

**PROCEEDINGS OF THE FIRST MEETING
OF
THE NATIONAL COUNCIL
OF EDUCATIONAL RESEARCH AND TRAINING**

**JAIPUR
JANUARY 2, 1962.**

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NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

First Meeting—Held at Jaipur on January 2, 1962

RESUME OF PROCEEDINGS

Present :

1. Dr. K L. Shrimali, Union Education Minister, (President of the Council).
2. Shri P.N. Kirpal, Educational Adviser to the Government of India, (Vice-President of the Council).

Representatives of State Governments :

3. Shri S B.P. Pattabhi Rama Rao, Education Minister, Andhra Pradesh.
4. Shri R.R. Das, Deputy Minister, Education, Assam.
5. Shri S M. Ahmad, Additional Director of Public Instruction, Bihar.
6. Shri Hitendra Kanaiyalal Desai, Education Minister, Gujarat.
7. Shri K G. Saiyidain, Educational Adviser to the Government of Jammu and Kashmir.
8. Shri Pattom Thanu Pillai, Chief Minister, Kerala.
9. Dr. S D. Sharma, Education Minister, Madhya Pradesh.
10. Shri K. Srinivasan, Secretary to Government, Education Department, Madras.
11. Dr. A.G. Pawar, Director of Public Instruction, Maharashtra.
12. Shri Anna Rao Ganamukhi, Minister for Education, Mysore.
13. Shri Pabitra Mohan Pradhan, Minister for Education, Orissa.
14. Shri Amar Nath Vidyalankar, Education Minister, Panjab.

Other Members :

15. Prof. P.S. Naidu, Vidya Bhavan Govindram Seksaria Teachers College, Udaipur.
16. Dr. Mohan Sinha Mehta, Vice-Chancellor, University of Rajasthan, Jaipur.
17. Shri A.R. Dawood, General Secretary, Anjuman-i-Islam, Bombay.

18. Miss S Panandikar, Bombay.
19. Shri V. Lakshminarayanan, Principal, Birla College of Engineering, Pilani.
20. Shri A C. Deve Gowda, Director of Public Instruction, Mysore
21. Dr. V K.R.V. Rao, Director, Institute of Economic Growth, Delhi
22. Shri Raja Roy Singh, Joint Educational Adviser, Government of India, Ministry of Education.
23. Shri J.P. Naik, Adviser (Primary Education), Ministry of Education
24. Shri T.K.N. Menon, Director, Directorate of Extension Programmes for Secondary Education, New Delhi.
25. Shri B.N. Malhan, Deputy Secretary, Ministry of Education (Member-Secretary).

The meeting was inaugurated by Dr. K L. Shrimali, President of the Council.

1. Dr Shrimali welcomed the members and explained the objects for which the Council was established, and the programmes that had been formulated in this regard. He reviewed the work that had been done since the Council came into being in September, 1961. (The text of the President's address is attached).

The President invited the members present to offer their general remarks and suggestions on the scope and work of the Council.

Dr. V.K.R V. Rao :

2. Mr. Chairman, I should like to make one or two remarks on the subject especially to welcome the formation of this National Council of Educational Research and Training and more particularly the formation of the National Institute of Education. I think for a long time there has been a feeling amongst people who are interested in education in universities, secondary schools or primary schools that while a great deal is being done in the matter of expansion of education, there has not been a bringing together of these various levels of thinking. As you yourself said, education is a subject that has got to be in the ultimate analysis treated as an integrated subject. The relationship between primary education, secondary education, university education, technical education, the connection between national integration and economic development, are the highlights of the discussions that have been taking place. I feel, Sir, that it was an important thing on your part and on the part of your Ministry to have thought of setting up this National Council for Educational Research and Training. I have gone through the papers and I have been very much impressed by the material that has been prepared.

3. I think Educational Research has not received that amount of attention which it requires. We have been having training institutions for teachers and departments of education for many years, but I do not think any University has a Department of Education. I do not think our universities have University Professors of Education. I wonder if even the Bombay or the Madras University has Professors of Education for all purposes of educational training and research. So far it has been treated as part of Governmental organisation, an education wing of the State Government or Central Education Ministry. I think it is a good thing now that you have set up this organisation, and that you are emphasising research in education.

4. In this connection, I should like to mention one or two points in respect of educational research. The first point is the subject which is foremost in our minds and one that has been highlighted by the recent conferences which were held under the chairmanship of the Prime Minister in Delhi a few months ago,—the subject of national integration. We have to think in what way education at the primary, secondary or university level can help in minimizing—if not completely eliminating—the tensions that are prevailing now. It is a very important subject. How can it be done? Can it be done through textbooks, national discipline schemes, audio-visual material? Obviously, you cannot remove all these prejudices by merely talking or giving lectures or by holding camps. There should be a special machinery for achieving this object. I would suggest that this subject may be taken up by your Council at an early stage. I think a Working Group should be set up. After all we have to remove these tensions that exist. They are bound to exist. I would suggest that attention should in this respect be paid not only to the primary stage of education, but to all stages of education, primary, secondary, university, technical and others.

5. The second subject on which I would like to lay emphasis and which also is on your agenda, is the question of textbooks. Let me give you an example. The other day I was talking to a friend of mine about the medium of instruction. The lady told me that her son had been taking education in Hindi for three years. The child did not know English. They went to England for an year and there the child learnt English and when they returned to India, the child refused to read anything in Hindi. Why is it so? The reason is that in English you have wonderful children's literature. It is a very important thing. There is something in English literature that gives excitement to the child. English has made a very tremendous headway, much more than all our languages. This means that our children get drawn away from our own languages, to English. They want to learn English and take interest in the language. Therefore, please also have a very important section for books for children. It is at the age of 3, 4 and 5, when the child reads pictures and is impressed with their

colours and material. If that can be linked with the roots of the soil, with traditional devils, and angels, it would be very much worthwhile. That is, Sir, the second important thing, namely, to bring out not only textbooks for schools, but good children's literature in all the Indian languages

6. One final thing, Sir. That is in regard to the sciences You have said scientific education is very important. One of the main things in the Council is to link it with other material. The whole subject of science is much more than finding the students for science. The problem is one of creating scientific interest and the scientific attitude—an attitude of rationality, of curiosity, which in a negative sense means an attitude of non-belief in superstition, in spirits and miracles.

7. If this is to be done, we must have scientific education on a very large scale, not merely in terms of provision for science education in schools but in terms of creating a scientific attitude in the younger generation of the country. I suggest for your consideration, the production in terms of scientific toys. Toys are as important a part of education as books. It is something which has not been given as much attention. A great deal of knowledge comes to the children through toys They are much less interested in reading books. Give them scientific toys. Manufacture them on a mass scale. Set up small shops in different types of engineering colleges. Spread them all over the country. These, Sir, are a few of the suggestions that I wanted to make regarding the work of the Council. I congratulate you on the initiative you have taken. The development of the Council would be a historic step. These activities will be able to improve the entire range of the educational system.

Dr. Mohan Sinha Mehta :

8. Mr. Chairman, please convey my congratulations to the people who are working in the National Council of Educational Research and Training for this very progressive and imaginative act which you, as Education Minister in the Centre, have initiated We are very happy indeed and I am quite sure that when this project and its conception come to be known in the country, you will receive the gratitude of a large number of people. From your speech it is quite evident that this was the great need of the country. It is a pity that it was not undertaken earlier, both in the States and in the universities as my friend, Dr. V K R V. Rao has pointed out. There has been a good deal of thinking on the subject of Educational Research. At this stage, after expressing my joy and congratulations, I would like to point out that this Central Institute will not be enough for the country and I hope your Ministry will think of some way of establishing similar centres in the States. You might say that the subject of education is a State subject. Well, I shall not enter into constitutional intricacies. But your Ministry and the Planning Commission and the University Grants Commission, are all thinking of an educational service for the

country as a whole. How you achieve this will be your problem. But I feel there should be a link between your National Institute of Education and the educational work in the States and the Universities. There are many problems which I feel will still require some local thought, local effort and local solutions. Even in the matter of more or less common problems of research, syllabii and curriculum, you will find that there are certain aspects in which the work done by your Council will need to be supplemented by research centres in the States and your Ministry should encourage this effort in the universities and in the State Departments. I do not think that there is any contradiction. Besides the two very important aspects to which you have drawn our attention in your address,—the inservice and the training arrangements—I would also emphasise the need for research in educational administration, in which a lead and guidance from this institute would be of great value. I have a very strong feeling in this matter and whenever you talk to people—even to educational workers and leaders and officers—you find very little response and very little thinking. An appreciable part of our backwardness would be remedied if somebody in an institution like this National Institute could give ideas to the State Departments of Education in improving the quality of educational administration after a certain amount of thinking and research. I would come back again to the need for local centres and university centres in the States for educational research. For some time unless we give some encouragement and also some assistance in personnel and finance, it would be an uphill task for the universities or State Departments to organize research along with the training colleges. The training colleges have become stereotyped. I have personally seen, time after time, that the teachers who went for training there came back without feeling that they had secured any benefit. Your Institute will, I hope, shake up the orthodox training colleges by guidance, training and by producing the necessary literature. I do not wish to take more time but what has been said by Prof. Rao has our support. I wish to conclude by saying that the establishment of the National Council of Research and Training will arouse the hope in humble workers like myself that efforts at starting similar centres on a smaller scale in the States will receive encouragement from this Central Institute. I would like to re-emphasise the fact that there are many problems which are local in a country of the size of ours and you will find that there are certain problems of which a National Institute cannot by its very nature take full cognizance. There are social problems, anthropological problems, also problems of the curriculum. Some States have better arrangements for science teaching, others are very backward. I support the proposal, because in our University we passed a resolution that we would like to establish a Centre of Educational Research and I found that it was not received with great enthusiasm. In fact, I have all along felt that in our country we need it even more than in others. That is why I welcome this. It will be a good beginning and the success that will be achieved in the

realm of research will be a very important contribution to our general progress. Thank you.

Education Minister (Punjab):

9. I welcome this project which, I consider, will be a landmark in the Indian educational field. Punjab, from the very beginning, has given much importance to training and research and that is why we have established a College of Education and also a Faculty of Education and that is why we thought we should make an offer for the Regional Training College and we had also made an offer for the establishment of a college in Kurukshetra. But we feel that Punjab should not monopolise everything and we welcome the establishment of a Regional College at Ajmer. We still hope, just as you have said in your address, Sir, that you would need more such colleges in every part of the country. In fact research is much more important—even more important than training, because training becomes absolutely insubstantial if there is no research behind it and, therefore, I endorse the views expressed by Dr Mehta that we should have more research centres in other parts of the country. In fact we should have a chain of research centres and they should collaborate with each other. They should exchange ideas and the results of research. I would suggest, Sir, in this connection, that this Institute should publish research papers from time to time, so that other parts of the country may know what research is being done and what they can contribute.

10. With regard to textbooks, just as you have mentioned in your address, we have made a start. We welcome the assistance given by the Centre. They have prepared textbooks for us in science. But there is a great need for textbooks on language teaching, because the present textbooks on language teaching are not up to the standard. Although, at present, we attach much more importance to language teaching, the method of language teaching in our country is very old fashioned and has not made any progress. I suggest that textbooks on language teaching should be prepared.

11. With regard to other research, just as Dr. Rao has stated, it is very necessary that we should have a scientific outlook. Also it is necessary that we should have a proper social outlook. Hence the textbooks should emphasise the scientific outlook as well as the proper social outlook. Therefore, we should attach particular importance to the textbooks on scientific studies, social studies and language studies. There are other areas where research is needed. For example, what kind of buildings schools should have, what should be the size, where should the blackboard be placed, what should be the colour and what types of

pictures should be placed in the textbooks? All these details have to be worked out.

Dr. Metha :

Furniture also.

Education Minister (Punjab) :

12. Yes. In fact details of furniture require a lot of research, keeping in view the various climates in India and the social environments. So, I welcome this venture and, I am sure this project will spread its roots in the whole of India and will create a climate for research. If this research is successful, then I think our training will also be successful and education will be placed on sound foundations. Thank you, Sir.

Education Minister (Mysore) :

13. Sir, I feel that it is an important step which the Education Ministry has taken and I think it is a landmark in the history of educational advancement in our country. As you have stated, Sir, the name of the Council appears as Council of Educational Research and Training. Well, research has come in the first instance and training has occupied the second place. I think, Sir, that this Body which is meant mainly for carrying on research, should not be burdened with too much of training courses. In the first instance it has been mentioned that it will carry on the task of pre-service and inservice training and secondly it will also administer the four Regional Training Colleges and thirdly it has also been said that the training of teachers will be undertaken at the postgraduate and doctorate level. We have entrusted this work of postgraduate and doctorate training to the universities and institutions carrying on researches in various fields and branches of learning. Therefore, Sir, I want to impress, that this Body should not be burdened with too much of training courses because research is a fundamental subject in other countries and a substantial portion of their national income is being invested on research.

14. In welcoming this step, I should like to impress upon you and the Education Ministry that while training is important, let this duty be delegated to the Education Ministry and I should say that this Council normally devote its time to research. As has been said, this body should formulate some specific recommendations.

Miss S. Panandikar :

15. With regard to this, I feel that we should also include primary education, which has not been mentioned anywhere in the report.

Shri Kirpal :

It is included.

Miss Panandikar :

That is absolutely necessary, both in the rural and urban areas.

Dr. Mehta :

16. This Council should really meet for a whole day. Members are not finding sufficient time to speak. This is the first meeting and an important one and many members want to speak. In future at least we should give one whole day.

Chairman :

17. I entirely agree with you that the time allotted for the Council meeting is short. We have difficulty collecting the Ministers at this time of the year as they are busy with the elections. Either we had to postpone it till the elections were over or have a meeting for a short period. I thought it would be worthwhile to have this meeting at least for a short period. We may meet again after February or March so that we could go thoroughly into the question.

Chief Minister, (Kerala) :

18. I take this opportunity to congratulate you on this step. I hope this will yield very good results. We have any number of schools and colleges. We have also a large number of training institutions, training schools and training colleges, but the results, so far as education is concerned, are not satisfactory. I think it will be generally true with regard to other States also. I have always wondered why in spite of so many training schools and training colleges and in spite of large amounts being spent by the State Government, the results, so far as education is concerned, are so unsatisfactory. There must be something wrong with the teachers and with the training institutions. I would like to say that part of the blame should be borne by the teachers and the training institutions. I hope, Sir, your present step will tend to diminish in a large way the defects, that we find in the teaching profession. That I thought is the main aim. There are training colleges and in spite of a year's training in the training school—it is two years' training in my State—the teachers are not of the right standard. We have an Education Bureau in my State. Of course, ideas as to its work seem to be vague and there is nothing concrete that anybody can tell you as to the aims of that Bureau. With the establishment of the National Institute, I think these defects will be substantially removed or at any rate steps will be taken to remove the existing defects and the large expenditure which is being incurred on education will yield useful results. Sir, on behalf of all the States I must say that it is a very good step which you have taken and the States will be largely benefitted and there will be enough cooperation between your Research and Training Council, the State Governments and the Departments of Education in the States.

19. The Council then proceeded to consider individual items of the agenda.

Item No. 2: To receive the report on the meeting of the Governing Body and the decisions taken therein. (Appendix A)

The report was received

Item No. 3: To receive the report on the Institutions that have been transferred to the Council. (Appendix B)

The report was received

Item No. 4: To receive for consideration the report of the Working Group on the Organisation and Functions of the National Institute of Education.

The Council approved of the proposal to establish a National Institute of Education and of the Report of the Working Group on its organisation and functions.

Item No. 5: To receive for consideration the schemes of the Third Five Year Plan transferred to the Council. (Synopsis of schemes attached Appendix C.)

(i) *Textbooks*

The President explained that the object of the scheme was to prepare textbooks which could be adapted by the State Departments of Education or used as source material for preparing their own textbooks. It was also proposed that before a textbook prepared by the National Institute was finalised, it should be experimentally tried out in a few schools.

Shri H K. Desai suggested that instead of prescribing only one book for a subject, a panel of books should be approved, leaving the choice of a particular book to the school Boards.

Shri Pattabhi Rama Rao suggested that copies of books prepared by the National Institute should also be made available in the reading and reference libraries in schools and colleges.

Dr. V.K R.V. Rao suggested that apart from preparing textbooks, a scientific study in language instruction should also be undertaken. So far little attention had been given to studying the instructional aspects of language as language. It would, therefore, be worthwhile to set up a whole section in the National Institute of Education for undertaking studies in the teaching of various Indian languages and to provide guidance to the States as to how languages other than their own can be most effectively taught.

Shri A.N. Vidyalkar suggested that the Council should also give advice to the State Governments on the selection of textbooks and the techniques of improving them.

The Council approved of the scheme for the preparation of textbooks.

(ii) Science Education

Dr. V.K.R.V. Rao suggested that a sample survey should be undertaken by the State Departments of Education on the availability of laboratory equipment in the schools and its adequacy.

Shri Deve Gowda stressed the need for bringing out science books for children.

The Council approved the scheme.

(iii) Regional Training Colleges

Shri Lakshminarayan said that the question of the maximum number that a Regional Training College should enrol should be very carefully examined and the universities which have engineering colleges might also be consulted.

Shri H.K. Desai suggested that each State should have a quota of seats in the Regional College.

Dr. Mohan Sinha Mehta suggested that the agency of the Regional Training Colleges should be used to promote studies and provide training opportunities in educational administration.

The Council approved the scheme.

(iv) Extension Services Centres at the Secondary Level:

Dr. Mohan Sinha Mehta stressed the need for organising short condensed courses in different school subjects in the States. He pointed out that the existing curricula were mostly out of date and the National Institute of Education should, therefore, take the lead in organising a network of condensed courses throughout the country.

The Council approved of the scheme.

The Council received with appreciation the First Year Book of Education.

20. The Council decided to postpone consideration of other items of the Agenda.

21. Shri Prem Kirpal thanked the members of the Council on behalf of the Government of India and the staff of the National Institute of Education. He referred to the formation of the National Council as a big step forward in the process of the development of education.

22. The meeting concluded with a vote of thanks to the Chair.

INAUGURAL ADDRESS

DR. K. L. SHRIMALI

Education Minister, Government of India, and President of the Council

Friends,

It gives me great pleasure to welcome you to the first meeting of the National Council of Educational Research and Training.

The need for establishing a Council of this kind was being felt with increasing urgency as the rapid development of education since independence brought new problems to the fore, but the measures required to meet this need took time to materialise. When a few months ago, I sent an outline of the proposal to the State Education Ministers, and invited them to be members of the Council, I was greatly moved by their warm response. A measure of cooperation equally encouraging was extended to us by the eminent educationists and administrators who have accepted the membership of the Council. I wish to tender my personal thanks to you. To my mind the Council is yet another link joining the Centre, the State Governments, the Universities and other learned bodies in a common endeavour to meet the demands of educational reconstruction, and I have no doubt that the goodwill with which it has started will continue to grow and give the strength equal to its tasks.

The constitution of the Council sets out the objects it is to serve. I need not enumerate them in detail. Two important areas included in its scope relate to research and training. During the last fourteen years, there has been a phenomenal increase in the number of educational institutions and pupils but along with this expansion our basic problems have also grown in complexity—the problem of quality, wastage, methods of examination, curricular content and its diversification, increasing the effectiveness of classroom practices, teaching aids—in short, the problem of making education an effective and sensitive instrument for a progressive and dynamic society. Educators would be failing in their duty to the nation if they allowed education to continue in a drift in the hope that these perplexing problems would somehow find their solutions. The policy of *laissez-faire* is out of date in education as much as it is in the sphere of economics. We have, therefore, to apply ourselves to a scientific study of these problems and evolve a coherent body of thought and practices which, based on the best experiences of our educational

workers, would bear upon our particular needs. The National Council will concentrate mainly on functional research related to our specific needs. Its merit is to be tested in practice, in action. Fundamental research has its own importance and I hope the Departments of Education in the Universities will carry on this research. The Council will address itself specifically to those practical problems which the educators and the educational administrators have to face from day to day. This type of research, however, cannot be adequately done by one institution alone; it must represent a co-ordinated effort of all who work in the field of education or have given thought to its problems—the universities and other learned bodies, training colleges, State Departments of Education, and most important of all teachers. The programme of work of the Council has been conceived in this light.

The other important function of the Council relates to training, which includes both pre-service and inservice training not only for teachers but also for 'educational personnel generally. The Council cannot obviously directly undertake the training of all grades of educational workers. It will apply itself to devising improved techniques of training and to contributing to the building up of an institutional structure which can adequately transmit not only improved techniques but also the urge for improvement. We have to admit candidly that the existing organisations for professional training are as out of tune with our needs as the methods that are in use. The Council will have to give fresh thought to the problems of methods and organisation of training.

The Council has been constituted as an autonomous organisation which is the form most suitable for academic and research functions. Work on behalf of the Council commenced with effect from September 1, 1961. The Ministry of Education, has, from that date, transferred to the control of the Council the following institutions and offices in Delhi, together with their staff and budget : the Central Institute of Education including the Bureau of Textbook Research and the Bureau of Educational and Vocational Guidance, the Directorate of Extension Programmes for Secondary Education, the National Institute of Basic Education, the National Institute of Audio-Visual Education and the National Fundamental Education Centre.

A project has been prepared for establishing a National Institute of Education. A Working Group reported on this project and you would have seen its report in the papers circulated to you. It was considered by the Governing Body at its very first meeting and was approved. I trust that the Report will commend itself to your final approval. It is proposed that the institutions transferred to the Council should be amalgamated and developed into a National Institute of Education which would function as a high level research institution. The problems of education

are so closely inter-related that organisationally they cannot be treated in isolation without injury to the cause. It will be the function of the National Institute to undertake investigations, research and other studies in collaboration with institutions and individuals in the States, the Universities and other institutions of higher learning. One of the departments of the Institute will be concerned with field services and function as a two-way channel to disseminate knowledge of improved techniques and practices and gather the experiences in the field for the benefit of the work of the Institute. The programmes that each department of the Institute will be developed to carry out are indicated in the Report, but I should like particularly to draw attention to two schemes. It is proposed that the Institute will provide advanced courses in education at post-graduate and doctorate levels. The students will be admitted from all the States in India and will be given stipends or scholarships for their studies in the Institute. While the training institutions in the States would continue to supply the teachers needed in the States, the Institute's training programme would be discharging a function which no other single institution is at present undertaking.

The other training scheme of the Institute is designed to provide inservice courses to the key personnel in the States who on return would carry forward the work in their respective areas. Any improvement that you wish to make can be accomplished only if there is a well-organised inservice training programme. During the last few years inservice training has been developed in the form of Extension Centres in the Training Colleges. They have done much useful work but an adequate institutional structure has yet to be provided which would ensure that inservice training is given the same importance as any other form of training. It would be desirable to give some kind of incentive either in the form of promotion or advanced increment to teachers after they have taken inservice courses of training. The National Institute, I trust, will be an important link in the organisation for an effective inservice training programme, covering all sectors of education.

I may refer to some of the other projects which the Council has taken in hand since it was established a few months ago.

You will recall that the Chief Ministers Conference held recently in Delhi had recommended that improved types of textbooks for schools should be prepared by the Central Ministry. The work has been entrusted to the Council, and it has set up a high power Committee to guide and supervise it. Comparative studies in curriculum and syllabi have started. It is proposed to prepare textbooks and teachers' guide books on important school subjects, which the State Governments may adapt to their use or utilise as source material. At the same time, seminars and conferences will be organised with authors, subject experts, publishers and others

concerned with the production of educational literature so that the experience in the field may be utilised to the maximum extent and the techniques of improved teaching material may be disseminated. The material that is prepared by the Institute in collaboration with others will be tried out in the schools in different parts of the country before it is given its final form. The Institute has already made a beginning and has, in collaboration with the State Department of Education of Punjab, prepared books on general science for classes II to VIII of the Punjab schools. The manuscripts in Hindi and Punjabi are being made over to the Punjab Government. The Institute proposes to bring out a trial edition of these books in English also, so that they may be tried out in three languages. After they have been tried out, the Institute would be prepared to bring out the books in other regional languages with such changes as may be found necessary in the course of the try-out. The Institute now proposes to prepare books on social studies for elementary classes during the next six months

The Government of India propose to establish during the Third Five Year Plan four Regional Training Colleges for training teachers for the practical streams of multipurpose high schools. The scheme has been entrusted to the Council for implementation. I am grateful to the State Governments for the offer of land and other facilities for the training colleges. It was evident from the response of the State Governments that many more training Colleges of the type that have been planned for these four are needed, but it was not possible to avail of all the good offers of location that were made. On the recommendation of an Experts Committee, sites have already been selected—Bhubaneswar, Orissa, for the eastern part of the country, Bhopal, Madhya Pradesh, for the central area, Mysore for the southern region and Ajmer, Rajasthan, for the northern region. The preparation of plans and estimates are in progress. These four regional training colleges will provide yet another link in the reorganisation of our training and inservice training system for teachers

Another project on which work has been done is in regard to the publication of Year Books on Education by the Council. Standard books of reference on Indian education are at present conspicuously lacking. It is, therefore, proposed to bring out every year a publication devoted to a particular aspect of education. Editorial Boards are formed for each Year Book. I am glad to report that the Council has been able to bring out the first number in record time. It is a review of the progress of education in India since 1947 and brings the account up to 1960. I am grateful to the State Departments of Education for contributing the material for the chapters dealing with the progress of education in each State and to the Ministry of Scientific Research and Cultural Affairs for an account of the progress of technical education. The preparation for the second and the third Year Books have already been taken in hand. The Second Year Book will deal with primary education in India and the third one with educational research in India.

The Institutes which have now come under the control of the Council have been engaged during the last few months in reviewing their work and preparing programmes for the next year and the subsequent years. I have referred to some of these programmes earlier. There are a few more which I think should also be mentioned. The Council proposes to undertake, in collaboration with the Association of the Principals of Training Colleges, a survey of teacher education in the country and to formulate specific recommendations for reorganisation and improvement.

A comparative study has also been undertaken in curricula and syllabuses in use in the various States. There has been little exchange of information about curricular content in the school system as between the various States and I hope that the study that is in progress will not only help in the preparation of suitable textbooks but will also provide the basic framework on which a curriculum ensuring comparable standards can be suggested for the consideration of the States.

I have outlined in brief some of the important programmes that the Council proposes to take up immediately. The first few months have necessarily to be devoted to building up the organisation of the Council. The most important element which would determine the success of the programmes to be undertaken by the Council is the quality of workers. I trust that the State Governments will, in this respect also, give us the same co-operation as they have done in all other matters and lend the services of some of their employees to the Council on deputation basis. The functions of the Council are such that its staff composition should represent a fair cross-section of persons with research experience in universities and higher institutions and also of those who have experience of actual field conditions. Ample opportunities should also be provided for free and easy exchange of experience between the State Departments and the Council's Institutes. Isolation of one from the other will restrict the usefulness of both. I have no doubt that full co-operation will be extended by the State Departments of Education and the Universities so that the Council may be enabled to fulfil the hopes with which it has been founded.

APPENDIX A

(Vide item 2 of Agenda)

REPORT ON THE FIRST MEETING OF THE GOVERNING BODY AND THE DECISIONS TAKEN THEREIN

Under rule 23 of the Rules of the National Council of Educational Research and Training, the affairs of the Council are administered, directed and controlled, subject to rules and regulations and orders of the Council, by a Governing Body.

The Governing Body of the Council is composed of the following :

- (1) Education Minister, Government of India. *President*
- (2) Shri P.N. Kirpal, Educational Adviser and Secretary to Government of India, Ministry of Education, and Director of the Council. *Vice-President*
- (3) Shri S. Bhoothalingam, Secretary to the Government of India, Ministry of Finance or his representative. *Financial Adviser*
- (4) Dr. D S. Kothari, Chairman, University Grants Commission. *Member*
- (5) Shri Raja Roy Singh, Joint Educational Adviser to the Government of India, Ministry of Education and Joint Director of the Council. *Member*
- (6) Prof. V.K N. Menon, Director, Indian Institute of Public Administration. *Member*
- (7) Shri J P. Naik, Adviser, Primary Education, Ministry of Education. *Member*
- (8) Shri M.M. Begg, Principal, Delhi College, Delhi. *Member*
- (9) Shri T K.N. Menon, Director, Directorate of Extension Programmes for Secondary Education. *Member*
- (10) Dr. E.A. Pires, Principal, Central Institute of Education, (at present on foreign Service ex-India). *Member*
- (11) Shri B.N. Malhan, Deputy Secretary to the Government of India, Ministry of Education. *Secretary*

(The late Prof. N.K. Sidhanta, Vice-Chancellor, Delhi University was also a member of the Governing Body.

The first meeting of the Governing Body was held on August 31, 1961, and the following decisions were taken :

(1) Approving the Report of the Working Group on 'Organisation and Functions of the National Institute of Education', the Governing Body resolved that a National Institute of Education should be established at Delhi.

Action taken :

- (a) The proposal for locating the National Institute of Education at Delhi has been approved by the Government of India.
 - (b) An application has been made to the Chief Commissioner of Delhi and the Delhi Development Authority for the allotment of land for the Institute and it is hoped that land will be made available in the immediate future.
 - (c) The estimates of the requirements of building space have been worked out. ;
 - (d) Provision in the budget has been made for acquiring the site and its development during the course of the next financial year.
- (2) The Governing Body expressed the view that, as soon as may be feasible, the post of Director or Joint Director should be filled on a whole-time basis.

Action taken :

The proposal will be given effect to from the next financial year.

(3) The Governing Body authorised the President to accept, on behalf of the Council, the transfer of schemes and programmes from the Ministry of Education, subject to the condition that such schemes and programmes are in consonance with the objectives of the Council.

Action taken :

The following schemes have been transferred from the Ministry :

- (a) Establishment of four Regional Training Colleges.
- (b) Extension Services Centres in (i) Secondary Training Colleges and (ii) Training Schools.
- (c) The programme for improving science education and scouting for science talent.
- (d) Establishment and development of the Central Unit for Examination Reform.
- (e) Establishment and development of the Central Unit of Educational and Vocational Guidance.
- (f) Assisting the development of research projects.
- (g) Scheme for the production of textbooks.
- (h) Studies in pre-primary education and child growth.

A few more schemes of the Third Five Year Plan are to be transferred to the Council in the immediate future.

(4) The Governing Body has issued interim directions for preparation and sanction of budget estimates and procedure for maintenance of accounts, procedure for appointment of officers and staff and the terms of their appointment, and the powers exercisable by Heads of Offices

(5) The Governing Body has appointed a Finance Sub-Committee to scrutinise proposals bearing financial implications. The Finance Sub-Committee consists of the following:

- | | |
|--|--------------------------|
| (a) Director of the Council | <i>Chairman</i> |
| (b) Financial Adviser or his representative | <i>Member ex-officio</i> |
| (c) Joint Director of the Council | <i>Member</i> |
| (d) Prof. T.K.N. Menon | <i>Member</i> |
| (e) Shri B N. Malhan, Secretary of the Council | <i>Member</i> |

(6) The Board of Educational Studies contemplated in rule 49 of the Rules of the Council has been constituted and its three Sub-Committees have started working

(7) The Governing Body has authorised the Director to constitute ad hoc/special committees in terms of rule 46 of the Rules of the Council.

Action taken :

Committees have been formed for the following purposes :

- (a) A committee to advise on the development of the Department of Psychology and its programmes.
- (b) A committee to suggest courses of study for the Regional Training Colleges.

(8) The Council has by Resolution appointed the State Bank of India as bankers to the National Council of Educational Research and Training.

(9) The Governing Body has constituted an Appointments Committee for a period of one year for making appointments to superior posts in the Council. The Committee consists of the following :

- | | |
|-----------------------------|-----------------|
| (a) Dr. D.S. Kothari | <i>Chairman</i> |
| (b) Director of the Council | <i>Member</i> |
| (c) Joint Director | <i>Member</i> |
| (d) Prof. V.K.N. Menon | <i>Member</i> |

Two experts are to be co-opted by the Committee for posts carrying an initial salary of Rs. 700 or more.

(10) The Governing Body has approved the establishment of an Accounts Section in the Council's office and sanctioned staff for the same.

Action taken :

The Accounts Section has been established.

APPENDIX B

(Vide item 3 of Agenda)

REPORT ON THE INSTITUTIONS TRANSFERRED TO THE COUNCIL

Part 1—Historical Background

With the coming of independence the educational structure in the country underwent a major change to bring it closer to the needs of a democratic society. This meant a reorganization and reform of the educational system at all levels. In order to develop the necessary programmes in the areas of major change, the Government of India established the following central institutes at Delhi, each devoted to specific sectors of education. These were:

1. Central Institute of Education;
2. Central Bureau of Text-book Research;
3. The Central Bureau of Education and Vocational Guidance;
4. National Institute of Basic Education;
5. National Institute of Audio-Visual Education;
6. National Fundamental Education Centre;
7. Directorate of Extension Programmes for Secondary Education.

I. Central Institute of Education

This is the oldest of the central institutions established by the Government of India. It was opened in 1947 with the object of preparing teachers and also for demonstrating in a practical way the best type of organization of a training institution to the country. It was also intended to be a good experimental institution devoting itself to research on the major educational problems of the country.

The Institute has been offering B Ed., and M Ed. courses to students. The institution has an experimental basic school and an experimental nursery school attached to it. The nursery school has served as a source of study and experimentation in pre-primary education.

An Extension Department was opened in the institute in 1955 through which in-service facilities have been provided for secondary school teachers of the territory.

A Psychology Wing was added to the institute in 1950 with the primary object of carrying out research in educational psychology. The

research work has largely concentrated on the development and standardization of intelligence tests. Several tests including an individual scale of intelligence, three group tests of intelligence, one non-verbal test of intelligence and test on achievement in Hindi have been standardized. Studies completed so far include the vocabulary of adults and children, leadership among children, adolescence needs, the problem of socialisation in the nursery school, frustration among children, two attitude studies, one on the attitude of junior basic children towards school activities and the other on the attitude of mathematics teachers in local schools, delinquency as an area of research, and prognostic value of the higher secondary examination of Delhi. Most of these research studies have been published by the Institute.

II. Central Bureau of Text-book Research

The Central Bureau of Text-book Research was established in 1954 with the object of undertaking systematic research in the whole field of textbook production for which there had been a long-felt need. The Bureau was expected to make a critical survey of the current textbook literature in the country, formulate sound educational criteria for writing textbooks, prepare a comprehensive scheme for appraising textbooks and to prepare model textbooks. The work accomplished so far includes the following :

1. Preparation of analysis sheets for science and language textbooks for primary classes.
2. Evolving score card for evaluating textbooks in languages and science for primary schools.
3. Bringing out brochures on procedures of selecting textbooks in India.
4. Helping the Delhi Directorate in drawing up revised syllabuses in science and social studies.
5. Preparation of assignments for secondary schools in physics and history.
6. Analysis sheets for geography and mathematics for the primary classes, and for Hindi, geography and science for the middle classes are under preparation.

III. Central Bureau of Educational & Vocational Guidance

This Bureau was established in 1954 in pursuance of the recommendation made by the Secondary Education Commission that every state should set up a Bureau of Educational and Vocational Guidance. The functions of the Bureau were to provide professional leadership to the country in implementing the programme of educational and vocational guidance, and to provide guidance services for Delhi schools,

The Bureau has conducted two training courses so far, the first one in May/June, 1955 and the second in 1958-59. The participants for these courses were drawn from various States. The first was a short-term course while the second was for a full session of 10 months. The officers of the Bureau have also participated in seminars and other training courses organized by various agencies in the States. Career conferences of students and parents in selected schools, follow-up study of the eleventh standard students of two local schools and individual guidance to students were other activities of the Bureau. Under research activities of the Bureau may be mentioned a project on construction of tests for guidance for the eighth class in a local school. Follow-up of the students who came under this project is in progress. The Bureau is currently developing a battery of tests which will be useful to select students for the science courses. These tests have been administered to about 500 students of local higher secondary schools. The third research study has been to work out an adaptation of the Wechsler Bellevue Adult Intelligence Test. The Bureau has also been assisting the Ministry in preparation of tests for the Government of India Merit Scholarship Scheme. A few surveys and investigations have also been carried out by the Bureau, among which may be mentioned studies carried out on the vocational maturity of school leavers of classes VIII and XI.

IV. National Institute of Basic Education

This Institute was established in 1956 to accomplish three purposes :

1. Conducting and publishing the results of research on the concept of basic education.
2. Training of State personnel in basic education.
3. Serving as a clearing house of information on basic education.

The main programmes which have been developed so far in the Institute are as follows :

1. Conducting and co-ordinating research in basic education.
2. Training of basic education personnel of State Departments.
3. Bringing out publications—periodical and otherwise.
4. Providing field services to local schools and local educational authorities.
5. Collection and dissemination of information on basic education.
6. Development of new and educationally potential crafts and conducting experiments on cheap and inexpensive material for use in craft teaching.

Ten research studies have so far been completed and 13 more are in progress. The projects cover various aspects of administration and

finance, assessment and evaluation teaching techniques, methods and curriculum of crafts.

During these years the Institute has organized various types of workshops, seminars and refresher courses and brought over 200 persons from various States under the programme.

Significant among the experimental studies carried out by the Institute in arts and crafts, are the studies on fibre craft, bamboo craft, clay and doll making from waste material. In the art section of the Institute preparation of posters and illustrations as well as experiments in arts for basic school decoration are undertaken.

V. National Institute of Audio-Visual Education

The National Institute of Audio Visual Education was started in 1959, and the first training course was undertaken in 1960. The syllabus of studies for the training programme of the Institute was also finalized. So far four short-term training courses of 10 weeks duration have been conducted for teachers of secondary schools, lecturers of training colleges, inspecting officers of the States and teaching personnel from Ministries of Health, Defence and Community Development. In addition, two courses of 6 weeks duration have been organized for the co-ordinators of extension centres to familiarise them with audio-visual techniques.

Some amount of experimentation has been accomplished in production work, e. g. the daylight projection screen, radio circuit, a project amplifier, television films, four 16 mm. films, film strips on a number of classroom subjects and charts and posters.

VI. National Fundamental Education Centre

This Centre was established in 1956 but its training programme commenced in April, 1958. It was set up with the object of training key personnel in the field of social education, carrying out research in social education, preparing prototype material for use by social education workers and to function as a clearing house in the subject.

The training programme has so far confined itself to the training of officers in charge of social education at the district level. This includes district social education officers, divisional social education officers, district education officers and district panchayat and welfare officers. So far 93 officers have been trained in six batches. The Centre maintains contact with the ex-trainees by sending out bulletins and copies of research projects to them, visiting them in their areas of work and through correspondence.

In the field of research the Centre has completed two studies, one on village meeting places and another on village meeting places and community centres. Nine other research studies are under way.

In addition to posters and flannel graphs the Centre has produced two film strips and a film.

VII. Directorate of Extension Programmes for Secondary Education

This was originally set up in 1955 as an autonomous body called the All-India Council for Secondary Education. In April 1959 it was reconstituted into the Directorate of Extension Programmes for Secondary Education, an attached office of the Ministry of Education. The All-India Council for Secondary Education continued as an advisory body. The former All-India Council as well as the Directorate have been carrying out a variety of programmes in the field of secondary education. The chief of these have been the organization and supervision of 54 Extension Centres in Training Colleges, a long-range programme of examination reform, various types of in-service courses for secondary school teachers at state, regional and all-India levels, programme of science improvement and science clubs, experimentation in schools, multipurpose secondary schools and regional colleges and other improvement measures in secondary education. Attached to the Directorate is an Evaluation Unit consisting of trained officers in evaluation to look after the implementation of examination reform.

Impressive as this record of achievements is of these several institutes, it has been increasingly felt that greater results could have been achieved if there had been a closer co-ordination of effort and pooling of resources. The areas in which these institutes have been working are more or less inter-related and the activities of the institutions have, therefore, overlapped to some extent. Besides, the limited resources of personnel and expertise in each institute have tended to make the individual institution's work somewhat diffused. Education is expanding rapidly in the country and is throwing up several problems which call for urgent study and solution in a co-ordinated manner. This co-ordination has to be brought about in the three major but inter-related areas of educational enterprise, namely, training, research and extension. The National Institute of Education aims at achieving this intergration of efforts of the several institutions mentioned above as also at ensuring a high standard of work in training, research and extension.

Part 2—Programmes Undertaken by the National Institute of Education Since its Inception.

The several institutions that have been merged in the National Institute of Education will have to function in their separate locations until the new campus is built. In the meanwhile efforts will have to be

made to integrate the programme of the institutions as far as practicable, lay the foundation for the development of the several departments contemplated under the National Institute of Education, locate problems for research which are of national priority and initiate some of the more urgent ones. During the four months since the inception of the National Institute efforts have been directed towards these objects.

1. Committees have been set up to draw up blueprints of development of the following departments :

- (a) The Department of Psychology, Measurement and Guidance
- (b) The Department of Educational Administration
- (c) The Department of Audio-Visual Education
- (d) The Department of Curriculum, Textbooks and Methods of Instruction.

Each of these committees is composed of persons drawn from the Departments concerned as well as the other related departments of the NIE so that pooling of thinking and planning will be ensured. All the committees are currently working on drawing up a revised programme for the M. Ed. degree defining the objectives of training at this level, the methods of training and the courses of specialisation to be offered. The next item that will be considered is the programme of research that should be taken up in a phased manner, as also to prepare detailed plans for programmes of training and extension. The work of the committees itself has brought in a considerable degree of co-ordination of effort among the institutions and highlighted the unity of purpose of their work.

2. Work in the field of examination reform, evaluation and test construction has been shared by the Examination Unit of the DEPSE and the Department of Psychology in the CIE. For example, in formulating the cumulative record cards the two units have worked in collaboration. The faculty members of the CIE have also taken up the consideration of a programme of assisting the Delhi Secondary Board in the construction of tests in the various secondary school subjects.

3. The Department of Instruction (Central Institute of Education) has taken up several improvement measures such as the revision of the Ph. D. work to ensure a more rational procedure of selection of students and choice of subjects for research, more effective and regular supervision, discussion at individual conferences and group seminars.

4. With the help of an expert committee a programme is being worked out for the construction and standardisation of the most essential mental tests that are needed for purposes of education and guidance.

5. A group is also working on the formulation of tests for selection of teacher trainees.

6. The Psychology Wing has given priority to the study and research in the areas of child and adolescent development, psychology and reading and the psychology of learning in general and school subjects in particular. Detailed plans for investigation and research in these areas are being prepared so that a nation-wide study could be undertaken in collaboration with the teacher training colleges and university departments of psychology.

7. A preliminary study has also been undertaken of standards of education at the school level

8. In view of the importance given to pre-primary education in the Third Plan, the Psychology Wing of the Central Institute is taking up a survey on pre-primary education in the country. The data collected in this regard by the Directorate of Extension Programmes for Secondary Education has been subjected to a preliminary analysis by the group on the basis of which the further plan for a detailed survey is being drawn up

9. The Directorate and the Central Institute of Education are jointly working out a programme for training of extension workers in the Extension Department of the Central Institute. In the enlarged context of the National Institute of Education, the Extension Department of the Central Institute of Education is proposed to be developed so as to perform the dual role of providing extension services to secondary schools in Delhi particularly, as well as to act as a training centre for extension workers in the country.

10. The Central Bureau of Textbook Research which is to develop later into the Department of Curriculum, Textbook and Methods of Teaching is taking up in collaboration with the Directorate and the other units of the National Institute of Education a large-scale programme of analysis of syllabuses and textbooks in subjects taught in all the school stages in the various States

11. The Directorate is currently engaged in a programme of preparation of textbooks in general science for classes I to VIII for one of the States of the country and in this effort also the resources available at the Central Institute of Education, Central Bureau of Textbook Research and National Institute of Audio-Visual Education are being mobilised.

12. In the major programme of science improvement which is being launched at the Directorate of Extension Programmes for Secondary Education, resources available at the Central Bureau of Textbook Research and other units of the National Institute are being fully utilized.

13. In the current year's programme of all-India seminars, the Directorate has included a group of six seminars in the areas of psychology, educational administration, measurement and textbook analysis. This is

the first set of seminars where the respective Departments in the National Institute of Education will be in charge of conducting the seminars while the Directorate will be looking after the organisational aspects. Working papers and other arrangements are being done jointly by these units.

14. The nursery school programme is getting revised so as to make it a model for the field and at the same time to enable it to serve as a practising ground for training leaders in pre-primary education. A plan for worthwhile experiments in pre-primary education is also being drawn up.

The experience of the past few months has shown very clearly that the programmes have got considerably enriched by this mutual contact and association. It has also helped to put the various programmes in their correct perspective which has been possible only by the joint thinking that has been available in the new set-up. Steps are already under way for drawing up similar co-ordinated programmes for the next year so that they may be launched well in time and early in the next academic year.

Part 3—Programmes Proposed to be Undertaken

Although it is still too early to define all the programmes that will be taken up during the next five years, the thinking that has already gone into the organization of the various Departments has indicated certain priorities in the development of the Institute. Some of these are listed below :

1. The foundation will be laid for all the major Departments contemplated under the National Institute of Education. Some of them are already in existence as separate institutes while others are wings or sections of the Central Institute of Education. Examples of the latter are the Psychology wing and the Educational Administration section of the Institute. During the next few years the Psychology wing and the Bureau of Guidance will be enlarged and developed into the Department of Psychology, Measurement and Guidance. Those aspects of examination reform which relate to measurement and testing will be carried out by this department. Similarly the existing section of Educational Administration will be developed into the Department of Educational Administration.

Any enduring educational reform has to be based on well-defined philosophical and sociological foundations. An institute designed to give leadership of the kind contemplated for the National Institute will have to take up as one of its first functions the formulation of a basic philosophy of education upon which all super-structure of educational progress can be built. This need finds added support because of the substantial programme of educational expansion contemplated in the Third Five Year Plan. One of the first programmes under the Institute in the next few years will,

therefore, be to develop the Department of Sociological and Philosophical Foundations.

3. All the departments would have developed by the end of the next five years a well-considered programme of M. Ed. and Ph. D. training.

4. All the Departments would also have formulated the blueprint of research activities which each should take up both within its own faculty as well as with the cooperation of other Departments in the Institute as well as selected institutions in the States.

5. Surveys of certain fundamental aspects of educational activity that will provide basic data for further programmes of improvement will be taken up by the Institute, surveys being located in the respective Departments wherever possible.

6. The Department of Instruction will be enlarged and strengthened to develop into a Centre of Research and Experimentation in teacher training. Among the experiments that it will carry out may be mentioned the development of a model school library and educational museum, preparation of reference material for teacher training institutions, co-ordination and supervision of improved programmes in teacher training institutions etc.

7. The Department of Psychology will take up as its first studies areas of reading, learning in school situations, problems of development during infancy and adolescence and the evolution of selection and assessment procedures.

8. Survey of pre-primary education in the country followed by the formulation of a good training programme for pre-primary teachers and research in this area will be given priority. This will also be accompanied by the development of a Child Guidance Centre.

9. Extension activities will be closely co-ordinated among the Departments of the National Institute and will be so organised that they will mobilize all available resources within and outside the Institute. The extension activities will also serve to locate problems of priority and carry out pilot studies in the field.

10. The Department of Measurement will focus attention on the development of tests in areas which have not been given sufficient attention hitherto.

11. The Extension Department in the Institute will be developed into a centre for research and training in extension work.

12. The science improvement programme to which great emphasis is given in the Third Plan will be developed in the first years in the Central

Science Unit located in the Directorate of Extension Programmes for Secondary Education.

13. A full-sized programme of textbook preparation for the school stages for the core and the elective subjects will be taken up by the present Central Bureau of Textbook Research which will be developed into the Department of Curriculum, Textbook and Methods of Teaching.

14. Four regional colleges for the training of teachers from multipurpose schools will be established and programmes of in-service training, textbook and reference material for use in multipurpose schools and the colleges developed.

15. Activities of the Department of Audio-Visual Education will be closely linked with the development of curricula and textbooks and methods of instruction.

16. Research studies of national importance such as problems relating to wastage and stagnation, standards in education etc will be taken up.

17. In-service programmes will be so organized as to train local leadership in the states and the training colleges.

18. In addition to these activities listed above, the Institute will also be bringing out year-books devoted to specific areas in education, summaries of M. Ed and Ph. D. dissertation and theses, researches in education, educational literature in Hindi and regional languages for teachers, and other publications of national importance and utility.

APPENDIX C

(Vide item 5 of Agenda)

SYNOPSIS OF THIRD FIVE YEAR PLAN SCHEMES TRANSFERRED TO THE COUNCIL

I PROGRAMME FOR TEXTBOOKS AND CURRICULUM DEVELOPMENT

1. The Third-Five Year Plan identifies textbooks as one of the major problems requiring immediate attention. Textbooks are, singly, the most powerful means for influencing the child's educational growth. The poor quality of the textbooks used in the schools in our country is only too painfully evident. The Third Five Year Plan emphasises the need for the Centre and the States 'to coordinate their efforts in large scale production of textbooks with a view to reducing costs as well as keeping certain national objectives uniformly in view.'

2. The importance of textbook production, in terms of the quality of content, get-up, printing and cost, is inextricably linked with the school curriculum and, therefore, the development of textbooks and curriculum has to proceed as an integral activity.

3. The programme that is envisaged in the Plan comprises the following main elements :

(a) Analysis of the textbooks (as the elementary and secondary stages) that are in use in the States with a view to :

(i) identifying the content load in terms of national ideologies that they carry ;

(ii) ascertaining their shortcomings and gaps in terms of curricular requirements, and

(iii) assessing the production and cost aspect

(b) Working out of the selection criteria for textbooks on the basis of the analytic study.

(c) Preparation of model textbooks in the important subjects of the curriculum and making them available to the State Governments for adaptation and use.

(d) Production of teachers' guide books for the textbooks.

(e) Production of supplementary reading books in the various subjects, particularly science and social studies.

4. Essential to and inter-linked with the textbook development programme is the programme of curriculum development which would

comprise the following elements :

- (a) Comparative study and analysis of the existing syllabuses in the various States with a view to :
 - (i) articulating the syllabuses on sound principles,
 - (ii) aligning the syllabuses to the objectives of teaching the particular subject and the textbook for that subject, and
 - (iii) integrating the syllabuses vertically.
- (b) Preparation of model syllabuses for the guidance of the State authorities in terms of :
 - (i) defining objectives and purposes of the syllabus at each stage and for each subject,
 - (ii) relating the gradation of the syllabus to the gradation of learning, and
 - (iii) relating the syllabus to the vocabulary load, teaching load and the requirements of the balanced time-table.

5. The subjects which will be taken in the first instance for curricular studies and textbook production are the following :

- (i) Social studies including civics.
- (ii) History.
- (iii) Geography.
- (iv) Mathematics.
- (v) Fine Arts.
- (vi) Home Science.
- (vii) Sanskrit.
- (viii) Hindi.
- (ix) English.

The work relating to scientific subjects will be dealt with in the Science Unit which has been proposed in a separate scheme.

6. Besides the preparation of textbooks in the school subjects mentioned above, it is proposed to bring out 10 supplementary readers on subjects connected with social studies during the Plan period. In the first instance, supplementary readers for classes VI to VIII will be undertaken.

7. The model textbooks, supplementary reading books and teachers' guides will first be prepared in English and then freely translated into the various regional languages. The preparation will be in the following stages :

- (a) An outline of the procedure and the basic framework will be worked out by the Central Bureau of Textbook Research on the basis of curricular studies,

- (b) The task of writing up selected units of textbooks and their translation into regional languages will be entrusted to a group of carefully selected and highly competent authors drawn from the States, universities and other institutions.
- (c) The manuscript prepared by the authors will then be reviewed by a Reviewing Committee before it is finally printed. Wherever necessary the manuscript textbook will be tried out in selected schools before being finalized.
- (d) The textbooks and other supplementary readers which are thus prepared in the various regional languages will be made available to the States and it will then be for the States to adapt them for their use and print the required number of copies.
- (e) Each textbook will be accompanied by a teachers' guide book so that the teacher may be helped to teach the units of study in an appropriate manner.

8. The programme is estimated to cost Rs. 43 66 lakhs as shown below :—

Abstract of Expenditure

Pay and allowances of gazetted officers	Rs. 6.02 lakhs
Pay and allowances of non-gazetted staff	Rs. 1.64 lakhs
Other items of expenditure	Rs. 36.00 lakhs
	Rs. 43.66 lakhs

II. PROGRAMME OF SCIENCE EDUCATION

The Third Plan lays high emphasis on the expansion and strengthening of science still further at the secondary stage. By the end of 1965-66 it is expected that all the secondary schools will be providing general science and nearly 47 per cent of them will be offering science of an elective standard. The completion of this programme will by itself provide a fairly sound foundation for the further expansion of science education in subsequent years. In order to make this expansion meaningful it will be necessary to introduce a number of supporting measures to strengthen science teaching. These will be on the following lines :

- (a) The existing science syllabi adopted in the various States will be reviewed and modified where necessary in order to integrate them successfully with the science syllabi at the earlier and later stages of education.
- (b) A programme of preparation of teachers' handbooks, students' manuals, textbooks and supplementary reading material in science will be undertaken.
- (c) The present shortage of science teachers will be made up by increasing the facilities for science education at the university stage.
- (d) Various types of inservice training in content and methodology will be organized in a suitable manner so that as many of the existing science teachers as possible are prepared adequately for their task.
- (e) Training will be given in the technique of handling laboratory apparatus.
- (f) Steps will also be taken to design, adapt and standardise science apparatus and get them manufactured in the country itself.
- (g) In order to co-ordinate, guide and direct the entire programme of science education and to organise programmes of research in science teaching as well as for training key teaching personnel, a central organization for science education will be set up.
- (h) A scheme of science talent search will be introduced with a view to identifying promising scientific talent at the secondary stage and providing opportunities for its development.
- (i) Science clubs, science fairs and science days will be utilized for spreading interest in science among young boys and girls.

1. Curriculum

The integrated approach fundamental to general science does not find full expression in some of the syllabuses. In order to achieve such integration it is necessary to make a study of the syllabuses in the different States as compared with the draft syllabus. It would also be desirable to extend the study to include science syllabuses in other countries so as to find out how our syllabuses compare with the standards maintained in these countries.

2. Teacher Preparation

(a) *Pre-Service* : In spite of the fact that general and elective sciences have been in force over the past 7 or 8 years, most of the training colleges have not yet introduced the method of teaching these subjects in their curriculum so that teachers continue to be inadequately prepared for the requirements of the new subject. Not only could they introduce the subject in their methodology courses but they could also effectively incorporate the integrated approach to the subject in their own methods of teaching. They could also take leadership in preparing worthwhile learning experiences in teaching the different units of the general science syllabus, and in preparing the teacher-trainees in the organization of co-curricular activities in science. The re-organization of the science teaching in the training colleges is an urgent need. It is proposed to pursue action in this matter actively during the Third Plan.

(b) *In-service Training* : During the Second Plan a large number of seminars, conferences and workshops at various levels were held for science teachers by the former Council, the Directorate and by the Extension Service Centres. During 1960-61 a series of science seminars were held in all the States and Territories so as to converge the thinking on the subject. It is necessary to step up this effort in the Third Plan and also to organize it in such a manner that it will reach the largest number of teachers in the shortest time possible. The Central Unit will, therefore, undertake the training of key personnel who would in turn take up the training of others at the state and regional levels. The services of the training colleges will also be fully mobilized in this matter.

3. Textbooks, Handbooks and Supplementary Material

At present there is an acute dearth of good textbooks, students' manuals and other reference material in science. It is, therefore, proposed to undertake a comprehensive programme of preparation of these books during the Third Plan in the following manner :

- (a) Textbooks for general science in elementary and secondary classes.
In addition four for the secondary stage in elective science,

- (b) Teachers' handbooks. Four series of 6 booklets each—24 booklets for the secondary stage and in addition booklets for the elementary stage.
- (c) Students' manuals. A series of three manuals in each of the 4 areas.
- (d) Supplementary reading material. A series of 5 booklets in each of the 4 areas.

In the preparation of textbooks, the services of experienced and highly competent science men drawn from the universities and schools will be utilised. The preparation of guide books and manuals will be done through workshops in which will be associated experienced secondary school teachers and training college lecturers. The manuscripts will have to be tried out before they are finalized.

In addition, guide lists of laboratory equipment, laboratory designs including furniture, lists of science books required for general and elective science, lists of audio-visual aids required for the subject etc., will be prepared for the guidance of the science teacher and the administrator.

4. Designing, Adaptation and Standardization of Laboratory Apparatus

The programme will involve investigations into what apparatus are used at present, what local material can be used, how the apparatus can be interrelated with teaching practices, what experiments are necessary and what equipment are required for these experiments and the designs of apparatus required.

5. Science Club Movement

During the Third Plan the science club programme will be expanded to the extent of establishing science clubs in 5 per cent of the secondary schools existing at the end of the Third Plan, namely 1000 secondary school science clubs, including those already in existence. This will mean the setting up of 600 new science clubs in the next five years. The State Governments will be requested to support the central effort by establishing additional science clubs so as to reach a target of at least 20 per cent of the secondary schools in their States.

As regards the Central Science Clubs, it is considered necessary to see that as many of the training colleges as possible establish such a club where the teachers under training will receive first hand experience in organising and conducting a science club. The programme of improvement of pre-service science teacher education gives a place of importance to the establishment of a workshop and a science club in every training college. Excluding the existing 38 central science clubs, it is proposed to

establish college science clubs in 125 more training colleges during the Third Plan. This will cover nearly 84 per cent of the training colleges. As part of the programme, the following activities will be organized :

- (a) Workshops will be conducted for the sponsors of school and central science clubs
- (b) A monthly science club newsletter will be brought out.
- (c) Literature relating to science clubs such as sponsors' handbooks, bibliography on science clubs, lists of science projects, resources of science material and equipment will be brought out.
- (d) A central science club-cum-workshop will be developed at Delhi where science projects and activities will be worked out.

6. Science Days and Science Fairs

The All-India Council for Secondary Education at its second meeting recommended that a national science day and science week accompanied by science fairs should be organized on the 1st of December and succeeding days. Madhya Pradesh has already organized such a day on December 1, 1960.

The programme will be channelized through the State Education Departments. In the first stages the organization of science fairs will be limited to the Extension Centres and their associated schools. In addition, state-level fairs and day will also be organized in selected States. In later stages the programme will be extended until it includes all the States and schools, the organization centres being limited to 50 per cent of the training colleges. This programme will ultimately culminate in a national science meet where the best exhibits will be displayed and given due recognition.

7. Research in Science

This will include :

- (a) research into the development of syllabus in science ;
- (b) research into the methodology of teaching typical science units ;
- (c) research into laboratory designs, equipment and teaching aids in science ;
- (d) research into various types of testing science ability and development of selection procedures ;
- (e) studies into science teacher requirement for the secondary school in relation to supply ;
- (f) studies regarding the preparation of science teachers at the pre-service level ;

- (g) cost of laboratory and equipment for general science and elective science.
- (h) studies of science teaching in other countries ; and
- (i) experimentation in various aspects of science education in the secondary school through field agencies such as training colleges, secondary schools, science associations etc

8. Assistance to Science Associations

It is proposed to encourage with financial assistance, the setting up of science associations at the state-level to serve as dynamic agencies through which science education can reach out to a larger number of science teachers.

Estimates of Cost

This scheme is estimated to cost Rs. 46 335 lakhs as shown in the abstract below :

	Rupees in lakhs
Staff.	7.00
Equipment for science laboratory.	1 00
Science kits.	0.40
Purchase of reference material.	0.27
Field programmes.	3.43
Central (college) Science Clubs.	2.50
School Science Clubs.	7 20
Central Science Club-cum-Workshop.	0.50
Science day and Science fairs.	5.03
Handbooks, Textbooks and students' manuals.	14 93
Other publications.	0.45
Designing and standardization of equipment.	1.00
Assistance to Science Associations.	0.50
Advisory Committees.	0 25
Research programme at the Centre.	0.40
Research and experimentation in the field.	1.375
Total	46.335

III ESTABLISHMENT OF REGIONAL TRAINING COLLEGES

One of the important recommendations made by the Secondary Education Commission (1952-53) and accepted for implementation by the Government of India was the introduction of multipurpose education in the country and there are approximately 2000 schools of the multipurpose pattern in the country at present. A survey of these institutions has revealed that they suffer from lack of suitably trained teachers and this has hindered the effective development of multipurpose education in the country. It is accordingly proposed to establish four colleges for training teachers of multipurpose schools. The scheme has been drawn up in consultation with the State Governments and the colleges would be located in four different regions each catering to the requirements of the States in its region. It has been decided to locate these colleges at Bhubaneswar, Mysore, and Bhopal respectively for the Eastern, the Southern and the Western Regions. Action for the selection of site for the fourth College to serve the Northern Region, is in progress. The State Governments would provide the land for the purpose free of cost and the rest of the expenditure in its entirety will be borne by the Government of India (now the Council of Educational Research and Training)

Each of these colleges will provide teacher training programme in the following branches of education :

- (1) Technology
- (2) Agriculture
- (3) Commerce
- (4) Home Science/Fine Arts
- (5) Crafts/Industrial Arts
- (6) Science

They will also provide courses in School Administration and in Educational and Vocational Guidance in so far as they relate to multipurpose school organisation. The objects of these institutions are :

- (i) To prepare existing teachers of the practical subjects of the multipurpose school in handling efficiently their respective subject fields.
- (ii) To prepare new graduates in the various subjects to become trained teachers in the multipurpose schools.
- (iii) To provide various in-service programmes for the teachers of the multipurpose schools in the region in which they are located.
- (iv) To undertake pilot studies and research projects in the curriculum and teacher preparation programme of the multipurpose school.

The distribution of students in each college would be as follows :

Technology	25	
Agriculture	25	
Commerce	25	
Home Science/Fine Arts	25	
Industrial Arts	25	
Science	75	[General Science 30 Physics 15 Chemistry 15 Biology 15]
	<hr/>	
	200	

In addition, each college will provide in-service programmes of short duration for about 100 teachers.

Each college will have attached to it a school to serve as practising and demonstration school with an average intake of 600 students.

The major items of expenditure for each college are estimated to be as follows :

	Rupees in Lakhs
Cost of college, school and hostel buildings.	31.92
Furniture.	6.38
Equipment.	10.17
Salary of staff.	12.96
Scholarships.	5.00
Contingencies.	4.90
Miscellaneous. (transport, land etc.)	5.20
	<hr/>
Total	76.83
	or say 308 lakhs for all the four colleges.

Common items

Development of site including cost of land where necessary.	22.00
Fencings.	8.00
Pilot Projects.	9.00
Examinations.	5.00
Local cost of U. S. Technicians.	3.00
Leave salary for persons deputed for training to U.S.A.	5.00
	<hr/>
Total	52.00
Grand Total	360.00

The estimates are under further examination in consultation with the Government of India and might be reduced by a few lakhs. The courses are expected to commence from the academic year 1963-64. The scheme will be implemented in cooperation with the T.C.M. who have agreed to provide equipment and teachers and training facilities for our personnel in the United States,

IV. EXTENSION SERVICES IN TRAINING INSTITUTIONS FOR PRIMARY TEACHERS

During the Third Plan the emphasis has been laid on providing free, compulsory and universal education for the age group of 6 to 11 and to develop a programme of Basic education in the context of this decision. It is also desired to bring about an all-sided educational development for the age group 6 to 14, and to make an intensive effort by studying the problems involved in a scientific manner so that the necessary training and experience available in such intensive studies may prove useful in the fourth and later Plans for the development of elementary education. With this aim in view, it has been decided to develop a programme of extension services in training institutions for primary teachers. The work of organizing the programme has been entrusted to the National Institute of Basic Education.

A similar programme is already in implementation at the secondary level where 54 Extension Services Centres have been established in selected post-graduate teacher training institutions with assistance from the Ford Foundation and T.C.M and have been in function for varying periods in the Second Plan. Each Centre serves about 50 to 100 secondary schools in its neighbourhood and carries out a comprehensive programme of in-service training through seminars, conferences and workshops, audio-visual, library and advisory services and publications. The experience of the past five years has shown that these Centres constitute a most dynamic agency for carrying new educational ideas and practices to the secondary schools and also for stimulating the pre-service training programme in the colleges to bring it closer to the actual needs of the secondary schools. The project has, in fact, been so successful that it is proposed to extend it to more training colleges in the Third Plan.

Organising Extension Services

- (i) The project may be described as the Extension Services Project for the primary teacher training institutions with the main object of helping the staff of the training institutions to initiate, plan and organize work for the in-service training of teachers in the areas in which they are located.
- (ii) As has been indicated above the major function of this programme is to work with the staff of the training institutions in the initiation, planning and development of field activities. These might be generally classified as follows :

- (a) To encourage primary schools in the surrounding areas to improve themselves (*viz.* the effectiveness of teacher-school community relations, details of the syllabus and their implementation etc.) through the provision of consultative resources and grants. This major purpose makes it clear that general orientation of the project should emphasise the experimental and consultative approach rather than the dogmatic and directive approach. The statement of this purpose also makes it clear that most of the actual consultative services are to be provided by the staff of the training institutions. The major responsibility of the coordinator is to *coordinate* and provide necessary guidance and grants.
- (b) To facilitate the vitalisation of the teacher training curriculum by means of closer association with schools.

One of the serious criticisms made of teacher training institutions is the isolation of the institution from the real situations in which the schools function and in which the trainees will be called upon to work. One of the indirect but nevertheless important functions of offices being established would be to facilitate the more intimate association of members of the training school staff with the purposes and activities of primary schools.

- (c) To coordinate field studies and research designed to determine, analyse the reasons for, and improve the quality of the primary school programmes.

These field studies might be of two general types. Group one would be the continuous kind of study that is necessary in order to provide consultative services. The second type might represent studies that are initiated by NIBE but require the close collaboration of field agents for the accumulation of data. Problems of study may well refer to wastage and stagnation, incentives for free and compulsory education, improvement on Basic education lines, etc.

- (iii) *Implementation of purposes* . These three major purposes of improvement of schools, improvement of teacher-training programmes, encouragement and coordination of field and research—will direct the activity of the ESPS. Their main work will consist of helping teachers to develop a programme of improvement in their schools. For this purpose, the Extension Services will take up a group of schools as a unit and for each unit the concerned training institutions will prepare a developmental programme for a specified period of time. This developmental programme will be carried out in various ways, some of which are suggested below :
- (a) *In-Service Training* : Through seminars and refresher courses for headmasters and teachers of the primary schools and for community leaders. This will pertain to school subjects, teaching methods, general information, production of simple aids and equipment, craft work and school-community relations

- (b) *Dissemination and Discussions* : Through publication of guide-books etc., lectures and consultation by experts, demonstrations, workshops and conferences, exhibitions, etc.
- (c) *Visits and Consultations* : By members of the staff of the training institutions and ESP inter-school visits by teachers and similar activities.

These activities are only suggestive.

- (d) *Evaluation of ESPs* : The evaluation of the various projects would be continuous and designed to determine the degree to which each Extension Service Project fulfils its functions.
- (e) *Relation of ESP. to NIBE* : The relationship of the Extension Services Project to the NIBE will be somewhat similar to the relationship that exists at present between the Extension Services Centres and the DEPSE, of course suitably modified and adapted to the special requirements of the primary school teacher whom it is expected to serve. The Directorate at present maintains an advisory and supervisory control over the Extension Centres, guides them in organising their programmes from year to year, coordinates their activities with the needs of the secondary school as well as with the larger programmes in secondary education initiated by the Directorate and carries out periodic assessments of the work of the Centres. Similarly, the NIBE will have to shoulder responsibility for the initiation, development and coordination of the functions of the Extension Departments. It will also have to provide periodic training to the personnel of these projects and also prepare 'package' material which may be used at conferences, demonstrations, workshops etc. These materials would, it is expected, provide the coordinators with necessary instruments for implementing in-service programmes.

The estimated cost for each ESP is worked out below :

Recurring :	Rs.
(a) Staff.	4,800
(b) Grant-in-aid.	5,000
(c) T.A. and Honorarium.	7,500
(d) Organisation of in-service programmes, seminars, workshops, etc , @ Rs. 2/- per day for 200 teachers on an average of 10 days in a year.	4,000
(e) Exhibition and Audio-Visual Services.	500
(f) Contingencies.	2,000
	<hr/>
Total Recurring	17,050
<i>i.e.</i>	17,000
Non-Recurring :	10,000

<i>Total expenditure for the Plan period</i>	Rupees in Lakhs
(a) Non-recurring expenditure for 60 institutions @ Rs. 10,000 each.	6.00
(b) Recurring expenditure @ Rs. 17,000.	28.05
	<hr/>
	Total 34.05
 <i>Budget estimates for the Central Unit at NIBE.</i>	
D.A.	60,980
T.A.	22,000
Training Programmes.	1,25,000
Contingencies.	67,500
	<hr/>
	Total 2,75,000
	<hr/>
Total estimated cost of programme	Rs. 36,80,000

V. EXTENSION SERVICES PROJECT IN POST GRADUATE TRAINING COLLEGES

During the last two Plans, Extension Services Centres were set up in 54 selected training colleges in the different States with the specific purpose of carrying out an organised programme of in-service activities for the secondary school teachers in their jurisdiction. During the years during which the Centres have been functioning, they have influenced considerably the teaching practices in the associated schools and helped to introduce the secondary school teacher to the new educational practices and concepts underlying the re-organised secondary school curriculum. At present the Extension Centres cater to the needs of about 8,000 secondary schools in the country in extensive and intensive work. The project has had still another valuable effect, namely, that of bringing the training colleges in closer and more live contact with the problems and needs of the secondary school. The results produced by the Extension Project have been found so universally useful and valuable, that it is now generally recognised that extension work should constitute an integral part of every training college. This is perhaps the only way by which teacher education programme at the pre-service level can be saved from getting out of step with current educational requirements.

The extension idea is, however, still new to the country and several aspects of the programme remain to be strengthened and stabilised. It is also necessary to extend the programme in order to achieve:

- (a) extension of in-service activities to as many training colleges as possible.
- (b) carry in-service assistance to every secondary school in the country.

This is proposed to be done in three ways:

1. Continue the existing 54 Centres and strengthen their activities in such a way that they develop into model and efficient departments.
2. Extend the scheme to 25 new Centres distributed in such a manner as to remove existing imbalances in the location of centres, so that schools and areas not served so far by any Extension Centre are brought into the ambit of this assistance.
3. Establish Extension Units in about 72 training Colleges. This part of the scheme is designed to spread extension activity to a larger

number of training colleges, but organised on a less extensive scale than in the case of full-fledged Extension Centres. This measure seeks to achieve two results :

- (a) To involve more training colleges in extension work.
- (b) To give more individual attention to schools which are too far away from other Extension Centres. Through this three-phased programme 151 out of about 200 or 75% of the training colleges will be associated in extension work by the end of the Third Plan.

Coverage

Each Extension Centre will be covering about 150 to 160 schools in extensive and intensive work while each Extension Unit will serve 40 to 50 schools. The 79 Extension Centres together with the 72 Extension Units are expected to cover almost all the secondary schools in the country.

Estimates of cost

The scheme is estimated to cost Rs. 95.85 lakhs during the Third Five Year Plan as shown in the abstract below :

Maintenance of existing 54 Centres	Rs. 54.00 lakhs
Opening of 25 new Centres	Rs. 29.25 lakhs
Establishing 72 Extension Units	Rs. 12.60 lakhs
	Rs. 95.85 lakhs.

VI. EXAMINATION REFORM—CENTRAL UNIT

The programme of examination reform at the secondary level has been in implementation since January, 1958, when an Evaluation Unit was set up in the Directorate staffed with officers who had been specially trained for the purpose. This programme seeks to improve the existing system of examinations in a period of 10 years, working in stages to achieve certain specific goals, namely .

- (i) The introduction of objective-based questions in the external examination in a phased manner and for this purpose define specific objectives of learning in each subject.
- (ii) Bringing about a corresponding change in the internal examination.
- (iii) Giving weightage to internal assessment.
- (iv) Bringing about necessary improvement in methods of teaching so that the objectives of teaching each subject are realized.
- (v) Improving the curriculum in order to align it with the objectives of teaching.

Work Achieved in the First Phase

During the past three years the Examination Unit has accomplished the following part of this programme :

- (i) Brought out test pools on two objectives in 4 subjects of the core and 4 subjects of the elective curriculum.
- (ii) Oriented over 7,000 secondary school teachers to the concept and technique of evaluation.
- (iii) Worked with about 50 training colleges in intensive and extensive programmes in order to introduce the lecturers and pupil teachers to the need and technique of the new reform.
- (iv) Brought out relevant literature on the subject and distributed them to Secondary School Boards, State Departments of Education, secondary schools, Training Colleges and other educationists.
- (v) Organised training courses for State Evaluation personnel so as to provide each State with a minimum unit of trained persons for future implementation of the programme at the State level.
- (vi) Made studies on internal assessment as practised by selected Boards.

- (vii) Conducted seminars on research in evaluation so as to form the basis for further research work in the subject.

Targets in the Third Plan

The work that has just been accomplished completes what may be called the first phase of the programme and has prepared the ground for the introduction of the more intensive aspects of the reform in subsequent years. During the Third Five Year Plan it is proposed to push the reform forward over its next phase in such a manner that the major part of the reform would have been covered. The work that lies ahead in the next 5 years includes :

- (i) Specifying more objectives in each of the subjects of the secondary school curriculum.
- (ii) Preparing illustrative test material for the guidance of State Evaluation Units and Boards.
- (iii) Analysing question papers, answer scripts and syllabi of the different States in order to guide the State Boards and State Education Departments in framing question papers and in specifying objectives more precisely while drawing up syllabuses.
- (iv) Carrying out intensive studies in internal assessment.
- (v) Involving the remaining 150 training colleges in the programme so that they play their full role in introducing the new evaluation approach in their own work as well as in preparing learning experiences and in orienting secondary school teachers.
- (vi) Giving guidance to Boards of Secondary Education in introducing the new type of questions in the external examination in gradual stages.
- (vii) Initiating research in evaluation on a large-scale through training colleges, secondary schools and State Evaluation Units.
- (viii) Training key personnel in evaluation required for State Evaluation Units, training colleges and State Departments.
- (ix) Providing consultative services to State Boards, State Evaluation Units, and State Departments in implementing the reform.
- (x) Producing literature on evaluation and related aspects.
- (xi) Ensuring co-ordination of work at all levels.
- (xii) Undertaking study of the syllabuses in the different subjects in order to bring about modifications and revisions based on the objectives of teaching and testing.

Need for Expansion of the Central Examination Unit

The successful implementation of this programme as detailed above requires that the Central Examination Unit should be strengthened and enlarged suitably. This augmentation falls under two aspects:

- (i) The strengthening of the staff required for the field services and training.
- (ii) The setting up of a Psychometric Unit which will assist the Unit in trying out tests, analysis, adaptations, standardisation of tests, research studies etc.

I. Strengthening of the Central Examination Unit

Experience of the past few years has shown that State Boards, Training Colleges and State Education Departments require continuous and constant guidance in understanding and implementing the various phases of the reform. The programme envisaged in the Third Plan call for such a continuous guidance service in an even more accentuated manner. It is, therefore, proposed to deal with the country in 4 regions so far as this programme is concerned, allotting a team of 6 evaluation officers to each region, each team consisting of subject specialists somewhat of the following composition:

Languages	2
Sciences	2
Mathematics	1
Social Studies	1

II. Psychometric Unit

The work of the Examination Unit has reached a stage when its further studies require the assistance of a body of psychometricians and statisticians. This Psychometric Unit will help the Examination Unit in its programmes of research, training and development of tests. The major functions of the Unit will be as follows:

- (i) To undertake programmes related to the standardisation of achievement tests, analysis of question papers, study of problems related to scrutiny, scaling of internal and external examinations etc.
- (ii) To undertake and provide technical assistance in the construction of intelligence, personality and aptitude tests, interest inventories and other psychological tests, and their standardisation.
- (iii) To give technical advice and assistance in designing research and collecting data for different studies.
- (iv) To analyse, tabulate and summarise statistical data pertaining to research studies undertaken by the Examination Unit as well as other agencies,

- (v) To undertake problems of research related to the measurement and evaluation such as those connected with the prediction and selection, validation and other aspects of test construction
- (vi) To assist in assessing the adequacy and significance of statistical aspects involved in research studies received from other sources.
- (vii) To provide research and training services on subjects related to psychometrics and statistics.
- (viii) To give guidance wherever necessary on studies having a direct bearing on psychological measurement, educational statistics and other statistical aspects of research work.

Estimate of Cost

The programme detailed above is estimated to cost Rs. 23.88 lakhs as shown in the abstract below :

I. Central Examination Unit :

	Rupees in lakhs
Pay and allowances of officers	6.55
Pay and allowances of establishment	3.23
Other expenditure on programmes, contingencies, furniture, equipment etc.	7.63
Total	17.51

II. Psychometric Unit

Pay and allowances of officers	3.70
Pay and allowances of establishment	1.41
Library, equipment and contingencies	1.26
Total	6.37

Total for expansion of Examination Unit	23.88
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VII. PUBLICATION OF YEAR BOOKS ON EDUCATION

The Ministry of Education had launched a scheme of Publishing Year Books of Education, broadly planned on the lines of the Year Books of Education in U.K. published by Evan Brothers Ltd. London. Each book will deal with an important educational topic. This scheme has now been transferred to the Council. The subjects for the first three Year Books are: (1) Review of Education in India (1947-61); (2) Primary Education in India; and (3) Educational Research in India. This scheme has been included in the Third Five Year Plan with an allocation of Rs. 50,000 at the rate of Rs. 10,000 per year. The scheme and the allocation has been approved by the Ministry of Finance.

Work on the First Year Book is over and the Book has been published. The preliminary work on the Second Year Book has also started. An Editorial Board has been constituted under the chairmanship of the Education Secretary. The Board has held one meeting and finalized the outline of the Second Year Book. Six Study Groups have been set up and invitations have been issued to a number of persons to write different chapters for the Year Book. A few draft chapters have been received in the Ministry. It is hoped that it would be possible to publish it on August, 15, 1962.

The subject selected for the Third Year Book is Educational Research in India. The work on this Year Book is now to be expedited. Steps are being taken to constitute an editorial board of about 12 persons. The book is proposed to be published in 1963.

The topic for the Fourth Year Book has also been selected: Investment on Education. The time to select the subject for the Fifth Year Book would be some time in June, 1962, when the work on the Second Year Book would have reached a final stage.

It is proposed to publish one Year Book every year. Since it is not possible to compile a Year Book in one year, work is started simultaneously on three Year Books to keep to the schedule of publishing a Year Book in August every year.

Each Year Book will have an editorial board and a whole-time editor. The board and the editor will be different for each year book.

The editor would prepare a plan of the Year Book which will be approved by the editorial board. He would also select contributors on the lines approved by the editorial board.

Printing and publication will be looked after by a small unit under an Associate Editor, with ancillary staff.

Estimated Expenditure per Annum

	Rs.
Staff salaries	57,000
Remuneration to contributors	10,000
Total	<u>67,000</u>

Cost of printing is expected to be offset by recoveries from sales.

VIII. PUBLICATION OF EDUCATIONAL RESEARCH CONDUCTED IN INDIAN UNIVERSITIES

At present, a large number of educational studies—some of which are very good—are conducted in Indian Universities in connection with M.Ed. and Ph. D. degrees. Students desiring to appear for the Ph. D. degree are expected to submit a thesis of a very high quality which has to be a contribution to knowledge. Students can take the M. Ed. degree in two ways. In some universities, they can submit a thesis of a fairly high order in full satisfaction of the requirements of the degree. In others, they are required to submit a dissertation in partial satisfaction of the requirements for the degree, the dissertation being equal to one or two papers. The estimate now is that, till the end of December 1961, there would be about 75 Ph. D. theses, 110 M. Ed theses, and 2700 M.Ed. dissertations approved by the Indian Universities.

2. Since very little of this research has been published, the Ministry of Education undertook a scheme for its publication last year and included it in the Third Five Year Plan. This has now been transferred to the National Council of Educational Research and Training and the total financial allocation for this scheme is Rs. 50,000.

3. The scheme is divided into two parts. The object of the first part is to publish a brief account of the educational studies carried out so far, i.e., till the 31st of December 1961.

For this purpose, information has been collected from all the Indian Universities regarding the Ph.D. and M.Ed. theses and dissertations in education approved by them. This information has been received for the period ending June 1960 and further information for the period ending 31st December 1961 is being collected and is expected to be in our hands by the end of January 1961.

A volume has been prepared giving a complete list of theses and dissertations in education approved by Indian Universities till June 1960. The list is arranged according to universities and gives the names of the student, the subject of the investigation, the degree for which it was approved and the year in which it was approved. Indices have also been prepared according to authors and also according to subjects.

The second volume in the series will cover the period from June 1960 to 31 December 1961.

4. It has also been decided to prepare brief synopsis of these investigations. The average length of the synopsis of an M Ed. dissertation would be 400 to 500 words ; that of an M Ed. thesis would be 1,000 words and that of a Ph.D. thesis would be about 2,000 words. About one-third of this work has already been completed and it is expected to complete the remainder during the next six to nine months. When fully published, it may require four or five volumes and these are proposed to be brought out before the end of 1962.

5. The second part of the scheme relates to the future. Universities were requested through the University Grants Commission, to amend their rules in such a way that every student who submits a thesis or a dissertation for the M.Ed. or Ph. degree, will also submit along with it a brief synopsis of his work. This synopsis also will be approved by the examiners of the thesis. If the thesis is accepted and the degree given, copy of the synopsis will be forwarded by the University to the Ministry of Education (now to the National Council of Educational Research and Training). This procedure is being accepted by most of the Universities. It is, therefore, hoped that with effect from the year 1962, brief synopsis of theses or dissertations in education approved by Indian Universities would be automatically available to the National Council of Educational Research and Training. It is, therefore, proposed to bring out the volume containing all these summaries every year.

6. It is also proposed that, in case of outstanding work, longer synopsis of thesis would be prepared and published separately in the series 'Educational Studies and Investigations'.

7. The Ministry of Education had also adopted a scheme under which grants-in-aid would be given to students for the publication of Ph. D. thesis of approved merit. The amount of grant-in-aid would be 50 per cent of the cost of production or Rs. 2,000 whichever is less. The total financial allocation for this scheme is Rs. 25,000. This scheme also has been transferred to the National Council of Educational Research and Training.