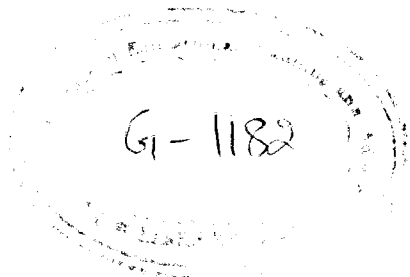




Proceedings of the Conference of State Education Secretaries and Directors of Public Instruction/Education

held in New Delhi on June 15 & 16, 1961





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A Conference of State Education Secretaries and Directors of Public Instruction/Education was held on June 15 and 16, 1961 in Vigyan Bhavan, New Delhi. The following were present :

Ministry of Education

SHRI	P. N. KIRPAL	(Secretary) <i>Chairman</i>
SHRI	R. P. NAIK	(Joint Secretary)
SHRI	R. R. SINGH	(Joint Educational Adviser)
SHRI	R. K. KAPUR	(Joint Educational Adviser)
SHRI	J. P. NAIK	(Adviser, Primary Education)
SHRI	A. R. DESHPANDE	(Adviser, Social Education)
DR.	P. D. SHUKLA	(Deputy Educational Adviser)
SHRI	NAUHRIA RAM	(Deputy Educational Adviser)
SMT.	MURIEL WASI	(Deputy Educational Adviser)
SHRI	K. R. RAMACHANDARN	(Deputy Secretary)
SHRI	B. N. MALHAN	(Deputy Secretary)
SHRI	K. D. BHARGAVA	(Deputy Secretary)
SHRI	P. N. NATU	(Deputy Secretary)
SHRI	T. K. N. MENON	(Director, Directorate of Extension Programmes for Secondary Education)
SHRI	SOHAN SINGH	(Director, National Fundamental Education Centre)
SHRI	J. K. SHUKLA	(Director, National Institute of Basic Education)
DR.	BISWA NATH PRASAD	(Director, Central Hindi Directorate)
SHRI	GOPAL SHARMA	(Special Officer) (Hindi)
SHRI	JIWAN NAIK	(Special Officer) (Hindi)
SHRI	R. S. CHITKARA	(Assistant Educational Adviser)

Ministry of Finance

SHRI	K. SACHIDANANDAM	(Deputy Secretary)
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Ministry of Community Development & Co-operation

SHRI	ABID HUSSAIN	(Deputy Secretary)
SHRI	M. C. NANAVATTY	(Director, Social Education)

Ministry of Health

LT. COL. V. SRINIVASAN	(Director-General, Health Services)
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Planning Commission

DR.	A. N. KHOSLA	(Member, Education)
SHRI	TARLOK SINGH	(Additional Secretary)
DR.	D. K. MALHOTRA	(Joint Secretary)
SHRI	K. L. JOSHI	(Chief, Education)
SHRI	D. P. NAYAR	(Director, Education)
SHRI	S. N. SARAF	(Assistant Chief, Education)

University Grants Commission

DR.	D. S. KOTHARI	(Chairman)
PROF.	S. MATHAI	(Secretary)
SHRI	R. K. CHHABRA	(Administrative Officer)

All India Council of Sports

SHRI	YADAVENDRA SINGH	Maharaja of Patiala
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State Representatives

SHRI	J. P. L. GWYNN	(Education Secretary, Andhra Pradesh)
DR.	N. RAM LAL	(Director of Public Instruction, Andhra Pradesh)
SHRI	L. SHARMA	(Education Secretary, Assam)
SHRI	S. C. RAJKHOWA	(Director of Public Instruction, Assam)
SHRI	S. SAHAY	(Education Secretary, Bihar)
SHRI	S. M. AHMED	(Director of Public Instruction, Bihar)
SHRI	R. N. ROY	(Deputy Director of Public Instruction, Bihar)
SHRI	M. D. RAJPAL	(Director of Education, Gujarat)
SHRI	C. H. CHAMPENARIA	(Deputy Secretary, Gujarat)
SHRI	P. K. ABDULLA	(Education Secretary, Kerala)
SHRI	N. CHANDRABHANU	(Director of Public Instruction, Kerala)
SHRI	L. C. GUPTA	(Education Secretary, Madhya Pradesh)
SHRI	S. P. VERMA	(Director of Public Instruction, Madhya Pradesh)
SHRI	K. SRINIVASAN	(Education Secretary, Madras)
SHRI	N. D. SUNDARAVADIVELU	(Director of Public Instruction, Madras)
SHRI	S. GUHAN	(Deputy Secretary, Madras)
SHRI	P. J. CHINMULGUND	(Education Secretary, Maharashtra)
DR.	A. G. PAWAR	(Director of Education, Maharashtra)
SHRI	MOHAMED RAHMATHULLA	(Education Secretary, Mysore)
SHRI	A. C. DEVE GOWDA	(Director of Public Instruction, Mysore)
SHRI	PRÓMOD SINGH	(Education Secretary, Orissa)
PROF.	B. C. DAS	(Director of Public Instruction, Orissa)

State Representatives—(Contd.)

SHRI	N. K. MUKERJI	(Education Commissioner, Punjab)
MISS	SERLA KHANNA	(Director of Public Instruction, Punjab)
SHRI	BALWANT SINGH	(Deputy Director of Public Instruction Punjab)
SHRI	S. S. SAXENA	(Director, Collegiate Education Rajasthan)
SHRI	J. N. SINGH MEHTA	(Director, School Education, Rajasthan)
SHRI	L. N. SAKLANI	(Deputy Secretary, Uttar Pradesh)
DR.	D. M. SEN	(Education Secretary, West Bengal)
SHRI	B. D. BHATT	(Director of Education, Delhi)
SHRI	K. L. SETHI	(Director of Education, Himachal Pradesh)
SHRI	H. MADAN GOPAL SHARMA	(Assistant Secretary, Manipur)
SHRI	G. N. CHATTERJI	(Director of Education, Tripura).

2. Inaugurating the Conference, Dr. K. L. Shrimali, Education Minister, Government of India, said :

“It gives me great pleasure to welcome you to this Conference. We should not have troubled you at this time of the year, but since we are entering the Third Five Year Plan, it was thought that a meeting at this juncture might be useful. During the last nearly twenty months, we have been busy in formulating the Plan. The stage of preparation of the Plan now passes into its execution. This is a moment of great significance for us all. So many hopes and expectations are bound up with it. The Plan is both a test and a challenge. It is, therefore, appropriate that all those who have to carry the responsibility for implementing the Plan of educational development should meet and take counsel together so that we may be better prepared to make our contribution to the realisation of the hopes embodied in the Plan.

“At one stage the prospects of our Plan for Education seemed to be gloomy but the Prime Minister with his farsightedness and vision threw his weight in favour of our Plan and we have now a firm assurance that within available resources education will get a high priority and there will be no reduction in the allocations already made in the Plan. About a fortnight ago, the National Development Council considered and gave its approval to the Third Five Year Plan. The total provision for General Education comes to Rs. 410·37 crores, out of which an outlay of Rs. 72 crores has been fixed for the Central schemes. I am heartened by the fact, as you would be, that as compared to the outlay for the Second Five Year Plan, there is an increase of nearly 87 per cent. In the educational schemes, elementary education which had not received a considerate treatment in the First and Second Five Year Plans has now been accorded the highest priority and our dream

of free and compulsory education is at last within the reach of realisation. Let there be no misapprehension in the minds of people that we have gone back on the constitutional directive. Free and compulsory education for the age group 6-14 still remains our goal and after we have taken this big step forward in the Third Five Year Plan, it would be our endeavour in the Fourth and Fifth Plans not only to fulfil the constitutional directive but even to go beyond it to catch up with the more advanced countries. There is an invariable correlation between the level of educational development and the pace of economic growth. We cannot, therefore, keep education on the waiting line too long without grave injury to the objectives of planning for a better and more abundant life.

“When one looks at a plan in the context of the total needs and the resources one is conscious only of the wide gap between the two. That is precisely the reason for planning, to narrow down the gap progressively. But if we look at a plan from the point of view of the effort that it calls for in order that the resources are put to most effective use, we become aware more vividly of the true magnitude of the plan. While formulating the Third Five Year Plan, we were viewing the question of resources from the point of view of total needs; after it has been made final, we have to look at it in the light of the effort it demands of us.

“I should like you to remember that few countries in the world democratically constituted have achieved the order of development which is envisaged in our Plan within a comparable time and within the limitations of an undeveloped economy. The stage of self-sustaining growth was reached by the advanced countries of today after a century long period of preparation. We have not that much time at our disposal. We cannot afford to let time take its course : we have to force the pace if we are to reach our goal. It is an exacting task that the Third Plan of educational development has laid down for us.

“As you are aware, free and universal primary education has to be ensured to the nation’s children by the end of the Plan. It means opening of 78,000 new schools, increasing the enrolment by additional 146 lakh children, and preparing 3 lakh 50 thousand more teachers. These broad figures do not accurately convey the measure of the disparities that exist as between one State and another or between one section of the population and another. In some States, educational facilities cover hardly 50 per cent of the children. There is also a marked disparity between the girls’ and the boys’ education. The Third Plan envisages an overall enrolment level of 76 per cent at primary stage, which, in detail, would mean universal enrolment in nearly two-thirds of the country and more than 50 per cent in the rest. I am convinced that this target cannot only be achieved but can also be exceeded by a

substantial margin. We have only to see the outlay for the expansion of primary education provided in the Second Plan and additional enrolment actually achieved and compare it with the outlay provided in the Third Plan to find in these figures the basis for the belief that by the end of the Third Plan the national target can be exceeded. I should like you to raise your eyes to this higher target. The effort that you put forth in raising the enrolment of girls will be of crucial importance.

“At the secondary stage, enrolment is likely to increase by 22 lakhs by the end of the Third Plan and nearly 15 per cent of the children in the age group will be in secondary schools. Secondary education is of decisive importance in the economy of a developing country. It has a determining qualitative influence reaching out into all important sectors. Much of the pattern of development of secondary education during the last ten years has been dictated by the sheer compulsion of rapidly growing numbers. In the Third Plan a concerted effort has to be made to ensure that qualitative improvement keeps pace with expansion. Secondary education in the country is rapidly ceasing to be a preserve of the privileged. The growing numbers represent a greater variety and range of ability, aptitudes and needs. The qualitative improvements have therefore to meet the new pattern of needs. The schemes in the Third Plan for diversification of courses, science education, examination reform and development of higher secondary pattern have to be viewed in the light of these new emerging needs.

“In higher education, the need for maintaining and raising the standards is of very high priority. A measure of expansion is inevitable and necessary, but it must not be made at the cost of quality. A number of new universities have been projected in the State Plans. We hope that the need for each new University will be judged objectively and the advice of the University Grants Commission will be fully availed of.

“It is not my intention to review the schemes for educational development in the Third Plan in the various sectors. You are well aware of these. I only wish to draw your attention to the magnitude of the organisational and educational effort that is needed on our part. How good a plan is depends entirely on how effectively it is implemented and implementation in turn depends on the spirit in which we approach the task.

“The scope, variety and range of the Governments’ responsibilities have grown enormously, and every forward step in social and economic planning adds to them. This has put the administrative machinery under a heavy strain. If this machinery has to respond adequately to the new tasks it is called upon to perform, it has to be equipped and, where necessary, redesigned for the purpose. The leisurely procedures

suited to a small organisation with a limited range of activities cannot work satisfactorily where the scale of activities is very much larger and time factor is of crucial importance. In the Second Plan the implementation was, by and large, fairly satisfactory, but still there was a shortfall of Rs. 14 crores. If we measure the achievement not in financial figures but in terms of the time-lag between the commencement of a scheme and the benefits that accrued from it, the gap between the target and the actual achievement becomes wider. Our complaint about insufficient allocation of resources for education would be rendered somewhat unreal if we are unable to utilise effectively even what has been allotted or allow these funds to be diverted for other development purposes. On a detailed analysis, it would be found that much of the shortfall in effective utilisation was due to procedural delays. May I remind you that procedures are designed to facilitate orderly and expeditious movement of work and are not permanent blocks which have either to be circumvented or broken.

“If the targets laid down in the Third Five Year Plan are to be fulfilled, it is clear that this will demand on your part a tremendous organisational effort. The increasing size and complexity of school organisation will necessarily demand a high degree of efficiency and co-ordination. It is the duty of the administrator to ensure that our limited resources yield maximum results. At the same time we should not allow efficiency in administration to do violence to democratic values. The line and staff pattern of administrative organisation with its hierarchy of officers—Secretaries, Deputy Secretaries, Directors, Deputy Directors, etc.,—is probably inevitable but if proper guidance and wise leadership is provided, friendship and warm human relationship may develop between the administrator and his subordinates. If the administrator shows sincerity, disinterested loyalty and a sense of mission for the realisation of ideals, he will naturally inspire and influence his subordinates to carry out the task set before them. When all persons in the hierarchy are inspired by a common cause and are loyal to the organisation and its purpose, efficiency would be attained without the loss of human values.

“The educational administrator will do well to remember that in educational organisations it is not always possible to measure the results. Although all administrative decisions are made on the basis of their efficacy to achieve certain ends, it is often impossible to determine what has been accomplished. Some of the results of administrative acts in education can be accurately measured, but many cannot as yet be expressed in measurable terms. If the educational administrator bears this fact in mind he would remove the distrust which often the academicians and creative people—teachers, scholars and artists—have for bureaucracy. There are some aspects of the educational function of organisations which would suffer little or none by conforming to ad-

ministrative demands, and may indeed be facilitated by them whereas there are other aspects which cannot be put into a straight jacket and must be allowed greater scope for originality, imagination and creativity. If the administrator is to get the co-operation of academicians and creative people, he will have to be careful in applying the test of efficiency. The purpose of good administration is not to inhibit the creative activity but to release it by providing an atmosphere suitable for its expression.

“In this connection, I should like to draw your attention to the shortage of competently trained personnel in administration, a shortage that is growing more and more acute from plan to plan. At the moment, I am not thinking of professional training but of administrative personnel in education departments. I feel that sufficient attention has not been given to training up the second and the third lines at each level. I suggest that this matter is of such vital importance that the personal supervision and guidance for this work of the State Education Secretaries and Directors will be necessary. You may be interested to know that the Ministry in collaboration with UNESCO will shortly be setting up a Training Centre for Educational Administrators. The countries of South East Asia are participating in the programme and I hope that all States will take full advantage of the training opportunities the Centre will provide. This cannot, however, meet all the needs at all levels. For that each State should develop its own programme to suit its local conditions.

“The Third Five Year Plan of Educational Development contemplates a big effort to mobilize community resources and co-operation. In our democratic framework, the community is an active partner in the educational endeavour. We must devise concrete measures for enlisting community co-operation. Many of the States have done this in a big way. We should all take full advantage of the experience gained in these States and devise suitable measures to enlist co-operation of the community for improving schools, for providing free midday meals, school uniforms and textbooks for children. If the administrator is resourceful and has initiative and leadership, the resources of the community can be mobilised to a considerable extent for improving our school system. Apart from the material benefits, this will bring the school closer to the community and will strengthen the bonds between the two. In this context I should like to mention to prospects of considerable aid from some materially advanced countries under the auspices of UNESCO; gifts of substantial supplies of paper are expected from the Scandinavian countries and the West German Government have agreed to supply an up-to-date printing press for the production of textbooks. As international co-operation in the field of education develops, such assistance will increase in magnitude and scope and would be a valuable supplement to our own efforts.

“The First and the Second Plans have demonstrated beyond doubt that for the success of the planning effort the greatest measure of collaboration between the Central and State Governments would be necessary. Education is a State subject and we would not like to encroach upon the autonomy of the States in any manner and still if we are to evolve a national system of education, there should be opportunities for frequent consultation between the State and Central Governments. The need has become all the greater now when forces inimical to national unity and social cohesion are raising their heads and are once more attempting to defeat those constructive forces, released after freedom, which are trying to impart a new impulse to the social system. In this battle for the allegiance of the mind, education is not and cannot be a passive spectator. It has a positive role, to fight the virus of the inimical forces and to strengthen the constructive ideals. In our educational programmes we must make a determined stand against the fissiparous tendencies. The schools must become the agencies for neutralising the influences of casteism, communalism, linguism and all that divides one section of the people from another. The schools must also assume the responsibility for instilling in the youth a vivid and pervasive sense of national unity. Even if this is considered indoctrination, I dare say that the schools cannot shirk this responsibility.

“You will agree with me that if education is to play its due role in strengthening the forces of national unity, both the Central and State Governments must work in close union. I would have personally welcomed the revival of All India Educational Service but since this proposal does not find favour with you, we must devise other measures to establish greater collaboration between the State and Central Governments. On our part, as a matter of policy, we have decided to recruit as many officers as possible from the State Governments for the Central Education Service which we propose to set up at the Centre and for other posts under the Ministry. We would also be willing to make available the services of our officers on deputation. This reciprocity will go a long way in establishing greater co-ordination. I do hope that this matter will receive your serious consideration.

“The success of the Plan depends on the faith and determination with which you carry out your task. If you are vigilant and do not allow the difficulties to damp your spirit, you may be sure of success. On the other hand, if you are half-hearted and raise doubts and difficulties, you cannot obviously accomplish this task. Weak hearts and wavering minds cannot accomplish great things. It is my sincere hope that our educational administrators will rise to the occasion.”

3. Dr. A. N. Khosla, Member (Education), Planning Commission, who spoke next, said :

“This Conference of the State Education Secretaries and Directors of Education and Public Instruction has been called for considering measures which should be taken to secure effective implementation of the educational programmes in the Third Five Year Plan. The Agenda for the Conference is full and comprehensive, covering as it does, all the vital programmes of education.

“The objective of all developmental planning is the raising of the standard of living of the masses and the satisfaction of their mounting material and spiritual requirements. The development of human resources is a part of that objective. The process of development should aim at generating creative activity and initiative among the broad masses of the people and lay emphasis on increasing per capita output. This can be possible only if our manpower has been equipped for this task through education. Education holds the key to such development.

In the Third Plan, the major emphasis will be on providing facilities for education of all children in the age-group 6-11, expanding and improving the teaching of science at the secondary and university stages, encouraging vocational and technical bias at all levels, expanding facilities for training of teachers of all categories and substantially increasing scholarships, freeships and loan assistance to brilliant but needy students. Emphasis will also be laid on pre-primary education. All elementary schools will be oriented to the basic pattern. Special steps will be taken to reduce the gap between the facilities for education of girls and boys and to meet the special needs of girls education. The re-organisation of university education along the lines of the three-year degree course will be completed and facilities for post-graduate and research work will be further expanded and improved.

“The object of this intensified programme of education’s is to build up the quality of human material which has to build up the nation and which, in fact, constitutes the nation.

“The first and most important objective of our national educational policy must be to bring about national integration, a feeling of oneness, a certain cohesiveness, shared objectives, and a certain commonness which holds us together. The new political consciousness and the democratic structure that we have built up have brought about a major concept of unity and have at the same time released fissiparous tendencies which take the shape of provincialism, communalism, casteism and linguism. These represent the basic conflicts between the traditional ways of living and their transition into the modern age of science and technology.

“In the Second Plan, the outlay for general education was of the order of Rs. 208 crores. In the Third Plan, the programme limit for general education is Rs. 418 crores. In addition, there is a programme

allocation of Rs. 140 crores for engineering education. For craftsmen training, agriculture and allied subjects and medicine and health, there is a further programme provision of Rs. 136 crores. These programmes call for a big organisational effort to secure efficient implementation and pose a major challenge to the teaching and administrative set-ups in education in the country.

“In the Third Plan, a great measure of flexibility has been introduced in the formation and execution of schemes in the States. There are, however, some national priority programmes, which all schemes, whether in the States or the Centre, have to subserve. There is, therefore, need both at the States and the Centre for periodic reviews of programmes and, in the light of experience thus gained during the course of the year, for preparing realistic programmes for the next year. These programmes, year after year, have to be conceived and formulated in the context of long-range needs and defined objectives with due regard to priorities.

“One of the important items on the Agenda of the Conference is the problem of textbooks. The quality of our textbooks in regard to content, and presentation stands out in a marked unfavourable contrast to the quality of textbooks in other countries. The rising cost of textbooks, particularly at the college level, has not only made education expensive, but has also deprived many students of the opportunities of thorough study. At the secondary level, the problem is presented by the non-availability of textbooks or their poor quality. At the primary stage, the expansion of education facilities that is contemplated, will throw up an unprecedentedly large demand for textbooks. We have also to work towards the goal of supplying textbooks free to primary school children. States have carried out different experiments, and this Conference would be helpful in bringing these together so that they may be developed into a constructive and unified policy for dealing with this urgent problem. I am very happy to learn that the West German Government has promised to give us machinery for printing, and in that connection I might add that if this proposal goes through, it will be possible to procure some other funds from the Planning Commission to supplement what you get from the German Government.

“Among the programmes accorded national priority, are science, education, vocational and technical bias at all levels and technical education in all branches of science and technology. There is no aspect of modern life that does not bear the strong imprint of science and technology. The pace of development of science and technology has determined in the past, and will determine in the future, the tempo of economic development in any country. It will be well to recognise that it is not so much the capital investment but the trained manpower that determines the rate of advance from stagnation to growth. It is in this

context that the Third Five Year Plan has laid down as a national target the introduction of general science in all secondary schools and provision of elective science in nearly 50 per cent of the schools. The aim is to provide science of the elective standard in all secondary schools within a measurable period of time.

“In the implementation of our educational programmes, the teacher will play the key role. We have, therefore, to enlist his willing and whole-hearted participation and support in the implementation of these programmes. We must plan to accord to him the social and economic status of an honoured member of the society. The problem of teachers is both social and economic and should be approached from both aspects, with due regard to financial limitations. This is a matter to which the Conference might give thought.

“Another matter to which I would like to draw special attention is the supreme necessity of inculcating in the mass of students at all levels (and the teachers) the spirit of service and the dignity of labour. This can be achieved by each one of them setting apart two to four hours a week for doing manual labour in building up amenities and assets in the school, college or university campus to begin with, and later in extending these activities to the neighbouring rural areas to build up similar amenities for them.

“The various schemes for educational development require a large-scale mobilisation of community effort and resources. This is particularly true of the expansion at the primary school level. Even at present the contribution of the community to the total cost of education constitutes a substantial proportion. This has to be augmented. There is a keen educational awareness in the people. If their interest and co-operation are enlisted, it should be possible to achieve the national target of free and compulsory primary education by the end of the Third Plan in all the most backward areas in the country.

“Education has to play a positive role in realising the social ideas which underlie the national Plans. It cannot merely remain a medium reflecting passively the social milieu. This positive role of education has to show itself in all educational programmes, not only in the formal schemes that have to be implemented but also in the educational programmes relating to curricula, syllabuses, textbooks, etc. It is now being recognised with a growing sense of immediacy that the role of education is not confined to developing the skills needed by the economy but it must also comprehend the realisation of the social and moral goals. This has an urgent relevance to our situation in the country today where stresses and strains have shown themselves to a marked degree. Educational development, therefore, has to be geared to promoting the objectives of social equality, social cohesion and co-operative

living which the Five Year Plans envisage. The ultimate goals of economic development have to be the immediate goals of educational development. Thank you.”

4. Shri P. N. Kirpal, Education Secretary to the Government of India, in his presidential address, said:

“It is more than a year since we met last. We have been engaged in the intervening period in discussing and preparing the programme for the next five years. The Third Five Year Plan has now been formulated and enters its first year, and with it opens a new chapter of challenges and endeavours. This, I believe, is the opportune moment when we should take counsel together, pool our experiences and see how best we may prepare ourselves for the tasks that lie ahead. All of us here are deeply conscious of the responsibilities that the Plan places on us and also of the opportunities for creative educational service that it presents.

“The Third Five Year Educational Plan carries forward on a much larger and more complex scale the general design of development laid down in the first two Plans, but there are also certain new features which distinguish this Plan from the earlier ones. These represent, a redistribution of emphases, which is bound to be of vital and far-reaching importance to the development of education in the country. The earlier Plans approached the problems of educational development through a series of schemes and projects and efforts were directed to securing the implementation of these schemes according to a more or less uniform pattern. In the Third Five Year Plan, the main emphasis is on certain national priorities and programmes and not so much on the patterned uniformity in individual projects. This change in approach is reflected in the manner in which the State Plans and the Central Ministry’s Plans have been formulated. The schemes which are to be executed by the States have been provided in the State Sector of the Plan, and the Ministry’s schemes have been designed to supplement the programmes in those particular areas which are of all-India significance or where experimental experience has to be built up or special training facilities are to be organised. In the total framework, the schemes, whether in the State Sector or the Central Sector, have to be implemented so as to secure the objectives of the National Plan. It is, therefore, of vital importance that there should be close and constant touch between the Central Ministry and the State Departments, and the progress of the schemes should be kept under joint review so that we may measure periodically how far we have advanced towards the objectives of the national programme.

“The magnitude of the effort that the Third Five Year Plan of Education calls for will inevitably put the administrative machinery, which is already fully stretched, under additional heavy strains.

Educational administration, at any time, is not routine administration, and more so, when developmental work has to be undertaken. It requires a dynamic combination of insights into educational problems and appropriate administrative skills. We have therefore, suggested in the Agenda for the Conference that we should give careful thought to the measures necessary to secure effective implementation of the Plan schemes. Even the most carefully designed schemes will fail to bear fruit if they are not implemented efficiently, with speed, foresight and imagination. Proper organisation must be at the very core of any worthwhile programme. In this connection I should like to draw your attention to a few points for consideration.

“First, there is an urgent need to give more attention to training up persons for various levels of responsibility. As the Education Minister remarked in his inaugural address the second, the third and even the fourth lines have to be built up. On the job training is no doubt a very effective method of training but it is not the whole of training nor is it sufficient by itself. We should also carefully review our recruitment and promotion procedures to see whether we are doing enough to attract merit into the Education Departments or giving it scope to show itself. I suggest that the question of building up the proper personnel through training and recruitment procedures is important enough to claim first priority on the time and attention of the head of the department.

“Secondly, we need to have a new look at our procedures and the methods of programming for work. There is, I think, general agreement supported by extensive experience that, though procedures are designed for facilitating work, in actual practice they can cause irretrievable delays if they are not applied in the spirit in which they are framed. I realise that one department cannot modify the procedures which govern all departments, but within the department itself are procedures laid down by the department itself which can bear closer scrutiny. Connected with this is the important question of greater delegation of power and responsibility at different levels. Excessive centralisation is invariably wasteful of effort, and I suggest that as we prepare ourselves for the Third Plan, we should subject the existing patterns of delegated powers to a searching appraisal. By and large, at present, too much time of the heads of the departments and others at the top is taken up with the routine details of administration. If we are to build up the second and the third lines, we must give them responsibility to assume, and authority to discharge it.

“Reference is made in the Agenda papers to the need of strengthening the Planning Unit. The Five Year Plans are not rigid frameworks. It would be unfortunate indeed, and contrary to the whole purpose of planning, if they were treated as such. It is not as if a five year plan

means a total suspension of thought for the duration. Even while we are in the midst of implementing the year's programme, we have to think ahead for the next year, and similarly the implementation of a five year plan should bring out the outline of the subsequent five years. All these processes require a body of statistical and other data. This has been a particularly weak point and I suggest that special measures should be taken to make the assembling and processing of data more effective.

“Lastly, I would like to draw your attention to the need for a continuous assessment and review of the progress of the various programmes. Such assessment has to be done at every level—district, region and State. I hope that some ways will be found for our meeting together more frequently so that periodical review of work at the zonal and all-India basis may be made.

“As the schemes in the Central Sector (including the Centrally Sponsored Sector) have already been discussed with you at the time of the last meeting of the Central Advisory Board of Education, we have not included all of them in the Agenda. We thought that it would be more useful if we sent the schemes to you after a final decision has been taken about the pattern of financial assistance for the Centrally Sponsored schemes, a question that is currently under consideration with the Planning Commission. We have, however, included in the Agenda some of the major programmes which are to be undertaken, whether in the State or the Central Sector, for example, science education and national scholarships. Furthermore, some of the items have been included in the Agenda with a view to drawing attention to the special problems that they raise. I may refer to the problem of the production and supply of textbooks, mobilising community efforts and physical education. The list of items is not intended to be exhaustive or even to cover the most important problems. There is real danger that in our pre-occupation with the schemes involving financial outlays or under the stress created by the rough and ready method of judging progress by the amount of money spent, we may not give sufficient attention to certain programmes which though they do not involve any large expenditure of money, are yet of as crucial importance to educational development as other schemes. I may refer to these as “content-programme.” Better syllabuses and curricula, better textbooks, better teacher training, improved examination methods, better supervision and inspection—these do not necessarily cost money or amounts that the Plan cannot provide, but they will make all the difference in the quality of education that we give. I suggest that appropriate studies should be developed in regard to such “content-programmes” and their findings should be given effect with a sense of urgency. We hear much expression of concern about the decline in standards. Improvement will be possible only if we deal with the total complex of the problem in an

integrated manner. For educational growth the pre-requisites undoubtedly are: the imaginative insight that makes long-range planning possible, constancy in the purposes we pursue and sustained effort to bring them to fruition.

“In the pursuit of rather ambitious targets, set out for the Third Plan period we must always keep in mind the broad objectives of Education which should guide and inspire our action. I should like to mention three major objectives which are a part of the social revolution through which our country is passing and which concern education specially. In the first place the content of education and its methodology must contribute to the emotional integration of our people, into a strong and homogeneous society, capable of fulfilling its destiny both on the national and the international planes. This overriding objective should be reflected in the construction of the curricula, in the preparation of textbooks and reading materials, in the pursuit of all educational activities supplementing the work in the classroom and in teacher training programmes. Secondly, the system of education should be based increasingly on that principle of equality which is the basis of the socialistic pattern of our society. Apart from providing free and compulsory education at the primary stage, no one should be denied the opportunity of education at higher levels if he or she has shown sufficient talent to benefit by it. This calls for adequate measures to afford special assistance to the backward areas and the poorer sections of our population along with a massive programme of scholarships at all levels of education. Lastly, education in a free and resurgent society should contribute to the preservation and adoption of cultural values rooted in our past and the emergence of new values to facilitate and enrich the process of living in a rapidly changing world. A dynamic balance in the teaching of the humanities, and the sciences and an ever-growing concern with the quality of education are required to fulfil this objective.

“Our tasks in the five years ahead are immense and significant and on the wise and energetic fulfilment of these will depend the pace of economic and social development. Never before in the history of mankind has there been such a wide consciousness of the importance of the education for the development of the individual and of society as is manifest today. The difference in the material conditions prevailing in the rich and the poor countries are less significant than the gap between the educationally advanced and the educationally backward societies and it is this gap which has to be bridged if humanity is to attain the glittering prizes which are within its reach now. The educationist has a great responsibility and I have every hope that in our own country we shall rise to the challenge of the times and accomplish even more than we have planned.”

5. On a reference from the Chair, the Conference passed the following Resolution condoling the death of Dr. K. S. Krishnan:

“This Conference of the State Education Secretaries and Directors of Public Instructions/Education places on record its deep sense of sorrow at the sad and untimely demise of Dr. K. S. Krishnan, Director, National Physical Laboratory. In Dr. Krishnan’s death the country has lost an eminent scientist and a great man of culture. The Conference offers its condolences to the members of the bereaved family.”

The members stood in silence for a minute as a mark of respect to the departed soul.

6. The Conference then began the discussion on the Agenda. The observations and suggestions made by the members on the various items of the Agenda along with the recommendations of the Conference are given below :—

ITEM 1.—*Third Five Year Plan on Education*

Shri R. R. Singh (Ministry of Education) said that in part II of the Memorandum on the item (Appendix A) some of the administrative and organisational problems had been listed. It would be useful to have the views of the members in the light of their experience in the implementation of the two Plans. The other parts could be covered under the general discussion that the Conference will have on the Draft Chapter on Education prepared by the Planning Commission for incorporation in the Third Five Year Plan.

(i) Building Component

Education Secretary, Andhra Pradesh, said that in his State the P.W.D. had four special Divisions for construction of buildings. This had relieved the strain to a considerable extent and they were able to concentrate on Plan Works and got them through in fairly reasonable time.

(ii) Delegation of Powers

Education Commissioner, Punjab, felt that the basic problem of delegation in the educational set-up of a State was the extent to which powers or functions could be devolved to Panchayat Samities and Zila Parishads. The present concept that Panchayat Samities should be given charge of education at the primary level had some obvious difficulties in it because the primary level is very closely linked up with the higher levels. It was, therefore, for consideration whether the functions in relation to the whole field of education, with some safeguards, should be transferred to these bodies.

Education Secretary, Andhra Pradesh, was of the view that it was far better to have local people in charge and give them the responsibility of looking after school education. In Andhra Pradesh, Panchayat

Samities were in charge of primary education. The results were very encouraging because members of the local Samities and Panchayats all watch the work of schools. The teachers were kept up to mark and the attendance of teachers, as well as, of students had much improved. Secondary education was being managed by Zila Parishads and they too seemed to be doing quite well.

Education Secretary, Madras, said that in his State only primary education had been made the responsibility of Panchayat Unions. Since these Unions had been functioning for a period of a year and a half only it was not possible at this stage to form any firm judgement in regard to their work. However, in his view a uniform pattern of delegation of powers applicable to the whole of India would not suit the needs of each State. Each State will have to solve its own problems in the light of its experience. As regards secondary education, the State Government was thinking of creating autonomous Secondary Education Boards for each district, which would include prominent educators, representatives of headmasters and non-officials. He further explained that the inspecting staff would continue to be under the control of the D.P.I. who would have the ultimate responsibility for the maintenance of academic standards and for other technical aspects of education.

The Director, School Education, Rajasthan, explained that the State Government had transferred primary schools and not primary education to Panchayat Samities and academic supervision continued to be the responsibility of the Education Department. The service conditions of teachers were prescribed by the State Government and it was incumbent on the Panchayat Samities to conform to them. The selection of teachers was made by a Zila Parishad and Panchayat Service Commission and the Samities had to appoint teachers selected by the Commission. All cases of dismissal or demotion had to be referred to a District Establishment Committee consisting of a Pramukh of the Zila Parishad and a member of the Service Commission. Transfers could, however, be effected by the Samities. The working of the Panchayat Samities had so far been satisfactory. It had enthused the people in the villages and they were coming forward with buildings, etc.

Shri R. R. Singh (Ministry of Education) informed the members that a study group on the working of the Panchayat Samities in the field of education has been set up and its report will be available in about two months time.

(iii) Improvement of Statistics.

Shri J. P. Naik (Ministry of Education) said that at present there was considerable time-lag in the publication of educational statistics. The Ministry was making every effort to bring out the 1959-60 report by March, 1962. He appealed to the members to give their full co-operation in the matter.

Education Secretary, West Bengal, pointed out that delays were mainly due to shortage of staff and other items of work which claimed a higher priority. Education Commissioner, Punjab, suggested that something should be done to check the reliability of the statistics furnished by the States. D.P.I., Mysore, suggested that the annual reports should be made more attractive.

The Chairman remarked that although considerable improvement have been made, the educational statistics were neither perfect nor sufficiently up-to-date. All concerned should do their utmost to make them effective.

(iii) Progress Reports

Education Secretary, West Bengal, pointed out that it would not be possible to send the annual report by the end of June. On a suggestion by Shri R. R. Singh (Ministry of Education) it was agreed that these reports should be submitted by the end of August. It was further agreed that copies of the quarterly progress reports sent to the Planning Commission may also be supplied to the Ministry of Education.

(iv) Co-ordination between the Central Ministries and State Governments

Education Commissioner, Punjab, was of the view that there was no need for regional or zonal conferences. Education Secretary, Madras, however, felt that such conferences were useful and necessary. He was supported by Education Secretary, Kerala.

The Conference made the following recommendations:

(a) The schemes, particularly the important ones, should be worked out in detail in advance and processed during the course of the year preceding the year in which the budget provision is made;

(b) When a scheme is prepared its components should also be worked out together with the time schedule for its implementation. Action on the components of a scheme, such as selection of location, determination of staff requirements, etc., should be taken in advance;

(c) The State P.W.D. should place a small engineering unit at the disposal of the Education Department for preparing plans and estimates and helping in their processing up to the stage of the administrative approval;

(d) Advance action for the selection of sites and their acquisition and evolving of type designs, wherever possible, should be taken;

(e) Particular attention may be given to early issue of financial and other sanctions and to reducing the period that elapses between the passage of the Appropriation Act and the actual issue of operative sanctions;

(f) Staff required for implementing the schemes should be in position early enough to undertake the work;

(g) State Planning Units should be strengthened;

(h) The existing pattern of delegated powers may be reviewed, if this has not already been done, with a view to delegating more powers, administrative and financial to different administrative levels;

(i) Training of staff at different levels, specially where expansion has been very large, should be organised systematically and as a regular part of the administrative routine;

(j) The time-lag in the publication of educational statistics should be reduced. For this purpose the States should send the statistics to the Ministry of Education in time;

(k) Annual progress reports should be submitted by the end of August every year;

(l) Copies of quarterly progress reports sent to the Planning Commission should also be supplied to the Ministry of Education;

(m) A small team may be set up in the States for periodic evaluation of the progress of every scheme;

(n) Appropriate machinery may be set up at the State level for co-ordination among the various departments which have funds for educational development;

(o) For exchange of views and experiences about specific programmes in relation to local circumstances, regional or zonal conferences between the officers of the Ministry and the State Departments may be organised;

(p) There should be more frequent exchange of visits as between the officers of the States; and

(q) States would give special consideration to the requests of the Ministry of Education for loan of services of officers.

ITEM 2—*Problems of Textbooks (Appendix B).*

Education Secretaries of Madras, Andhra Pradesh, Maharashtra, Bihar and Assam and Director, Collegiate Education, Rajasthan, said that the main difficulty in the nationalisation and production of textbooks was shortage of suitable paper and printing presses. Private presses, wherever these had been tried, were not of great help. The Central Government should, therefore, help the States in this matter.

D.P.I., Orissa, suggested that changes in the curriculum may be made, if necessary, once in five years so that the textbooks were not frequently changed.

D.P.I., Bihar, felt that something should be done to check the publication of spurious books. He also referred to the deterioration in the quality of textbooks.

As regards the method of having textbooks prepared, D.P.I., Orissa, felt that it would be better to invite tenders and choose the best books instead of commissioning an author to write a book. D.P.I., Mysore, was however, of the view that the system of selecting experienced teachers to write books had worked very well. Education Secretary, Maharashtra, said that the panel of authors gave better results and the work of individual textbook writers did not come up to that standard. The Director, Collegiate Education, Rajasthan, suggested that class teachers may also be associated with the panel of authors.

Education Commissioner, Punjab was of the view that selection of textbooks should not be confined to books written within a particular State. He suggested that the best books in science, for example, should be selected on an all-India basis. Two or three books could be selected or prepared for the whole of the country and each State Government could choose from them or adopt them. It was also desirable to prepare the syllabuses on an all-India basis.

Shri J. F. Naik (Ministry of Education) said that experience had shown that a large number of books were torn and destroyed in classes I and II. To overcome this problem some countries had started the practice of keeping the necessary number of books and writing materials for these classes in the school itself. This led to a great saving in paper and money. Director, Collegiate Education, Rajasthan, however, did not agree with this suggestion.

The Chairman gave a brief account of the recent discussion in Unesco regarding assistance for paper and printing. He said that the Scandinavian countries had promised a large supply of paper and he expected that about 10,000 tons of paper might be made available to India. It would, however, be necessary to work out quickly the requirements for paper in the field of education during the Third Plan. Assistance may be forthcoming from other countries also. The Chairman also referred to the offer of a modern printing press from the West German Government which was likely to mature during the next year.

Dr. A. N. Khosla (Planning Commission) said that the Planning Commission gave a high priority to the problem of textbooks and if additional funds were required for it, they would be arranged.

The Conference recommended that each State should undertake immediately a detailed study of the problems of supply, production and distribution of textbooks.

ITEM 3—*Strengthening of Extension Services Projects in Training Colleges.*

Introducing the item, Shri Raja Roy Singh (Ministry of Education) said that 54 Extension Departments in the Training Colleges had been opened so far and it was proposed to add about 25 Departments during the Third Five Year Plan. A review of the working of these Departments had shown that they had done a good job of work. The Directorate of Extension Services had during the past few months convened a series of conferences with some of the State representatives for further improving the working of these Departments. In the light of these discussions some specific suggestions (*Appendix C*) had been made for the consideration of the Conference.

During the general discussion on the subject the following suggestions were made :

D.P.I., Punjab

Separate funds should be allocated for the sub-centres proposed to be established. An honorarium of Rs. 50 be given to the Principal incharge of a sub-centre and another sum of Rs. 1,000 be placed at the disposal of the authorities for contingent expenditure.

Director of Education, Gujarat

It may not be possible to cover all the secondary schools in a State by the Extension Centres. As far as possible only a limited number of schools should be attached to an Extension Centre so that more intensive work might be possible.

D.P.I., Mysore

(a) Delays in the payment of grants should be avoided. These grants should be made to the Department of Extension Services direct instead of routing them through the State Government.

(b) The Extension Services should be extended to other colleges also.

D.P.I., Bihar

An Extension Services Department should have a small staff of its own apart from the Co-ordinator.

Education Secretary, Madras

Till the idea of Extension Services permeates into all corners of the secondary education field, it would be better to concentrate on a few good centres.

D.P.I., Orissa

There should be co-ordination between the work of the Extension Departments and of the State Government.

Education Secretary, Assam

In starting new centres, States like Assam should be given special consideration.

Shri T. K. N. Menon (Ministry of Education) explained that a proposal to establish a few more Extension Units (besides the 25 centres contemplated in the Third Plan) was under consideration. The suggestions made in this regard would be taken into consideration. As regards assessment, Shri Menon said that in the beginning 15 centres were assessed through Assessment Teams. With the establishment of a large number of new centres this had to be given up and evaluation was now being done by means of a questionnaire. Other criteria for evaluation were, however, being explored. He suggested that all administrative difficulties should be solved so that the centres may function properly.

Shri Raja Roy Singh (Ministry of Education) said that in some States the year's programme has been formulated by the Directors of the Extension Departments in meetings under the chairmanship of the D.P.I. and in consultation with the officers of the Education Department with the result that the various programmes of the State Government and Extension Departments were integrated. He suggested that this practice should be followed in all the States. He further requested that issue of sanction for Extension Departments located in Government colleges should be expedited.

The Conference recommended as follows :

(i) Joint meetings of Directors of Public Instruction/Education and Directors and Co-ordinators of the Extension Services Centres should be convened as early as possible in the academic year 1961-62 to review the work that has been done so far and prepare future programme. Its implementation and progress should then be watched and assessed through periodic meetings.

(ii) The Director of Public Instruction/Education may make a suitable allocation of areas to the Extension Services Centres.

(iii) In order to render guidance service adequately to this enlarged area, Extension Units may be established in the training colleges located within the area of the Extension Services Centres. The in-service programmes could be suitably distributed among the colleges depending upon the resources of specialists available.

(iv) The Director of Public Instruction of the State should circularize all the secondary schools and the officers of the Inspectorate about the significance of in-service activities and the need for extending the fullest co-operation to the centres' programmes.

(v) Incentives should be provided to teachers to draw them into greater participation in in-service programmes.

(vi) The programmes of the Extension Services Centres should give priority to the State and National targets in secondary education.

(vii) The staff of the Extension Services Centres should pay more frequent visits to schools especially in backward and rural areas. During these visits the officers of the State Education Department may accompany the Extension Services staff whenever possible.

(viii) Copies of circular letters issued by the State Department to secondary schools may also be sent to the Extension Services Centres to keep them informed of the current programmes and instructions of the Department.

(ix) The Extension Services Centres should assist the State Department in implementing the various schemes in secondary education particularly those which bear directly upon teacher education and improvement of schools.

(x) On important schemes such as cumulative record cards, organising content courses, etc., the Extension Services Centres in a State should work together so as to divide the load and avoid duplication of effort.

(xi) The State Department might consider pooling the funds available in its budget for in-service work with the funds of the Extension Services Centres to achieve the targets in the Third Plan.

(xii) The centres in a State should combine their resources in respect of publications, so that worthwhile publications may be brought out in adequate number. The feasibility of distributing copies of the centres' publications to all the secondary schools in the State may also be considered.

(xiii) Every seminar organised by the Centre should be accompanied by self-evaluation and a plan for follow-up work.

(xiv) Every centre should also undertake a continuous evaluation of the various techniques employed by it so as to find which techniques yield the maximum results.

ITEM 4—*Science Education in Secondary Schools*

Shri R. R. Singh (Ministry of Education) introducing the item said that in the Third Five Year Plan, science education had been accorded a very high priority. In the Memorandum on the item

(*Appendix D*), certain suggestions for meeting the shortage of science teachers and for taking measures to create greater awareness about science education had been made. These were for the consideration of the members.

The following suggestions were made :

Director, Collegiate Education, Rajasthan.

Monthly science magazines written in simple language should be provided to the schools. If necessary, a board may be set up to edit these magazines.

Education Commissioner, Punjab

(a) More students should be encouraged to go in for science courses at the collegiate stage. The fee should not, however, be higher than the fee for arts courses.

(b) The programme for training of science teachers should be given top priority.

Education Secretary, Maharashtra.

The time table for selections under the Science Talent Search scheme should be drawn up in such a way so as to give sufficient time to the students to prepare for their annual examinations.

Secretary, University Grants Commission

The problem of shortage of science teachers should be treated on a war basis. Instead of insisting on M.Sc. degree, teachers with B.Sc. degree supplemented by some *ad hoc* training may be appointed. It would be necessary to devise special training courses. These could be in the form of concentrated special training to the existing teachers or one-year content course to B.Sc's. If this was accepted, the strain on the universities in producing M.Sc's would be considerably reduced.

Education Secretary, West Bengal

At the higher secondary stage it is not absolutely essential to have an M.Sc. A B.Sc. (Honours) with one year's concentrated training is quite sufficient.

Shri T. K. N. Menon (Ministry of Education) remarked that the All India Council for Secondary Education had already recommended short-term courses, vacation courses and special courses for science teachers with B.Sc. qualifications. In actual practice this recommendation was being implemented by some of the States.

Shri R. R. Singh (Ministry of Education) suggested that in order to attract the right type of persons it would be necessary to revise the existing pay scales. B.Sc. science teachers who had undergone one year's extra course should be given the same pay scale as an M.Sc. teacher. Raising the age of retirement for science teachers would also be of some help in meeting the shortage. As regards the training course, Shri Singh said that it was contemplated to have three kinds of such courses—one-year intensive course for persons possessing B.Sc. degree, content courses in universities for existing teachers and short-term course for teachers of General Science.

The Chairman remarked that in this field a good deal of expert advice and examination of the developments in science education in other countries was needed. The Government of India had under consideration the appointment of a high level Expert Committee on Science Education. He also referred to the assistance available from international organisations in the form of equipment, experts, etc. If a national plan for science teaching could be drawn up, there were good chances of obtaining assistance from outside.

The Conference was of the view that the development of science education at the secondary and the university stages should be given top priority. For this the Conference made the following recommendations :

I—IMPROVEMENT OF SCIENCE TEACHING

(i) In order to draw up a specific programme of improvement, a survey regarding the existing position of science teaching in the various States should be made.

(ii) It is necessary to make a comparative study of the existing syllabuses in the various States with the draft syllabus originally formulated by the Ministry.

(iii) Content courses in science should be organised on a large scale.

(iv) The standard of science teaching in the training colleges should be raised. For this purpose a detailed study of the methodology of science teaching should be undertaken.

(v) Steps should be taken to produce graded scientific literature.

(vi) The following ancillary measures for supporting the major programmes indicated above should be adopted :

(a) preparation of guide lists of laboratory equipment;

(b) preparation of laboratory designs, including furniture, for the guidance of schools, teachers and State Education Departments;

- (c) preparation of lists of science books which every secondary school should have ;
- (d) preparation of lists of audio-visual and other teaching aids required in science teaching;
- (e) working out students' science assignments;
- (f) evolving time-saving devices in the teaching of science;
- (g) evolving improvised or cheap apparatus for the teaching of science; and
- (h) mobilization of resources of knowledge and experience available in the teaching fraternity by organising a network of science teachers' associations as is being done in the United Kingdom.

II—SCIENCE CLUBS

(i) The establishment of more Science Clubs in secondary schools should be encouraged and a suitable provision for recurring and non-recurring grants for this purpose should be made.

(ii) Every training college should provide training to the teacher-trainees in the organisation and running of Science Clubs, and for this purpose a well-equipped workshop in the training college should be set up.

III—SCIENCE DAYS AND SCIENCE FAIRS

Science Days and Science Fairs should be organised on National and State levels. It would also be desirable if some of the States could take up this activity as a pilot project during 1961-62 so that on the basis of this experience a large scale programme could be organised later.

IV—SCIENCE TALENT SEARCH

The Conference approved the schemes of Science Talent Search as formulated by the Ministry of Education.

ITEM 5—*Introduction of Guidance Service in Schools*

Shri R. R. Singh (Ministry of Education) explained that in the Third Five Year Plan guidance programmes have been included in the Centrally Sponsored Sector. These programmes envisaged the strengthening of State Vocational and Guidance Bureaux, establishment of bureaux in States where these had not been set up, training of career-masters and provision of full-time counsellors in some of the bigger schools. He further suggested that some of the progressive schools which desired to develop their own guidance service should

be allowed to levy a small fee to cover expenditure on the provision of a full-time counsellor. D. E., Gujarat, Education Secretary, Maharashtra and Education Secretary, Andhra Pradesh were, however, of the view that no special fees should be charged.

The Conference noted the programmes (*Appendix E*) and recommended that no fee should be levied for provision of guidance service in schools.

ITEM 6.--Programmes for the Promotion of Physical Education and Sports.

Shri R. K. Kapur (Ministry of Education) said that the funds provided for physical education and sports in the Third Five Year Plan were extremely inadequate. Whereas increase in the number of schools had been taken into consideration while making allocations for other sectors of education, this factor seemed to have been ignored in the case of physical education. The provision for physical education had no doubt been increased from about Rs. 10 crores in the Second Plan to about Rs. 12 crores in the Third Plan, but its percentage to the outlay for General Education had actually decreased. Shri Kapur further said that the programmes started in the Second Five Year Plan would be continued. He mentioned in particular the re-constitution of the Central Advisory Board of Physical Education and Recreation to which representatives from each State Government had been invited, establishment of the National Institute of Sports for training of coaches, organisation of National Sports Week and National Physical Efficiency Drive and acquisition of play grounds for schools and colleges.

In the course of the discussion, the following observations and suggestions were made :

Director, Collegiate Education, Rajasthan.

(a) It should be compulsory for every youngman to undergo physical education. A scheme of introducing physical education in all educational institutions should be formulated.

(b) Certain simple indigenous games which do not require much of land and costly equipment should be evolved for rural areas.

(c) Physical efficiency tests should be introduced in all institutions.

(d) There is lot of overlapping in the various schemes under physical education.

(e) Discrimination between boys joining N.C.C. and N.C.C. Rifles should be avoided.

Education Secretary, Maharashtra.

(a) Unless there is follow up, there is no practical utility in testing people and giving them various kinds of certificates.

(b) The National Discipline Scheme gives physical fitness as well as mental discipline and the middle and high schools would like to give first preference to the National Discipline Scheme over other schemes like A.C.C., etc.

(c) N.C.C. should be confined to college students only, but the dual system of having N.C.C. and N.C.C. Rifles should be discontinued.

D.P.I., Andhra Pradesh.

Nobody should be taken directly to the N.C.C. Any one who wishes to join the N.C.C. should be required first to complete successfully the course in the N.C.C. Rifles.

D. E., Gujarat

The allowances for the two wings, *i.e.*, N.C.C. and N.C.C. Rifles should be unified.

Director, School Education, Rajasthan

(a) Provision should also be made for the improvement of play grounds.

(b) Overlapping in the schemes of physical education should be avoided.

Education Secretary, Mysore.

Incentives, monetary or in the form of assured employment, should be given to the students who are very good at sports.

Education Secretary, Assam.

(a) There is no harm in having indigenous form of sports but the importance of modern games should not be undermined.

(b) Sports material at cheap and reasonable prices should be produced in the country.

Education Secretary, Madhya Pradesh.

Ways and means should be evolved for encouraging students to take part in physical activities as they do in other items of education. For this purpose it would be necessary to include physical education in some form as an important item of General Education or decide that physical education is as important as any other subject of study.

Secretary, University Grants Commission, suggested that the relationship between character and sportsmanship was at times over-emphasised and it is necessary to bear in mind the distinction between physical education as an educational process and sports as a recreation. A balanced development should be aimed at.

His Highness the Maharaja of Patiala said that most of the points raised in the discussion had already been answered in the report of the *ad hoc* Committee. He would, however, like to clarify a few points. If proper attention was paid at the time of planning a new institution, there should be no difficulty with regard to play grounds. As regards incentives, it was for the State Governments to help those students who showed promise of outstanding athletic ability. Great stress has always been laid on the development of character through the medium of sports and he was convinced that a good sportsman was a good man also.

His Highness further suggested that more funds should be provided by the State Governments for physical education and sports. In the matter of development of sports and physical education there had to be a common approach and a common pattern. The difficulty with the indigenous sport was that it was localised and had no common pattern. Greater emphasis should, therefore, be laid on sports which were practised all over the country.

The Conference noted the programmes (*Appendix F*) mentioned in the Memorandum on the item.

ITEM 7—*Scholarships Schemes for Meritorious Students*

Shri R. K. Kapur (Ministry of Education) introducing the item, referred to the two important scholarships schemes to be implemented in the Third Five Year Plan. Under the first scheme, 500 scholarships will be given every year to meritorious children of teachers at the Primary and Secondary school levels. The main object of the scheme was to provide to the teachers a small but very important amenity, namely, the assurance that their children, if they are of first class merit, will be educated at the expense of the State. Under the second scheme, namely, National Merit Scholarships Scheme, 2,000 scholarships are proposed to be awarded every year on the basis of results of Matriculation, Intermediate, B.A. and M.A. examinations. This will cover about 2½ per cent of students passing these examinations in the first division. A National Advisory Committee will be set up at the Centre for awarding these scholarships.

Education Secretary, Madras; D.P.I., Orissa; D.P.I., Mysore; Director, Collegiate Education, Rajasthan; Education Secretary, Andhra Pradesh and Education Secretary, Assam were of the view that the

administration of scholarships, including the selection, under the National Scholarships Scheme should be left to the States. Education Secretary, Kerala, further suggested that all scholarships awarded by the universities, State Governments and the Central Government should be announced at the same time, as separate announcements only create a suspense in the students.

Shri Kapur said that for the current year they were merely expanding the existing Post-Matric Merit Scholarships Scheme. The Chairman assured the members that there was no desire on the part of the Ministry to retain unnecessarily any administrative procedures and that the suggestions made by them would be kept in view while finalising the details of the scheme. If later the Advisory Committee decided to decentralise the scheme there would be no difficulty in giving the administration of the scheme to the State Governments.

As regards the scheme for award of scholarships to meritorious children of teachers, D.P.I., Mysore, Director, Collegiate Education, Rajasthan, Director of Education, Gujarat and Secretary, University Grants Commission suggested that the scope of the scheme may be extended to cover teachers **working in institutions other than primary and secondary schools** whose income was below a certain level. D.P.I., Punjab, felt that in view of the small number of scholarships it would be better to confine it to teachers of primary schools only.

Winding up the discussion the Chairman said that although the scheme had been finalised and announced, the suggestions made by the members would be taken into consideration in its further development.

The Conference noted the programmes indicated in the Memorandum (*Appendix G*).

ITEM 8—*Translation and Production of Standard Works in Hindi and Other Regional Languages*

Shri R. P. Naik (Ministry of Education) introducing the item said that the scheme was originally started with reference to the Language of the Union but now it had been extended to all the regional languages of India. To begin with about 200 to 300 standard works, textbooks, reference books, etc., would be selected and translated with the help of the universities. So far as Hindi was concerned, the work had already been started in some of the universities in Uttar Pradesh, Bihar, Madhya Pradesh and Rajasthan. A Standing Advisory Committee has been set up at the Centre, in which all interests are represented. The State Governments should set up Co-ordination Committees in their States so that the work may be started at an early date. Such committees were necessary for working out a co-ordinated plan of action.

Director, Collegiate Education, Rajasthan, and that their main difficulty was with regard to copyright. It was a problem to enter into correspondence with all the publishers.

Education Secretary, Maharashtra and D. E., Gujarat, felt that if the latest directive of the Board of Scientific and Technical Terminology with regard to uniformity in all the different languages and international terminology was to be followed, books so far published or proposed to be published would be useless. Education Secretary, Madras, suggested that the Ministry should help the State Governments in getting foreign exchange for obtaining copyrights from foreign publishers. Director of Education, Gujarat, referred to the difficulties in producing diagrams in books on medicine and engineering.

Shri R. P. Naik (Ministry of Education) explained that the Commission on Scientific and Technical Terminology was going to have a second look at the terminology already evolved. There may be marginal adjustments and changes wherever it was found that some terms did not conform to the directives given by the Board of Scientific Terminology. The best course would be to start work on the basis of what had been done so far instead of waiting for another eight or ten years till the whole of the terminology was ready. As regards foreign exchange, Shri Naik assured the members that the Ministry would take up the matter with the Department of Economic Affairs. For the production of diagrams provision would be made for special payment.

The Conference noted the programme as outlined in the Memorandum (*Appendix H*) and recommended that early steps may be taken to set up Co-ordination Committees in the States.

ITEM 9—*Programme for the Training of Hindi Teachers in Non-Hindi Speaking States/Union Territories*

Shri R. P. Naik (Ministry of Education) said that the item was for information and to request that the States which had not yet sent in their proposals, might do so. As regards pattern of Central assistance, the Planning Commission had not taken a final decision.

The Conference noted the programme given in the Memorandum (*Appendix I*).

ITEM 10.—*Measures for Implementing the Recommendations of the Committee of Parliament on Official Language pertaining to Evolution of Scientific and Technical Terminology for all Indian Languages.*

Shri R. P. Naik (Ministry of Education) explained that originally it was contemplated that the Commission for Scientific and

Technical Terminology might be able to evolve a standard terminology for all Indian languages. On further examination, this does not appear to be immediately feasible. It would, therefore, be better if the State Governments or the regional universities or the State Governments in collaboration with them, set up committees to evolve terminology and send it to the Commission and then finalise it in the light of their advice. Education Commissioner, Punjab, suggested that the new terminology should be circulated. Shri R. P. Naik said that it had been compiled in the form of a glossary and would be published by the end of November, 1961. Copies would be made available to State Governments, universities, colleges, schools, etc.

The Conference noted the programme given in the Memorandum (*Appendix J*) and recommended that suitable agencies which would work in co-operation with the Commission for Scientific and Technical Terminology for the evolution of terminology in regional languages may be set up.

ITEM 11—Provision of Rucksacks for School Children

The Chairman said that the item (*Appendix K*) was for their information and further action.

The Conference recommended that the schools should be encouraged to adopt the scheme. It noted that in some States a beginning had already been made.

ITEM 12—Mobilisation of Community Resources for the Expansion of Primary Education.

ITEM 19—Construction of Primary School Buildings—Harnessing Community Co-operation—Sanction of Central Assistance for Building Construction.

The following suggestions were made :
D.P.I., Bihar.

The limit of Rs. 1,000 for a school building was unworkable and it should, therefore, be raised to Rs. 1,300.

Director, Collegiate Education, Rajasthan.

The donations for buildings should be exempted from income tax.

Director of Education, Gujarat.

Unless the State Governments participated in the programme it would not be possible to implement any of the suggestions made in the Memoranda (*Appendices L and S*) on the items. In Gujarat assistance is being given to the extent of 60 per cent provided the building was constructed according to prescribed specifications which have been considerably reduced.

Education Secretary, West Bengal

It has been possible to construct buildings for schools with two rooms for Rs. 7,500. This has been done by inviting private tenders from outside and after consulting private architects. In our national calculations we should rule out private voluntary contributions.

D. P. I., Orissa

It would not be possible for the community to take responsibility in all spheres. A priority list may be prepared and the community asked to take a possible load.

Shri Nanavatty (Ministry of Community Development and Co-operation) pointed out that the suggestions made in the Memorandum (*Appendix L*) were for the guidance of the States. The Chairman remarked that these suggestions were of a general nature. Each State should examine these keeping in view the local conditions and requirements.

ITEM 13—*Circulation of List of Centrally Sponsored Schemes by the Ministry of Education (Appendix M)*

Shri R. R. Singh (Ministry of Education) said that the list of Centrally Sponsored schemes was the same as circulated in the last meeting of the Central Advisory Board of Education. This was not circulated to the States as the concurrence of the Ministry of Finance had to be obtained for individual schemes. As and when a scheme was approved, its details would be communicated to the State Governments.

ITEM 14—*Simplification of Procedure for the Implementation of Centrally Sponsored Schemes (Appendix N)*

D.P.I., Bihar, suggested that the Centrally Sponsored schemes should be finalised in the Working Group meetings where Annual State Plans were discussed. Shri R. R. Singh (Ministry of Education) explained that once a scheme was finalised and the pattern of Central assistance was known there should be no difficulty in further processing it. The amount that would be forthcoming from the Centre would be known and every State would, therefore, be in a position to provide for its counterpart share in the budget. A view was expressed that the term 'Centrally Sponsored' should be clearly defined.

ITEM 15.—*Establishment of a Network of Libraries and Reading Rooms along with the Starting of Primary Schools (Appendix O)*

Director, Collegiate Education, Rajasthan, said that if primary education was to be made compulsory it would be useful to supplement it by libraries. Without this the experiment of compulsory education would not succeed. The Chairman remarked that this would be taken into consideration.

ITEM 16—*Selective Admissions in Colleges and Universities (Appendix P)*

Director, Collegiate Education, Rajasthan, said that there should be selective admissions, specially in the case of science where equipment was costly. Unless and until this was done the problem of overcrowding would not be solved. The Chairman pointed out that the problem had been discussed in detail in the last Conference of State Education Ministers.

ITEM 17—*Encouraging Students to Cross Language Boundaries for Higher Studies for the Emotional Integration of the Country (Appendix Q)*

Director, Collegiate Education, Rajasthan said that it would be useful to bring together students from different language regions. It would also help if scholarships were awarded to students coming from other States. In Rajasthan, scholarships had been instituted for students from Southern States. D. P. I., West Bengal, felt that if a student had to learn the language of the place also it would be more of a hardship than help to him.

The Conference commended the scheme as useful.

ITEM 18—*Starting of Diploma Classes in Indian Languages in the Universities and Colleges (Appendix R)*

Director, Collegiate Education, Rajasthan, explained that in his State facilities were being provided to teach languages of other States. Arrangements had been made to award diplomas and to enable students to go on tour and to speak the new language by moving among those who spoke it. This would help in the emotional integration of the country.

The Conference felt that it was a very useful proposal.

ITEM 20—*Finalisation of the Third Plan Proposals for Higher Education—Need for Immediate Scrutiny of Universities' Proposals by the University Grants Commission (Appendix T)*

Education Secretary, Bihar suggested that before the University Grants Commission formulated any scheme, which created immediate or future financial liability for the State, they should have prior consultation with the State Governments. D. P. I., West Bengal, and Education Secretary, Madras, supported the view.

The Chairman said that the Commission had the statutory authority to decide upon the grants to the universities for the maintenance and improvement of standards. He, however, promised to convey the views expressed of the Conference to the Commission.

ITEM 21—*Distribution of Milk to School Children (Appendix U)*

Shri J. P. Naik (Ministry of Education) explained that the present system of distributing the milk powder, supplied by UNICEF, to the schools was not working satisfactorily. The main difficulty was that the State Education Departments were not properly involved in the programme. The UNICEF were prepared to increase the quota, which had been reduced in 1961-62 by about 5 million pounds, provided that they were assured of adequate distribution arrangement. He, therefore, suggested that the State Departments of Education should take over full responsibility for the distribution of milk powder. They would have to bear only the transport charges and the handling charges at the ports which came to about 50 nP per child per year. The supply of the powder from ports to district headquarters would be arranged by the Director-General of Health Services. Shri Naik further said that no change might be possible in the 1961-62 programme but it would be possible to get a higher quota for 1962-63.

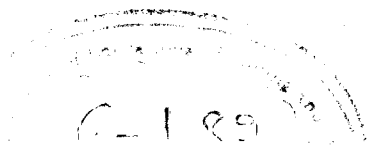
Lt. Col. Srinivasan (Director-General, Health Services) said that it was a great pity that the full quantity of powder available was not being utilised. He assured the members that the Ministry of Health would be happy to render assistance for the successful implementation of the programme. For proper reconstitution of powder into liquid milk it would be necessary to train the teachers. This would be arranged at the maternity and child health centres.

Education Commissioner, Punjab and D.P.I., Punjab, raised the question of cost. They suggested that the agency at present responsible for meeting the cost should continue to do so. The Education Departments should bear only the cost and incidental charges from the health centre to school. Lt. Col. Srinivasan pointed out that according to the present arrangements the debit for handling and transport charges was being raised against the Health Department. With the revised procedure it would be raised against the Education Department. As far as the State Governments are concerned it would only be an internal adjustment.

It was decided that the Ministry should send round a general letter to the State Governments to find out whether they would like to take over the programme under the Education Department or work out any other satisfactory method of distribution. They should also be requested to communicate their requirements for 1962-63.

ITEM 22—*Promoting Knowledge about Panchayati Raj and Co-operative Movement in Schools (Appendix V)*

The Conference considered the suggestions made for promoting knowledge about Panchayati Raj and cooperative movement in schools and recommended as follows :—



(a) In the syllabuses of training colleges and training institutions appropriate content courses may be provided for the teachers under training. In-service training programmes particularly those relating to social studies should cover information about Panchayati Raj and the cooperative movement. The orientation courses being organised for the primary school teachers under the Third Plan should similarly include these topics.

(b) The syllabuses for social studies at the elementary and secondary stages should be examined to see whether adequate emphasis has been given to Panchayati Raj and co-operatives and revisions, wherever necessary, may be made. Material on the subjects should be included in the language and social studies textbooks.

(c) Special talks on these subjects should be arranged in schools, student clubs, discussion groups, etc.

(d) Self-government projects, e.g. School Parliament, should be patterned on the Panchayat system, particularly at the elementary stage.

(e) The programme of field visits and excursions for students may also include visits to the local Panchayat or co-operative society so that the actual working of these institutions may be observed by the students.

(f) Printed literature on Panchayati Raj and co-operatives may be distributed widely to the schools. It is understood that a number of brochures on these topics have been prepared by the Ministry of Community Development and Co-operation and would be available from the State Departments of Community Development.

(g) The schools should be encouraged to have their own co-operative stores for the supply of school material, such as paper, stationery, etc. Wherever possible, school co-operatives may also be entrusted with the sale and distribution of textbooks.

7. The Conference also discussed the Draft Chapter on Education in the Third Five Year Plan circulated by the Planning Commission. The following observations and suggestions were made :

Education Commissioner, Punjab

If 1961 census figures are taken into consideration the targets of enrolment will have to be reduced.

D. P. I., Madras

In para 21 '2.3 million' should be changed to one million.

Education Secretary, West Bengal

(a) There is no mention about the expansion of library service as a part of education.

(b) The para on 'Education of the Handicapped' needs amplification.

(c) No mention has been made about art and music education in the Chapter.

Director, Collegiate Education, Rajasthan

(a) The Ministry of Education should evaluate the work done so far by the Rural Institutes.

(b) More emphasis should be laid on examination reforms.

Education Secretary, Bihar

In paragraph 48, mention should be made about Sanskrit Universities.

Education Secretary, Madras

In para 30, which deals with science education in universities, no guidance has been given as to how the enrolment is to be stepped up to 40 per cent. The steps to be taken to limit the enrolment in arts colleges have also not been indicated.

Secretary, University Grants Commission

(a) Apart from the enumerative approach to what is sought to be done in the Third Plan, there should be a sharper highlighting of the areas which are to dominate in the Plan.

(b) The whole statement about science education at the university level will have to be looked into again and made fairly descriptive. Any generalisation about percentages all over the country would be completely fallacious in respect of particular States.

Shri Tarlok Singh (Planning Commission) said that the observations made by the members would be kept in view while revising the Chapter. He, however, pointed out the difficulties in making any large scale revisions on account of the increase in population as revealed in the 1961 census.

Shri R. R. Singh (Ministry of Education) pointed out that the statement about improving the salaries and allowances of teachers would not be correct as provision for this purpose had been made by a few States. It was agreed that the wording would be changed.

Shri A. R. Deshpande (Ministry of Education) said that in the paragraph on social education no solution had been indicated to the problems posed. Some way ought to be found to make it complete and understandable to people who are interested in social education. Even if the problem of adult illiteracy was to be solved in subsequent stages, foundations for it had to be laid in the Third Five Year Plan. Some indication of the manner in which this could be done should be given. Shri Sohan Singh (Ministry of Education) was of the view that the

paragraph did not sound like a plan. Neither the priorities nor the manner in which the amounts provided should be spent had been indicated. Shri Nanavatty (Ministry of Community Development and Co-operation) felt that instead of putting this as a negative approach or as a situation arising out of some conflict, it would be better to put it as a positive approach. Education Secretary, West Bengal suggested that the responsibility for adult education and social education should be that of the Ministry of Education.

Shri Tarlok Singh (Planning Commission) said that certain aspects of social education were not being given the place that they deserved in the programmes of the Ministries of Community Development and Education. The result was that sometime the just cause suffered. The Planning Commission had deliberately put this in to highlight the problem so that steps could be taken to solve it. Mention would, however, be made in the Chapter of the manner in which the financial resources should be pooled and utilised.

As regards the pattern of Central assistance Shri Tarlok Singh said that a final decision had not been taken but tentatively the thinking was that under each head of development certain schemes might be picked out and relatively simple patterns, either 75 per cent or 50 per cent, indicated for them. Other schemes will not carry specific patterns of assistance. For Centrally Sponsored schemes, according to the present thinking, the percentage varied from 50 to 100.

Education Secretary, West Bengal, Education Commissioner, Punjab, D.P.I., Andhra Pradesh, D.E., Gujarat and Education Secretary, Madhya Pradesh, pointed out that in the case of Centrally Sponsored schemes the pattern was less than 100 per cent, the States will have to recast their Plans to provide for their matching share which only will involve a major recasting of their Plans. Shri R. P. Naik (Ministry of Education) suggested that since the promotion of Hindi was the duty laid on the Union Government under the Constitution, the pattern of assistance should be 100 per cent for Hindi schemes. The Chairman said that the views expressed by the members would be taken into consideration while discussing the matter further with the Planning Commission.

8. The Chairman in his concluding remarks said that the follow up of the deliberations of the Conference was very important. He was sure that a steady flow of communication will develop between the Ministry of Education and the States which will be helpful in the implementation of the schemes. The Ministry would do everything possible to further the suggestions that had been made by the members.

9. The Conference came to a close with a vote of thanks to the Chair.

APPENDICES
(Memoranda of Items of the Agenda)

APPENDIX A

Third Five Year Plan on Education (Item 1) (Ministry of Education)

I. OUTLAY

The Draft Outline of the Third Five Year Plan envisaged an outlay of Rs. 365 crores for schemes of General Education. According to the latest available information,* the States and Union Territories have provided Rs. 338·37 crores in their finalised Plans for this purpose. With an outlay of Rs. 72 crores for Central schemes the total provision for General Education in the Third Five Year Plan comes to Rs. 410·37 crores. This is nearly 80 per cent more than the outlay for the Second Five Year Plan. The following table compares the outlays for the main groups in the two Plans :—

Group	Outlay		Percentage of total	
	Second Plan	Third Plan	Second Plan	Third Plan
1	2	3	4	5
	(Rs.in crores)			
Elementary Education	97·51	209·71	43·0	51·1
Secondary Education	52·32	88·62	23·1	21·6
University Education	46·30	78·05	20·4	19·0
Other Educational Schemes	30·69	33·99	13·5	8·3
TOTAL	226·82	410·37	100·0	100·0

State Plans

2. The provision of Rs. 338·37 crores in the State sector consists of Rs. 317·53 crores for schemes of the States and Rs. 20·84 crores for those of the Union Territories. Compared with the outlay for the Second Five Year Plan, this shows an increase of nearly 87 per cent—84 per cent for the States and 149 per cent for the Union Territories. The group-wise distribution of the total outlay is :—

*Figures are provisional.

Group	Outlay	Percentage of Total
1	2	3
	(Rs. in crores)	
Elementary Education	204·61	60·5
Secondary Education	77·74	23·0
University Education	37·90	11·2
Other Educational Schemes	18·12	5·3
TOTAL	338·37	100·0

Further break-up according to main sub-heads is given in *Annexure I*.

3. Under 'Elementary Education' the programmes for the expansion of educational facilities for children in the age group 6-11 account for nearly Rs. 113 crores or 55 per cent of the outlay. The other main items are : expansion of educational facilities for children in the age group 11-14 (Rs. 20·70 crores), teachers' training programmes (Rs. 20·61 crores), improvement of salaries and service conditions of teachers (Rs. 13·39 crores), school buildings and equipment (Rs. 11·76 crores) and special programmes for education of girls (Rs. 6·95 crores).

4. In the group 'Secondary Education', the expansion programme are estimated to cost about Rs. 18 crores or a little less than one fourth of the outlay. Conversion of high schools into higher secondary schools, school buildings and equipment and improvement of high/higher secondary education with an outlay of Rs. 11·61 crores, Rs. 11·90 crores and Rs. 13·55 crores respectively are some of the other major programmes in this field.

5. Under 'University and Higher Education', Rs. 17 crores (nearly 45 per cent of the outlay) is for the improvement of University and Collegiate education, including introduction of Three-Year Degree Course. Grants to Universities (including establishment of new universities) with a provision of Rs. 14·52 crores comes next and is followed by Scholarships (Rs. 1·93 crores). Each of the other programmes is estimated to cost less than Rs. one crore.

6. The group 'Other Educational Schemes' comprises schemes relating to Social Education, Audio Visual Education, Physical Education, Education of the Handicapped, Development of Hindi and Sanskrit, etc. The distribution of outlay for these sub-groups is as follows :

	Outlay
	(Rs. in crores)
(i) Physical Education and Youth Welfare Activities	6·57
(ii) Social Education	5·40
(iii) Directorate and Inspectorate	1·51
(iv) Education of the Handicapped	1·27
(v) Development of Hindi	0·96
(v) Development of Sanskrit	0·77
(vii) Audio Visual Education	0·58
(viii) Other Schemes	1·06

Central Plan

7. The outlay for the Central sector is Rs. 72 crores, out of which Rs. 37 crores are for schemes to be implemented by the University Grants Commission. This is nearly 56 per cent more than the outlay provided for the Second Five Year Plan. The break-up of Rs. 72 crores for the main heads is as follows :

	Outlay	Percentage of Total
		(Rs. in crores)
(i) Schemes of Pre-Primary Education and Child Welfare	3·00	4·2
(ii) Elementary Education	2·10	2·9
(iii) Secondary Education	10·88	15·1
(iv) University and Higher Education	40·15	55·8
(v) Physical Education, Sports and Youth Welfare Activities	5·85	8·1
(vi) Propagation of Hindi and Sanskrit	3·15	4·4
(vii) Scholarships	4·00	5·5
(viii) Social Education	0·92	1·3
(ix) Audio Visual Education	0·31	0·4
(x) Education of the Handicapped	0·99	1·4
(xi) Evaluation and Research	0·15	0·2
(xii) National Archives	0·50	0·7

II. PHYSICAL TARGETS

8. With the outlay provided by the States and the Union Territories the main targets* proposed to be achieved by them are :

Primary Education

- (i) starting of 78,000 new primary schools ;
- (ii) provision of educational facilities to 146 lakhs additional children in the age group 6-11. This will increase the enrolment in this age group from 343 lakhs in 1960-61 to 489 lakhs in 1965-66. The corresponding rise in the percentage of children in schools will be from 61.1 to 75.7;
- (iii) orientation of all schools to basic pattern ;
- (iv) appointment of over 3.50 lakhs additional teachers ;
- (v) increasing the percentage of trained teachers from 65 in 1960-61 to 75 by the end of the Third Plan.

Middle School Education

- (i) opening of 19,000 new middle schools;
- (ii) increasing the enrolment of children in the age group 11-14 by 42 lakhs (from 63 lakhs in 1960-61 to 105 lakhs in 1965-66). This will raise the percentage of children in this age group in schools from 22.7 to 30.6;
- (iii) appointment of nearly 1.30 lakhs additional teachers;
- (iv) raising the percentage of trained teachers from 65 in 1960-61 to 75 in 1965-66.

High/Higher Secondary education

- (i) opening of about 5,000 high/higher secondary schools;
- (ii) provision of educational facilities for 22 lakhs additional children in the age group 14-17, thus increasing the enrolment in this age group from 30 lakhs in 1960-61 to 52 lakhs by the end of the Third Five Year Plan. The corresponding rise in the percentage of children in this age group in schools will be from 11.7 to 17.6.
- (iii) raising the number of higher secondary schools by about 3,000 to about 6,400. This will constitute nearly 30 per cent of the total number of high and higher secondary schools;
- (iv) opening of about 300 multipurpose schools;
- (v) appointment of about 61,000 additional teachers;
- (vi) raising the percentage of trained teachers from 68 to 75; and

*Figures are provisional.

- (vii) provision of Elective Science in 9,600 secondary schools as against about 6,000 in 1960-61. This will increase the percentage of such schools to the total number of secondary schools from 36 to 45.

University Education

- (i) establishment of about 12 new universities;
- (ii) starting of nearly 350 new colleges;
- (iii) increasing the enrolment at university stage (Arts and Science) from 9 lakhs to 13 lakhs;
- (iv) introduction of Three-Year Degree Course by all universities; and
- (v) increasing the enrolment in science classes from 2.9 lakhs to 5.2 lakhs. This will increase the percentage of science students from 32 to 40.

9. The position with regard to enrolment of girls in the different age groups in 1960-61 and 1965-66 will be as follows :—

Age Group	1960-61		1965-66		Additional Enrolment
	Enrolment (Estimated)	Percentage of Girls in Schools	Enrolment (Proposed)	Percentage of Girls in Schools	
1	2	3	4	5	6
	(in lakhs)		(in lakhs)		(in lakhs)
6-11	110	40.4	196	63.0	86
11-14	14	10.6	27	16.4	13
14-17	5	4.3	10	6.8	5

III. SOME PROBLEMS FOR CONSIDERATION

10. The outlay for educational development in the Third Five Year Plan is almost double that in the Second Five Year Plan. Effective implementation of the developmental programmes would, therefore, call for a big administrative and organisational effort. In the Second Plan there was a shortfall in expenditure of about Rs. 14 crores against a total outlay of Rs. 227 crores. Bearing this in mind and also the fact that the allocation of resources from one annual Plan to another would depend very much on the progress achieved during the year, it appears necessary to give consideration to the measures required for speedy and effective implementation of the schemes.

11. Much of the delay in bringing a scheme into operation occurs at the stage when the details of the scheme are subjected to scrutiny at various levels and before the operative sanctions, financial and others, issue. It is observed that almost invariably the shortfalls in expenditure are largest in the first and the second years of a Plan. Since the allocation for the annual Plan depends in some measure, though not wholly, on the level of expenditure achieved in the previous years (as an indicator of capacity) the shortfall in one year tends to have somewhat of a "cumulative" effect. The considerable time that the pre-sanction scrutiny takes is generally attributed to the fact that the schemes as presented for scrutiny are not worked out in sufficient detail.

12. In the "post-sanction" stage delay is likely to occur in such ancillary processes as recruitment or posting of staff, construction of buildings, selection of location, issue of instructions to subordinate offices, etc.

13. The time available for a new scheme—provided for the first time in the budget—is limited to the financial year and if the greater portion is taken up in the preliminary scrutiny and other processes, there is so much less time available for actually working the scheme.

14. The following suggestions are offered for consideration :

(i) Advanced Preparation of Schemes

The schemes, particularly the important ones, should be worked out in detail in advance and processed during the course of the year preceding the year in which budget provision is made. In practically all States the budget rules provide for the examination of new schemes to be spread over the year, from July onwards of the preceding year. The schemes may have to be adjusted to some extent in the light of the ceiling fixed in the Annual Plan and the exigencies of the budget but such adjustments are generally of a marginal nature. However, valuable time would be gained by such advanced processing .

(ii) Time-Schedule

When a scheme is prepared, its components should also be worked out together with a time-schedule for its implementation. Components of a scheme such as selection of location, determination of the staff requirements, etc. can also be taken up in the advance preparation. The time-schedule would indicate the period within which action on the various components should be completed. Such time-schedule will be found useful in keeping track of the progress of the scheme.

(iii) Building Component

(a) In the Second Five Year Plan, one of the major items responsible for shortfall in expenditure was the building component. Where a fairly big programme of building construction is involved, it would be of advantage to have the arrangement that was tried out by some of the States in the Second Five Year Plan. They had arranged with the State P.W.D.'s for placing a small engineering unit at the disposal of the Education Department, for preparing the plans and estimates and helping in their processing up to the stage of administrative approval.

(b) Advance action for selection of sites and acquisition and evolving of type designs, wherever possible, may also be helpful in reducing the time given to the preliminary stages.

(iv) Issue of Operative Sanctions

If the schemes are worked out and processed in advance, it would be possible to issue the financial sanctions without much delay and start implementing the schemes soon after the budget appropriation has been granted by the Legislature. It seems desirable that particular attention may be given to reducing the period that elapses between the passage of the Appropriation Act and the actual issue of financial sanctions. The time saved here would add to the working time available for the actual implementation of the scheme.

(v) Administrative Strengthening

(a) All State Plans provide for the strengthening of the administrative staff of the Directorate. Advance planning as proposed in the above suggestions would not be possible if the staff required for it is not in position early enough to undertake the work. The traditional pattern has been that staff follows the scheme—schools are first opened and then the additional inspectorate is provided. It is suggested that the order may be reversed.

(b) Of particular importance is the strengthening of Planning Unit in the Directorates, as without an adequate Planning Unit, it becomes difficult to secure co-ordination or assemble the basic and up-to-date data for the preparation of the schemes or the review of their progress.

(vi) Delegation of Powers

The Administrative machinery is growing in size and the complexity of the functions it has to perform. It is felt that the necessary structural changes have not been brought about as rapidly as the size of the organisation has grown. This has led to excessive centralisation. It

is desirable that the existing pattern of delegated powers may be reviewed, if this has not already been done, with a view to delegating more powers, administrative and financial, to different administrative levels.

(vii) Staff Training

A consequence of the growing size of the organisation has been an unavoidable dilution of quality at those levels where the expansion has been largest. It is suggested that staff training at these levels should be organised systematically and as a regular part of the administrative routine.

(viii) Improvement of Statistics

It has to be admitted that the deficiency in educational planning that stands out most markedly is the lack of up-to-date statistical information. It is urgently necessary to strengthen the statistical organisation and equip it to contribute effectively to the processes of planning. A particular difficulty that has been experienced in compiling all-India figures on any matter is the very long time that it generally takes for the information to be communicated from the States. It is requested that arrangements may be made for sending statistical information as early as possible so that it may not lose its freshness by lapse of time.

(ix) Progress Reports

At present progress reports on the implementation of the Plan schemes are not being received regularly. Even in cases where these are furnished, the information given is very meagre and confined to expenditure figures. Reporting on progress and evaluation are of crucial importance for the Third Plan. These reports should help not only in judging the past but in anticipating problems and following up. They should be based on clear fact and analysis and not be mere descriptions or explanations. It is suggested that quarterly progress reports on important schemes may be sent. The annual reports, divided into two main parts, one dealing with the Plan as a whole and the other with the programmes in different fields, may be furnished by the end of June every year.

(x) Assessment of the Progress of the Schemes

Periodic review and evaluation of the progress of a programme or its impact is necessary for meaningful planning. Such reviews have hardly featured so far. It is suggested that for periodic evaluation of the progress of every scheme, the Department may set up a small team from amongst its officers, which will examine the working of the scheme and report on it to the Head of the Department.

(xi) Co-ordination in the Use of Funds

In addition to the money provided for education under the development head "General Education" there is a separate provision under other Heads of Development, which is also related to Education. Thus under the Community Development programme, a provision of Rs. 37 crores has been made in the Third Plan of which Rs. 19 crores is for social education and Rs. 18 crores for elementary and secondary education. A provision of about Rs. 32 crores has also been made for specific programme of education for scheduled castes, scheduled tribes and other backward classes. It is suggested that at the State level appropriate machinery may be set up for co-ordination amongst the various departments which have funds for educational development.

Co-ordination between the Central and the State Departments

15. (a) The programmes in the Third Five Year Plan have been so designed that the schemes in the Central and State sectors supplement each other and both subserve the objectives and targets of the National Plan. It is, therefore, necessary that there should be constant and close contact between the Central Ministry and the State Departments. At present such contacts are made in all-India conferences and at the time of the discussion of the annual plans. It is suggested that such conferences should be supplemented by conferences at the regional or zonal level where it may be possible to have an exchange of views and experiences about specific programmes in relation to the local circumstances.

(b) It is also suggested that there should be more frequent exchange of visits as between the officers of one State and another. Each State is conducting significant experiments in the educational field and visits of officers from other States will be greatly helpful in making these experiments widely known in the country and building up a common pool of experience. It is generally felt that our knowledge of what is happening in our country and of the educational systems in the various States does not match our knowledge of what is happening in other countries.

(c) One of the sources of recruitment for some of the posts under the control of the Ministry is by obtaining the services of State officers on deputation. The Ministry would like to get more officers from the State Departments than it has been able to secure so far. The arrangement for service on deputation is of as much advantage to the Ministry as it is to the State Department. While we appreciate that there is

a great shortage of qualified personnel, which fact accounts for the reluctance of the State Departments to spare its officers for service on deputation, it may be pointed out that the incidence of such deputation, would be merely of a marginal character so far as State Departments are concerned. A State would at the most have to lend only 2-3 persons. We hope that the requests of the Central Ministry for the loan of services of the State officers will be considered with utmost sympathy.

IV. SOME MAJOR PROGRAMMES IN THE THIRD FIVE YEAR PLAN

Some of the important schemes in the Third Plan will be discussed by the Conference in connection with the items included in the Agenda. Reference in the following paragraphs is confined to a few other programmes :—

(i) Expansion of Primary Education

One of the major programmes in the Third Five Year Plan is the introduction of free and universal education for children in the age-group 6-11. This programme calls for a big effort in mobilising community contribution and educating public opinion. In some States advisory boards of non-officials have been set up at the State level and also further down, for the purpose of associating non-official elements with the programme. It is suggested that if such State Councils or Advisory Boards are set up in all the States they may be found useful in focussing public attention on this programme.

(ii) Expansion of Educational Facilities for Girls

Another major programme in the Third Five Year Plan is expansion of educational facilities for girls at all stages. The Plan has referred to it as “by far the most important objective in the field of education”. It is most important for the success of this programme that the resources that have been allotted for it should be put to effective use and should not be diverted to any other scheme. It is also necessary that the progress of girls’ education at all stages should be reviewed periodically and up-to-date statistics of enrolment, expenditure, etc. should be specially collected. The special programme, which includes the items recommended by the National Council for Women’s Education, such as quarters for teachers, hostels for girls in secondary schools, stipends, etc., should be given particular attention and the progress of expenditure on these schemes kept under constant review.

(iii) Orientation Programmes

In the field of basic education the Programme of Orientation has been given high priority. The orientation courses covering all the teachers of the primary schools have to be completed during the first two years of the Plan. In the secondary education the development and consolidation of the multipurpose schools programme and the conversion to the higher secondary pattern have to be pressed forward at a greater speed.

(iv) Teachers' Training Programme

(a) The Training colleges have been somewhat of a neglected sector in the total plan of educational development so far as the allocation of resources is concerned. The whole problem of teacher-training needs to be carefully reviewed. At present there are mainly three different types of Training colleges preparing the secondary school teachers; some of them are run by the Departments of Education directly and award either university degrees or departmental diplomas; there are others which are private independent colleges affiliated to the various universities; and there are also the University Departments of Education. Though all these training institutions are serving the needs of the same school system, there is generally little or no contact between them, or between them, as a body, and the Department.

(b) At present the research activity in the Training colleges is at a low ebb and it is, therefore, suggested that the training colleges and similar institutions should be encouraged to undertake surveys and special studies on the various problems of secondary education. The training colleges can also participate more actively in organising inservice training for teachers. At present this is done mainly through the Extension Services Departments. If an immediate impact is to be made on the secondary schools, it is very necessary that all training colleges should be involved in the programme of inservice training.

(c) In a few States, the Department has taken the initiative in calling periodic conferences of the principals of the training institutions and the departmental officers where the problems of the training colleges are discussed and their experiences pooled. It is suggested that such biennial or annual conferences may be made a regular feature in all the States so that the training colleges may be brought closer to the problems of the secondary schools as they obtain in actual classroom situations. It would also help in giving a greater measure of unity to the training programme of secondary school teachers.

ANNEXURE I

**Outlay for Education in the Third Five Year Plan
according to Main Sub-heads**

Sub-head	Outlay	Percentage of Outlay for the Group
1	2	3
(Rs. in Crores)		
<i>Elementary Education.</i>		
(i) Expansion of Educational Facilities for Children in the Age Group 6—11.	113.15	55.3
(ii) Expansion of Educational Facilities for Children in the Age Group 11—14.	20.70	10.1
(iii) Teacher's Training Programmes.	20.61	10.1
(iv) Improvement of Salaries and Service Conditions of Teachers.	13.39	6.5
(v) School Buildings, Equipment, etc.... ..	11.76	5.7
(vi) Special Programmes for Education of Girls.	6.95	3.4
(vii) Basic Education (including Orientation Programmes).	5.76	2.8
(viii) Mid-day Meals and Free Supply of Textbooks.	4.70	2.3
(ix) Inspectorate and Directorate.	4.28	2.1
(x) Other Schemes of Improvement.	2.02	1.0
(xi) Pre-Primary Education.	0.73	0.4
(xii) Other Schemes.	0.56	0.3
TOTAL	204.61	100.0

ANNEXURE I—(contd.)

Sub-head	Outlay	Percentage of Outlay for the Group
1	2	3
	(Rs. in Crores)	
<i>Secondary Education:</i>		
(i) Expansion of Educational Facilities for Children in the Age Group 14—17	18.37	23.6
(ii) Conversion of High Schools into Higher Secondary Schools. ...	11.61	14.9
(iii) School Buildings and Equipment	11.90	15.3
(iv) Improvement of High/Higher Secondary Education	13.55	17.4
(v) Opening/Strengthening of Multipurpose Schools	3.86	5.0
(vi) Special Programmes for Education of Girls	3.58	4.6
(vii) Teachers' Training Programmes	3.36	4.3
(viii) Improvement of Salaries and Service Conditions of Teachers	3.15	4.1
(ix) Facilities for Teaching of Science	1.66	2.1
(x) Scholarships	1.63	2.1
(xi) Provision of Hostel Facilities for Boys	1.07	1.4
(xii) Directorate and Inspectorate ...	1.08	1.4
(xiii) Other Schemes	2.92	3.8
TOTAL ...	77.74	100.0

ANNEXURE I—(concl.d.)

Sub-head	Outlay	Percentage of Outlay for the Group
1	2	3
(Rs. in Crores)		
<i>University Education:</i>		
(i) Improvement of University and Collegiate Education	17.00	44.9
(ii) Grants to Universities (including Establishment of New Universities)	14.52	38.3
(iii) Scholarships	1.93	5.1
(iv) Construction of Hostels	0.99	2.6
(v) Facilities for Postgraduate Teaching and Research	0.88	2.3
(vi) Improvement of Salaries and Service Conditions of Teachers	0.76	2.0
(vii) Construction of Staff Quarters	0.50	1.3
(viii) Special Programmes for Education of Girl	0.48	1.3
(ix) Other Schemes	0.84	2.2
TOTAL ...	37.90	100.0
<i>Other Educational Schemes:</i>		
(i) Physical Education and Youth Welfare Activities	6.57	36.3
(ii) Social Education	5.40	29.8
(iii) Directorate and Inspectorate ...	1.51	8.3
(iv) Education of the Handicapped	1.27	7.0
(v) Development of Hindi	0.96	5.3
(vi) Development of Sanskrit	0.77	4.2
(vii) Audio Visual Education	0.58	3.2
(viii) Other Schemes	1.06	5.9
TOTAL ...	18.12	100.0

APPENDIX B

Problems of Textbooks (Item 2) (Ministry of Education)

Considering the important place that textbooks have in our educational system, it is necessary that the problems connected with them should be continuously under review and study the findings of which would form a common pool of experience that the States could draw upon. The nature of the problems differs from one stage of education to another—elementary, secondary and higher. There are also inevitable variations from one State to another, though the fundamental similarity of the problems as they present themselves in the States is more striking than the variations caused by local circumstances.

2. All the States, with the exception of two, have “nationalised” the production of textbooks for elementary schools. In the secondary schools, though full “nationalisation” has been done only in very few States, nearly all States have assumed full control over the selection and prescription of textbooks. There is, therefore, an adequate administrative organisation for dealing with some of the urgent problems.

3. It is suggested that as the first step it would be useful if each State Department set up a study group to examine in detail the problems of the production and supply of suitable textbooks at the elementary and secondary stages and formulate concrete suggestions for their solution. In particular, the study group may apply itself to the examination of the following points :—

- (i) preparation of projections of the demand for paper over the next five years ;
- (ii) data relating to the cost of production at different stages ;
- (iii) determination of the factors contributing to improvement in the production of textbooks and reduction of cost ;
- (iv) ways and means of prolonging the life of the textbook, particularly at the primary stage ;
- (v) analysis of the selection and reviewing procedures for secondary school textbooks ;
- (vi) identifying subjects of the secondary school curriculum where there is dearth of suitable textbooks ;
- (vii) examining the feasibility of inter-State collaboration so as to reduce the cost of production and improve the quality of content of textbooks, particularly at the secondary stage ;

- (viii) assessing the need for nationalising the preparation, production and supply of textbooks ; and
- (ix) introducing a positive emphasis on the promotion of the sense of national unity in school textbooks, particularly those relating to social studies and languages.

4. It is hoped that if these study groups are set up immediately, it may be possible for them to produce their reports within the next three or four months. The Ministry proposes to call a conference on the subject and it would be useful if the reports and investigations of these Study Groups are available to the Ministry before the conference on all-India basis is convened.

5. The general outline of some of the problems connected with the supply, production and selection of textbooks at the elementary and secondary stages are given in the following paragraphs. The arrangements under consideration for the supply of inexpensive textbooks in universities and colleges have also been described.

PRIMARY STAGE

Supply of Paper

6. The total number of textbooks needed will increase substantially during the Third Plan. In the age-group 6—14, the total enrolment is expected to rise to 594 lakhs, out of whom about 188 lakhs will have been enrolled for the first time. In view of this increase and the fact that the demand for books is continually rising, it is estimated that the total demand for textbooks will rise by about 40 per cent between 1960-61 and 1965-66. The strain on the paper supply position on account of this increase of school population will be considerable. Hitherto, textbooks for schools as well as writing materials for children used to be manufactured with imported paper. Owing to the difficult foreign exchange position imports of paper were totally stopped with the result that the paper supply position for school books and writing materials became very unsatisfactory during the Second Five Year Plan. In the Third Five Year Plan, this position is likely to worsen. Owing to the increase in demand in other and more urgent sectors, the total quantity of paper likely to be available for school textbooks and writing materials is expected to be far too inadequate to meet the likely demand.

Life of Textbooks

8. At present, the parent is responsible for supplying his children with textbooks and writing materials. With compulsory education, it may become necessary for the State to assume increasing responsibility for supplying free books and writing materials to children and certainly to all needy children.

9. In advanced European countries and the U.S.A. the general position is that the State has taken upon itself the responsibility to provide textbooks and writing materials which are needed by children at the primary stage, irrespective of the income of their parents. This position will have to be adopted in India sooner or later, and it is, therefore, of interest to know how "Western" countries have faced this problem and solved it. In those countries, the average life of a textbook is much longer than it is in India. Unfortunately, this aspect of the problem has not received here the attention that it deserves. Now that the State is faced with the problem of providing school books for all children, it is no longer possible to ignore this point.

10. The importance of a study of this problem is obvious. From the few enquiries conducted in this field, it appears that the average life of a textbook in India is between one and two years at the primary stage. It is the least in class I. Children who have been newly enrolled in schools generally require five to six copies of their first primer and reader before they pass class I, so that the average life of a textbook in this class may be said to be two to three months only. As against this, the average life of school books in England is eight years, so that even if an English book costs a little more at the beginning, it is ultimately far more economical than the cheap but poorly produced school books of our country. From the point of view of paper supply, the longer the life of a textbook, the smaller the demand for additional paper.

11. Studies made in England and other countries have shown that the following factors affect the life of a school text :—

- (a) paper, binding and production of the book;
- (b) attractiveness of the book—children generally tend to preserve carefully a beautiful book while they tend to destroy a bad one ;
- (c) the home atmosphere of children—in cultured homes with traditions of reading and the proper care of books, children grow up to love and respect books and to trust them properly while, under contrary conditions, children generally tend to treat the books with scant respect and to destroy them;
- (d) the attitude of the teacher and the emphasis that is laid by him on teaching children how to take care of books and keep them for longer use ;
- (e) the total number of books available in the school—the larger the number of books, the greater is the life of each individual book ; and

- (f) whether the books are kept in school or given to children at home. Books kept in school in the custody of teachers and made available to children during school hours only last longer. Books which are entrusted to children and are taken home, are generally destroyed more quickly. Children are most careless with books at home and on the way to school and back.

12. In view of these findings, it is clear that concern should be to take steps through the proper education of teachers and through other suitable methods, to prolong the life of a textbook as much as possible. It is proposed to undertake such an investigation under the Central Bureau of Textbook Research in the areas round Delhi. But only one investigation of this type will hardly serve our purpose. It would be desirable to carry out small sample surveys in every State so that the findings can be pooled and more reliable general conclusions can be drawn from them.

13. Studies made in villages of India show that the destruction of school books is the greatest in class I. The child in this class is new to school and is very often unwilling to attend it. This hostility to the school is often directed against slates and books, and children break slates and tear books or throw away pencils when going to school or coming back. That is why, on an average, a child will need three or four slates and the same number of books before completing class I. When it grows up and begins to like school and books, its attitude changes and the hostility to books disappears. In order to conserve the resources of the school books at this stage, therefore, experiments have been tried under which the required number of slates, pencils and school books are provided by the State to the school in classes I and II. These are given to the children when they come to school, and taken back from them when they leave. There is very little home work at this stage, particularly in class I, so that this arrangement does not affect the progress of children. (There is no objection to a parent's buying slates and books on his own and giving them to his children at home. This is an extra with which the State is not concerned). But in so far as the life of books and slates is concerned, it was found that in a group of 40 children in class I, the average replacement per year would be two or three books, and four or five slates as against three or four books and slates required by each child under the other system. Experiments on these lines should be tried more generally. Other experiments for the same objectives may also be conceived and tried.

Frequent Change of Textbooks

14. At present considerable wastage that occurs is owing to frequent changes of textbooks. No textbook should be changed for a period of less than five years and care should be taken to see that the

textbooks produced are strong and durable. The absolute price of the book is not as important as its life. Under a system where the parent is responsible for providing his children with books, and where he is not interested in using the book for more than a year, the price of the book becomes all too important. In such a system, the parent asks for the cheapest book and the publisher encourages him in this preference because the sooner a book is destroyed, the greater is his turnover in trade. But in a system where the State provides the children with books, it is the duration of the life of school books that is more important than the price. It becomes economical to spend more on the production of books if their average life can thereby be increased. These points will require to be taken into consideration in producing textbooks under the direct control of the State or in improving them for use in schools.

Nationalisation of Textbooks

15. The problem of nationalisation of textbooks will also have to be examined. There are now two systems in vogue—under the first system, production of textbooks is left to private enterprise and the State only appraises and prescribes selected books ; and in the other, the State itself produces the textbooks required. Both systems have now been in operation for some time and a stage has been reached when the whole field can be reviewed and a more fruitful policy adopted for the future. The experience and proposals of State Governments would be of great interest and value in formulating a new policy.

SECONDARY STAGE

16. The Secondary Education Commission set up by the Government of India in 1952 studied the textbooks problem for secondary schools and pointed out various defects and suggested remedies. The Commission noted that there was a great deterioration in the standard of textbooks. Most books submitted and prescribed were poor specimens in every way—the paper was usually bad, the printing was unsatisfactory, the illustrations were poor and there were numerous mistakes. The Commission recommended, *inter alia*, that :—

- (i) the Textbook Committee should lay down clear criteria for the type of paper, illustrations, printing and format of the book ;
- (ii) the Central and State Governments should maintain libraries of blocks of good illustrations ;
- (iii) frequent changes in textbooks prescribed for study should be discouraged ;
- (iv) some textbooks should be published directly under the auspices of the Textbook Committee ;

- (v) it was desirable to modify the dependence of education on certain prescribed textbooks; and
- (vi) high-powered Textbook Committees should be constituted.

Such committees should have the following functions :—

- (a) to prepare a panel of expert reviewers for each of the subjects included in the secondary school education curriculum ;
- (b) to appoint Expert Committees from time to time, consisting of two or three members to give detailed reports on the suitability of the books referred to them. They should be paid a suitable honorarium ;
- (c) to invite experts to write textbooks and other books for study, if necessary ;
- (d) to co-operate with similar committees in other States wherever possible so as to select suitable books in the language concerned on a regional basis ;
- (e) to arrange for the publication of textbooks and other books needed for the schools ;
- (f) to maintain a fund from the amount realised from the sale of publications ;
- (g) to grant suitable honoraria to authors or royalties to publishers whose books are approved as books of study for the schools ; and
- (h) to utilise the balance of the fund for purposes such as, awarding scholarships to poor and deserving candidates, providing necessary books for such pupils ; contributing towards the cost of the supply of milk, midday meals and evening refreshments to school children, and generally for such other purposes as are conducive to the improvement of secondary education.

17. At its meeting held on January 5, 1961 the Committee on Secondary Education set up by the Education Panel of the Planning Commission considered the question of textbooks and made the following suggestions :

- (i) the selection of good textbooks was a task of national importance, especially if the fissiparous tendencies evidenced in the country, at the moment, have to be counteracted and a sense of emotional integration and national cohesion developed among the people ;

- (ii) the Government should take over the responsibility of selecting a panel of authors and making payments of adequate remuneration for writing textbooks ;
- (iii) after the books have been approved the Government should hand over the production of textbooks to private publishers laying down various norms like the quality of paper, printing, format, the price range, etc. and
- (iv) a high-powered Textbook Committee should be set up at the Centre. The functions of this Committee, comprising educationists of eminent standing, State representatives and representatives from non-official agencies, would be as follows :
 - (a) to lay down general guiding principles on which textbooks in various subjects would be prepared ;
 - (b) to get textbooks prepared for Union Territories whose administration was the responsibility of the Centre ;
 - (c) to arrange for the preparation of model textbooks by eminent authors in various subjects for the guidance of States; and
 - (d) to see that the general policies laid down are being followed in the preparation and prescription of textbooks.

18. The important problems that require to be tackled at present in textbooks at the secondary stage are :

(i) Improvement of the Quality of Contents of the Textbooks

(a) It is necessary, in the first instance, to analyse the content of the textbooks in force and ascertain the nature of the deficiencies from which they suffer. It is clear enough that competitive bidding by private publishers and authors has not always succeeded in securing the best textbook : at the most it has generally only ensured a textbook with less mistakes than others. The problem of improving the quality has also to be examined in relation to the procedures for selection, reviewing and editing, and the criteria that may have been fixed for the physical appearance and production of the textbook. In the selection procedure one important element is the time allowed to authors and publishers to submit their books. It has been found that the shorter the time, the greater the possibility of only a mediocre textbook being offered. Another point to be considered is whether the tenders should be only for published books or may also include manuscripts. The practice differs from State to State. These points in the selection procedures would need to be carefully examined with reference to the results that have been obtained.

(b) It is observed that where criteria are not specified clearly and in unambiguous terms, the assessment of different reviewers on the same book varies so widely that it loses much of its validity. In some States reviewing does not include editing and, therefore, there is no arrangement for rectifying the errors that may be found in a book which otherwise may be acceptable.

(c) It has now been accepted in all countries that a good school textbook is not so much the undertaking of an individual author or publisher as a joint co-operative enterprise of more than one author, collaborating with other experts. It seems desirable, therefore, that an experiment should be made in producing some textbooks by a panel of authors and illustrators under the direct supervision and guidance of the State departments.

(ii) Preparation of Suitable Textbooks for 'New' Subjects

(a) In some subjects the dearth of suitable textbooks is more acute than in others. For example, social studies and general science represent subjects which are somewhat still unfamiliar. Similarly, good textbooks are not available in technical subjects like agriculture, technology, etc.

(b) It would be useful if each State undertook a study of the particular subjects in which suitable textbooks are not available. It would be necessary to have textbooks for these subjects specially prepared by commissioning a panel of authors for the purpose. This is also an area where greater inter-State collaboration can be of advantage. In subjects like technology and science a book can be prepared on an all-India basis with the help of experts on the subject and can be made available to the State authorities for introduction in their schools after such adaptation as may be necessary in the light of local conditions. The possibilities of such inter-State co-ordination need to be explored.

(c) Apart from textbooks on these new subjects, it is also necessary that they should be supplemented by guide books for teachers and other supplementary reading material. It is suggested that the preparation of such guide books may be entrusted to the training colleges.

(iii) Greater Co-ordination Between Curriculum Construction, Examination System and Textbooks

Curriculum construction is more or less a continuous process and the textbooks should exemplify the objectives of the curriculum. Similarly, the new evaluation techniques of examination have to be woven into the curriculum on the one hand and the textbook on the other. The existing procedures for curriculum construction, the examination

system and the selection and prescription of textbooks need to be carefully analysed to ascertain to what extent there is co-ordination and what measures are necessary to bring about greater collaboration in these three processes.

(iv) Improvement In the Quality of Production

By and large our textbooks stand out in the poor quality of production. One possible reason is that the criteria of production are not laid down exhaustively or with sufficient specificity. The standards in regard to paper, print, type and the use of illustration have to be examined. A collection of representative textbooks from the States shows a wide range in the quality of production which does not necessarily co-relate with the differences in price.

(v) Cost of Textbooks

With the introduction of more subjects in the school curriculum, the number of textbooks is increasing with a consequential increase in the cost of education. Rise in the cost of writing material has added to the rising cost of textbooks. Detailed studies are necessary about the cost data and how some reductions can be effected. In this connection, the following points would need to be borne in mind :

- (i) printing of large editions so as to reduce the cost per unit. The feasibility of inter-State collaboration for subjects such as English textbooks or use of printing blocks or common illustration has to be explored ;
- (ii) reduction in overhead charges ;
- (iii) reduction of the margin between the selling price and the cost of production. An examination of the existing system of pricing shows that the variation is as large as 40 per cent in one State to over 300 per cent in another State ; and
- (iv) to examine the feasibility of using school co-operative shops also as distribution centres.

(vi) Selection of Textbooks

Apart from the mechanics of textbook production, a good textbook has also to discharge a task of national importance by promoting in a positive way the values that the nation stands for. The recommendation of the Education Panel of the Planning Commission has drawn particular attention to this matter. Education has a vital role to play in counteracting the fissiparous tendencies which has been gaining strength and in promoting the sense of national unity and emotional integration. It is felt that in the selection of textbooks not enough emphasis is being given to this positive role of education. Textbooks relating to social education and languages particularly have to carry a positive

emphasis on national unity. One of the criteria for selection of textbooks should be :

- (i) it should give a positive emphasis to national unity ; and
- (ii) it should not contain any material that might encourage inter-communal, inter-State or inter-language group differences.

COLLEGIATE STAGE

19. One of the major problems in the development of Higher Education in India is the non-availability of reasonably priced books in various fields both for purposes of reference and for use as textbooks in colleges and universities. The problem arises mainly from the fact that we have to rely almost entirely on foreign books for imparting instruction, and this is particularly so in the Humanities, Economics, Sociology, Psychology and Political Science. As foreign books are expensive, they cannot be easily bought by students and teachers.

20. The Ministry of Education has taken the following steps for developing an adequate programme to encourage inexpensive publication in India of foreign textbooks and other textbooks :

(i) Inter-Ministerial Committee

An Inter-Ministerial Committee consisting of representatives of the Ministries concerned and the University Grants Commission has been set up. With the assistance of this Committee, select lists of titles in Basic Sciences, Humanities, Medicine, Agriculture and Veterinary Science and Engineering and Technology have been finalised.

(ii) Cheaper Editions of Foreign Textbooks

(a) In consultation with the concerned Ministries and the Ministry of External Affairs, certain broad guiding principles have been finalised within which the programme of inexpensive publication of American textbooks, with the help of P.L. 480 Funds, would be undertaken by the American Embassy or a representative designated by the Embassy for this purpose. The United States Information Service have already taken up work regarding the publication of some titles.

(b) The Government of the United Kingdom have also initiated action for the production of low-priced books for use in India and have given a measure of priority to University textbooks. The first group of 23 textbooks on scientific, engineering and other technological subjects is now being produced. The price range of these books varies from nine to fifteen shillings a volume. These prices average roughly one-third of the normal and, in some cases, even less. The list will be followed by a further group of University textbooks on these and other

subjects. The books will be sold through normal commercial channels in India and are expected to be available on the market very shortly.

(c) There has also been an offer from the Soviet Government under the Indo-Soviet Agreement for Technical Assistance for the Development of the Institute of Technology in Bombay, to make English translations of Russian textbooks in science and technology available to the Government of India without any cost for publication and distribution in India. This work is being handled by the Ministry of S.R. & C.A. It is understood that that Ministry has made a list of 30 titles, and that a decision is being taken on how many of these require to be translated, as also on the number of copies to be printed.

21. The proposal for the cheap publication of foreign textbooks in India has entailed the introduction of suitable measures to safeguard the interest of Indian authors, who have already established themselves and whose textbooks, etc., can be treated as standard. In order that these books and their authors do not suffer a setback by not being able to compete in the general market with the foreign books now proposed to be produced cheaply, steps will have to be taken to protect their interest. For this purpose, a suitable subsidy will require to be made.

APPENDIX C

Strengthening of Extension Services Project In Training Colleges (Item 3)

(Ministry of Education)

The Extension Services Project was introduced in the country in 1955-56. During these six years, 54 Extension Centres have been established in selected training colleges in the various States and they have been carrying out a varied programme of in-service training for teachers of secondary schools in the areas which they have served. Nearly 8,000 schools are served by these centres so that a little less than 50 per cent of the existing secondary schools are covered in one form or another.

2. Experience of the past few years has convinced all who have seen the Extension Centres at Work that the Extension Project has perhaps been one of the most successful efforts of the last two Plans in improving teacher competence at the secondary level. With a modest investment of money and personnel it has been possible to carry out the various new ideas of re-organisation of secondary education to a considerable section of teacher population in a manner which would not have been possible through any other agency. They have also produced another wholesome effect, namely, that of bringing the training colleges in closer contact with the problems of secondary schools to which they are expected to supply trained teachers. In fact considered from the long-range point of view it may be claimed that the more enduring result of the Extension Project has been to stimulate the training colleges to a keener and more realistic awareness of the needs of the secondary schools in the way of teacher preparation.

3. In spite of this record of good work, much more remains to be done to stabilise and strengthen the Project, to extend its idea to other training colleges and to ensure that its activities are well integrated with the requirements of the States. The areas which require strengthening are mentioned below :

- (a) Only a small part of each State is covered at present by the Extension Centres. Even within the area allocated, the Centres are not able to serve all the schools situated in that area. It is, therefore, necessary to so demarcate the districts in a State that no secondary school is left out of the jurisdiction of one or the other of the Extension Centres in the State. It is realised that a too extensive area might not be able to receive equal attention in all respects from the Extension Centres. It is, however, felt that to carry some service or other to every secondary school is better than not to include some schools at all. This would also ensure that no teacher in a State will be precluded from participation in a Centre's programme.

(b) One of the weaknesses in the past has been that some Extension Centres have not maintained an adequate measure of co-ordination with the trends and needs of the State Education Departments. In the initial stages of the project, the Centres were entirely administered, financed and controlled by the former All-India Council and this perhaps contributed in a large measure to this situation. At the same time the State Departments also have not utilised the resources available at the Extension Centres in carrying out their various measures of secondary education reform. In the Third Plan where we have set ourselves specific targets of achievement in secondary education, it is most desirable to have the maximum co-ordination between the State Education Department and the Extension Centres. The Extension Centres should in fact function as in-service out-posts of the State Education Department helping it in implementing the various programmes of improvement of teacher education.

(c) The original intention when the Project was started was that the extension idea should ultimately become an integral part of the training colleges. In fact it has been borne out repeatedly by past experience that no teacher education programme can function efficiently without incorporating within itself a sound programme of in-service training. Education being a continuously growing process, educational concepts, practices and techniques do not remain static. However efficient the pre-service training programme may be, it soon gets out of step with the current trends unless extreme vigilance is exercised to keep in touch with them.

(d) The limited resources of funds and personnel at the Centre and the States should be utilised to optimum advantage for promoting essential programmes arranged in a well-considered order of priority in the light of the needs of the State and also of the overall objectives.

4. The five zonal conferences of the Honorary Directors and Co-ordinators of Extension Services Centres held during the months of February and March 1961 discussed these and related matters. Subsequently, the Directors of Public Instruction/Education Madhya Pradesh, Punjab, Madras and Kerala held meetings in their respective States with the Directors and Co-ordinators of Extension Services Centres to review the work that has been done so far and prepare the future programme. These meetings have been of inestimable advantage for building up an integrated programme of Extension Services for the secondary schools.

5. In the light of the experience of these discussions the following measures are suggested for the consideration of the State authorities :

- (i) Similar joint meetings may be convened in the remaining States also as early as possible in the academic year 1961-62.
- (ii) The Director of Public Instruction/Education may make a suitable allocation of areas to the Extension Services Centres so that the entire State is covered by in-service programmes.
- (iii) In order to render guidance service adequately to this enlarged area, extension units may be established in the training colleges located within the area of the Extension Services Centres. The in-service programmes should be suitably distributed among the colleges depending upon the resources of specialists available. The expenditure involved may be borne by the main Centre. One of the lecturers of the training college may be placed in additional charge of this work and be paid a suitable honorarium.
- (iv) The Director of Public Instruction of the State should circularise all the secondary schools and the officers of the Inspectorate about the significance of in-service activities and the need for extending the fullest co-operation to the Centres' programmes.
- (v) Incentives should be provided to teachers to draw them into greater participation in in-service programmes. Provision may be made for suitable entries in the confidential reports of such participants provided the individual had been invited.
- (vi) The programmes of the Extension Services Centres should give priority to the State and National targets in secondary education, *e.g.*, improvement in the teaching of English and Science, content courses in subjects like Social Studies, Home Science and General Science, evaluation, educational and vocational guidance and improvement of school libraries.
- (vii) The staff of the Extension Services Centres should pay more frequent visits to schools especially in backward and rural areas.
- (viii) During these visits the officers of the State Education Department may accompany the Extension Services staff, whenever possible.
- (ix) Copies of circular letters issued by the State Department to secondary schools may also be sent to the Extension Services Centres to keep them informed of the current programmes and instructions of the Department.

- (x) The Extension Services Centres could assist the State Education Department in implementing the various schemes in secondary education, particularly those which bear directly upon teacher education and improvement of schools. They could be utilised to assess the needs of a school in a particular area or appraise the progress of an improvement scheme.
- (xi) On important schemes such as cumulative record cards, organising content courses, etc., the Extension Services Centres in a State should work together so as to divide the load and avoid duplication of effort.
- (xii) The State Education Department might consider pooling the funds available in its budget for in-service work with the funds of the Extension Services Centres to achieve the targets in the Third Plan.
- (xiii) The Extension Centres in a State should combine their resources in respect of publications so that worthwhile publications may be brought out in adequate number. The feasibility of distributing copies of the Centres' publications to *all* the secondary schools in the State may also be considered.
- (xiv) Every seminar organised by the Centre should be accompanied by self-evaluation and a plan for follow-up work.
- (xv) Every Centre should also undertake a continuous evaluation of the various techniques employed by it so as to find which items yield the maximum results.
- (xvi) Such an integrated programme as indicated above should be drawn up at the beginning of the year in the joint meetings between the State Education Department and the Extension Services Centres. Its implementation and progress should then be watched and assessed through periodic meetings of the officers of the State department and Extension Services Centres, preferably once in four months.

6. The Conference may examine these suggestions and offer its views for making the Extension Services Project a dynamic instrument for achieving the targets in secondary education.

APPENDIX D

Science Education in Secondary Schools (Item 4) *(Ministry of Education)*

It is universally accepted that science education at all levels and specially at the secondary stage should receive special emphasis during the Third Five Year Plan. The various State schemes have also laid a similar accent in their programmes. The precise picture regarding the amount provided or the schemes of science improvement contemplated in each State is not yet available. However, it is presumed that the following broad areas of emphasis would receive attention in these programmes :

- (i) provision of general science in all the secondary schools in those States where such an arrangement does not exist at present ;
- (ii) provision of elective science in as many schools as possible (statistics collected after discussions with the State Working Groups indicate that on an all-India level we shall be able to achieve introduction of elective science in about 47 per cent of the total number of secondary schools that would exist at the end of the Third Plan);
- (iii) improvement of laboratory and science library facilities in secondary schools ;
- (iv) preparation of teachers for the increased provision of general and elective science. This will have to be dealt with at both pre and in-service levels ; and
- (v) encouragement of co-curricular programmes in science, such as, science clubs, science fairs and science exhibitions.

2. During the past year the Directorate of Extension Programmes for Secondary Education has been giving considerable thought to the improvement of science education in secondary schools in the next five years. A series of State-level seminars were held on the subject as a result of which suggestions are now available on the immediate and long-range needs of science education. On the basis of these data, a programme of improvement of science education in secondary schools has been tentatively drawn up which incorporates the following major features :

I. IMPROVEMENT OF SCIENCE TEACHING

(i) Survey of Present Position

Although the direction in which science education should progress is known in a broad way there is no comprehensive or objective data on the position of science teaching in the various States. This knowledge is necessary in order to draw up a very specific programme of improvement. It is also equally necessary that such a survey should be quick and comprehensive so that its results will be available very early in the first year of the Third Plan. Such a survey should also bring out concrete suggestions as to the measures to be taken immediately for improvement. A suitable agency will have to be entrusted with this survey.

(ii) Curricular Studies

The syllabus in general and elective sciences which were introduced about five years ago, has taken various shapes in the States in the actual implementation. This is particularly true of general science where the concept has not been clearly understood and the integration consequently remains not fully realised. Before we can undertake any worthwhile revision or improvement of the existing syllabuses, it would be necessary to make a comparative study of the existing syllabuses in the various States with the Draft Syllabus originally formulated by the Ministry.

(iii) Preparation of Teachers

The major difficulty in any programme of educational reform is the preparation of teachers. This is particularly accentuated in the case of science. In fact the pace of introducing elective science in higher secondary schools in the Third Plan has had to be limited to the capacity of each State to find the requisite number of trained teachers to handle the subject. The different aspects of the problem are :

(a) Paucity of M. Sc.'s

It is generally stipulated in most of the States that M.Sc. graduates should alone handle the elective science in the higher secondary schools. Only about 2,500 M.Sc.'s pass every year out of the Universities of whom those who would enter the teaching profession cannot be more than about 500. The requirement of these graduates on the other hand is somewhere in the neighbourhood of 12,000 for the provision of elective science alone during the Third Five Year Plan. It is, therefore, obvious that the possibility of securing the required number of teachers with M.Sc. qualifications for our improvement programmes in science is remote, if not impossible. This question was discussed by the All India Council for Secondary Education and by its sub-committees and various long and short-term measures were recommended for preparing teachers to handle the subject. It seems as if we shall now have to

make a more realistic approach to this problem. For a long time to come it may be necessary to meet our teacher requirements by preparing the existing B.Sc. teachers with content-*cum*-pedagogy courses so as to give them sufficient competence to handle the science course of the higher secondary schools. The National Science Foundation of America organises Summer Institutes at selected universities where teachers from the secondary schools are given a series of content courses in the various branches of science. A similar arrangement will have to be tried out in this country for preparing our teachers.

(b) Three-Year Courses

A long-range solution to this problem, however, seems to lie in another direction, namely, that of instituting three-year content-*cum*-pedagogy courses for students passing out of the higher secondary schools. An experiment in this direction is being tried at the Kurukshetra University and this is the pattern that is widely in vogue in the U.S.A. It is also proposed to try out such a course as a pilot project in one of the regional colleges that will be set up in the Third Five Year Plan.

(c) Content Courses

In the meanwhile, parallel efforts will have to be made through the Extension Services Centres and other in-service programmes to give greater competence to the science teachers in handling the content of the new courses. The recent conferences with the Extension Centres and the State Education Departments also emphasised the need for organising more content courses in science, especially in general science.

(d) Pre-Service Training

At the same time, it cannot be overlooked that all these measures will have to be supported by suitable reorganisation of the teacher preparation programme at the pre-service level. At present the preparation given to the teacher trainees in the training colleges in the methods of teaching general or elective science is far from adequate to meet the new demands. In fact, very few training colleges offer satisfactory instruction in the method of teaching general science. It is, therefore, imperative that we undertake a detailed study of the methodology of science teaching at the training college level and initiate steps to improve it in such a manner that it meets the requirements effectively. Madhya Pradesh has a proposal by which one or more of the training colleges will be exclusively set apart for training teachers in science. This would enable these institutions to be equipped and staffed in the best possible manner and to provide a more effective type of training to the teachers. Similar methods may have to be explored to raise the standard of science teaching at the pre-service level in the training colleges.

(iv) Production of Science Literature

There is at present an acute dearth of attractive and well-prepared textbooks and other supplementary reading material in science. If an abiding interest in the subject is to be stimulated in the pupil, steps shall have to be taken to present to them scientific facts in a graded and attractive manner so as to draw them into a deeper study of the subject. Efforts in this direction will have to include :

- (a) textbooks in general science and in the various branches of elective science ;
- (b) teachers' handbooks in general and elective science ; and
- (c) supplementary reading books in science.

As regards the preparation of teachers' handbooks, the Directorate of Extension Programme for Secondary Education is considering a programme of preparing handbooks for specific units of the general science syllabus. In respect of supplementary reading material, the Directorate is preparing a list of topics on which a series of books could be brought out. The agency which would be entrusted with the preparation of these books will have to be considered in due course. As regards the preparation of model books for use in schools, an experimental effort has to be made by involving groups of teachers of recognised competence in working out the draft.

(v) Other Ancillary Measures

Supporting the major programmes detailed above in strengthening science teaching are other ancillary measures such as the following:

- (a) preparation of guide lists of laboratory equipment ;
- (b) preparation of laboratory designs including furniture for the guidance of schools, teachers and State Education Departments;
- (c) preparation of lists of science books which every secondary school should have ;
- (d) preparation of lists of audio-visual and other teaching aids required in science teaching ;
- (e) working out students' science assignments ;
- (f) evolving time-saving devices in the teaching of science ;
- (g) evolving improvised or cheap apparatus for the teaching of science ; and
- (h) mobilization of resources of knowledge and experience available in the teaching fraternity by organising a network of science teachers' associations as is being done in the U.K.

II. SCIENCE CLUBS

(i) Establishment of Science Clubs

3. During the last three years the former Council and the Directorate have established 428 school science clubs and 39 central science clubs distributed over the various States of the country. Besides these clubs there are a number of other clubs in schools which have sprung up on the local initiative. The aim of these clubs is to produce a creative interest in scientific activities and to present an environment which will lead them on to make an exploratory approach to scientific phenomena for it is through such activities that future science talent can be built up. It is proposed to strengthen and expand this movement in the Third Plan bringing within its fold about 800 more science clubs. Since this constitutes only about six per cent of the total number of secondary schools in the country, it would be desirable if the programme should be extended to at least 20 per cent of the schools. This will be possible only if State Education Departments encourage the establishment of more clubs in secondary schools and make a suitable provision for recurring and non-recurring grants for the purpose. State departments could also consider the possibility of treating the expenditure incurred by schools on the running of science clubs as an admissible item of expenditure for purposes of grant.

(ii) Science Club Movement And The Training Colleges

4. If the science club movement has to take firm roots, the foundation for it has to be laid by the training colleges in their pre-service training programme. As a first step in this direction, the Directorate has established central science clubs in 39 selected training colleges where Extension Services are located. These central science clubs are expected to give guidance and direction to the other science clubs in the area in organising activities effectively. The immediate need in this programme is to give necessary training to the sponsors of these science clubs in organising various projects and in giving the type of leadership that is required by member schools. The Directorate proposes to organise two or three training courses for these sponsors during the current year. It would accelerate the movement if every training college provided training to the teacher-trainees in the organisation and running of science clubs and in order to do so effectively set up a well equipped workshop in the training college.

III. SCIENCE DAYS AND SCIENCE FAIRS

5. In order to develop scientific attitudes and interests in the children and the public, it is necessary to create a suitable climate through such programmes as science days and science fairs. The second meeting of the All India Council for Secondary Education laid great emphasis

on this programme and recommended that December 1 should be celebrated as a National Science Day to be followed by a week of science exhibitions and other activities. The State of Madhya Pradesh has already organised a State-wise science day in December, 1960. It is proposed to implement this programme on a country-wide scale during 1961-62, in the first instance through the agencies of the Extension Centres and the existing science clubs. In the subsequent years, these science fairs would be organised on a State and national level. It would also be desirable if some of the States could take up this activity as a pilot project during 1961-62 so that on the basis of this experience a large scale programme could be organised later. It is felt that a well-organised programme of science days and fairs with due publicity through films, articles and photographs would go a long way in making the general public and the students more keenly aware of the importance of scientific progress.

IV. SCIENCE TALENT SEARCH

6. Efforts to improve science instruction would take care of the basic informational aspect of science and will ensure that every secondary school pupil receives a minimum of science instruction in the best possible manner. However, it will not be adequate to build what will truly constitute the future investment for the nation, namely, a body of scientists of high calibre. This requires another type of effort which would locate and discover science talent among pupils as early as possible and foster the talent, thus located, until it develops into a fully grown scientific mind.

7. While science clubs, science fairs and science days, as those stated above, are effective measures for making large masses of pupils science minded, they will not in themselves constitute an organised method of finding and developing the future scientists of the country. This requires a programme of a somewhat different kind and, one that will be subjected to more rigorous procedures of selection and follow-up. The Directorate has, therefore, formulated a programme of All-India Science Talent Search, which it proposes to implement as early in the Third Plan as possible. This programme has been drawn up with the assistance of Miss Patterson, Science Consultant from the Ford Foundation, who has worked for over 17 years with the Westinghouse Science Talent Search of the U.S.A.

The All-India Science Talent Search

(i) Aims and Objectives

8. The aims and objectives of the All-India Science Talent Search will be :

- (a) to locate through suitable procedures science talent in pupils by the time they complete the secondary school ;

- (b) to provide financial and other facilities to those talented pupils in science to pursue and complete their studies in the subject ; and
- (c) through these two processes, to build up a body of future scientists who will contribute to the scientific advancement of the nation in the fields of both pure and applied science.

Certain other outcomes will also emerge out of this programme of which the most important will be the following :

- (a) to step up the teaching of science as a whole at the secondary and higher levels, by influencing the curriculum teaching methods, etc.
- (b) to provide colleges, universities and technical schools with a means of contacting talented science students ;
- (c) to mobilise the interest and support of industries, research centres and other science agencies in the development of science talent; and
- (d) to provide an incentive for science activities such as science clubs, science fairs, etc.

(ii) *Abilities, Skills and Qualities to be Tested*

9. The following abilities, skills and qualities will be tested :

- (a) Interest in science, perseverance and tenacity of purpose ;
- (b) knowledge of fundamentals of the different branches of science ;
- (c) ability to apply knowledge in solving problems, interpretation and analysis of data ;
- (d) experimental and constructional skills ;
- (e) scientific way of dealing with problems, skills, and attitudes required for scientific research ;
- (f) powers of abstract, spatial and mechanical reasoning ;
- (g) resourcefulness and ingenuity ;
- (h) imagination and creativity ;
- (i) alertness in sensing problems and working out solutions ; and
- (j) general knowledge about the scientific and industrial development in India and abroad.

(iii) *Selection Procedures*

10. In order to assess the above abilities and skills, testing procedures should include the following :

(a) *A Scholastic Aptitude Test*

This will assess the pupil's knowledge in the subject as also higher scientific abilities such as application analysis, synthesis and interpretation. This test will be of about $2\frac{1}{2}$ to 3 hours' duration and will consist of 125 to 150 test items covering the different areas of science. It will also include a section on science information in general.

(b) *A Test of Reasoning*

As reasoning and logical thinking are indispensable qualities in a scientific problem it is proposed to administer in addition to the above a test that will assess the reasoning power of the student. This test will be of about $1\frac{1}{2}$ to 2 hours duration and will also provide indirect evidence of the pupil's scientific thinking and analytical powers.

(c) *A Project Report*

Each contesting pupil will also be required to give in a report of a science project on which he has worked.

The above three stages will be open to all the science students in the eleventh class of the secondary schools, who are certified by their Headmasters as competent to take the test. It is also proposed to collect detailed information about each contesting pupil's scholastic and other achievements and personal data through suitable proformas before admitting him/her to the test.

(d) *Interview*

Out of the candidates who appear for the above tests and pass in them, about 25 top students from each State will be called up for an interview arranged at the State or regional level. The interview committee will consist of seven persons, three of whom will be outstanding scientists and common to all the interview committees for the different States or regions. Two will be co-opted from the States and two will be representatives from the Centre. The interview will seek to find out the student's power of oral expression, personal and social qualities, promptness in thinking, reasoning power and his special areas of interest. It will also help to assess the genuineness of the project on which the candidate has prepared his paper and also find out his potentialities for similar project work in the future.

Out of these interviews at the State and regional levels will emerge a selection of 50 outstanding science students for receiving scholarships awards. The next 100 in rank will receive certificates of their standing which they can use for entering technological careers.

(e) *An All-India Science Meet*

The 50 students who are finally selected will be invited to a central place, preferably a place of scientific significance, where they will live together for a few days and where the organisers will have further opportunities of grading their talent. It is proposed to spot out the five most outstanding students for special distinction who may be awarded certificates of merit.

(iv) *Time Schedule*

The entire procedure of selection and announcement of results will have to be completed by the end of long term of the academic year of the 11th class. The awards will, however, take effect only after the Secondary School Examination results are announced and after the students join a college or university and the principal of the college certifies that he has joined a science course.

11. The Conference may consider the programme of science improvement and science talent search as outlined above and make suggestions for their implementation.

APPENDIX E

Introduction of Guidance Services in Schools (Item 5) (Ministry of Education)

The aim of guidance services in schools is to individualize education in order that the true aim of education, *viz.*, the maximum development of all the individual's potentials and his adjustment in all areas of living, may be fulfilled. No educational scheme can be of greater importance for achieving this aim than the introduction of guidance services in schools. Guidance services are a *sine qua non* of good education in a democratic republic like ours which is pledged to providing equal educational opportunities to all, in the sense of discovering the abilities and needs of each individual and providing educational opportunities which are best suited to his abilities and needs. The introduction of guidance services in our secondary schools acquires greater importance and urgency in the context of the multipurpose pattern of education towards which we are moving and the manpower requirements of our country for the implementation of its vast developmental plans.

2. Since the strong recommendation regarding the introduction of guidance services in schools made by the Secondary Education Commission in 1953, the Education Departments of 12 States have each set up a State Bureau of Guidance, but guidance services have not as yet really penetrated into the schools.

3. In order to set up a guidance service, a school requires the services of a full-time counsellor. The counsellor should be a trained graduate teacher who has had not less than six months' full-time training in guidance, and he should be given at least two increments in his salary. It is estimated that it would cost a school Rs. 9,000 to set up a guidance programme for three years, including the Counsellor's emoluments and equipment for the school for this period, as well as the counsellor's emoluments and T.A. for six months' training prior to this period. The training of the counsellors would be undertaken by the Central and State Bureaux of Guidance, which would not charge any fees.

4. Since the training facilities are limited, it would not be possible to train a large number of counsellors during the current Plan period, and hence many schools will have to be content with setting up an occupational information programme, requiring the part-time service of a career-master. Such a programme would aim at orienting the pupils of the delta and the pre-final classes to the world of work and to educational facilities, through collecting and displaying occupational information, and through group methods such as class talks, career

conferences and visits. The career-master should be a trained graduate teacher who has had not less than three weeks full-time training for this work. While it would be desirable to give him some extra remuneration for his work, it is not absolutely essential. It is essential, however, to relieve him of his normal teaching load by at least two periods a week, which he would then devote to the occupational information programme, and also to make a corresponding provision in the timetable of the pupils. Such a programme would cost a school approximately Rs. 250 for a period of three years, including equipment and the T.A. and D.A. of the career-master in connection with his training. The training would be imparted by the State Bureaux of Guidance and the training colleges, with the help of employment officers and coordinators of extension services, and no fee would be charged for the training.

5. It is proposed that in the Third Five Year Plan, the Central Ministry should help the State Governments to strengthen their bureaux, or to establish them in States where the Bureaux have not been set up. Efforts will also be made to give financial assistance to the State Governments for organising the training programme for career-masters. It is, however, to be recognised that if the guidance movement is to cover the schools rapidly, much more needs to be done particularly in the direction of providing wholtime counsellors in schools which have a large enrolment and offer a variety of courses.

6. There are in every State some progressive schools which may like to develop their own guidance service. It is suggested that a few selected schools may be permitted to levy a small guidance fee to cover the expenditure on the provision of a counsellor in the school. The incidence of such fees will be hardly 50 to 60 nP. per pupil per month and, in the beginning, it would be necessary to limit the permission only to a few selected schools. The suggestion is placed before the Conference for its consideration.

APPEND IX F

Programme for the Promotion of Physical Education and Sports
(Item 6)
(Ministry of Education)

Physical education is today accepted as an essential part of education. Through a well-directed programme, children engage in activities which are not only conducive to building up their organic health but which also contribute to their mental and emotional well-being and develop their social qualities. Physical Education should, therefore, have an improved status and given greater attention than it has received in the past. With physical education is linked the question of physical fitness and the need to improve games and sports. Although interest for these subjects is growing in the country, India's position in the world of sports is still relatively low. The spectacular success in the field of sports which certain countries have achieved in recent years was made possible through a well-planned and comprehensive effort and was born of the recognition that high standards in sports are the result of special training and a large net work of facilities. India has, therefore, to make sustained effort in this direction.

2. The Government of India is doing its best within the resources at its disposal. The establishment of the Lakshmibai College of Physical Education, the strengthening of physical education training institutions by providing hostels, gymnasia, library books and equipment, the promotion of research in yoga, the National Physical Efficiency Drive, the implementation of syllabi of physical and health education, the assistance to all-India sports organisations to enable them to hold championship contests and to participate in international events, the assistance for the construction of utility stadia and the setting up of the National Institute of Sports at Patiala are some of the schemes which the Government of India undertook to implement during the Second Plan period. We propose to continue them in the Third Plan as well and trust that the State Governments will co-operate with us by making adequate provision in the State Plans for the development of games and sports. At the time when the schemes of the Third Plan were discussed, the high importance given to the expansion of primary and secondary education tended to crowd out the promotion of physical education. This is unfortunately borne out by the very small provisions included in the State Plans for physical education and development of sports. This Conference of Education Secretaries and Directors of Public Instruction Education is requested to impress upon the State Governments the necessity of taking more interest in the subject, as it is vital not only for the success of the educational effort but for the welfare of the entire nation also. The Government of India have recently revised the constitution of the Central Advisory Board of

Physical Education and Recreation so as to give representation upon it to all the State Governments. The Education Secretaries will no doubt see that the officers who are nominated on the Board are officers of high status, preferably not below the rank of Deputy Directors of Public Instruction who are in charge of physical education in the State.

3. The Government of India have always felt that for the proper development of sports and games in the country, work on correct lines should be done at the school stage and for this purpose the schools should have the necessary facilities. With this object in view, funds were allocated to the State Governments during the last two years for making grants to the educational institutions to acquire playfields and necessary equipment. The intention was that a single grant for the acquisition of playfields should not exceed Rs. 5,000. Funds were also placed at the disposal of the State Governments to popularise sports and games in the rural areas.

4. The scheme has been working satisfactorily and the reports received from the States show that it has aroused sufficient interest in children. It was, therefore, considered advisable to continue this scheme as part of the State Plans and to provide necessary funds for this purpose. The State Education Secretaries and Directors of Public Instruction Education are requested to make liberal allocations for the scheme in their Plans.

5. As the Conference is aware, during 1960-61 the State Governments/Union Territories were requested to organise the National Physical Efficiency Drive in the light of the suggestion made in the policy outlined in this Ministry's circular letters No. F26-18/60-PEU, dated 5th and 15th October, 1960. Full reports about the working of the Drive are still awaited from most of the State Governments. The policy with regard to the popularization of the Drive has been revised in the light of past experience. The salient features of the new policy are indicated below :

- (i) To create a consciousness for physical fitness, a concentrated national effort at a specified time in the year would have a greater impact in the country than spreading the programme in a routine manner throughout the year. For this reason, the Tests under the Drive should be held in the country only once a year during the 'National Sports Week' (19th to 25th of January).
- (ii) In view of the limitation of funds, the number of testing centres should be kept to the minimum. One thousand testing centres should be established this year and the number may be increased by 500 every year so that by the end of Third Five Year Plan there may be 3,000 centres in the country.

- (iii) Although the Drive has primarily to be conducted with voluntary effort, some financial assistance from the Government of India for the testing centres is considered necessary to pay honoraria to the Directors of the Centres and their assistants and for meeting expenditure on incidentals, etc.
- (iv) The implementation of the Drive should be a part of the normal duties of the physical education officers in the States.
- (v) An All-India Seminar on National Physical Efficiency Drive is to be organised to which representatives of State Governments/Union Territories and experts on the subject are to be invited.

Since these programmes are to be carried out by the State Governments, the State Education Secretaries may kindly provide every assistance for their implementation.

6. The Government of India have recently set up the National Institute of Sports at Patiala. The aim of the Institute is to produce coaches of outstanding merit. The Institute has obtained the services of one Indian coach instructor and six foreign coach-instructors. There will be two types of courses of study—(i) a regular course ; and (ii) an *ad hoc* training course. The regular course is of 3 years' duration and the *ad hoc* training course is to last for six months. The coaches who undergo the regular course will be designated as first-grade coaches and those who undergo the *ad hoc* training course will be considered as coaches in the second grade. The *ad hoc* training course commenced on March 20, 1961 and at present instruction is being given in Hockey, Wrestling, Volleyball, Cricket, Gymnastics and Athletics. Since it will take not less than three years to shape first-grade coaches, we will have to depend almost entirely on coaches of the second-grade during the next three years to propagate coaching techniques in the country. The Institute proposes to run two or three *ad hoc* courses along with the regular course during the Third Plan.

7. For the success of the scheme, it is very essential that the State Plans for the encouragement of games and sports should be dovetailed with the turn-out of the Institute. The objective is that each State should have at least one first-grade coach in Cricket, Hockey, Football, Tennis, Athletics (perhaps more than one coach here), Basketball, Volleyball (the same coach can occasionally be employed for these two), Wrestling, Gymnastics, Weight Lifting, Boxing, Swimming, Badminton and Table Tennis. While these posts are to be borne on the National Sports Coaching Scheme which is shortly expected to be launched, it is also of the utmost importance that the State Governments/Union Territories should create posts for coaches in schools, colleges, etc. where the coaches turned out by the Institute could be employed. The first batch of coaches trained at the Institute (113 in

number) would be available within four or five months. Some of them are already employed and there should be no difficulty for the State Governments to utilise the services of the remaining coaches for training boys and girls in their educational institutions. The out-turn of the *ad hoc* and the regular courses during the Third Plan period is not likely to exceed 500 and 100 respectively and it is hoped that these coaches can be easily absorbed in the educational institutions of the country if the State Plans provide suitable scope for the utilization of their services.

APPENDIX G

Scholarships Schemes for Meritorious Students (Item 7) (Ministry of Education)

Two new scholarships schemes have been proposed for implementation in the Third Five Year Plan for meritorious students :—

- (i) National Scholarships Schemes; and
- (ii) Scheme of Merit Scholarships for Children of Primary and Secondary School Teachers.

National Scholarships Scheme

2. During the Second Five Year Plan, a total provision of Rs. 34 lakhs was made for awarding 200 scholarships every year to outstanding students, selection being made on the result of the Matriculation and equivalent examinations in the year of selection. Altogether, 1,198 awards were made during the Plan period.

3. In view of the need for a national programme of scholarships to foster exceptional talent and to provide opportunities for its growth, it was considered desirable to formulate a comprehensive scheme of National Scholarships. It was suggested that the selection of deserving and able students should be made to cover each stage group marked by the terminal points in the three stages of education—primary, middle secondary and higher. However, in view of the paucity of adequate resources, it has been possible at present to propose a Merit Scholarships Scheme of modest dimensions for helping the education of outstanding students at only the Post-Matriculation stage. The proposal, pending approval by the Cabinet, is to award about 2,000 scholarships each year the selection being made at the Post-Matriculation, B.A./B.Sc. and M.A./M.Sc. stages. When the present scheme comes into force, the existing scheme of Merit Scholarships for Post-Matriculation Studies will be merged with it and the scheme of Scholarships for Research in Humanities will also be operated as part of the new scheme. Exact details of the scheme will be furnished to the State Governments as soon as the Cabinet approval is obtained.

4. As a corollary to the foregoing, it is further proposed to increase the number of awards under the existing scheme of merit scholarships for study in residential schools for the age group 5 to 12. The exact size of the increase is still to be determined. In the light of the comments received from the State Governments and other agencies concerned with the working of the scheme, the scheme is being revised with a view to simplify procedures and to make it more effective in operation.

5. Under the National Scholarships Scheme, the allocation of awards to the different States will be made on the basis of the number of candidates taking the terminal examinations at the different stages of education. After the quota has been fixed, the State Governments will be requested to forward to the Centre applications twice in number of the allotted awards. The required scholarship-amount will be made available to the State Governments for disbursement to the scholars and all administrative action in respect of the awardees will thereafter be taken by the State Governments. The State Governments may like to consider the administrative arrangements that may be necessary at their end.

6. The Scheme will be administered by the State Governments on the pattern of the Post-Matric Merit Scholarships Scheme, the rate of scholarships being Rs. 50, Rs. 75 and Rs. 100 for the three stages of education, subject to the application of the existing means test under which full scholarship is given up to the income of Rs. 500 p.m. and reduced scholarships up to the income limit of Rs. 1,100 p.m.

Scheme of Merit Scholarships for Children of Primary and Secondary School Teachers

7. In recognition of the important service rendered by primary and secondary school teachers, and also as a measure of indirect assistance to them, a new scheme for the award of merit scholarships to the children of such teachers has been proposed. The scholarships will be awarded for Post-Matriculation education of children who obtain first division marks in Matriculation or equivalent examinations. The scheme will be implemented from this year. It is proposed to award up to 500 scholarships every year and it is expected that this would cover all the meritorious children in this group. The pattern of this scheme will be the same as the Post-Matric Merit Scholarships Scheme, the rate of scholarships being Rs. 50, Rs. 75 and Rs. 100 and the means test being also the same. The allocation of awards for each State will be in the proportion to the number of teachers in primary and secondary schools. This scheme will be Centrally administered. The State Governments have been requested to advertise the scheme, giving adequate publicity in relevant quarters. They are also requested to forward to the Central Government by August 15, 1961, applications 50 per cent in excess of the State's quota of awards.

APPENDIX H

Translation and Production of Standard Works in Hindi and other Regional Languages (Item 8) (Ministry of Education)

One of the essential pre-requisites of a change-over of the medium of instruction at any stage is an adequate supply of appropriate books of high academic standard with a uniform terminology. Till now, however, even those universities which were desirous of adopting regional languages as the media of instruction have not been able to make much headway in this direction for want of appropriate standard books in the regional languages. Academic bodies which could have produced such literature have also not been able to do so for want of funds. A scheme of preparation and translation of suitable works and textbooks was drawn up for Hindi only to begin with as that is the Constitutional responsibility of the Union Government. In the meantime, however, the Order of the President (Dated 27th of April 1960) was issued requiring that in the work of evolution of scientific and technical terminology, maximum possible identity should be aimed at in all the Indian languages. This work has now been entrusted to the Commission for Scientific and Technical Terminology. (Papers on the question of terminology have been circulated separately). The scheme has now, therefore, been extended to cover all the regional languages of India provided the terminology evolved by the Ministry of Education is used in all these books as far as possible. A detailed scheme has been circulated to the State Governments and Universities separately. It is requested that the Education Secretaries may kindly take early steps to establish co-ordination committees in their States so that the work may be started at an early date.

APPENDIX I

Programme for the Training of Hindi Teachers in Non-Hindi Speaking States/Union Territories (Item 9) (Ministry of Education)

The question of provision of facilities for training of Hindi Teachers in non-Hindi speaking areas has been engaging the attention of various committees and conferences since 1955. The Hindi Shiksha Samiti had recommended that at least one Hindi Teachers' Training College should be opened in each non-Hindi speaking State/Union Territory depending on their actual requirements. The State Governments were addressed in January, 1959 to survey the existing facilities for the training of Hindi teachers and to intimate if there was a need for opening new training colleges in their States. In reply, the State Governments of Kerala, Mysore, West Bengal and Gujarat agreed to open a each new Hindi teachers' training college in their area. The Government of Madras have also agreed to open a new Hindi teachers' training college at Gandhigram through the Gandhigram Rural Institute. The Governments of Assam, Maharashtra, Andhra Pradesh and Tripura Administration agreed to the expansion of the existing facilities for the training of Hindi teachers in their areas. The remaining non-Hindi speaking States have intimated that adequate arrangements already exist and that there is no need for the opening of any new institutions.

2. The States which had agreed to the setting up of new training institutions or expansion of existing facilities had been requested to send their proposals (estimates of expenditure). The present position in respect of each State is given below :

Kerala : The State Government have submitted their proposals amounting to Rs. 2,80,296 (Rs. 2,06,000 non-recurring and Rs. 74,296 recurring) for establishing a new Hindi teachers' training college in the State to provide facilities for the training of 120 Hindi teachers per year. The proposals have been accepted by the Government of India and the State Government have been asked to establish the college at an early date.

Mysore : The proposals received from the State Government are being processed.

West Bengal : The proposals are awaited.

Gujarat : The State Government have recently expressed a desire to participate in the scheme. It has been requested to furnish information in regard to the existing arrangements for the training of Hindi teachers and their requirements for the next three or four years. Reply is still awaited.

Madras : The college is proposed to be set up at Gandhigram through the Gandhigram Rural Institute. The matter is under correspondence between the State Government and the Institute.

Assam : The State Government have been requested to submit their proposals for the setting up of a Hindi teachers' training college.

Maharashtra : A sum of Rs. 36,480 was released to the State Government in December, 1960 for opening four short-term courses for the training of Hindi teachers. The State Government could not implement the scheme during the last financial year. The proposed courses will be started during the current financial year.

Andhra Pradesh : Out of a total grant of Rs. 27,040 sanctioned during 1959-60 a sum of Rs. 15,020, was released to the State Government in December 1959, for strengthening the facilities for the training of Hindi teachers. The State Government have already developed its Training College at Khairatabad where 40 Hindi teachers are receiving training. A sum of Rs. 23,434 was spent by the State Government on the training of Hindi teachers during 1959-60 and 1960-61.

Tripura : Administrative approval of Rs. 1,66,800 was accorded to the Tripura Administration during 1959-60 for the expansion of the existing training facilities. The Administration could not implement it during that year but have intimated that two full-fledged courses for the training of 30 junior and 20 senior teachers will be started from 15th July, 1961.

3. It is requested that the State Governments who have not yet sent their proposals and the required information may kindly do so at an early date.

APPENDIX J

Measures for Implementing the Recommendations of the Committee of Parliament on Official Language Pertaining to Evolution of Scientific and Technical Terminology for All-India Languages (Item 10)

(Ministry of Education)

The main recommendations of the Official Language Commission on Terminology accepted by the Committee of Parliament on Official Language, are:

- (i) in preparing terminology clarity, precision and simplicity should be primarily aimed at ;
- (ii) international terminology may be adopted or adapted in suitable cases ;
- (iii) the maximum possible identity should be aimed at in evolving terminology for all Indian languages ; and
- (iv) suitable arrangements should be made for co-ordinating the efforts made at the Centre and in the States for evolving terminology in Hindi and other Indian languages.

2. The Committee envisages further that in the field of science and technology, there should, as far as possible, be uniformity in all Indian Languages and the terminology should approximate closely to English or international terms.

3. While considering the report of the Committee, the Cabinet agreed with the general principles accepted by the Committee but desired that in the field of science and technology, the terms in international use should be adopted with the minimum of change, *i.e.*, the base-words should be those as at present in use in international terminology, although the derivatives may be Indianised to the extent necessary.

4. Under paragraph 3 of the Order of the President, dated April 27, 1960, the Ministry of Education has been directed to take action—

- (i) to review the work done so far and to evolve terminology in accordance with the general principles accepted by the Committee. In the field of science and technology, the terms in international use should be adopted with the minimum change *i.e.*, the base-words should be those at present in use in international terminology, although the derivatives may be Indianised to the extent necessary ;
- (ii) to formulate proposals for making arrangements for co-ordination of the work of preparation of terminology ; and

- (iii) to constitute a Standing Commission for the evolution of scientific and technical terminology as suggested by the Committee.

Review and Co-ordination Committee

5. In regard to terms relating to Humanities and Social Sciences, it has been decided to set up a Review and Co-ordination Committee under the chairmanship of Prof. R. D. Sinha Dinkar. The first meeting of the Committee to lay down broad principles in this regard is expected to be held in the first week of July, 1961. The Committee has been entrusted with the task of reviewing the terms coined so far by the Central Hindi Directorate, and will also examine new words to be coined hereafter. It will also co-ordinate the terminology in use in the various fields of Social Sciences and Humanities.

6. It has further been decided to set up a Commission for Scientific and Technical Terminology consisting of Scientists and Technologists in addition to one or two linguists. The programme for the evolution of scientific and technical terminology in all Indian languages will develop over the years. In the first stage it is essential that the work done so far should be reviewed, the general principles for the evolution of terminology worked out in detail, the terminology that may be evolved or approved by the Commission brought into actual use, and co-ordination ensured between the various agencies working in this field.

7. The Commission can successfully achieve its task of bringing about necessary co-ordination only with the full co-operation and support of the State Governments. It would, therefore, be desirable if the work of co-ordination is undertaken by the Commission with the express approval or at the instance of the State Governments concerned.

8. The functions of the Commission will include, *inter alia* :

- (i) review of the work done so far in the field of scientific and technical terminology in the light of the principles laid down in Paragraph 3 of the Presidential Order ;
- (ii) formulation of principles relating to co-ordination and evolution of scientific and technical terminology in Hindi and other languages;
- (iii) co-ordination of the work done by different agencies in the States in the field of scientific and technical terminology, with the consent or at the instance of the State Governments concerned, and approval of glossaries for use in Hindi and other Indian languages as may be submitted to it by the concerned agencies ; and

- (iv) the Commission may also take up preparation of standard scientific textbooks using the new terminology evolved or approved by it, preparation of scientific and technical dictionaries and translation into Indian languages of scientific books in foreign languages.

9. A high level Advisory Board to advise the Government of India in regard to the work entrusted to the Commission has been set up. The Minister of Education is the Chairman of the Board which will meet at least once a year. The first meeting of the Advisory Board was held on November 6, 1960 at New Delhi. It laid down general principles relating to the problems of scientific and technical terminology in Indian languages. It was also decided that the State Government should set up suitable agencies for the evolution of terminology in regional languages, which will work in co-operation with Commission for Scientific and Technical Terminology. The Conference of the Education Secretaries may consider this question and propose such measures as it may consider necessary in this regard.

10. The work done so far by the Ministry with regard to terminology is given in the Annexure II.

ANNEXURE II

Factual Note On the Work So far Done In The Field of Terminology

The Ministry of Education has been coining terms during the last ten years or more. It has already coined about 2·9 lakh terms and has completed the terminology relating to the following subjects up to B.A. and B.Sc. standards:—

Physics ; Mathematics; Chemistry; Zoology ; Geology; Medicine;
Botany; Agriculture; History; Political Science and Economics.

The work is in progress in other subjects such as—Engineering
(Civil, Mechanical and Electrical); Philosophy; An-
thropology and Sociology;

2. The terms relating to these subjects have been published in the form of pamphlets and a consolidated dictionary of the entire terminology evolved so far is under print and is expected to be out during September 1961.

APPENDIX K

Provision of Rucksacks for School Children (Item 11) (Ministry of Education)

At the last meeting of the Central Advisory Board of Education held in January 1961, the Prime Minister in his address to the Board said :

“I watch little boys and girls going to schools here carrying a bundle of books, tiny tots of 7 or 8 with 4 or 5 books and wobbling along. That is absurd. Do you ever see that kind of thing in Europe ? I do not think so. Why ? They all carry their books in rucksacks. It is a cheap little bag. Even here, they carry bags. They carry it on one side and one the other, their tiffin-carrier. It is absurd. They should be carried, as is done everywhere, in cheap little canvas rucksacks on their shoulder. Normally it is not a question of money really, because they can be made very cheaply. It is a little canvas bag of various sizes. The point is, there should be two little straps on the two shoulders and then both hands are free. It is essential for the child that the weight is properly put on the back and the mere fact of finding the weight there makes a child straighten itself. It pulls it back, this tendency of the child to straighten his back. These are small things which are important. I think this Advisory Board of Education with eminent experts may think of high matters but it is important as to how a child carries books to the school. I think it can easily be done to start with in cities, etc. The parents ought to do it. I do not mean to say that if our school-masters or others give a push to this, this will not happen. Of course somebody should produce them cheaply. They can be produced quite cheaply of various sizes.”

2. Some of the State Governments have already introduced rucksacks in a few towns and the experiment has been reported to be successful.

3. It is suggested that the State Governments may consider the introduction of rucksacks in the schools on as wide a scale as possible. In this connection a letter has already been sent to the State Education Secretaries.

APPENDIX L

Mobilisation of Community Resources for the Expansion of Primary Education (Item 12)

(Ministry of Education)

The key to the effective implementation of this programme lies in mobilising community resource in support of the school and the utilisation of the available personnel and finances to the optimum advantage. Particular attention, therefore, needs to be given to devising suitable administrative and other measures to bring about intimate association between the primary education programme and the community.

2. The administrative structure for the planning, establishment and maintenance of primary schools differs from State to State. In view of the diversity of local conditions, there cannot be a rigidly uniform or set pattern for associating the community with the school. Certain broad principles, however, can serve as guide lines for developing such association and enlisting community support for an enriched school programme.

(a) The school and the community come into closest contact at the village level and adequate steps have, therefore, to be taken to associate the local community with the development of the school at this level.

(b) The existing organisations of local community, such as Village Panchayat, etc. would provide the most suitable channel of contact between the school and the community.

(c) The closer the association of the local community with the school, the more vivid will be its sense of direct responsibility for the school and this would be strengthened by giving it opportunities to participate in the decisions that govern the school.

(d) The funds specially collected by the local community on a voluntary basis should be expanded on the local schools in consultation or in accordance with the wishes of the contributing body.

3. In a large number of States primary education forms an integral part of the panchayat system, with devolution of powers, in varying degree, to the panchayat organisations for the maintenance of the schools. Even in States where this pattern has not yet been adopted, it should be possible to enlist more active association of the local community by establishing school committees consisting of members of the Village Panchayat and others interested in education. The panchayats and/or the school committees should be actively encouraged to take on the responsibility for improving the local schools, enrolling

all children of the school-going age of the area, enforcement of compulsory attendance, provision of midday meals and free textbooks to the needy children and all such matters connected with the local school other than technical supervision.

4. At the State and the district level it would be helpful if suitable consultative bodies are set up which can keep a watch on the progress of primary education and advise on programmes that should be undertaken for educating public opinion and enlisting public cooperation. With a view to more rapid progress in this sector, at the district level, such a committee should be formed by or in consultation with the Zila Parishad and the District Development Committee as may be considered feasible by the State Government.

5. An examination of the reasons for the relatively slow progress of the primary education programme in the rural areas reveals that in many cases it is due to the following factors :

- (a) resources available for the programme are not clearly known;
 - (b) the use of the available resources is not adequately co-ordinated;
- and
- (c) procedural difficulties come in the way of optimum use of the resources.

6. Funds for primary education are provided:

- (i) by the State Education Departments;
- (ii) in the schematic budget of the Blocks in the C.D. Programme;
- (iii) in the programmes for the welfare of scheduled castes/scheduled tribes;
- (iv) by local bodies and authorities including Village Panchayats; and
- (v) by voluntary contributions, in cash or kind, of the local community.

An effectively co-ordinated utilisation of these resources will go along way to ensure the success of the primary education programme. The detailed administrative action that is required to bring about such co-ordination would obviously depend on, among other things, the system prevalent in the State for the administration of primary education. In a few States the resources for primary education are being pooled at one point in the Block with a view to enabling the Panchayat Samiti to draw on the total resources for the development of primary education in its jurisdiction. Wherever Panchayat Raj System has been introduced, the Panchayats and Panchayat Samities have already been given statutory responsibilities for promoting primary education. Even

if in the light of the local conditions it is not considered feasible at this stage to pool the resources at one point, co-ordinated use of these resources can be effected by defining the purposes for which the resources should be used so as to avoid overlapping and duplication and to secure concentration of resources on those points where the impact will be most effective and help to induce maximum community contribution. The rules and procedure governing the disbursement of grants by the authorities controlling the different funds may be so devised that the terms and conditions are uniform as far as possible, except in the cases of specific purpose grants such as those for the welfare of scheduled castes, scheduled tribes, the special programmes for women's education etc. The broad principle would be that in the same area and for the same purpose, the pattern of financial assistance from the funds of different authorities should not be dissimilar.

7. The following is a suggestive list of the items and special programmes for defining the purposes for which the funds available with different authorities may be utilised:

(a) The resources from the Education Departments may be used primarily for providing adequately trained school teachers, the essential educational equipment in the schools, the training programmes, conversion of primary schools to basic schools, and providing incentive grants to attract community contribution for school buildings and special programmes of midday meals and supply of free textbooks and uniforms to needy children.

(b) The funds in the Block budget of C.D. Programme may be utilised for schemes designed to bring the school and community in closer rapport by developing the school as a community centre and for special projects such as school beautification, school farm or kitchen garden, maintenance of children's parks and playgrounds, development of library and reading room, audio-visual aids to education including radio and film projector and children's school museums.

(c) The funds contributed by the local bodies or raised by voluntary contribution of the people may be expended on improving the equipment and other educational aids in the schools, construction of school buildings or their expansion.

8. The provision of midday meals is an important item in the programme of universal primary education and, for the purpose, community effort on as extensive a scale as possible should be mobilised. The Panchayats and the Panchayat Samities should be actively involved in the implementation of this programme and raising of donations and contributions in cash or kind. Other local organisations like the *Mohalla Mandals* and the Youth Clubs could also be associated so that their help would be available in the preparation and distribution of school meals.

9. The above suggestions are designed primarily to emphasise the urgency of involving the community in the development of primary education programme and to draw attention to some of the points on which action is needed in this regard. The precise administrative arrangements would necessarily have to be worked out by the State Governments themselves in the light of the local conditions and also the determination of priorities for the use of the funds available with different authorities. Special consideration would have to be given to economically backward areas and socially handicapped sections of the people. Subject to such special consideration, it may be desirable to lay down the percentage of the people's contribution and share from Government's funds for different items of the programme.

10. These suggestions have the approval of the Ministry of Community Development and Co-operation. It is proposed to address all the State Governments on the lines indicated above. The State representatives may give their views before a formal communication is sent.

APPENDIX M

*Circulation of List of Centrally Sponsored Schemes by the Ministry
...of Education (Item 13)*

(Andhra Pradesh)

The Government of India have not yet communicated the particulars of the schemes which would be taken up as Centrally Sponsored schemes during the Third Plan. As the Plan has already come into operation, it is necessary to have these particulars immediately in order that the schemes may be put on ground in time. It may be mentioned that the Working Group on Education had recommended that the following schemes should be taken up as Centrally Sponsored schemes with cent per cent Central assistance and as such no provision for them has been made in the State Plan :

- (i) Strengthening of the Existing Multipurpose Schools ;
- (ii) Establishment of New Multipurpose Schools;
- (iii) Expansion of Vocational Guidance Programme ;
- (iv) Introduction of Examination Reforms; and
- (v) Expansion of Extension Services Departments.

2. List of schemes which will be eligible for inclusion in the State Plans may also be furnished to the State Government.

APPENDIX N

Simplification of Procedure for Implementation of Centrally Sponsored Schemes (Item 14)

(Andhra Pradesh and Rajasthan)

Andhra Pradesh

At the present practice of obtaining prior approval of the Government of India for implementing Centrally Sponsored schemes is resulting in delay, the State Governments may be permitted to implement these schemes within the pattern indicated by the Government of India. The Government of India may indicate the allotment of funds to different States for each scheme and the State Governments permitted to proceed with the implementation of the schemes on the basis of the given pattern.

Rajasthan

The present practice is that the States are asked to implement a Centrally Sponsored scheme within the current year. This results in long delays due to procedural formalities and schemes cannot be implemented in full as they are to be implemented in haste. State budgets are prepared some time in October of the preceding year and if Centrally Sponsored schemes are indicated by that time, the State Governments may be in a position to make adequate provision in the budget. This arrangement will cut down procedural delay and will give enough time to the Department to make necessary preparation for the implementation of the schemes.

APPENDIX O

Establishment of a Network of Libraries and Reading Rooms along with Starting of Primary Schools (Item 15)

(Rajasthan)

We are launching an extensive drive for providing facilities of primary education to the age group 6-11. It is in the fitness of things that every child must be given the facility of primary education. Since it is a Constitutional responsibility of the State to provide primary education, the Government will have to spend colossal amount on primary education. But, there is a great danger that if after finishing primary education the child is not provided with the facility of further education by starting a middle school the education which he has received in his primary stage may be soon lost and the colossal amount of money spent by the Government may turn out to be wasteful expenditure. The schooling which a child receives during the age of 6-11 does not make him literate enough and necessary steps should be taken so that he may not lapse again into illiteracy and ignorance. Considering the financial position of the country, it will be very difficult for the Government to simultaneously make education for 11-14 age group compulsory and, therefore, there is a danger that the efforts made for providing compulsory primary education may be lost. It will be, therefore, very necessary to set up a network of libraries and reading rooms in the villages attached with the primary schools where children who have passed out of the primary school may flock in the evenings and mornings to read easy and simple magazines, papers and books so that they may not lapse into illiteracy and ignorance. It will be proper that a few easy, simple magazines and papers may be subscribed in every primary school and five primary schools may be organised into village library unit. One of the Headmasters of the primary schools may be put in charge of the village library. The books meant for literate children may be kept in the unit and sets of 20-25 books may be sent from the unit to every primary school for two weeks or so. The Headmaster of the primary school may issue these books to the ex-students of the school who have passed out of his school and encourage them to further their knowledge by reading more and more books. In this way those children who have attained the age of 11 and have passed out of the primary school will not be pushed into wilderness but will keep in contact with the school and will further their knowledge by reading magazines, papers, books. Of course, this will require publication of literature, magazines and papers which may suit the village children who have a preliminary schooling. This could easily be done by setting up a publication board which will publish books and papers in different languages. The Government of India in collaboration

with the State Governments can easily launch the scheme of producing necessary literature for such libraries and reading rooms or if it is not considered possible and desirable publishers may be asked to produce books according to the scheme suggested by the Ministry of Education and private publishers may be encouraged to publish magazines and papers suitable for village children whose schooling will be very limited. If steps are not taken to attach village library and reading room units to our primary schools there is a danger that the money and efforts invested in primary education will be lost to a very great extent. India can ill-afford to indulge in any wastage of national resources and efforts. Therefore, in order to consolidate and improve the education which will be provided to the children in the age group 6-11, a network of libraries and reading rooms will have to be established.

2. Even if the country is in a position to provide compulsory and universal education to every child up to the age of 14, the utility of village libraries and reading rooms will not decline. The schooling up to the age of 14 will be sufficient to make a child literate permanently and there will be no danger of his lapsing into illiteracy again. But, if we want that every Indian should develop a sense of civic responsibility which is a necessary pre-condition of successful democracy, it will be necessary to provide him with good reading material so that the grown-up child may further his knowledge about the problems which are facing the country and the world. Therefore, the establishment of a network of village libraries and reading rooms must be considered necessary for supplementing programme of free compulsory and universal education and for bringing about a sense of civic responsibility among the grown-up children.

APPENDIX P

Selective Admissions in Colleges and Universities (Item 16) (Rajasthan)

We in India are facing a very difficult situation as far as higher education is concerned. Inasmuch as almost every student who passes high school or higher secondary examination tries to enter the portals of a university. It can be said without exaggeration that nearly 70 per cent of those who pass high school or higher secondary examination seek admission in the universities and colleges. So far the situation was not very acute because the number of students who sought admission in universities and colleges was not unmanageable. But, in recent years the problem has become really acute and threatens the standards of education in the universities and colleges. In future years the problem will grow more acute and the condition in this respect will worsen because a large number of high schools and higher secondary schools are being started all over the country. Now it is high time that all those who are interested in higher education seriously consider this problem.

2. If we adhere to the present policy of allowing admission to all and sundry who seek admission in universities and colleges, it will not be possible to improve the academic standards and discipline in the colleges and universities and the meagre resources available to the country for education will not be properly utilised. This is the experience of most of the teachers in colleges and universities that quite a large number of those young men who join universities and colleges are not fit for higher education and they cannot benefit from the university education. Such students over-crowd the colleges. The result is that much of the equipment and apparatus and other scientific articles are wasted on such students who are not fit for higher education in science, with the result that our colleges and universities cannot provide sufficient facilities to those who really are talented and can be developed into successful and original scientists. The large majority of mediocre and indifferent students lower down the academic standards all-round and the better and brilliant ones have to suffer. In the case of other faculties, in Humanities, etc., the problem of equipment and laboratories, does not arise but here as well a large number of those who are not fit for higher education hang as a dead weight on the universities and colleges and the academic standards remain very low. It is futile to expect that the academic standard will go high if we persist in the policy of admitting one and all to offer themselves for admission in colleges and universities.

3. Of course, every young man must be provided with opportunities of developing the talents which he possesses and, therefore, it is very necessary that alternative courses of training may be made available to those who are not considered fit for higher education. Therefore, it is very necessary that some criteria may be laid down by the universities themselves so that it may be possible to introduce selective admissions in the universities and colleges. May be, the universities may decide that those who secure a certain number of marks or those who secure at least a second division shall only be admitted in colleges and universities. Passing of high school or higher secondary examination should not be a passport for admission in the universities. It is a matter of educational policy. Our colleges are ill-equipped and our meagre resources are being wasted on indifferent, mediocre and unsuitable students. A country like India which is poor cannot waste its meagre resources and cannot indulge in the luxury of giving higher education to even those who are unfit and unsuitable for the same.

APPENDIX Q

Encouraging Students to Cross Language Boundaries for Higher Studies for the Emotional Integration of the Country (Item 17)

India has gained political independence and thereafter has become one integrated political unit. But, so far India has not been successful in bringing about emotional integration of the country. Of late, the ugly incidents in various States, the language disputes, cry for creating separate States based on language and other considerations, are a clear proof that sentiments of nationalism are very shallow. If India has to develop as a democracy it is absolutely essential that India must be emotionally one integrated whole and the sentiment of nationalism must be so strong as to overpower the narrow considerations of language, State, religion, etc. As it happens at present certain parts of India are unknown to other parts. For instance, a young man of Andhra, Kerala, Mysore, Madras, is as ignorant of the language, culture, way of living and traditions of the North as an Indian is ignorant of Chinese culture and the culture of Sri Lanka. Similarly, a young man of the North is absolutely ignorant about the South. In order to encourage the educated young men of different States to know each other and to know more of the States other than their own it is very necessary to encourage young men of different States to go to the other States for higher studies. From this point of view it will be desirable that every State must institute a large number of stipends of sufficient value for students coming from other States having a different language than their own. This will enable students to go to States other than their own for higher education in their Universities. For instance, the State of Uttar Pradesh institutes stipends of Rs. 100 to Rs. 150 p.m. for students from West Bengal, Gujarat, Maharashtra, Andhra, Madras, Mysore, Kerala, Assam. The students from these areas will flock to the universities of Uttar Pradesh and will come into contact with people in that State, their language, literature, and culture and will develop a better outlook and a sympathetic and liberal attitude towards the national problems. Such a move on the part of the States and the universities will help emotional integration of the country. Therefore, the Ministry of Education, Government of India, should request the States to launch such a scheme of inviting students from other States for higher studies in their universities.

APPENDIX R

Starting of Diploma Classes in Indian Languages in the Universities and Colleges (Item 18)

(Rajasthan)

Another step which universities and colleges can take towards furthering emotional integration in the country is the opening of diploma classes in Indian languages in important educational centres. For instance, a State of Northern India can start diploma classes in important educational centres of Southern languages and *vice versa*. This will also go a long way in bringing about better understanding, feeling of oneness among the educated young men of different States. This will not only bring the students of one State closer to other States but they will know the literature, culture and traditions of the other States and thereby will develop liberal outlook. It will be better if such students after securing diploma in a particular Indian language may be given the facility of going to that State on an educational tour for a month or so, so that they may know the State on close quarters and try to speak the language of the State which they have read for their diploma courses.

APPENDIX S

Construction of Primary School Buildings—Harnessing Community Co-operation—Sanction of Central Assistance for Construction of Buildings (Item 19)

(Bihar)

People's co-operation and participation have been recognised as essential components of any programme of development. Co-operation of the community has, therefore, to be harnessed in the project of construction of school buildings. Apart from the economic value of such a co-operation it is socially desirable to associate the community with the school in order to instil in it a sense of belonging in respect of the institution as a whole.

2. Community participation in the programme of construction of school buildings can generally be enlisted mainly around the following :

- (i) free gift of land;
- (ii) local contribution in the shape of building materials, labour and supervision;
- (iii) offer to serve as the executing agent to construct the building according to the approved plan and specification; and
- (iv) petty repairs and maintenance of the existing buildings.

One classroom of a primary school building, built with brick in lime-mortar with cement pointings on outer and inner surfaces and finished with white-washing, with *katcha*-floor and a *pucca* open platform in front, with *nurria* tile roofing on locally available bamboo, costs nearly Rs. 2,000. On scrutiny of the estimates, it will be found that not even one-fourth of the estimate provides scope for local contribution, unless it is raised in the shape of cash. In view of the present economic condition of the people in rural areas, it is becoming difficult to secure cash contributions. Keeping in view these difficulties, the State Government has been contributing approximately two thirds of the estimated cost (*i.e.*, at the rate of Rs. 1,300 per classroom) for the construction of primary school buildings. The local community is expected to meet the balance of the amount in cash or in kind (including labour). In the scheduled and backward areas, the local contribution is fixed at one sixth of the cost only. In such areas, the State Government meets the balance of the estimated cost (*i.e.*, Rs. 1,650 per classroom).

3. The Working Group on Education, while scrutinising the Third Five Year Plan proposals recommended reduction in the State Government's contribution from Rs. 1,300 to Rs. 1,000 per classroom. The State Government's apprehension is that if the State's contribution is limited to Rs. 1,000 only, the construction of the school buildings might be rendered difficult because of inadequacy of people's contribution to cover the balance. The specification prescribed by the State Government works out at nearly Rs. 3.40 N.P. per Sq. ft. This is obviously a very low specification and it is not possible to lower it further. It, therefore, appears necessary either that the outlay is raised to enable the Government to sanction contribution at the rate of Rs. 1,300 per classroom or that they may be permitted to adjust the physical targets within the outlay approved at the above rate of contribution. This Conference of Secretaries and Directors of Public Instruction may like to consider this matter and make suitable recommendations in this regard to the Ministry of Education, Government of India, for appropriate action.

APPENDIX T

Finalisation of the Third Five Year Plan Proposal for Higher Education—Need for Immediate Scrutiny of Universities, Proposals by the University Grants Commission (Item 20)

(Bihar)

When the proposals of the State Government relating to the development of the State Universities during the Third Five Year Plan period were discussed by the Working Group, the State representatives were given to understand that the University Grants Commission would sanction assistance to the extent of 100 per cent on schemes relating to postgraduate studies and research, as a result of which the outlay proposed by the State Government for this purpose was omitted from the State Plan. It was expected that decision would be communicated to the universities by the University Grants Commission while issuing necessary instructions for the preparation of their plans. But it has been brought to the notice of the State Government by the universities that they have not yet received any communication to this effect and as such they have not been able to finalise their Third Plan proposals in this regard.

2. Perhaps this decision of giving assistance directly by the University Grants Commission was taken in pursuance of their statutory obligations of improving higher education as also for better control and check on expansion of teaching at that level. While the State Governments may not have any disagreement with the above procedure, they would like to be consulted about the nature of the financial liabilities and commitments after the expiry of the Third Five Year Plan and the source which is expected to meet the same. Any physical development visualised at the postgraduate level is to be correlated with the achievements already secured and with those proposed in the Third Five Year Plan at the undergraduate level. This Conference of Education Secretaries and Directors of Public Instructions may like to discuss the specific responsibilities of the State Governments in this matter. They may also like to impress upon the University Grants Commission, the necessity of finalising the proposals of the universities quickly so that enough time is left for the implementation of the projects.

APPENDIX U

Distribution of Milk to School Children (Item 21)

(Ministry of Education)

UNICEF used to import about 30 million pounds of milk powder a year in India for distribution in M.C.H. Centres and to school children. In the beginning, this powder was distributed between these two programmes in the ratio of 50 : 50. The recent experience, unfortunately, has been that the distribution of milk to school children leaves much to be desired. The milk powder is very often wasted; the teachers do not take adequate interest; and the necessary reports are not submitted properly and in time. UNICEF has, therefore, reduced the quota of milk allocated for distribution to schools to only about 11 million pounds in 1961-62 (*vide* Annexure III).

2. The problems which the Education Departments have to face in this sector may, therefore, be stated as follows :

(i) We are not utilising our quota of milk powder from UNICEF to the best advantage at present. (We are using 11 million pounds only as against 15 million pounds we are likely to get.) In addition, milk powder has been promised by Australia and New Zealand although the exact quantum of assistance has not yet been decided. What steps should be taken in order to see that our existing and future quotas of milk powder are fully and properly utilised by the schools ?

(ii) The existing arrangements for distribution of milk in schools are not satisfactory. What steps can be taken to improve these arrangements ?

3. This problem has been examined in detail by the Ministry of Education and the Ministry of Health and it has been found that the main weakness of the present system is that the Departments of Education are not properly involved in the programme. The distribution of milk in schools is also being looked after at present by the Director of Health Services whose contact with the school is necessarily limited. It is, therefore, felt that the situation will not improve unless and until the Education Departments squarely face and undertake their legitimate responsibility for this programme. From this point of view, the following proposals are made :

(i) The Departments of Education in the States and Union Territories should accept full responsibility for the programme of distributing milk to school children.

(ii) The responsibility for the programme would be ultimately on the Director of Education. But for day-to-day administration, it would be desirable to make one officer responsible for this programme at the

State level. In addition, District Educational Officers would also have to be made responsible for this programme because the distribution of milk can be conveniently organised on a district basis.

(iii) For 1961-62, the quota fixed for distribution of milk to schools is 11.6 million pounds (see Annexure III for details). It may not be possible to make any change in this programme; but it will be possible to get a higher quota for 1962-63. This will be at least 15 to 16 million pounds from UNICEF alone and in addition, some milk powder would be available from Australia and New Zealand. The Education Departments are, therefore, requested to work out programmes for this purpose and to send their requirements of milk powder to the Ministry of Education not later than October, 1961. In the light of these demands, steps will be taken to allocate quotas for 1962-63. (It is assumed, in milk distribution, that a child will require about 16 lbs. of milk powder per year. In working out these demands for milk powder, it would be desirable to work them out district by district. It would then be possible to despatch milk powder direct to the District Education Officers. This will save both time and money.)

4. The financial aspects of the proposals are also under consideration. Milk powder will be free; but the following expenditure thereon will have to be incurred by the State Governments till it reaches the schools :

- (i) handling charges incurred at the ports;
- (ii) transport charges from the port to the district headquarters; and
- (iii) further transport charges from the district headquarters to the school where the milk is to be distributed.

The handling charges will not be very heavy. Experience has shown that they amount to about 2 per cent of the cost of milk, *i.e.*, 50 nP. per pound or 16 nP. per child per year. The transport charges from the port to the district headquarters and from the district headquarters to the school concerned cannot be easily calculated. But these also will not be very high. It is felt that if a provision of about 50 nP. per child per year is made, all these charges may be covered therein. In the light of actual experience, this basis may be revised.

A good deal of expenditure is incurred in converting the milk powder into milk and distributing it to the children. The school concerned will need some utensils for this purpose and fuel for heating. In most places, children do not relish milk unless sugar is added, and that becomes a fairly large item of expenditure. It is possible to turn this milk into very good curd and give it to the children in the form of curd or buttermilk. In this case the expenditure on sugar would be reduced to the minimum or would be eliminated altogether; but

greater care in the preparation of curd and buttermilk is necessary. Each State can work out its own programme for such distribution. It is also suggested that the local community should be made responsible for all additional expenditure. Several communities would gladly come forward to incur this expenditure in the distribution of milk and it should be possible for the State Governments to arrange this programme without incurring heavy expenditure from State funds.

5. It is a pity that we are unable to use even the existing quotas of milk powder when the malnutrition among school children is so great and the need of providing supplementary diet is so urgent. If action on the above lines is taken, it should be possible to provide milk to a large number of our school children every year.

ANNEXURE III

UNICEF Skimmed Milk Allocation (In Pounds)

State/Territory	M.C.H. Centres		Schools	
	Allocated for 60-61	Proposed for 61-62	Allocated for 60-61	Proposed for 61-62
1	2	3	4	5
Andhra Pradesh	500,000	300,000	312,500	300,000
Assam	150,000	100,000	55,000	58,000
Bihar	451,000	580,000	2,690,000	3,800,000
Delhi Mun. Corpn.	80,000	100,000	..	..
Delhi C. H. S.	120,000	100,000	..	..
Gujarat :				
(i) Saurashtra	300,000	300,000	186,000	186,000
(ii) Other Areas . . . . .	..	100,000	..	..
(iii) Ahmedabad Mun. Corpn. . . . .	..	..	200,000	200,000
Jammu & Kashmir	83,000	100,000	..	..
Kerala	2,000,000	1,800,000	500,000	500,000
Laccadives	83,930*	42,000	67,744*	38,000
Madhya Pradesh	500,000	400,000	..	..
M2dras	1,500,000	1,000,000	..	..
Maharashtra :				
(i) Old Bombay State	1,368,000	800,000	855,000	600,000
(ii) Vidarbha	156,000	100,000	..	..
(iii) Marathwada	49,000	40,000	110,000	100,000
(iv) Poona Mun. Corpn. . . . .	..	..	..	10,000
(v) Nagpur Mun. Corpn. . . . .	..	..	300,000	300,000
Manipur	76,000	68,000	..	..
Mysore	205,000	..	..	..
Orissa (MCH)	175,000	150,000	5,000,000	4,000,000
Orissa (Mahila Samiti)	800,000	800,000	..	..
Punjab	500,000	500,000	182,500	180,000
Rajasthan	79,000†	150,000	..	..
Sikkim . . . . .	..	..	72,000	60,000
Tripura	80,000	70,000	..	..
Uttar Pradesh	500,000	500,000	..	..
West Bengal	5,000,000	4,000,000	1,200,000	1,200,000
Total	15,555,930	12,100,000	11,730,744	11,616,000
Total Number of Beneficiaries	696,000	..	1,017,000	..

*For a period of 21 months.

†For a period of 6 months.

APPENDIX V

Promoting Knowledge About Panchayati Raj and Co-operative Movement in Schools (Item 22)

(Ministry of Education)

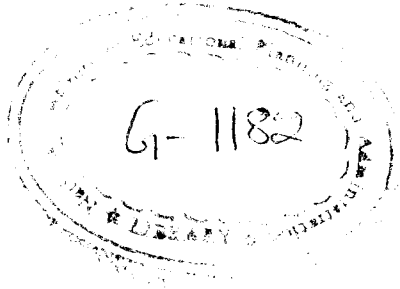
The objectives of social reconstruction envisaged in the Five Year Plans include as leading elements the organisation of rural life on panchayati system and of the processes of production and distribution on the co-operative pattern. It is, therefore, necessary that the schools should actively promote knowledge about panchayati raj and co-operatives through their curricular and co-curricular programmes. The Prime Minister has also made the following observations in regard to this matter:

“The idea of Panchayati Raj and Sahkari Sanghs and Co-operatives is catching on all over India. I wonder if it is possible to introduce some talks about it in our village schools. This is just the time when our children should be interested in these subjects. What is more, they will be seeing this working in their villages and it will be a matter of practical interest to them. Also, why not extend the idea of the panchayat to the school itself? Thus, each village school could elect its own panchayat from among the students. This panchayat would deal with matters like discipline, recreation, sanitation, etc. Also it should run a co-operative society or stores for the school. This would be useful in many ways and will be a good training”.

2. The Conference may consider measures that should be taken to give effect to this idea. In this connection, the following suggestions are offered:

- (i) In the syllabuses of training colleges and training institutions appropriate content courses may be provided for the teachers under training. In-service training programmes, particularly those relating to social studies should cover information about panchayati raj and the co-operative movement. The orientation courses being organised for the primary school teachers under the Third Plan should similarly include these topics.
- (ii) The syllabuses for social studies at the elementary and secondary stages should be examined to see whether adequate emphasis has been given to panchayati raj and co-operatives and revisions, wherever necessary, may be made. Material on the subjects should be included in the language and social studies textbooks.
- (iii) Special talks on these subjects should be arranged in schools, student clubs, discussion groups, etc.

- (iv) Self-government projects, e.g., School Parliament in schools, should be patterned on the panchayat system particularly at the elementary stage.
- (v) The programme of field visits and excursions for students may also include visits to the local panchayat or co-operative society so that the actual working of these institutions may be observed by the students.
- (vi) Printed literature on panchayati raj and co-operatives may be distributed widely to the schools. It is understood that a number of brochures on these topics have been prepared by the Ministry of Community Development and Co-operation and would be available from the State Departments of Community Development.
- (vii) The schools should be encouraged to have their own co-operative stores for the supply of school material, such as paper, stationery, etc. Wherever possible, school co-operatives may also be entrusted with the sale and distribution of textbooks.



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