

BOMBA

REPORT

OF

~~THE WORKING OF THE TRAINING INSTITUTE~~

FOR

PHYSICAL EDUCATION

Committee

1946.

Chairman: Swami Kavalayandada.

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INTRODUCTION.

1. Physical education in Bombay Province has a fine tradition behind it. The Province was up to the beginning of this century, a nursery where some of the finest systems of physical culture had their birth and growth. Changing political, economic and social conditions have had a profound influence on its growth as well as on its decline. Sometimes its very existence has been threatened, but it has nevertheless survived. In remote villages, where these changing influences are least felt, one can still see people participating in their traditional activities which are striking for their rhythm, vigour and daring. In urban areas and among educated classes the emphasis has shifted to western games. Indigenous activities have been relegated to obscurity, or dubbed as fit only for villagers.

2. Even though individual Head Masters and teachers have, from time to time, tried to popularise sports, games and scouting, no systematic attempt was made to promote physical education in schools till after 1910. It is recorded that the Educational Department, in 1913, placed Mr. P. C. Wren, who had special qualifications in physical culture, on special duty, for training teachers in the methods of physical culture. Government also paid a grant for expenses under physical training. But, on the whole, physical training in schools depended on the interests or fancy of a Head Master or an Inspecting Officer.

3. The appointment in Bombay, between 1924 and 1928, of two American physical directors, Mr. F. Weber and Dr. A. G. Noehren, attached to the Bombay City Y. M. C. A., and their work drew the attention of Government to the need for providing improved leadership and better programmes for physical education in schools. Mr. Weber (one of the members of the present Committee) was appointed Director of Physical Education by Government in 1925. Dr. Noehren succeeded him in 1927. His services, however, were terminated soon after, as a measure of retrenchment.

4. In 1927 a Physical Education Committee was appointed by Government with Mr. K. M. Munshi as its Chairman. That Committee made some very useful recommendations regarding the establishment of a Board of Physical Education, the training of physical education teachers, organization of physical education in the Presidency. Unfortunately, the recommendations of this Committee could not be given effect to, due to financial stringency and, as described by the 1937 Committee, the report was "still-born and remained buried in a Secretariat pigeon hole". However, through the efforts and enthusiasm of certain individuals and institutions and especially due to the growing wave of nationalism, physical education continued to make progress, though the progress was slow.

5. *The 1937 Committee.*—A new life began to manifest itself in the Province with the acceptance of office by the Congress-Ministry in 1937. Soon after assuming Office in 1937, the Prime Minister the Hon. Mr. B. G. Kher, who was also the Minister for Education, appointed a Committee to advise Government on the question of physical education in the Province. This Committee elected Swami Kavalayananda (Chairman of the present Committee) as its Chairman, and after a thorough study of the problem submitted a report with progressive, practical recommendations. The development of physical education in the Province since then has been guided by the recommendations of that Committee. The progress made, though by no means up to expectations, has been considerable.

The Educational Department, schools and sections of the public have become more aware of physical education and its importance than before. The declaration of War in 1939, the abnormal political conditions which developed in the country soon after, and the many peculiar influences which affected education and social conditions during the past few years, all had a bearing, mostly adverse, on the progress of physical education. Things did not work out according to plan. Credit for keeping up the few things started in 1938 must go to Government and a few enthusiastic workers who, without flare or publicity, carried on the work with faith, tenacity and sincerity.

6. The noteworthy features adopted as a result of the 1937 Committee's Report were—

- (i) the establishment of an Institute at Kandivli for the training of teachers of physical education,
- (ii) the creation of a Board of Physical Education,
- (iii) the introduction of physical education as a compulsory subject in all schools,
- (iv) the revival and inclusion of indigenous activities in schools,
- (v) the recognition of gymnasia for grant-in-aid, and
- (vi) the appointment of an Inspectorate for inspecting physical education.

7. After observing the progress of physical education for a period of about seven years, Government felt that the time had come to take stock of the situation and to plan for further development in conformity with the new post-war reconstruction schemes which were being inaugurated in the Province. Accordingly the present Committee was appointed by the Government of Bombay by Government Resolution, Education Department, No. 7143 of 10th April 1945, which is quoted below :—

“RESOLUTION.—Government is pleased to appoint a Committee to report on the working of the Training Institute for Physical Education, and its future and on the general state of physical education in the Province of Bombay.] The Committee should consist of the following persons :—

Chairman

1. Swami Kuvalayananda, Chairman, Board of Physical Education.

Members.

1. Mr. N. K. Mia, Principal, Y. M. C. A. College of Physical Education, Madras.
2. Mr. F. Weber, Principal, Government College of Physical Education, Hyderabad, Deccan.
3. Miss M. Benjamin, Principal, Alexandra Girls' High School, Bombay.
4. Mr. G. R. Kelkar, B.A., D.P.Ed., Head Master, P. R. High School, Bhivandi.
5. Mr. N. M. Shah, M.A. (Cantab), F.R.A.S., Principal, M. T. B. College, Surat.
6. Dr. K. S. Mhaskar, M.D., M.A., B.Sc. (Bomb.), D.P.H. (Lond.), D.T.H.H. (Cantab), Bombay.
7. Dr. V. K. Bhagwat, M.Sc., Ph.D., A.I.C., A.I.I.Sc., A.M.C.T., Principal, Ramnarain Ruia College, Bombay.

Mr. P. M. Joseph, Principal, Training Institute for Physical Education Kandivli, should work as the Secretary of the Committee.

2. The terms of reference of the Committee should be as follows :—

(i) The Committee should examine the present work of the Institute and suggest modifications in the existing course of studies for the training of physical instructors in schools.

(ii) The Committee should also consider whether the Institute should continue as it is or take any other form, e.g., develop into a College affiliated to the University working for a degree course of two or three years after the Intermediate stage, and also whether it can undertake training for a military career.

(iii) The Committee should also report on—

(a) The constitution and duties of the Board of Physical Education.

(b) The inspection of physical education in Primary and Secondary schools.

(c) The syllabus of physical education in Primary and Secondary schools, and Training colleges.

(d) The recognition of private institutions for physical education.

3. The Committee should be requested to submit its report in four months.

4. Sanction is accorded to the entertainment of a clerk on Rs. 50 per mensem and a peon on Rs. 23 per mensem *plus* dearness allowance for a period of four months and to the following additional expenditure in connection with the work of the Committee :—

	Rs.
Travelling Allowance to non-official members	300
Contingencies	50
	350

The Director of Public Instruction should be requested to point out a source from which the expenditure involved should be met.

5. The Chairman should, if necessary, take help from his Personal Assistant in dealing with the Committee's work. The Secretary of the Committee should get in touch with the Members and arrange for the meeting of the Committee at an early date."

By a subsequent resolution (Government Resolution, Education Department, No. 7143, dated 14th September 1945) Government was pleased to direct that Mr. P. M. Joseph, Secretary of the Committee, should also be a member of the Committee.

As the investigation and the work of the Committee proceeded it became clear that it was impossible to submit the report within the prescribed period of four months. The tenure of the Committee had therefore to be extended by subsequent Government Resolutions to 15th October 1946. Similarly the sum allotted to meet the expenses of the Committee was found to be inadequate and had to be substantially increased to Rs. 14,000 approximately.

6. The Committee takes this opportunity to record its thanks to Sir I. H. Taunton, Ex-Adviser to H. E. the Governor of Bombay, and Mr. M. D. Bhansali, Secretary

to Government, General and Educational Departments, not only for appointing the Committee but also for extending its tenure from time to time and making the necessary financial provision. The Committee also appreciates the keen interest taken by them in its work and the opportunity that was given to the Committee for making recommendations for the reconstruction of physical education in the Province.

It is extremely difficult to fully acknowledge our gratitude to the many individuals and institutions whose help and hospitality we received. A Committee that undertook extensive touring in these days of travelling and accommodation difficulties could not have done it without the wholehearted help of many people. Officers of the Department of Education, Heads of schools, training colleges and gymnasia and other individuals, too numerous to mention, helped not only by giving every facility but extended to the Committee a warm hearted hospitality in every place it visited. To all such the Committee offers its thanks. If the many facilities and co-operation offered in the Province deserve the appreciation of the Committee, the facilities and co-operation offered by the many people outside the Province deserve to be more appreciated and acknowledged with greater gratitude.

The Committee's thanks are specially due to Mr. D. G. Wakharkar, Personal Assistant to the Chairman, Board of Physical Education, who had to manage most of the details of the Office routine and the bulk of correspondence involved. He rendered help in the work of the Committee during its tours and was helpful in putting together details required for drafting the Report.

CHAPTER I.

PROCEDURE AND IMPRESSIONS.

1. *Meetings.*—Altogether the Committee had seven meetings on the dates given below :

First Meeting.—15th and 16th May, 1945.

Second Meeting.—8th September, 1945.

Third Meeting.—17th and 18th March, 1946.

Fourth Meeting.—18th, 19th, 20th, 21st and 22nd April, 1946.

Fifth Meeting.—10th, 11th and 12th May, 1946.

Sixth Meeting.—29th June, 1946.

Seventh Meeting.—27th, 28th and 29th September, 1946.

Attendance at all these meetings was good, members from Bombay being regularly present. Mr. Mia because of his duties in Madras, and the long distance he had to travel could not attend all the meetings. Mr. Weber did not attend any of the meetings. It was learnt later that Mr. Weber had left India for America. The Committee therefore could not take advantage of his experience and advice. Though Mr. N. M. Shah could not attend any of the meetings due to indifferent health, he was in frequent touch with the work of the Committee. He joined the members when the Committee visited Surat, and took part in the programme of engagements the Committee had arranged there. The members then acquainted him with the progress of the Committee's work and had the opportunity of discussing the various points of investigation with him.

In addition to the formal meetings mentioned above, the members had several opportunities for informal discussions and exchange of ideas during the course of their tours.

For facilitating certain aspect of the work of the Committee, two Sub-Committees were appointed which met from time to time.

2. *Questionnaire.*—With a view to getting information regarding the existing state of physical education in the educational institutions of the Province, an exhaustive questionnaire (Appendix No. II-A) was sent to a large number of people—Heads of schools, Training colleges and gymnasia, Inspecting officers of the Department of Education and prominent workers in the field of physical education. Questionnaires were also sent to Directors of Public Instruction, Heads of Universities and Ministers of Education in the various provinces and states in India. Suggestions and criticisms were invited including details about the work carried on in their respective areas. To the questionnaires sent to 750 persons in the Province 380 replies were received. Of the 90 people outside the Province, 40 sent replies. This works out to about 50 per cent., a not discouraging response considering the lengthy Questionnaire and detailed information called for. Another short Questionnaire asking for information and suggestions regarding the provision of recreation for the public was sent to a few selected individuals (See Appendix II-B). To this also the response was good.

In addition to replies to the Questionnaires, a number of individuals, and Associations sent memoranda placing their views and suggestions before the Committee.

3. *Inspection of the Training Institute for Physical Education, Kandivli.*—The Committee visited the Training Institute for Physical Education twice, once on 16th May, 1945 and again on 7th December, 1945. A whole day was spent there on each occasion. The members inspected the buildings, play-grounds, gymnasium, equipment, library, etc. They observed lessons given by the Staff members in the Lecture Hall and on the play-ground: They watched the students in their physical activities and games. Demonstration lessons taken by the students were observed. The members were guests of the students at one of their meals, and were able to see the messing arrangements. Representatives of the students were interviewed. The Committee met the staff members as a group and had several informal consultations with them. In these ways the members were able to get a comprehensive idea of the working, the student body, the Staff members, and the problems and difficulties of the Institution.

4. *Tours.*—At the very first meeting of the Committee held on 15th May, 1945, the members expressed the view that a comprehensive and constructive report would not be possible unless they had a chance of getting first-hand information about the existing position of physical education from institutions and individuals in the various parts of the Province. Moreover it became clear to the Committee that a satisfactory assessment of the training imparted at the Kandivli Institute would not be possible unless they had an opportunity of seeing the work of the students who had taken their training at the Kandivli Institute. To make this possible the Committee felt that visits to a few selected places in the Province were necessary. The members were also of the opinion that, for making recommendations regarding the future of the Institute and its development, it was essential for them to visit and see some of the prominent Institutions of Physical Education, if not in other parts of the world, at least in India. For these reasons the Committee, with the approval of Government, visited the following places, both in and outside the Province :—

A. *In the Province—*

1. Poona.
2. Dharwar.
3. Dhulia.
4. Amalner.
5. Nasik.
6. Bombay.
7. Thana.
8. Ahmedabad.
9. Surat.
10. Pokhran (University Officers' Training Corps Camp).

B. *Outside the Province*

1. Amraoti.
2. Nagpur.
3. Baroda.
4. Madras.
5. Ambala.

By a special invitation from the State authorities the Committee also visited Kolhapur.

A. *In the Province*—

(i) *Interviews*.—In every place the Committee visited in the Province, the members interviewed a number of officials and non-officials, connected with the promotion of education, physical education and health. Their opinions and suggestions were elicited and recorded. Out of eighty non-officials invited, fifty-three appeared before the Committee. All the fifteen officials that were invited were interviewed by the Committee. In addition to such personal interviews eight joint meetings with the Administrative Officers and Deputy Educational Inspectors were arranged. Outside the Province the members met nineteen prominent leaders out of the twenty-two to whom invitations were sent. A list of persons invited for interviews is given in Appendix-III.

(ii) *Visits to Schools, Training Colleges and Gymnasias*.—The Committee's programme also included visits to selected Primary schools, Secondary schools, Training colleges, and Gymnasias. During such visits lessons in physical education, conducted by teachers trained at Kandivli and elsewhere, were observed. The members had discussions with the heads of the Institutions, and also with the Assistant Masters. Special opportunities were given to Physical Instructors to express their views on physical education and put forward their difficulties. Informal and friendly contacts were made with pupils. Play-grounds and other facilities were inspected, time-tables, syllabus of physical education, medical inspection reports, and other relevant matters were examined. In this way, in spite of the "dressing-up" generally attempted, the members were able to form a definite and clear idea about the existing state of physical education in educational institutions. Altogether seventy-three institutions were visited out of which twelve were Primary schools, five Primary training colleges, forty-two Secondary schools—twelve of which were girls' schools, and fourteen gymnasias (Appendix IV).

(iii) *Meetings*.—Meetings were held in the various places the Committee visited for the purpose of acquainting the Heads, Teachers and Physical Instructors of schools and gymnasias of the purpose of the Committee's enquiry and for inviting their suggestions and criticisms. Occasionally these meetings were organised separately for the Heads, Teachers and Physical Instructors and at other times jointly. Many valuable suggestions were placed before the Committee at these meetings. Altogether fourteen such meetings were held.

B. *Tours Outside the Province*—

(i) *Amraoti*.—The special purpose of the visit to this place was to see the Hanuman Vyayam Prasarak Mandal. This Mandal has done pioneering work in the Central Provinces and Berar for the promotion of physical education and particularly indigenous activities. Through its summer classes it has trained a number of teachers who are working in various parts of India. The members of the Committee met the workers of the Mandal and had interesting discussions with them. They were impressed by the voluntary spirit of service and the enthusiasm of the workers of this Mandal. In addition to visiting the Mandal's classes, the Committee also visited a number of educational institutions in Amraoti to see their work in physical education. The Committee also had a chance of witnessing a mass demonstration by the Primary school pupils of the place.

(ii) *Nagpur*.—The most satisfactory experience the Committee had in Nagpur was its contact with the University Board of Physical Welfare. A special meeting of the Board was convened by the Vice-Chancellor, the Hon'ble Justice Mr. W. R. Puranik, and the Committee had a very useful interchange of ideas with the members

of the Board. The Committee inspected the physical training classes conducted in one of the centres organized by the Board. It was interesting to see how students, residing in the neighbourhood of a centre, attended the classes irrespective of the college to which they belonged.

The Committee had a chance of meeting at Nagpur several officers of the Department of Education including the Director of Public Instruction, Dr. V. S. Jha. An account of the work they were doing and their plans for the future and the many suggestions they gave were of great value to the Committee. The Committee also visited a few schools and gymnasia in Nagpur.

(iii) *Baroda*.—The visit to Baroda was undertaken to see the Jumma Dada Vyayam Mandir, an Institution which has rendered outstanding service to the popularisation of physical education in Western India, and particularly to the development of techniques in the mass method of teaching in indigenous activities. Some of the persons trained at this centre have proved to be successful teachers, and their proficiency and skill has earned very high reputation. The Committee had a chance of witnessing a short demonstration of physical activities at the Mandir and were struck by the smartness, ability and team work of the performers. An interview with the Head of the Institute, Raja Ratna Raja Priya Prof. Manikrao, was highly inspiring. He insisted on selecting the best material for the profession, and giving them a training which would make them experts in various activities. He also pointed out that no lasting results could be achieved unless the workers had genuine faith in the work and approached it with missionary zeal.

In Baroda the Committee had interviews with the Director of Public Instruction of the State, and also with the State Physical Director. The Committee also visited a few other institutions among which special mention must be made of Narayan Guru's Talim. Here the members saw a commendable effort by Mr. D. C. Muzumdar, President of the Institute, to prepare and disseminate literature on physical education in Indian languages. Another place which the members visited was the Pratap Shastragar where they saw a rare and notable collection of ancient Indian weapons of war.

(iv) *Madras*.—The Committee visited Madras to see the Y. M. C. A. College of Physical Education, the oldest centre in the country for training teachers of physical education. The members were cordially received by the College authorities. They were housed in the College hostels, and were given every opportunity to see the facilities and understand the working of the College. By joint conferences and through individual and informal contacts with the Staff of the College much valuable information was gathered. The Committee was impressed by the excellent facilities provided at the College. The College stands on a campus of more than seventy acres of level ground, with a river forming one of the boundaries. The buildings and class-rooms are well planned and well adapted for the purpose. The well-laid-out play-grounds, with a running track, cricket oval, several grounds for football, hockey, etc., a swimming pool, an outdoor theatre with loud speaker and cinema arrangements, an amphi-theatre for boxing and wrestling, a boat house, and sanitary conveniences, etc., gave the Committee an idea of the facilities that are required for a high-grade training centre. A great deal of the Inter-collegiate and Inter-school sporting activities of Madras City are conducted on the College ground, and the staff members of the College were of opinion that this feature has been of great value in giving practical experience to the students of the College. The authorities emphasized that their College was a noteworthy contribution to the sporting activities of the City.

While in Madras the Committee visited some of the local educational institutions, colleges, Secondary schools and Primary schools. An interview was arranged with the Deputy Director of Public Instruction, who explained some of the Province's future plans regarding physical education. He drew the attention of the Committee to the scheme of compulsory Primary Education contemplated in the Province and the consequent arrangements proposed for the feeding of school children. Under his advice the members visited a rural Primary school and saw a mid-day meal of rice and curry being served to the pupils. They also visited the Central kitchen in the City where meals for about 8,000 children were prepared daily, and distributed to all the Primary schools conducted by the Corporation. This impressed the members as a very noteworthy undertaking.

(v) *Ambala*.—The Army School of Physical Training is situated in Ambala, and some of the members of the Committee paid a visit to it. Lt.-Col. Mohinder Singh, the Commandant of the School, received the visitors with every courtesy and he, along with some of his staff members, devoted two full days to the members of the Committee explaining their facilities and training methods. The Commandant stated that the purpose of the school was to train Instructors for the Army. Physical Training in the Army, he said was to *make* a soldier physically fit for war and to *keep* him fit. Those under training looked fine physical specimens, and the work that was being carried on indicated strength, stamina, agility and daring. The discipline was rigid and the work strenuous. The sense of freedom and recreation, which is so essential a part of a school programme was absent. It was pointed out that a man who was selected from the Army and trained as a Physical Instructor had the attractions of a substantial increase in his remuneration, and also relief from the strenuous duties required of the other members of his unit. This prospect made the men keen for selection for the training, and they were prepared for any amount of hard work, under strict discipline.

(vi) *Kolhapur*.—The Committee visited Kolhapur on a special invitation from the State authorities. Kolhapur is undertaking some progressive reforms and one of them is directed towards the provision of a sound system of education. The City itself is having a new Town Planning Scheme where a number of Primary school buildings are being constructed with sufficient play-grounds attached to them. The school and the grounds are so planned and equipped that they can also be used for the recreation of the people residing in the locality. Even though this was a new experiment the authorities expressed the opinion that the scheme had great possibilities. The Committee members were pleased to learn that the State had decided to make physical education a part of the curriculum both in the Primary and Secondary schools, and steps were being taken for the training of teachers, for the provision of play-grounds, and for the creation of an agency for promoting and inspecting the work. The State, it was pointed out, was deputing every year some teachers to Kandivli for training. It was most gratifying to note that there was keen enthusiasm for physical education among the people.

5. *Information from other Provinces and Countries*.—The Committee was keen to collect available information about physical education in other parts of India, and some of the foreign countries. Letters were addressed to Heads of Educational Departments, University authorities, etc., in the various States and Provinces in India soliciting information. A number of replies giving interesting and useful information was received. A summary of the information collected is given in Appendix XI.

A similar request was made to the various foreign Consuls in the country. Most of the Consuls replied saying that the War had interfered with physical education and very little information was available from their respective countries. Some were able to send pamphlets and printed matter on the subject which proved useful to the Committee.

6. As the problems of physical education are closely interrelated and cover a large field and as the Committee was directed to report on the general state of physical education in the Province of Bombay, the Committee decided to make a broad approach to the subject and included several matters intimately connected with the terms of reference even though they were not specifically mentioned in the Government Resolution.

7. The interviews, the visits, the meetings, the replies to the Questionnaires and information otherwise collected produced certain outstanding impressions on the members of the Committee. Some of these are given below :—

(i) There is complete agreement that physical education must be an essential part of school instruction. The idea of education being directed only to the mind is a thing of the past, and educationists and parents want pupils to be trained not only intellectually but also want to see them physically sturdy, and socially well-adjusted.

(ii) There is increasing appreciation that physical education can do more than merely contribute to physical welfare. The educational significance of physical activities and play is being gradually recognized. Many—though not all—seemed to see in it not only sturdy muscles and erect postures but also opportunities for drawing out individual effort and team work promoting desirable personal and social virtues.

(iii) Whatever enthusiasm and faith a Head Master or school management might have in physical education, in many cases it was impossible to introduce and foster a varied and vigorous programme due to severe handicaps particularly lack of adequate play-grounds. The Committee was seriously distressed over the situation. While in some places some solution seemed possible in cities like Bombay and Ahmedabad where an appreciable proportion of the total schools of the Province are situated, the position was most baffling and disconcerting.

(iv) Repeatedly the members were told about the inadequacy of Government grants paid to schools and gymnasia for physical education. While Government had accepted the principle of paying 25 per cent. grant on physical education, actually the amounts disbursed were less than 15 per cent. Managements were very critical of this and sounded a note of warning that physical education would remain neglected unless better grants were paid. The general consensus of opinion was that Government should pay at least 50 per cent. grant on the admissible expenditure on physical education.

(v) Another handicap to which our attention was drawn was the overcrowded academic curriculum in schools. As long as this continued, and the very great emphasis placed on the passing of examinations only in academic subjects remained, neither pupils nor parents, nor even the teachers would be able to pay much attention to physical education. Being a non-examination subject, there was a definite tendency to treat physical education as an extra-curricular activity.

(vi) The lot of teachers of physical education seem to be an extremely unhappy one. Those of them who worked conscientiously complained bitterly

of the disadvantages under which they were labouring. If they remained in school, out of school hours, to arrange games and other activities, they could not undertake any private tuition in order to supplement their salaries which were in most cases extremely meagre. In a number of cases they were required to carry a full load of academic work in addition to the work in the gymnasium or on the play-ground with very little or no extra allowance as a compensation. There seemed to be a strong feeling that to possess a Diploma in Physical Education was a definite handicap. The Committee felt that this was a very serious state of affairs and these teachers needed substantial relief and a great deal of encouragement.

(vii) Indigenous activities like Lathi, Lezim, etc., and games such as Hu-tu-tu and Kho-kho were finding an increasingly popular place in the programme of physical education. However, the finer techniques and high forms of skills were missing. The new Instructors evidently possessed little skill in the more difficult activities and therefore did not teach them. The old drill masters who were trained in the traditional *Akhadas*, and possessed excellent skills, were gradually being replaced. There was need to preserve and teach these finer skills, and the Committee felt that a way must be found to do this.

(viii) Very little co-ordination existed between medical inspection and physical education. Very few schools undertook effective follow-up service.

(ix) The problem of under-nourishment was present everywhere in a serious form and most of all in Primary schools.

CHAPTER II.

IDEAL OF PHYSICAL EDUCATION AND SOME ASPECTS OF THE SCHEME.

PART I.

The Ideal of Physical Education and its Objectives.

[Figures in small brackets show references given in Appendix V.]

The 1937 Physical Education Committee has defined the ideal of physical education as follows :—

“The ideal of physical education is not merely to build up a powerful and healthy body, but also to evoke and foster those personal and civic virtues in pupils which would make them better citizens whether they choose to be civilians or soldiers in their afterlife. Leaders of physical education all over the world now recognise the closest association of the body and mind, and have come to the conclusion that the education of one cannot be divorced from the education of the other. Hence as remarked by Marshall and Rees, (1) ‘Physical Education is but one aspect of the larger problem of education in general, and any system which divorces, or tends to divorce, the physical from the moral and intellectual aspects of life, is thoroughly unsound.’ This very principle was emphasised by E. Major, (2) Warden of the Carnegie Physical Training College, Leeds, when at the last Olympic gathering he declared, ‘We need to aim higher than mere health, than vigorous games and teams, than strong muscles and profuse perspiration. No physical training can have any abiding value unless it contributes also to mental and moral education.’ According to this ideal, therefore, physical education and intellectual education are complementary to each other and must be integrated in such a way as to form an organic whole.”

Having defined this ideal, the 1937 Committee has clearly stated the different objectives of physical education, namely, physical fitness, endurance, resourcefulness, initiative, leadership, civic sense, national consciousness and patriotism.

2. *The International and National background of recommendations.*—The abstract statement of the ideal of physical education and its objectives given in the last two paragraphs stands good even today. However, we feel it desirable to take stock of events that have happened since the 1937 Committee submitted its report, so that we can clearly visualise the concrete problems which physical educationists in India have to solve today and also understand the general background against which our recommendations stand. These events may be summed up as follows :—

- (1) World War II.
- (2) The fateful capture of atomic energy and its use in World War II.
- (3) The foundation of the United Nations Organisation.
- (4) The dawn of Indian independence.
- (5) Emergence of post-war reconstruction problems including those of physical education.

It will be seen that the first three events supply the international background and the fourth provides the national background from which the problems of the fifth item arise and against which our proposals for the reconstruction of physical education will stand.

The International background—World War II.—The second World War that lasted for nearly six years has shaken the World to its very roots. The price that humanity had to pay in blood and treasure for this war passes all imagination. According to United Press Association (3), the United Nations have suffered a total loss of 55,000,000 in men in the war and a trillion dollars in money. When we take into consideration the enemy's losses, these figures will have at least to be doubled. England alone had to spend £10,000,000 every day to win the war (4). According to 'Globe' (5), American statisticians hold that the war cost the world £288,500,000,000 for armaments and materials and £57,725,000,000 for damage. These astronomical figures would make even the boldest heart shiver! But the political, economic and moral effect of the second world war on nations is far more tragic than the loss humanity had to suffer in men and money. As stated by Mr. Ernest Bevin (6), the Foreign Secretary, in the House of Commons, on the 4th of June last, the second world war disrupted Europe to an infinitely greater extent than the war of 1914-18. Naturally this disruption of Europe has torn the erstwhile delicate political, economic and moral fabric of the whole world.

The Atomic Bomb.—Nothing, however, has shaken humanity all over the world and the Western civilisation so much as the atom bomb dropped on Hiroshima on Sunday, the 5th of August, 1945, destroying the whole city in a moment. In this crime, both America and England co-operated. The plan was agreed to by President Truman and Mr. Churchill at Potsdam (7) as admitted by the latter in his speech in the House of Commons on the 16th August, 1945. The use of the atom bomb was against all international understanding about warfare. Already as a result of the Washington Conference (8) which started its meetings in 1921, the abolition of the use of poison gas in international warfare was embodied in a treaty. This abolition of the use of poison gas was understood by nations to be the abolition of the use of all the weapons deadlier than that gas. But when the two leading nations of the world like England and America used the atom bomb—a weapon infinitely more destructive than poison gas—the very foundation of international understanding and security were shattered to pieces. The sense of international security has further been frightfully impaired by the joint declaration which President Truman, Mr. Clement Attlee and Mr. MacKenzie King made on the 15th of November, 1945, at Washington (9), announcing their intention not to internationalise the atomic bomb secret till proper safeguards against the destructive use of atomic energy were established. The two atom bomb tests carried out by U. S. A. so jealously guarding their secrets, one on the 1st of July, 1946, and the other on the 25th of the same month, at the Bikini Lagoon, have further weakened the sense of international security, because these test experiments were undertaken to understand how atomic energy was to be used in war and not in peace. Pandit Jawaharlal Nehru even went to the length of interpreting these experiments as a preparation for the third world war!

The Atomic Energy Commission.—It has, however, to be noted that the three representatives of U. K., U.S.A. and Canada (referred to in the previous paragraph), in their joint declaration asserted that they seriously proposed to bring into existence an Atomic Energy Commission 'in order to attain the most effective means of entirely eliminating the use of atomic energy for destructive purposes and to promote its widest use for individual and humanitarian purposes'. This Commission was actually set up on the 24th of January, 1946, by the General Assembly of the United Nations by a unanimous vote of all the forty-seven delegates present. The task assigned to this Commission was to prevent the destructive use of the atomic bomb and to facilitate international exchange of scientific information

to foster peaceful application of the discovery (10). The Atomic Energy Commission is expected to reach final conclusions by early autumn and these conclusions will be placed before the General Assembly of UNO for its approval in October next. If nothing unexpected happens till then, these proposals are sure to be approved with immense acclaim by the General Assembly. Mr. Noel Barker (11), Minister of State, has already expressed his satisfaction at the progress of the Atomic Energy Commission.

UNO and International Security.—This is so far so good. But here two questions clamour for solution: (i) Whether the abolition of the use of the atom bomb by UNO will prevent nations from using weapons deadlier than this bomb, if a war breaks out. (ii) Whether UNO will be able to eliminate war from the world.

It is difficult to answer the first question in the affirmative for two reasons. First of all the charge of the Atomic Energy Commission is to make proposals regarding atomic energy only. Up to now no proposal has come forward to prevent the use of weapons deadlier than the atom bomb or weapons developed as a result of research in the field of chemistry and biology. These circumstances coupled with the fact that "agents of destruction, in particular those belonging to the field of chemical and biological warfare, have been actually devised and tested, which so far as human life is concerned will be found to be at least as destructive as the atomic bomb and, perhaps, in their efficiency, more insidious". These words are Sir John Anderson's (12) who, during the war, played a leading part in the development of the atomic bomb. Sir John's suspicion regarding the use of these weapons in future warfare is, most probably indicated, when he said that his word may not be particularly a word of comfort to the people at large!

Secondly even if UNO abolishes the use of not only the atomic bomb which belongs to the field of physics, but also of equally or more deadly weapons belonging to this and other fields, past history of warfare does not hold out the promise that this abolition will be respected, if a war breaks out. In spite of the abolition of the use of poison gas, that gas was first used by Germany in 1915 and afterwards by other nations engaged in the first world war. Further, in 1922, the prohibition of the use of poison gas in international warfare was embodied in a treaty. If not in the letter at least in the spirit, this prohibition meant the prohibition of all weapons that were equally deadly or deadlier than poison gas. But notwithstanding this prohibition, America did use the atom bomb in the second World War.

These historical facts make it extremely difficult for us to take an optimistic view of the result of the work of the Atomic Energy Commission and to answer the first question in the affirmative. If a war breaks out there is every possibility of not only the atom bomb but even deadlier weapons being used.

Whether UNO will be able to eliminate war from the world is the second question. Even the stoutest optimism will not be able to give a favourable reply to this question. It is true, indeed, that the foundation of UNO is to be traced to the Atlantic Charter which was broadcast over the B. B. C. on the 14th August, 1941, and which declared the belief that "all nations of the world for realistic as well as spiritual reasons must come to the abandonment of the use of force" (13). No doubt, the fifty nations that met at San Francisco in a conference in June, 1945, issued the United Nations Charter on the 27th of that month avowing their determination to secure peace for the world. No doubt also that on the 10th January, 1946, when UNO was formally inaugurated in London,

H. M. the King in his message to the delegates expressed his satisfaction that machinery was created appropriate to the grave problems confronting them *in building up of a system of international security* (14). It is also true that the British Premier, Mr. Clement Attlee, at the very first meeting of UNO declared its ultimate aim in the following words: "If the ultimate aim is not just negation of war but the creation of a world of security and freedom, of the world which is governed by justice and moral law, we desire to assert the pre-eminence of right over might and the general good against selfish and sectional aims" (15). But against all these weighty declarations and statements the following facts are also to be taken into account. The High Contracting Parties to the League of Nations founded after the first World War had agreed to its covenant "by the acceptance of obligations not to resort to war" (16). But the League after repeated failures to discharge this obligation, had to lamentably dissolve itself within twenty-five years, its final death certificate having been signed by the representatives of the Member States in the middle of April last (17) and its palatial former home in Geneva being bought by its successor, UNO (18)! Mr. J. L. Garwin writing in the *Times of India* on the 11th July, 1946, has seriously expressed his misgivings regarding the success of UNO. He says "The sphinx-riddle of the world's future is whether the New World Organisation of the United Nations is to recover a fair chance of fulfilling the saving hopes and tasks for which it was created, or whether at this early stage and henceforth it is to be reduced to a fate both more lamentable and more ludicrous than the tragic fiasco of the old League". General Smuts, the great veteran statesman of the British Commonwealth of Nations speaking over the radio on the 31st of May last, appealed to the people of the Commonwealth *not to rely solely on UNO* and said in effect, just as the Commonwealth stood when the League of Nations broke down, so it might do again if a greater storm should happen to overwhelm UNO (19). General Smuts further added, "UNO is a great advance on the League of Nations and deserves our fullest support. *But* the world has also become far more dangerous than it was after the last war, with far mighty powers and forces and deadlier weapons than in the time of the League of Nations" (19). The meaning of what Mr. Garwin and General Smuts have said is very clear. Nations are sceptic about the capacity of UNO to eliminate war from the world. And this scepticism is quite understandable. Right from the first session of the Assembly of UNO the big powers began to differ. At consequent conferences of their representatives these differences created acute tension. Even at the Peace Conference now sitting in Paris this tension is quite apparent. There are two distinct camps in Europe—the Eastern and the Western. And the problems of these two camps are the problems of the world, because, like peace, today's world is also indivisible. Referring to this situation Viscount Cranborne remarked in the House of Lords on the 29th July as follows: "There is no predominant problem facing the world today which over-shadows all others—Russia and her policy and relations with the rest of the world" (20). So the tension existing in Europe affecting the whole world including the Middle East, makes it extremely difficult even for a man with the most optimistic frame of mind to answer the second question in the affirmative and to say that UNO *will* be able to eliminate war from the world. Whatever the future accomplishments of UNO, the fact remains that the world today is an armed camp and, even when nations are meeting in a peace conference, they are going there for selfish ends and with distrust and suspicion, overawed by the atom bomb and its deadlier successors!

3. *The International and National Situation and our Recommendations.*— This is the international situation in which the world finds itself today and this is the situation which we in India, as a part of the world, have to face and try to improve to the best of our ability. We are not oblivious of the fact that international situation can be dealt with by international co-operative efforts. No single nation, howsoever powerful, can determine the shape of international things to come. We are also convinced that international affairs are mainly influenced by the political and economic ambitions of different nations. And yet we feel that as we have been called upon to make recommendations for physical education, our recommendations must be such as to take into account the international situation; and if properly implemented, should, in howsoever small a measure, help to bring about a better international situation. They must also be in the best interest of India and should make constructive and far-reaching proposals to the Government of Bombay for the reconstruction of physical education in our Province.

4. *The Ideal of International Citizenship.*—We as educationists have immense faith in the efficacy of education. We are convinced that if a nation is educated for one generation with a particular ideal having its definite objectives, that ideal sinks so deep into the nation's blood that every tissue of its nationals vibrates with that ideal and every action of its citizens is directed to achieve its objectives. Taking into consideration, therefore, today's war-smitten world presenting the appearance of an armed camp, we wish that every nation in the world places before its youth the ideal of world citizenship, with peace and international security by eliminating war as its objective. And we hold the same ideal before the youth of India.

Luckily, international educationists have already started holding this ideal before the nations of the world. The International Education Assembly held in U. S. A., in September, 1943, where twenty-nine nations *including India* were present by their representatives, recommended amongst others the following work to be done.

To examine the curriculum to determine how the *development of World citizenship may permeate the teaching of all subjects* and to eliminate the content and materials which foster intolerance, prejudice and war among the peoples of the world (21).

Recently the International Congress of Teachers, at its final session in Paris, passed a resolution favouring the use of propaganda in text books and other media to destroy the spirit of distrust between nations and to foster world co-operation (22).

Dr. J. C. Maxwell Garnett's famous book *Education and World Citizenship*, as its title indicates, strongly advocates the ideal of world citizenship through education. Dr. Maxwell's plan for the establishment of a World Council of Universities which he presented at a meeting in London on the 25th July on behalf of the British Association, clearly points out that the all-overriding ideal of education should be world citizenship (23).

Further it was only a month back that a World Conference of the teaching profession which met at New York, discussed ways to improve the teaching of international understanding and how teachers can work for world citizenship (23').

International Citizenship will reinforce Indian Citizenship.—Here a doubt may be expressed.—Is the ideal of world citizenship in any way wholesome for a country like India which has just grown conscious of her nationhood? Will this ideal not root out from the Indian soil the tender plant of national consciousness

and patriotism which was recommended by the 1937 Physical Education Committee to be grown with the manure of physical education? (24). We are satisfied that these doubts are groundless. There is no inherent antagonism between the citizenship of a nation and international citizenship. A group of former officials of the League of Nations writing on International Loyalty have expressed their opinion as follows:—

“What is International Loyalty? It is not the denationalised loyalty of the man without a country. On the contrary, it is the conviction that the highest interests of one's own country are served best by the promotion of security and welfare everywhere, and the steadfast maintenance of that conviction without regard to changing world” (25). Again Mr. Grayson, Chairman, Liaison Committee of the International Education, commenting upon the International Education Assembly's resolution referred to above, remarks:—

“World citizenship does not mean either the sacrifices of national culture or national citizenship or the subordination of one culture or ethnic group to another. In fact, good national citizenship and good world citizenship will reinforce each other, once all nations give up the ideas of foreign conquest and racial superiority. The qualities of character most desirable in the relations of home, neighbourhood and nation, are those which are most needed in world relations. Education in world citizenship should begin with the whole development of the whole child in the personal-social relations of his immediate environment and concurrently extend his understanding of and his responsibility and effectiveness in a wider environment which comprehends the people and the places in an interdependent world” (21).

These arguments should convince everybody that the ideal of world citizenship with its objectives of peace and international security by the elimination of war, will not only not weaken our ideal of Indian citizenship but will certainly reinforce it.

5. *Physical Education for World Citizenship and Elimination of War.*—But is physical education capable of fostering the ideal of world citizenship? Can it help to eliminate war and thus promote peace and international security? We are happy to answer these questions in the affirmative. Not only educational psychologists but some of the eminent scientists of America have worked on the problem of physical education and their work leads to the conclusion that *physical education, if properly organised and administered*, can be an alternative for war (26). The proposition that physical education can help the elimination of war, is of such an absorbing interest at the present juncture in the affairs of the world, and has such a direct bearing upon our recommendations, that we wish to discuss it here at some length giving arguments both for and against it.

Those who advocate the impossibility of the elimination of war argue as follows. The business of killing and avoiding death has been one of the primary instincts of living beings throughout their long history on the earth. It is in the highest degree natural that feelings of hostility often burn with fierce intensity. These are powerful emotions, so also the deeply ingrained instinctive reactions which invariably precede combat. They are the emotions and instincts that sometimes seize upon individuals in groups, until entire populations are shouting and clamouring for war; and when the time comes, these surging elemental tendencies assume control of their conduct and send them madly into conflict.

It has been argued also that survival has been decided by the grim law of mortal conflict and the mechanism for rendering the body more competent in conflict is extraordinarily perfect and complete. Hence, as with other physiological processes, bodily harmony would be promoted by its exercise. Further, as this mechanism requires satisfaction, occasional conflicts in the form of wars are not only justifiable but are absolutely necessary.

Modern scientific researches have clearly proved that this fighting mechanism is present in the human body and that it is perfect and complete. Physiological considerations also show that this mechanism itself requires exercise and consequent satisfaction. Are then wars unavoidable? We feel, on psychological and physiological grounds, that they are not. Physical education, if it is properly planned, organised and administered with the ideal of producing citizens of the world, can definitely make a very valuable contribution to the elimination of war. We shall first examine the psychological grounds.

The Psychological Argument.—The arguments of the advocates of war when psychologically examined only prove that the fighting instincts and emotions of man are pent up and clamour for expression and satisfaction. But the question is whether war is the only outlet for these instincts and emotions, or there is an alternative way of expressing and satisfying them. The cathartic interpretation of play shows that play does provide an outlet for the pent up instincts and emotions and can be a substitute for fight and war. The following quotations from James S. Rose will explain the matter clearly.

“ Play is cathartic in its action ; that is to say, it provides an outlet for certain pent-up instincts and emotions which, whether in childhood or in adult life, cannot find sufficient direct expression. In civilized life the instinct of pugnacity, for example, finds insufficient scope for exercise. By nature we are fighters, and fight we must, so the civilized man fights in play. Every game is a sham fight, in which no blood is shed, or even anger displayed, but which nevertheless relieves the energy of this instinct, providing a vicarious channel for its expression ” (27).

The Physiological Argument.—An examination of the physiological arguments of the advocates of war will also prove that physical education can be an effective substitute for wars. The fighting mechanism of which they talk, is the sympathetico-adrenalin system in the human body. Now the physiological reactions of this mechanism in a man engaged in a mortal combat are as follows :—

1. Increase in the adrenalin content of the blood.
2. Increase both in the rate and the amplitude of cardiac contractions.
3. Increase of red blood corpuscles in circulation.
4. Contraction of blood vessels.
5. Increase in the oxygen delivery.
6. Heightened arterial pressure.
7. Hastening coagulation of the blood.
8. Faster activity of the lungs.
9. Flooding the blood with sugar.
10. Increased muscular energy.
11. Quick reduction of muscular fatigue.

It will be immediately realized that these physiological changes are meant by Nature to protect the fighting individual. They provide for heavy muscular work, quick removal of muscular fatigue, fuel for consumption in the form of sugar and oxygen, more liberal and richer blood supply and also arrange for less loss of blood supply if the individual is bled.

Now according to Dr. Walter B. Cannon (26) and a host of others, it has been conclusively proved that these very psychological changes take place in persons engaged in strenuous athletic and competitive activities, and hence these rivalries fully exercise the fighting mechanism and keep it healthy and satisfied. We wish, however, particularly to emphasise that the fighting mechanism in man can never be successfully exercised by monotonous gymnastics and ordered marches. It requires more enlivening activities in the form of competitive testing of strength and physical skills. Activities like wrestling, lathi fight, dagger fight, foot ball, hockey are needed. A physical education programme emphasising these and similar activities properly planned, organized and administered, should certainly be a substitute for war. We shall close our arguments on this particular point by quoting a paragraph of Dr. Cannon dealing with "Alternatives for fighting emotions".

"In many respects strenuous athletic rivalries present, *better than modern military service*, the conditions for which the militarists argue, the conditions for which the body spontaneously prepares when the passion for fighting prevails. In competitive sports the elemental factors are retained—man is again pitted against man, and all the resources of the body are summoned in the eager struggle for victory. And because, under such circumstances, the same physiological alterations occur that occur in anticipation of mortal combat, the belligerent emotions and instincts, so far as their bodily manifestations are concerned, are thereby given complete satisfaction" (26).

From this discussion, it will be abundantly clear that physical education, if properly organized and administered, can help the elimination of war by substituting an alternative for it and thus lead to international peace and security.

How Physical Education Can Foster World Citizenship.—Here we want to emphasize one point which is the most essential aspect of physical education. The activities which are most capable of developing social virtues which would ultimately flower into national and world citizenship, are the combative games played either between two individuals such as wrestling, farigaga, lathi fight, boxing, etc., or between two groups, such as atya-patya, khokho, hututu, foot ball, hockey, etc. Unfortunately, more often than not, these games are played merely for victory achieved by ways fair or foul. As stated by Professor Franklin Bobbitt in his Curriculum of Modern Education, in such a game "when staged between teams of strangers, it is more the fight than the play that comes to the surface. It is enjoyable, of course, since human kind loves the joy of battle and finds its supreme ecstasy in rejoicing over a fallen foe. In both players and spectators it whips up the antagonistic emotions and attitudes of fighting spirit rather than the friendly emotions of generous play. It seems not to promote the virtues of the self-directed non-policed generosity and fair dealing" (28). Games played merely for victory generally lead to discord, enmity, disregard for honest dealings, etc., qualities which are anti-social. Training merely for skills without emphasising and developing social virtues, though not as bad as training merely for victory, is not the thing that would lead on to national citizenship or world citizenship. The teacher must at every step see that he does not teach only skills, but he tries to build in his students such healthy habits, attitudes and appreciations as would make them ideal citizens. In this connection

the remarks made by Miss Agnes R. Wayman in her excellent book "A Modern Philosophy of Physical Education" may be aptly quoted.

"Even more important than skills are *habits* and *attitudes* and *appreciations*. These should be the by-products of the field of play and of physical education and recreation when sports, games and physical activities are wisely chosen, wisely organised and wisely administered. Out of this activity programme should come a *philosophy* of conduct and of right thinking, an *attitude of mind* which will function not only in schools and in colleges and at home, but later on in community life and in public life as good citizenship. That attitude of mind, that philosophy is more valuable by far than skills" (29). In the syllabus that we have framed for physical education, we have made a generous provision for the fighting activities. We insist that they are wisely chosen, wisely organised and wisely administered, so that training in those activities will lead to the flowering of those civic virtues which should make one not only a citizen of India but a world citizen.

In this section of the chapter we have taken a bird's eye view of the international situation. We have defined the ideal of world citizenship against the international background, and have shown that national citizenship and world citizenship reinforce each other; and have explained how physical education can help to eliminate war and thus lead to peace and international security. In the second part, we will take into consideration the present position of India and set out the duties which the young and the old alike will have to fulfill. We will also explain by considering some aspects of our scheme, how health, physical, efficiency, etc., needed for the fulfilment of our tasks, can be secured for our Province, if our Provincial Government implements the recommendations we make.

PART II.

The Present Position in India.

6. India is on the threshold of independence. H. M. the King Emperor promised full self-government for India in his speech made from the Throne on the 15th of August, 1945 (30). On the 15th of March, 1946, Premier Mr. Clement Attlee, confirmed that promise and declared his intention to help India to attain self-government speedily (31). Thereafter the Viceroy and the British Cabinet Mission have been trying to fulfil the King's promise. Interim National Government has already been established at the Centre. And although dark clouds are gathering on the political horizon of India, her sons and daughters, one and all, are bent upon seeing freedom for their Motherland. So we take Indian freedom to be a foregone conclusion.

7. *Problems of Independent India.*—Independent India has to face immediately many difficult problems. Out of the many, we will single out only those problems which require health and physical efficiency of the nation for successfully grappling with them. These are defence, industrial development and agricultural development. We shall first deal with defence.

Indian Defence.—The defence of India will first of all require a large standing army. It will also require a large navy because the defence of India is not confined to its borders. The security of the Indian Ocean is also as vital to us. As aptly described by Mr. K. M. Panikkar in his booklet "India and Indian Ocean", "Her (India's) life lines are concentrated in that area (The Indian Ocean). Her future is dependent on that vast water surface. No industrial development, no commercial growth, no stable political structure is possible for her unless the Indian Ocean is

free and her own shores fully protected. The Indian Ocean must, therefore, remain truly Indian" (32). This will prove "that India is a maritime state with predominance of interest on the sea" (33), and as such must maintain a powerful navy of her own. However, we wish to emphasise it here in the words of Mr. K. M. Panikkar that "her claim to interests in the Indian Ocean is not with a view to any aggression or imperialist design, but purely and solely as a matter of defence (32). World War II has established beyond doubt the extreme importance of the air arm and it is clear that independent India must organise a powerful air force also.

What it means is this. India will have to maintain all the three arms—army, navy and air force—efficiently.

Indianization of the Three Arms.—Luckily for the first time under the British rule we have now an opportunity to have all the armed forces of our country completely Indianized. A declaration (34) to this effect was made by General Claude Auchinleck, C.-in-C., disclosing the Government of India's plans to press correspondents on 22nd October, 1945. To make Indianization of our armed forces speedy and successful, India must be able to send physically efficient young men from year to year, to the various centres of military training that exist today at Dehra Dun, Bangalore, Mhow, Ambala, Calcutta, Bombay and Lonavala and also to those centres that may develop hereafter. We must take full advantage of the opportunities that are presenting themselves to us and make all the three arms of our fighting forces eminently powerful. The National War Academy is going to admit Matriculates for a four years' course (35), and other institutions for military training are now likely to do the same. These military training centres wish to admit boys of 17 to 20 years, because as the C.-in-C. said, these are the impressionable years (36). This plan of complete Indianization of the three arms throws a great responsibility upon our secondary schools. And our physical education programme must be such as would constantly send out capable youths for the recruitment to the National War Academy and other centres of military training.

Our Syllabus of Physical Education is Meant for Prospective Soldiers as well as Civilians.—Taking these facts into consideration, we have framed our general syllabus of physical education for secondary schools in such a way as would develop in our students those physical and mental qualities which are necessary not only for a civilian whatever his profession or career may be but also for a candidate seeking admission to military training centres for any one of the three arms. Throughout the course, there is a liberal provision of individual and combative games such as wrestling, boxing, farigadga, lathi fight, dagger fight, foot-ball, basket ball, hu-tu-tu, etc. These games lead to courage, endurance, leadership, initiative, resourcefulness, emotional balance and comradeship, qualities so essential for a man in arms. We have also included various physical activities which are particularly suitable for preparing boys for a military training. Camping, hiking, marching, running, cross country, steeple-chase, etc., will help boys to undertake an army training. As a preparation for naval training we have included in the syllabus swimming with clothes on and swimming with equipment, diving and life-saving. Rope climbing, rope swinging, rope vaulting, rope travelling, pole vaulting, and malkhamb are designed as preparatory to elementary aeronautics. Apart from this, squad drill with military precision and discipline has been made a compulsory part of the training of every pupil.

Thus it will be seen that our general high school syllabus of physical education if efficiently followed, will qualify a student to join any military training centre

with capacity and confidence or take the U.O.T.C. training if he goes to the university.

There will, however, be a large number of students who will choose a profession or a career other than military. These will most probably never have in their lives the thrill of firing a shot or even carrying a rifle on their shoulders. The Junior Cadet Corps that we have advocated for every high school is intended to give students an elementary knowledge of firearms so that in times of national emergency, they may be quickly mobilised.

We are glad to see that the Government of India have thought of establishing a National Cadet Corps for India and have already formed a National Cadet Corps Committee to advise them in the matter (37).

If our plans of physical education are to show the desired results, the Bombay Government must make a liberal provision of camps and provide facilities for swimming in tanks, rivers and in the open sea all along the coast line. To make our youth take to air, we would think it worthwhile for our Government to arrange to give joy rides to our students wherever civil aviation centres are available. Our Government owe it to themselves and to our boys to give them every opportunity to satisfy the noble yearnings of their hearts.

Government's Attitude Towards Military Training.—Speaking at a passing out parade of the students of the Indian Air Training Corps in Bombay, on the 14th June last, Mr. B. G. Kher, the Prime Minister, Government of Bombay, declared defence to be an integral part of the country's administration. In fact, during the last Congress Ministry, a resolution purporting to provide proper military training in the university had been passed (38). We are happy to note this favourable attitude of the present Government towards military education and we recommend that they should now complete the work previously planned and provide facilities in the secondary schools not only for preparing a few candidates for military training but also for giving some military training to all.

India's Present Capacity for Defence.—According to Sir Samuel Ranganathan (39), the armed forces of India amounted to nearly 2,500,000 men at the end of the war. The Secretary of State (40) declared the unsurpassed gallantry and endurance of these men throughout the long and bitter struggle to be beyond all praise. We must, therefore, make every effort to take advantage of our vast manpower and our youths' potential gallantry and endurance to make our defence perfect. We wish again to emphasize that our advocacy of military training is entirely for Indian defence and not for aggression or for any imperialistic designs.

8. *Need for Adequate Nutrition.*—Howsoever perfect may be the machinery that we set up for imparting physical education to our boys, we shall not be able to get them to rise to their full stature physically, mentally, morally and spiritually, unless adequate provision is made for their nutrition. We must make arrangements to provide one full mid-day meal to every child going to school and must see that milk forms a necessary part of the meal. The nutritive value of milk is now admitted on all hands. But we should like to quote from the League of Nations Volume on Nutrition one experiment that is so apt. "A pint of milk added daily to what was considered a good diet in an institutional boarding school, caused in boys of 6 to 11 years old, an increase of 2.63 inches in height and 6.98 lbs. in weight as compared with increases of only 1.84 inches and 3.85 lbs. of similar boys who did not receive the supplement of milk" (41). When we remember that this

“dramatic” result was obtained in the course of only one year, we stand convinced of the urgent need of providing milk for our school-going population with the mid-day meal every day. Even before World War II, in several countries, the diet of school children was being supplemented by the regular provision of free or cheap meals at schools (41). As early as 1906 and 1914, England, by legislation, (Provision of Meals Act), secured that no child should be prevented by want of food from profiting by education (42). The Education Act of 1914 had already greatly emphasised the need of mid-day meals with milk and had promised *liberal grants* at times ranging up to 100 per cent. (43). Now the Ministry of Education has gone further and on the 28th of March, 1916, the Minister made a statement in the House of Commons making school milk free of charge and so also school dinners to day-pupils. For establishing and equipping school canteens 100 per cent. grant was offered (44). So far as India is concerned, the Sargent Committee has recommended that all the children should be given a mid-day meal, parents sharing the cost only according to their economic status (45). The Government of Madras is launching a scheme of feeding every poor child attending an elementary school to be fully developed in ten years, the first five years being estimated to cost 12½ crores (46). The National Planning Committee recommended that every basic school should make adequate provision for nourishment of school children during school hours. We have recommended that not only the prebasic but every school child must be given mid-day meals in the school, the cost of such meals being borne by Government either partially or fully according to the economic conditions of the parents or guardians. When we know, as stated in Chapter VI, that the heights and weights of our school pupils are less by 10 to 20 per cent. than those of the British pupils of the same age and that even in the college students mal-nutrition is prevalent, we feel that Government must shoulder the responsibility of the nutrition of our school children and immediately give effect to our recommendations made in this connection.

From information supplied to us by 444 Secondary schools in our Province, we find that out of the 31 per cent. of under-nourished pupils in these schools, as many as 16 stand in need of free nourishment, 10 at half the cost and the remaining 5 can pay their own expenses (*vide* Appendix VI).

Other sources seem to indicate that mal-nutrition prevails on a much larger scale and the proportion of undernourished and needy pupils comes to about 60 per cent. of the total school-going population. Besides this there will be 25 per cent. of the school-going population that is in need of nutrition at half the cost involved. Our calculation of expenditure on nutrition has been based upon these percentages.

9. *Nutrition and our Terms of Reference.*—No Government will be able to keep the cost of free feeding even of the school children within certain limits, unless the standard of living of the whole nation is raised by industrial and agricultural development. The higher the standard of living the smaller will be the burden of providing free meals to poor school going children, in proportion to their total revenue. Now the industrial and agricultural development upon which the standard of living depends, necessitates in its turn the physical efficiency of labour engaged in industry and agriculture. And as physical efficiency of every individual depends conjointly upon physical education, recreation and nutrition, we think it necessary to make our recommendations regarding nutrition and recreation also, although the terms of reference do not ask us to deal with these subjects. Further the terms of reference do ask us to consider the question of gymnasia. These national institutions are directly concerned with the physical education and

recreation not only of school children but even of adults. As we thought it undesirable to isolate from one another nutrition, physical education, recreation and gymnasia, we have gone beyond our terms of reference and made our proposals regarding nutrition and recreation also.

10. *The Condition of Industrial and Agricultural Labour and Need of Physical Efficiency.*—Regarding the question of the standard of living, industrial and agricultural labour, and the efficiency of industrial and agricultural labourers in relation to nutrition, recreation and physical education, we have to note the following facts.

A comparative study of the daily consumption of food of a free industrial worker and a prisoner in Bombay, has revealed, according to Mr. K. M. Munshi, the Ex-Home Member of the Government of Bombay, that a worker in textile industry gets 1·54 lbs. of food whereas a convict sentenced to light labour and hard labour gets 1·69 lbs. and 1·87 lbs. respectively for his daily consumption (47). However, although a textile worker is at present less nourished than a convict, the lot of a handloom weaver is still worse. As stated by the Commerce Member of the Government of India in August last, the handloom weavers have been the most exploited class in India. Worse than that of the weavers, however, is the lot of the agricultural labourers. No doubt the average *per capita* income according to Dr. V. K. R. V. Rao, is Rs. 65 per annum in India. But a calculation based on a survey of about 600 villages in the Central Provinces gives *per capita* income of Rs. 12 per annum only (48). This works at one rupee per month and this vividly depicts the miserable lot of the agricultural labourer. When we realise that the submerged agricultural population of our country is 300,000,000, as stated by Professors Wadia and Merchant (49), we see at once how miserable is the life of India and the Indian labourer today! No doubt, during the last two years or more, quite a network of plans for the economic development of India has been woven. Some of the threads of this network are spun by people of capitalist persuasion, some by people of Gandhian persuasion and others by people of socialistic persuasion. These plans, though mutually conflicting and very often bewildering, aim at raising the standard of living and helping the labourer to have a more comfortable life. However, we are not concerned here with the soundness of their schemes. We only know, if successful, these plans may solve the question of nutrition of the factory labourer and the peasant. Training in technical education, both of the industrial and agricultural type, will certainly improve their skills. But in all these economic plans we seriously miss any practical suggestions to develop the physical efficiency of the workers. Mere skills without physical efficiency will never secure the desired productivity.

11. *Need for Recreation and its Organisation.*—Besides the development of physical efficiency what is required of our workers in the factory and the field, is the building up of a robust optimism. Today our masses, especially the peasants, are seriously suffering from dark pessimism and a defeatist attitude towards life. As stated by Prof. N. Gangulee, "So long as this defeatist attitude towards life dominates the outlook of the masses, the impetus to improve their conditions of life will be found lacking. Therefore, it is this attitude which has to be changed, if India is to arrest the symptoms of decay, so conspicuous among the population" (50). Much water has flowed under the bridge since 1938 when Professor N. Gangulee wrote his book in which the passage just quoted occurs. World War II and the subsequent economic and political developments have improved the psychology of our masses greatly. And yet Himalayan work remains to be done before an enthusiastic outlook on life and optimum physical efficiency become characteristics of our masses.

Besides political advance and economic uplift, if there be one thing which will bring about the required physical and psychological change, it is *recreation*. Our Province should have the maximum number of welfare centres where facilities will be provided in the form of grounds for track and field events, a pit for wrestling, a ring for boxing, courts for folk dancing and fields for all sorts of sports and games. Equipment for Indian activities must form an essential part of the recreative arrangements made available at these centres. A radio set is a necessity. Above all this, the welfare centre must provide competent leadership. The person in charge must not only know the different recreative activities that should be arranged at these centres; but also must know adolescent and adult psychology and must possess those qualities which are necessary to make a good leader. He must be familiar with the problems which workers in fields and factories have to face and solve. Not only cities and towns, but every village must have these centres. We feel sure that these centres, if wisely planned and properly conducted, will bring joy and happiness, health and enthusiasm, efficiency and optimism to our masses. According to Walter Duranty (51), in Russia, these imponderable factors, by which he means these welfare centres, little less than tractors and giant ploughs, were winning the peasant masses, as they had already brought fresh joys and interests to factory workers and soldiers. There is no reason why these welfare centres should not do the same thing for the masses of India.

In establishing these welfare centres the existing gymnasia, sports clubs and similar institutions should be taken advantage of. The pamphlet "Planning for the Future of Bombay Country-side", published by the Government of Bombay early last year, does make references to Welfare Centres and also advocates their development (52). But the way suggested for recreation in villages, is hardly capable of achieving anything. It is no use having merely a "club house, gymnasium, library or reading room". Every centre, must be as fully equipped as shown in the previous paragraph, and must make arrangement for competent leadership.

A Separate Department for Recreation.—We attach as much importance to recreation for our masses working in fields and factories, as to physical education in schools and colleges. That is why we have devoted a separate chapter (Chapter VIII) to this subject in this report; and in the proposed college of physical education, we have recommended an optional course of this subject in the last two years. Further, as recreation for the masses does not come within the purview of the Educational Department, we have advised Government to place this subject under the Board of Physical Education to begin with, but to develop a separate department for it later on. Mr. Henry A. Wallace, Secretary of Commerce, U. S. A., hopes to bring joy to the masses of America by finding sixty million jobs (53). Our Indian industrialists hope to accomplish the same thing by complete removal of unemployment. We feel convinced, however, that without recreation our toiling millions that are sweating in fields and factories, will never feel the thrill of a buoyant life. The Province will get back every pie that would be spent on making our masses bubble with energy, shine with radiant health and over-flow with joy and optimism. Luckily, the Finance Minister of our Province has declared that it was Government's aim to bring about "a happier and richer peasantry, a richer body of artisans, and a richer body of workers all over the Province" (54). We would point out to Government that they may be able to make our masses richer, but they will not be able to give them health, happiness and optimism without recreation.

12. *Physical Education for Girls.*—Whatever has been said regarding boys applies equally to our girls. The question of the ideal and objectives of physical education and the problem of nourishment are common to both girls as well as boys. However, woman differs from man biologically, anatomically and psycho-physiologically. Because of this difference, track and field events, rough and tumble games and military training must be omitted from the physical education of the girls. However, it will be desirable to give training in musketry and Field Craft to girls also. We shall explain this point at some length.

The Anatomical Factor.—Compared with man, woman is light in weight and shorter in stature. Her bones are smaller and her muscles more elastic and more easily separable. Her heart and lungs are smaller in size. Her legs are shorter and her vertebral column is longer. Her pelvis is broad and capacious. Her abdominal and thoracic organs are held together rather loosely. All these anatomical differences are necessary, if child bearing is to be natural, healthy and comfortable. Hence the 1937 Committee advised the omission of all those activities which interfere with the anatomical structure of women.

In this connection the following facts have to be taken into consideration. As stated by J. Linhard, "The development within the civilized races tends more and more to produce children born with large heads. If this development is to continue, the female pelvis must also develop to greater and greater spaciousness and more and more typically female form" (55). Unfortunately, so far as the American experience of physical educationists goes, as pointed out by Miss Agnes R. Wayman, Head of the Department of Physical Education, Barnard College, Columbia University, "Statistic show that even within ten years there has been an increase in height, strength, vital capacity and size of waist of girls *with a decrease in the girth of hips*" (56). At another place the same author says that "the modern girls undoubtedly have smaller hips and tend towards the masculine type."

Neither the 1937 Committee had, nor have we today Indian statistics to guide us. So, to err on the safe side, we have advised in the case of girls the omission of track and field events and combative groups games which are likely to affect the female form and thus interfere with normal functions peculiar to women. We are of the opinion that for abdominal and pelvic culture, the Yogic exercises of Asanas (57) and exercises given by E. Bjorksten (58) and by Th. H. Ven De Velde (59) are good.

The Psycho-physiological Factor.—There is one more consideration. It concerns the psycho-physiological side of women. As pointed out by J. Lindhard and E. Bjorksten, "The woman's nervous system is generally less stable than a man's and especially so in the vaso-motor system. The woman's unstable nervous equilibrium makes her more sensitive to all emotions, and she is distracted from her work more easily than the man" (55 and 58).

With a view to stabilising the female nervous system it is recommended that in the case of girls, greater attention should be paid to those light exercises and rhythmic activities which are to be done to the accompaniment of music.

Maternal health.—The question of maternal health is of grave concern to India. According to Sir John Megaw's estimate, (47), India's total maternal death rate per year is 200,000. This appalling loss of life and the misery that it brings to our homes must be reduced. We feel that our recommendations regarding nutrition and physical education will surely help to bring down the maternal death rate in our Province.

We attach great importance to physical education for girls. As remarked by the Bhole Committee "in training a boy you train an individual, in training a girl, you train a family" (60).

13. *Cost of the Scheme.*—The most expensive part of the scheme is nutrition. In calculating the expenditure on this item we are faced with two difficulties. Firstly, the cost of living is likely to vary greatly from quinquennium to quinquennium. Secondly, we cannot calculate with any precision the increase in school-going population, because we do not know exactly by what stages compulsory primary education is going to be introduced. Hence, instead of depending upon hypothetical figures, we have confined our calculations of the nutrition cost to the initial five years, taking for our basis, the number of the school-going population as it is given in the Departmental Report of 1943-44, the latest that is available.

We have divided the school-going children into three groups: (1) Those who stand in need of free nutrition (2) those who can pay 50 per cent. of the nutrition cost and (3) those who can pay fully for their nutrition. As stated earlier in this Chapter, these groups respectively consist of 60, 25, and 15 per cent. of the total school-going population. The cost of nutrition which Government will have to bear, has been calculated accordingly. We strongly advise Government that they should at least arrange for the nutrition of every school-going child of the first group referred to in this para. within the next five years.

We want to impress it upon Government that although we have calculated the expenditure of nutrition and shown it as an expenditure for physical education, really speaking, that expenditure is common not only to education in general, but also to all aspects of national life. Hungry and weak youth augurs ill for the future of a nation.

In working out expenditure on other items, we have again confined ourselves to the first quinquennium. Government must see their way to meet the expenditure as it is calculated in Appendix XIII, because that expenditure is absolutely necessary for the minimum development of our scheme.

We wish to point out two ways in which a part of the required expenditure could be met. The Entertainment Tax should be substantially increased and the entire proceeds should be utilized for implementing our scheme. Government should also claim a liberal contribution for physical education from the Central Government, as is done in the United States of America. Government must find money to implement our scheme vigorously and lay the foundation on which the superstructure of an independent and powerful India can be erected.

CHAPTER III.

THE TRAINING INSTITUTE FOR PHYSICAL EDUCATION, KANDIVLI.**1. Teachers of Physical Education in Secondary Schools before 1937.**

Teaching of physical education in the Secondary schools of our Province before 1937 was far from satisfactory. Not only were there no adequate facilities for imparting physical education in the form of equipment and play-grounds, but the teachers of physical education were not properly qualified to do justice to their task. These teachers, generally speaking, belonged to one of the three groups, namely, ex-service-men of the army, products of the gymnasia, and scout masters. Unfortunately, most of these physical education teachers were lacking in that combination of intellectual and physical equipment which alone is capable of inspiring students to develop an integrated personality. The ex-service-man was rigid and rough. He gave his commands with incorrect intonation and was often not an impressive specimen of civic virtues. His knowledge of games was poor, and he was hardly capable of developing the moral side of his students through the few games that he happened to know. Most of these ex-service-men were no doubt capable of getting ordered marches executed by their students, but the whole of foot-drill and marching forms only a fraction of real physical education. The products of the gymnasia were definitely a better set of physical education teachers. But they themselves were, generally speaking, men with very little intellectual or educational background and hence they laid a disproportionate emphasis on muscles and skills. These physical education teachers were mostly innocent of adolescent and educational psychology, and although many of them won the hearts of their pupils, they were as a class not quite competent to develop a well-balanced and integrated personality. Had some of the University Graduates who were trained in private gymnasia been secured as teachers of physical education in Secondary schools, they would have rendered better service to the cause of physical education. But either such graduates thought it below their dignity to be engaged as teachers of physical education, or schools found them to be too expensive. It was only after the Congress Ministry's accession to power in 1937 and the founding of the Training Institute for Physical Education, Kandivli, that physical education has acquired some status. The scout master was intellectually and psychologically better qualified, but in spite of his knowledge of games his equipment on the physical side was poor. In this way, he also was not able to produce a balanced and harmonious physical, mental and moral development in his students. In short, nearly the whole class of physical education teachers in Secondary schools was lacking in full equipment necessary for a good physical education teacher. This situation divided education in the Province into two water-tight compartments of intellectual and physical education. The ideal of physical education in schools was never defined from any point of view. There was no plan. Whatever development there was, was the result of mere chance. Physical Education in secondary schools was on the whole disorganised and inefficient.

2. Recommendations of 1937 Committee and the Foundation of the Training Institute for Physical Education, Kandivli.

The first thing the 1937 Committee did, was to define the ideal of physical education as "not merely to build up a powerful and healthy body, but

also to evoke and foster those personal and civic virtues in pupils which would make them better citizens, whether they choose to be civilians or soldiers in their after-life". Further they expressed their conviction that "according to this ideal, therefore, physical education and intellectual education are complementary to each other and must be integrated in such a way as to form an organic whole." The integration of the two types of education and the full realisation of the ideal as defined above would necessarily require two or three decades of whole-hearted national effort. The 1937 Committee realized the long distance physical education would have to cover to be ideally organised in the Province, and thought of laying the first few mile-stones within the next five years. With this object the Committee proposed to Government a two-fold plan which would provide on the one hand at least one physical education teacher, fully equipped for this work, to every Secondary school, and on the other hand would make every young teacher in the Secondary schools physical education minded. For training the first type of physical educationists a year's course at the Training Institute for graduates was recommended, and for the other type, the Short-Term Courses were advised. In 1938, Government accepted the plan recommended by the 1937 Committee and on the 14th May passed orders for founding the Training Institute for Physical Education at Kandivli. According to the Government Resolution in this connection, the total number of admissions to the Institute was to be hundred. Admission was open to any graduate but preference was to be given to B.T.s., and to those who had some teaching experience. The places not filled by Women were to be filled by Men. The Institute was to be entirely residential.

3. The Committee's Visits to the Training Institute for Physical Education for Inspection.

Inspection.—Government required that the Committee should examine the present work of the Institute and suggest modifications in the existing course of studies for the training of Physical Instructors in schools.

Accordingly, two visits were paid by the Committee—first on 16th May, 1945, and second on 7th December, 1945. The first visit was intended to evaluate the results of the training given at the Institute and the second was to gauge the quality and calibre of the Men and Women who joined the Institute for training. The two visits gave the Committee the impression that, in spite of the many handicaps under which the Institute was labouring, its work was conducted with enthusiasm and tolerable efficiency, and that the trainees made a much better impression as prospective physical education teachers because of the training they had received during the nine months that they were there. Nevertheless there was much left to be desired at the Institute and we felt that, if physical education was to be raised to its proper status a College of Physical Education with a four years' course after Matriculation was absolutely necessary.

The training Institute at Kandivli, however, was to continue under improved conditions till such time as the College could send out its physical education teachers. We recommend, therefore, that—

the Institute should continue to work till the product of the proposed College is available. In the meantime Government should make good the many short-comings from which the Institute is at present suffering. If this is done the one year's course as it exists to-day is capable of showing better results.

4. The Short-comings of the Institute.

The short-comings of the Institute are many and serious. We shall consider them one by one and recommend measures to be adopted to remove them.

(a) *The Site and Building.*—The site is picturesque and impressive, but it is malarious. The incidence of sickness due to malaria, among the teacher-students, has become scandalous and is one of the factors that has prejudicially affected recruitment. The area though large, adequate level space is not available for play-grounds. On account of the hilly nature of the site, a disproportionately large outlay of money will be required, if sufficient additions and alterations are to be made to the existing play-grounds. The situation of the Institute is isolated and it has not been possible for it to keep up contacts with other educational institutions, sporting associations, clubs, and the public. Further, because of this isolation, practice-teaching for the students could not be arranged on a satisfactory basis.

None of the buildings of the Institute was built for educational purposes. They had to be reconditioned to suit temporarily, the work of the Institute. In spite of the reconditioning, however, the buildings continue to be rickety and unsuitable, and cannot be used as a permanent house either for the Institute or for the proposed College. We, therefore, recommend—

that the Institute be shifted to a site selected for the proposed College of Physical Education having at least seventy-five acres of level ground. The new site should be healthy and should be such as would enable the Institute to have easy contacts with other educational institutions, sporting associations and clubs, and the public, and should have, in its neighbourhood, Secondary schools available for practice-teaching. The Lloyds Recreation Ground near the Church Gate Station, Bombay, will be suitable and should be made available for the Institute as well as for the proposed College. The new buildings to be erected for the College will accommodate the Institute during the first three years of the College, and the Institute will cease to exist when the College is in its fourth year. We further recommend that—

the present site of the Institute with its buildings and water and lighting facilities, should be reserved by Government for purposes of physical education and should be available to schools, colleges and gymnasia as camping grounds.

The site is healthy from December to June and will afford excellent facilities for the type of camps described in our Chapters on "Physical Education in Schools" and "Recreation for the Public".

As it is very likely that it will take some time to change the site and to provide buildings, it is imperative that immediate steps are taken to improve the situation at Kandivli. In this connection, we recommend that—

(i) effective measures be adopted to check the menace of malaria ;

(ii) a bus be placed at the disposal of the Institute for students to go for practice-teaching and for meeting many emergency situations that often arise at the Institute.

(b) *Library and Laboratory.*—The Training Institute for Physical Education is a post-graduate institution, teaching a variety of cultural subjects to students, many of whom are B.T.s and M.A.s. Anatomy, physiology, hygiene, dietetics, health, psychology, etc., would each of them require a liberal provision of books, if the subjects are to be properly studied. Again the library is not to be used only by students. Looked at from this point of view, the present library is grossly inadequate, and must be largely supplemented as early as possible.

If the library is poor, the laboratory is poorer. In fact, there is no laboratory as such. The anatomical museum of the Institute would not do credit even to a Secondary school. No Professor of Medicine, whatever his brilliance, can make his students learn anatomy and physiology without a museum and laboratory. It is, therefore, absolutely necessary that immediate provision is made in the Institute's budget for improving the library and the laboratory. For this we recommend that—

Government should sanction as initial expenditure of Rs. 5,000 each, on the library and the laboratory, and an annual recurring expenditure of Rs. 1,500 on the library and of Rs. 500 on the laboratory.

This equipment will ultimately be transferred to the proposed College.

(c) *Facilities for Students.*—The Training Institute for Physical Education does not get some of the facilities which are made available elsewhere to students in other Government institutions at Government expense. Because of the isolated position of the Training Institute for Physical Education, it becomes extremely difficult for the students to get into touch with people in Bombay or in the suburbs. The students' quarters are situated at a distance of several furlongs from the Office where alone a telephone is available. The Principal has no telephone at his residence. The result is that students can have no contact with their Principal even when emergencies arise requiring immediate attention of the responsible authority. This situation must be improved. We, therefore, recommend that—

(i) an extension of the Office telephone should be fitted up in the Principal's bungalow ;

(ii) the students' hostel should be provided with a telephone.

(d) In other Government Training College Hostels, the expenses for the mess establishment are paid by Government. This facility has been denied to the students of the Training Institute for Physical Education. We, therefore, recommend that—

the charges for the mess establishment of the Training Institute for Physical Education should be met by Government.

(e) *Water Supply and Electricity.*—The well that supplies water to the Residential Quarters near the Office, the Ladies' Hostel, the Principal's Bungalow, etc., sometimes runs dry in April and May. We recommend, therefore, that—

necessary arrangements should be made for an adequate supply of water at the Institute.

The Dispensary, the Ladies' Hostel, Lady Assistant's Quarters and the newly built Gymnasium are not provided with electric connections. We recommend that—

these buildings should be provided with electric fittings.

5. Students' Recruitment.

The most disappointing feature of the Training Institute for Physical Education is the extremely poor recruitment of students. Government had arranged for the admission of a hundred students. But during no year in the whole history of eight years, except the first year, could the Institute attract that number. When every other professional college such as the Medical, Engineering and Agricultural, rejects applications for admission, this Institute has almost to go a begging for students ! Even the little enthusiasm that was to be seen in the beginning, progressively disappeared, as will be seen from Appendix No. VII, till in 1945-46, the total enrolment

of students was only 39. When we see that out of these 39, as many as nine students were from outside the Province, we realise the deplorable state to which the recruitment in the Province is reduced. A further analysis is necessary to understand the real gravity of the situation. Out of the thirty candidates that joined in 1945-46, twenty-three were Government teachers and six were deputed by aided high schools. These students can be classed as a group that came under compulsion. If voluntary recruitment were to be the real test of the attractiveness of the Diploma Course, we must admit that the Diploma Course given at the Training Institute for Physical Education fails to pass that test. In 1944-45 there were three private candidates whereas in 1945-46 there was only one! We shall presently describe the causes which have reduced the Institute to this plight. But before we do this, we shall show how this small enrolment has affected efficient teaching at the Institute.

Generally speaking, the candidates deputed either by Government or by aided schools, have a poor background of physical activities. Their age is against them. Their enthusiasm is moderate. The consequence is that with all the efficiency and the honesty of purpose and enthusiasm of the teaching staff, the result is not very satisfactory. The candidates' age and lack of proper enthusiasm prove to be serious handicaps. The Women candidates have made a poor response. Their total number at the Institute in 1943-44 was 9; in 1944-45 was 8 and 1945-46 was 5! During the last three years, Women could not even once make up a team. What group games could they play? How demoralising should be the effect of this miserably small number not only upon Women teachers, but upon the whole group?

6. Causes of Poor Recruitment.

We have studied carefully the causes of this serious situation which the Institute is facing as far as recruitment is concerned and we are satisfied that the following factors are responsible for the situation:—

(a) *Apathy of the Educational Department.*—The Educational Department did depute Government teachers to the Institute, but for a long time, it did not offer any attractive conditions of service to the deputed candidate. The Board of Physical Education repeatedly recommended first one increment and later on two increments to the Diploma holders in their scale of salary. But it was only as late as last year that Government gave them one increment.

When we remember that there are only twenty-five Government Secondary schools and more than 900 aided Secondary schools in the Province, we see that the main recruitment should have come from the aided schools. But the aided schools did not depute even 50 per cent. of the Government candidate! No doubt, the Educational Department has been sending circulars to aided schools threatening them with the total loss of their physical education grant and a cut even in their general grant, if they did not make adequate provision for physical education. But during the last seven years, the Department has not made a single example and this when a majority of the Secondary schools have no trained physical education teacher on their staff. Hence the Secondary schools have treated these circulars as dead letters. Further, in spite of the recommendations of the Board of Physical Education to give the Diploma-holders the status of a "Trained Teacher", the Department has put the Diploma Holder on the same status as the S.T.C. (Secondary Teacher's Certificate). Putting both the D. P. E. (Diploma in Physical Education)

and the Secondary Teacher's Certificate on the same level is doing serious injustice to the Diploma holders. A graduate, if he takes his B. T. (Bachelor of Teaching) degree, is considered by the Educational Department as a trained teacher whereas a graduate taking his Diploma in Physical Education is not, although he spends more energy and money. Naturally graduates are attracted to the B. T. course and not to the Diploma course in Physical Education.

We are of the opinion that the facts stated in the previous paragraphs clearly demonstrate the apathy of the Educational Department towards physical education which, we think, more than anything else, is responsible for the deplorable condition of recruitment at the Institute.

(b) *Discouraging Attitude of Aided Schools.*—Although there are some aided high schools in the Province, which have made adequate arrangements for physical education, a majority of them have maintained a discouraging attitude. If any of them deputed teachers for training at Kandivli, those teachers generally received no financial help from the school nor were they paid any salary. On their return after the training, they received practically no increments. On the other hand, very often, they had to forego the advantages of private tuitions for supplementing their salaries, as they had to be on the play-ground after school hours. Very often their load of work in the class-room was the same as that of their co-workers with the additional burden of other work on the play-ground for which they received no additional remuneration. In this way to be deputed to Kandivli became a distinct disadvantage to a teacher and hence there was great reluctance on the part of teachers to be trained for the Diploma in Physical Education. There is no lack of enthusiasm for physical education among the Secondary school teachers. The Short Term Course, the whole cost of which is borne by Government, attracts almost double the number that Government can admit. But the disabilities which are imposed upon a Diploma holder by the Heads of aided Secondary schools, are proving a serious obstacle in the way of graduate teachers seeking admission to the Training Institute for Physical Education.

(c) *The War.*—The impact of the War has raised the cost of living from 200 to 300 per cent. The Secondary school teachers are generally married and have to maintain families. During the year of deputation they have not only to bear their own expenses at the Institute, but they have also to maintain their families at home. The chilling effect of economic pressure has in many cases reduced their enthusiasm for the training. Besides this, the War has opened for graduates many avenues which are far more lucrative than teaching and seriously affected the teaching profession and recruitment at the Training Institute for Physical Education in particular.

(d) *The Malarious Site.*—The malarious site of the Institute is, no doubt, in a way responsible for adversely affecting the enrolment at the Institute.

To improve recruitment to the Training Institute for Physical Education we recommend, therefore, that—

(i) Government should raise the status and salaries of the Government teachers holding the Diploma in Physical Education as proposed in Chapter V, paragraph 9, sub-paragraph (iii);

(ii) Aided schools must be compelled to depute teachers to the Training Institute for Physical Education on full pay, and on their return with the Diploma

they should be paid a flat increment of Rs. 25 per month in their scale of salary, their total load of work, however, being equal to that of other teachers.

If these and other recommendations made elsewhere in this Chapter for improving the position at Kandivli, are accepted and implemented by Government, we are sure that the Training Institute for Physical Education even as it is, will show satisfactory progress.

7. The Staff.

(i) *The Principal.*—The Principal of the Training Institute has rendered unique service to the cause of physical education in the Province and is fully qualified to be the Head of not only this Institute, but also of the proposed College. We, therefore, recommend that—

Government should take full advantage of Principal P. M. Joseph's experience and qualifications, and he should continue as the Principal of the Institute and further should also be the Principal of the proposed College.

(ii) *Other Members of the Staff.*—So far as the other members of the teaching staff are concerned, we are happy to note that they are doing their work to the best of their ability, in spite of the many difficulties that the Institute has to face as described earlier in this Chapter. They have a definite share in the credit the past students of the Institute have brought to the Institute and to themselves as teachers of physical education throughout the Province. However, when we take into consideration the post-graduate nature of the present Institute, and also look forward to the establishment of a full fledged College of Physical Education, we do feel that gradually the present staff should be replaced by professors with higher academic qualifications and with much higher scales of salaries as recommended for the College in the next Chapter. As the Training Institute for Physical Education is to merge in the proposed College, this arrangement for gradual replacement will be to the advantage of the Institute, as well as the College. We, however, wish that in view of the qualifications, past service and experience of the present staff, Government must not lose their services, but must absorb them in suitable and deserving posts in the Educational Department. We, therefore, recommend that—

in view of the establishment of the proposed College, the present staff of the Training Institute for Physical Education should be gradually replaced by professors with higher academic and technical qualifications on adequate salaries, as mentioned in Chapter IV, the present staff members being absorbed elsewhere in the Educational Department.

(iii) *Permanence of the Teaching Staff.*—The Training Institute for Physical Education is in existence for the last eight years. Most of the staff members have been working there, for at least seven years. They have not yet been made permanent by the Education Department! Although this position has not affected the quality of work the staff members are putting in, we feel that they hardly deserve such treatment. We, therefore, recommend that—

Government should immediately arrange to make the staff members of the Institute permanent in the Department.

(iv) *Immediate Arrangements Regarding the Staff.*—It may take some time to give effect to the recommendations made in Items 7 (ii) above. As an immediate measure, therefore, we recommend that—

(a) the posts of the Principal and the staff of the Training Institute for Physical Education, should be reconstituted as early as possible as given below :—

(i) The post of the Principal to be in B. E. S. Class I and Mr. P. M. Joseph, the present Principal, to be appointed in it and confirmed immediately. In view of his eight years' service as Principal, he should not be required to put in the usual period of probation. The salary for his post should not be less than Rs. 600 per month plus other admissible allowances.

(ii) The post of the Senior Assistant to be in B. E. S. Class II, with a starting salary of Rs. 250 per month plus other admissible allowances.

(iii) The three posts of the Junior Assistants to be in B. E. S. Class II, with the usual allowances.

(b) The reconstituted posts under (ii) and (iii) above, should be filled in temporarily by the present incumbents of the respective posts.

(c) Government should thereafter arrange to make the staff members of the Institute permanent in the Department in suitable posts carrying the grades of salaries stated in recommendation (a) (i) and (iii), special preference being given to them when the posts in the Administrative and Inspecting branch of physical education, as recommended in the Report, are filled in. Government should further see that their absorption in the Department precedes their relief from the posts they hold as members of the staff of the Institute.

(d) In fixing the seniority of service, credit should be given to the service already put in by the Principal and the members of the staff of the Institute.

(v) *Technicians on the Staff.*—Whatever the mastery over physical activities possessed by the teaching staff, there will always remain the need of having highly skilled technicians as permanent members of the staff. It is essential that these technicians possess the necessary cultural and educational background. At present there is only one such technician on the Institute staff and his services are engaged only for about five months in the year. We, therefore, recommend that—

Government should immediately appoint at least three technicians as full-time workers, their salaries being fixed according to exigencies of service.

8. Changes in the Syllabus for the Diploma in Physical Education.

On reviewing the present syllabus both in the theory and practical work of the Training Institute for Physical Education, we felt that the course of studies was over-crowded. A drastic cut would affect the efficiency of the training of the teachers. But some adjustments we felt are necessary. We recommend the following changes—

(1) *Theory*—

- (i) No separate period should be provided for teaching History of Physical Education. This should be incorporated with Principles of Physical Education.

(ii) Similarly Current Problems of Physical Education should be taken along with Organisation and Administration of Physical Education.

(iii) Sociology should be dropped as a separate subject, but should be included in Principles of Physical Education.

(2) *Physical Education Activities*.—The following activities should form a required part of the Diploma Course—

- (i) Atyapatya, khokho, hututu, lagoriya.
- (ii) Foot ball, hockey, play-ground ball, basket ball, volley ball, net ball and throw ball for women.
- (iii) Games of low organization including relay games, minor games, circle games, combative games, free play, story plays.
- (iv) Callisthenics, light apparatus, Asanas, Pranayamas, dands, baithakas, Indian clubs, marching, etc.
- (v) Combative activities—lathi, jambia, wrestling, farigadga.
- (vi) Malkhamb.
- (vii) Track and field sports.
- (viii) Tumbling, pyramids, stunts, etc.
- (ix) Rhythmic activities, tipri, folk dances, gymnastic dances, lezim, etc.
- (x) Camping and hiking.

Note.—From among the games under (i) and (ii), a student should choose two from the first group and two from the second group for purposes of being graded for the Diploma.

9. Practice Teaching.

We felt that the practices teaching arranged at the Institute is unsatisfactory inasmuch as the lessons given by the trainees were not well supervised. It is necessary that when a pupil gives a lesson, this should be under the close guidance of a qualified and experienced teacher. To make this guidance possible, it would be necessary to have a large number of Masters of Method. But this would be a difficult matter. We, therefore, recommend that—

(i) the students under training should be sent to ten or twelve schools for giving their practice teaching lessons under the supervision of qualified physical education teachers of these schools. The schools must be carefully selected and in every case a well qualified teacher should supervise the lesson. For this service an honorarium of Rs. 1-8 per supervised lesson, should be paid to the physical education teacher of the school. As far as possible, only one lesson should be supervised by a teacher, but it should never be more than two,

(ii) a member of the staff of the Training Institute for Physical Education should regularly visit the schools selected for practice teaching purposes,

(iii) to enable the above arrangement to be carried out satisfactorily, the Institute should be provided with a bus in which the students can be taken to the practice teaching schools which may be a considerable distance away from the Institute itself.

10. Evaluation of the Work of the Institute.

The real basis for the evaluation of the work turned out by the Training Institute is the success with which the teachers trained are doing their work in their respective schools. In our extensive tour, in the Province, we carefully examined in detail the physical education work that was being done by these teachers. From our observation and experience we can definitely say that these teachers have given a new orientation to physical education, and have succeeded in introducing better educational methods. Their approach to physical education is not only physiological and psychological, but also sociological. They are attempting to develop in their students, an integrated personality, and to a large extent, have beneficially influenced the outlook of the school management on physical education. This is a great gain and we are sure the training given at the Institute, is in the right direction.

This success is achieved by the Physical Education Teacher, in spite of many obstacles in his way. The school timings are not suitable for physical education. The school programme is over-crowded. Facilities in the form of play-grounds etc., are poor. More often than not willing co-operation of the colleagues is not forthcoming. If these obstacles are removed and if Government and school managements are more liberal in providing for physical education, the product of Training Institute for Physical Education, would put in much superior work.

However, if we want to realise the ideal of physical education, as stated in the last Chapter, we must establish a full-fledged College of Physical Education, and merge the Training Institute for Physical Education in that College. This is discussed in detail in the following Chapter.

CHAPTER IV.

COLLEGE OF PHYSICAL EDUCATION AND OTHER INSTITUTES FOR TRAINING PHYSICAL EDUCATION TEACHERS.

1. *Introduction.*—If the training of physical education teachers of our Province is to be satisfactorily arranged, we recommend that Government will have to undertake two plans—one temporary, lasting for about six years, and the other permanent. The temporary plan is intended to see that at the end of its completion, every teacher whether in a Secondary or in a Primary school, who is below the age of 35, possesses some definite training in physical education. This plan will consist of running the Training Institute for Physical Education at Kandivli for some time more and of conducting Short Term Courses in Physical Education for the Secondary and Primary teachers. The permanent plan is expected to provide a steady supply of physical education teachers to all the Primary and Secondary schools in our Province. It will require the institution of a degree course, lasting for four years and a certificate course, lasting for one year, in physical education. It will also mean the inclusion of physical education as a subject in the B.T. (Bachelor of Teaching) and T.D. (Diploma in Teaching) Courses and also in the Course of the Primary Teachers' Training Colleges. We shall explain this plan step by step in this Chapter taking up its component parts in the following sequence—the College of Physical Education, the Training Institute for Physical Education, the Short Term Courses for Secondary Teachers, the Certificate Course and lastly the Short Term Course for Primary Teachers.

In order to make possible the new orientation of physical education, the 1937 Physical Education Committee had advised the institution of two courses of studies, namely, the Diploma Course and the Short Term Course for training teachers of physical education. The Training Institute for Physical Education was established to teach the Diploma Course and the Short Term Course was to be run under the supervision of the Principal of the Training Institute for Physical Education. The Short Term Course, we shall deal with later on in this Chapter. As regards the Training Institute for Physical Education, we have a separate Chapter devoted to it. It would be desirable, however, for the purpose of the present Chapter to say a few words again regarding the Diploma Course.

As stated in our observations regarding the Training Institute for Physical Education, though teachers trained there have turned out some good work in physical education, that work has not come up to the ideal standard. The lack of efficiency shown by these teachers was mainly due to the following reasons:—

- (i) The period of training was too short for the large number of subjects they were to study.
- (ii) The teachers did not necessarily possess a physical education background.
- (iii) Many of the teachers had no aptitude for physical education.
- (iv) Most of the teachers were too old to master any physical activity.

If there are to be efficient teachers of physical education, it is necessary to have a longer course of training and the students to be admitted to the course must be young men possessing an aptitude for and a background of physical education. In other words we must have a College of Physical Education teaching a four years' course.

We have taken a comprehensive view of physical education and made our recommendations accordingly. If these recommendations are to be properly implemented, we require efficient teachers to handle the subject. Even before we give details regarding the College of Physical Education, where these teachers are to be trained, we think it desirable to present here a complete picture of what we would consider to be an efficient teacher of physical education in a Secondary school, so that our whole scheme of training physical education teachers will be clearly understood.

2. *Qualifications of a Physical Education Teacher.*—In our opinion a teacher of physical education, fully qualified to take charge of physical education in a Secondary school, should have the following qualifications:—

(i) He must be educationally qualified to teach any one class-room subject such as English, Mathematics, Anatomy, Physiology, Dietetics, Hygiene and Principles of Physical Education in a Secondary school.

(ii) His general education must be such as to enable him to determine the effects of the total load of work both physical and mental, that every pupil under his care, is able to bear.

(iii) In consultation with the class-room teachers he must be able to advise students as to how the latter could distribute their work over different class-room subjects and the play-ground activities, so that the students could develop well-balanced and integrated personalities.

(iv) He must be in a position to detect the causes of backwardness in his pupils wherever it is present and to administer to them the necessary physical or mental correction either individually or in co-operation with other teachers concerned.

(v) Where psychological correction is needed by students, he should be competent to understand the undesirable complexes which the students may have developed and should know how to deal with these complexes on the play-ground.

(vi) He must be able to find out postural and remediable defects in his pupils, and either on his own responsibility or in consultation with the medical officer of the institution, as the case may be, should know how to treat these defects with physical exercises.

(vii) He must be able to carry out chemical, pathological tests for his pupils such as qualitative analysis of urine for sugar, phosphates, etc.

(viii) He must be able to co-operate with the medical officer of his school in conducting the medical examination of his pupils and must be in a position to help the medical officer with the health history of every pupil under his care.

(ix) He must have a capacity to understand the bearings of the follow-up work, that may be prescribed by the school medical officer for his students, and must have the ability to watch and record the progress of his students under the prescribed treatment.

(x) His knowledge about personal, public and school hygiene should be such as to enable him to advise competently the school authorities on measures they should adopt as a matter of routine or even in cases of emergency.

(xi) He must have a commanding personality and winning manners.

(xii) He must be conversant with physical activities in general and should have mastery over some individual and group combative games.

(xiii) His general culture must be equal to that of any other graduate of a chartered University.

(xiv) He must have a genuine love for his profession.

(xv) The best of them should have intellectual equipment sufficient to undertake Post-Graduate research in physical education and even be able to take a Doctorate in the Subject.

It will be readily admitted that for training teachers of physical education possessing such qualifications as are described above, a liberally planned four years' course after Matriculation is absolutely necessary. The course must contain a large number of cultural subjects. The college teaching such a course must be a full-fledged college with adequate facilities of libraries, laboratories, play fields, swimming pools and a highly qualified teaching staff able to prepare research scholars for the M. A. and Ph. D. degrees in physical education.

3. *Colleges of Physical Education in Other Countries.*—There are two Colleges of Physical Education in Denmark and two in Sweden. The College of Physical Education for Women at Silkeborg in Denmark provides a three years' course. The National Gymnastic Institute for Men and Women at Copenhagen, under the famous physiologist Professor J. Lindhard, offers five or six years' training to the University under-graduates who wish to be trained as teachers. They learn the theoretical work at the University and obtain their practical training at the National Training Institute. In Sweden there are two institutions for training teachers of physical education. The Sydevenska Gymnastic Institute situated in the University town of Lund run in co-operation with the University. Practical and theoretical gymnastics are carried on in the Institute but the teaching of Anatomy, Physiology and Pathology is given at the University, and training in medical gymnastics of physical treatment is provided at the University Hospital. The course lasts for two years. The other institute is the Royal Central Institute of Gymnastics at Stockholm. It provides a three years' course for teachers of physical education and medical gymnastics.

In Germany every teacher of physical education in a Secondary school, before 1937, had first to undergo one year's training at the Teachers Training College. Then he had to spend four years at the University, during which time he shared for three semesters (1½ years) with every other University student, training in physical education, and had to specialise in physical education for one year more. After passing the University, he had to work as a probationary teacher for two years before receiving recognition as a fully qualified teacher. In Germany every physical education teacher had to receive University education for four years, out of which he spent 2½ years for physical training.

From what has been said in the last paragraph it will be seen that every Secondary teacher in a German school had to undergo physical education for a year and a half and consequently every Secondary teacher was more or less a physical education teacher. It is to be noted further that every teacher in a Secondary school, while at the University, had to learn small-bore Rifle Shooting for one session. Even women were not exempted. Again every male teacher had to devote one session for training in life-saving. It may be noted incidentally, that in Germany no pupil was allowed to enter a Secondary school unless he or she passed a physical test in running, rope climbing, and obstacle racing. Such is the characteristic German thoroughness in the field of physical education.

Systematic physical training in Russia is of recent growth. "Soviet sportsmen and women have, in a few years, caught up to, and in some cases surpassed the best that other countries can boast".* In the U. S. S. R., they have five National Colleges of Physical Education established at Moscow, Leningrad, Keiv, Kharkow and Ibilise. The courses are for four to five years and several thousand students take these courses. There are shorter courses for instructors, but they too last for two years. The number of schools at which these instructors are trained is twenty-five.

England makes a contrast with the countries described above, so far as physical education is concerned. As stated in the Bhowe Committee's Report, "Love of sport in England permeates the country as a whole, nevertheless, it would not be correct to say that a national policy in regard to physical education has been developed yet". Even then there are a few Physical Education Colleges for Women recognized by the London University which teach a Diploma Course extending over three years.

If any country is to be taken as an example in physical education, it must be the United States of America. In that country there are at least fifty Universities with a number of Colleges attached to them, where students can offer physical education as a Major subject for their degrees. The course extends over four years after the High school. Post-graduate Courses leading to the degree of Master of Physical Education are also offered by many Colleges and Universities. Some Universities like the Columbia and New York offer advanced courses leading to the Ph.D. degree in Physical Education. When we remember that even Germany had to borrow the services of American coaches for winning honours in the Olympic competitions,† we realise the degree of efficiency the American nation has attained in physical education.

4. *Establishment of a College of Physical Education.*—Our Indian Universities have blindly followed the British pattern and have consistently neglected physical education as a subject of study and research. Very recently the Academic Council of the Madras University voted against the resolution to start a degree course in Physical Education. We, however, hope that the Bombay Government and the Bombay University will co-operate whole-heartedly in raising the dignity and improving the efficiency of physical education in our Province, and we recommend that—

The Government of Bombay should immediately move the Bombay University to institute a Faculty of Physical Education and offer a degree course in Physical Education modelled on the lines recommended here for a College of Physical Education. A graduate in Physical Education should be considered both by the University and Government, equal to a graduate in Arts for all educational purposes. Further the Bombay University should be invited to encourage Post-graduate research in physical education by combining the facilities that are available at the different University Departments of Research and at the different colleges, affiliated to it.

We should like to elucidate the latter part of our recommendation regarding the Post-graduate research in physical education.

5. *Post-Graduate Research in Physical Education.*—Physical education as we conceive it, has different aspects. We shall select only three, namely, sociological, physiological and anatomical. The sociological aspect suggests many problems. For instance, the effect of physical education upon the efficiency of factory

*"Soviet Schools to-day" by Deana Levin.

†Coaching and Care of Athletics, by F. A. M. Webster.

workers, or the effect of physical education upon the conduct of criminal tribes or the effects of physical education upon the intelligence of backward children, are all problems that are common to physical education and sociology and have the dignity of Post-graduate research problems. These problems and many others of this nature can best be tackled by a graduate in Physical Education working under a University Professor of Sociology. Neither an exclusive student of sociology nor an exclusive student of physical education can successfully investigate these problems. The physiological aspect of physical education provides a very vast field for research. To single out one problem—President Hoover's White House Conference on Child Welfare and Protection, disclosed the alarming fact that of 20,000,000 American school children, one in every twenty, or 1,000,000 have impaired hearts.* We do not know what is wrong with our school children. The medical examination that is current to-day in schools cannot supply any reliable data in this respect. The findings of a school medical examination and the findings of a medical research scholar bear mutually the same relation as the accuracy of an apothecary's scale and that of a highly sensitive laboratory weighing balance. So it should be an interesting Post-graduate research problem to determine the effects of a particular set of exercises upon the hearts of particular groups of students. This problem can be studied and investigated by a graduate of Physical Education who knows the accuracy of the different exercises, working under and in co-operation with a medical man. The anatomical aspect of physical education also presents a number of problems for Post-graduate research. We shall mention a typical one. As a result of physical education the American girls have been found developing narrower hips during the last ten years."*

In our Province girls have been taking part in physical activities for nearly a decade or more. A graduate of physical education can take up this problem for investigation and work it out under a research professor of Anatomy. The physiological development of our girls is a vital national concern. Our universities should wake up, realise their responsibility to the people and lose no time in providing facilities for post-graduate research in this and similar fields. Let the Bombay University tread in the wake of Columbia and New York and not to the line of Oxford or Cambridge. No body can justifiably say that the types of problems suggested above do not deserve the dignity of Post-graduate research.

6. *Why a University Degree for Physical Education.*—In the last but one paragraph, we have recommended that the Government should persuade the Bombay University to institute a Faculty of Physical Education and to offer a degree course in the subject. We have made this recommendation principally for the following reasons :—

(i) A University Degree carries greater prestige and dignity with it than a Government Diploma.

(ii) A Bombay Government Diploma would be recognised in the Bombay Province, but not necessarily in other Provinces. The Bombay University Degree would be recognised by the Universities and Governments throughout India and even abroad.

(iii) Research work in physical education can best be developed in co-operation with the University.

*How to have good heart through Biological living, by Dr. J. H. Kellog, M.D., LL.D., F.A.C.S.

†A Modern Philosophy of Physical Education, by Agnes R. Wayman, M.A.

(iv) All the Post-graduate Courses in the Arts Faculty of the Bombay and other Universities would be available only if they are graduates in Physical Education and not otherwise.

(v) Entrance into service in Departments other than Educational in different Provinces and States, would be more easily available to graduates in Physical Education than to Government Diploma holders.

Although we have recommended that Government should work in co-operation with the University of Bombay for training teachers of physical education, we strongly advise Government that it should not wait for the University to institute a Faculty of Physical Education. Government must make an immediate and determined effort to establish the recommended College and start the work of training teachers on an improved basis. The dearth of qualified physical education teachers is so acute that there is no time to lose. It is to be remembered that the product of the recommended College would be only available after four years after its foundation. The question of starting the College brooks no delay.

7. *College to Provide for Training in Recreation Also.*—So far we have dealt with the College as an institution for training physical education teachers, but a few of the graduates of this College may prefer service in fields other than educational. In our opinion the organization of physical education will not be complete unless leadership for recreation is also provided for. Physical Education and Recreation are merely the obverse and reverse of the same coin. The former is mainly meant for the school-going population and the latter is principally intended for adults. There is so much common to the training of these two aspects, although some specialisation in each aspect is necessary. Hence it is desirable that the College of Physical Education should make provision for training leaders of recreation also. In our view the best arrangement would be to have the first two years of the four years' College Course common to all. At the end of the two years, there should be a bifurcation—one branch specialising in physical education and the other in recreation. Even after bifurcation, much of the training will be common to both. We have framed our syllabus accordingly (Appendix I-A). We, therefore, recommend that—

the total Physical Education College Course should spread over four years. The first two years' training should be common to all. There should be bifurcation at the end of two years, one branch specialising in physical education and the other in recreation.

We further recommend that—

the syllabus framed for the College and given in Appendix No. I-A should be adopted.

8. *Some Aspects of the College Syllabus.*—We expect the graduates of the College of Physical Education not only to be experts in physical education as it is narrowly conceived, but also to be equal to any other graduate so far as general culture and knowledge are concerned. We also wish that the graduates in Physical Education should have as much knowledge in English as would enable them to have access to world's literature through the English language. Hence we have recommended for each of the first two years a course in English of the Bombay University standard. We have also included in the first two years' syllabus such subjects as Indian Administration and Elements of Civics and Economics. In framing courses in Physics, Chemistry, Anatomy, Physiology, Hygiene, etc., we have mainly followed the syllabi of the Physical Education Colleges recognized by the London University and some American Universities. We feel sure that the graduate in Physical Education of

the recommended College will in no way be inferior to any other graduate, so far as general culture and knowledge are concerned.

9. *Military Training at the College.*—As we have recommended the establishment of a Junior Cadet Corps in High Schools in Chapter V, it is essential that the Physical Education Teachers in charge of High Schools should have an elementary military training. We, therefore, recommend that—

during the first two years of the College every student must complete the course in military training covering the Course of Training for the “B” Certificate Examination.

10. *Time Allotment.*—For theory work three to four periods of forty-five minutes each should be arranged every day. Laboratory work should be extra. For physical activities, during the first and second years, one and a half hours in the morning and one hour in the evening must be required of all students. In the third and fourth years, there should be one hour of physical activities in the morning and one hour in the evening on alternate days. Whenever there are no physical activities in the evening, students should go out for Practice Teaching and Group Work. In addition to this regular work, students are expected to specialise in Gymnastics, Wrestling, Akhada Activities, Boxing and Jui-Jitsu for the training of which facilities and leadership should be provided.

The work during a year should be divided into nine months of instruction at the College and one month of Camp. Altogether during the whole year, the period of vacation should be not more than two months.

11. *The Staff.*—As we expect the College to keep up the University standards, it is essential that the teaching staff of the College must compare well with the staffs of other colleges. Besides this, the professors of this College should have an additional qualification. All of them must have a physical education background and must be able to co-ordinate their subjects with physical education and help students on the play-ground. As stated in our Chapter on the Training Institute of Physical Education, the Principal of the Training Institute is fully qualified to take charge of the Principalship of the proposed College. However, it is extremely difficult to get ready-made people to work as qualified professors in the College. We, therefore, recommend two arrangements in this connection one temporary and the other permanent. The temporary arrangement may not be as satisfactory as the permanent one, but, it would be, in our opinion, quite workable—

(i) *The Temporary Arrangement.*—Persons available in India or abroad should be engaged on a contract basis for four to five years. When a sufficient number of people are available in the country, the foreign element may be substituted by the Indian element.

(ii) *The Permanent Arrangement.*—A diligent search should be made for persons who have a bright University career, holding at least a Master's degree and who possess a sufficiently good background of physical education. A few persons of this type are available from among those who held high Commissions either in the regular Army or in the Indian National Army. But the search should not be restricted to armies only. Different Indian Universities may be combed for this purpose. Candidates for permanent professorships when available should be taken on probation of 3½ years and should be deputed to undergo one year's training at the Training Institute for Physical Education. After successfully passing the course of the Training Institute for Physical Education, a suitable number of them should be deputed to some American Universities for undergoing Post-graduate

training in physical education for two years. After finishing the Post-graduate training, these candidates should be sent on a visit to different Universities and Recreation Centres in America and Europe in order to get acquainted with the latest methods in physical education. The tour should last for about six months. In this way when fully qualified, the candidates should be confirmed as Professors in the College of Physical Education.

Out of the candidates finishing the Training Institute for Physical Education Course, not less than two should be singled out for acquiring special efficiency in Indian activities. They should be deputed for a year and a half to the best institutions in India that may be known for giving expert training in indigenous physical activities. After they finish their special training in Indian activities, these candidates should also tour America and Europe and these can be later absorbed as permanent Professors on the College staff. No distinction should be made regarding the status, salary etc., between the candidates trained in India and those trained abroad.

(iii) In addition to the staff suggested in (i) and (ii), there should be four highly skilled experts in different activities permanently on the staff of the College from its inception. Experts should be employed, according to requirement also on a part-time basis.

B. *Teaching Staff Common to the College and the Training Institute for Physical Education.*—In our Chapter on the Training Institute for Physical Education, we have recommended that the present teaching staff of the Institute should be replaced by educationally better qualified persons. As soon as the College starts, the College staff should take up work also of the Training Institute for Physical Education for the first three years. At the end of the third year, as recommended previously the Training Institute for Physical Education will be merged into the College.

C. *Salary Scales of the Teaching Staff.*—We recommend the following salary scales for the teaching staff of the proposed College :—

(i) The Principal of the College should be in Bombay Educational Service (Bombay Educational Service) Class I, with a starting salary of at least Rs. 600. Heads of Departments should be in Bombay Educational Service, Class I with a starting salary of Rs. 350. The Professors of the College should be in Bombay Educational Service, Class II, their starting salaries being fixed according to qualifications, efficiency and seniority. No member of the teaching staff should be below Bombay Educational Service, Class II.

(ii) All the incumbents of all the posts at the College should be entitled to the usual allowance attached to the posts.

(iii) Expert in activities should be employed on attractive grades of salaries, the starting pay in no case being below Rs. 150 per month.

12. *Location of the College and Its Site.*—The College is expected not only to teach the Degree Course but also undertake Post-graduate training and research in physical education. As explained in some of the foregoing paragraphs, this can best be done in co-operation with the Bombay University and the Colleges affiliated to it in the city of Bombay. Hence we recommend that—

The College of Physical Education should be located in Bombay. The College will require at least seventy-five acres of land for its buildings, play-grounds, etc. We strongly recommend that the Lloyds Recreation Ground and the Southern

Section of Block No. 2, B. B. Reclamation on either side of the Jamshedji Tata Road should be made available for the proposed College.

The Lloyds Recreation Ground measures about twenty-five acres and the Block No. 2, B. B. Reclamation measures about thirty acres including the Road. The total area of these two pieces of lands is about fifty-five acres and both of them belong to Government. The required buildings should be erected on the Southern Section of Block No. 2, B. B. Reclamation, and the Recreation Ground should be kept open for physical activities. The two pieces of land mentioned here are not adjoining. They are situated some two to three furlongs apart. However, this small distance would not interfere with the harmonious working of the College.

In this connection we wish to impress upon Government that the proposed College is going to be the key institution of the Province so far as physical education and recreation are concerned. If the Lloyds Recreation ground is to be a part of the College, the whole sports life in Bombay can be concentrated there and it could be made a highly developed nerve centre for physical education in the Province. The proximity of the Bombay University Library, the Royal Asiatic Society's Library and the Royal Institute of Science and of the Elphinstone College makes the site we have recommended singularly suitable. The large number of Secondary schools, the various gymkhanas and sports associations situated round about, afford the best opportunity for Practice Teaching. Besides these cultural advantages, the site has an immense propaganda value. We are, therefore, convinced that the cause of physical education would best be served, if the College is located on the site recommended by us.

As an alternative, we recommend Poona as a suitable site for the College.

If the College of Physical Education is started in Poona, which is suggested as an alternative site, it will have the following advantages :—

(i) The College can easily acquire plenty of open space with adequate provision of future developments, sufficiently near the City, to get all the advantages of the City as a centre of education.

(ii) Climatic conditions in Poona are more suitable to physical education than those in Bombay.

(iii) Cost of living will be much cheaper, in normal times, in Poona than in Bombay. This point is important in view of our recommendation that the College should be a residential institute.

(iv) The introduction of physical education as a degree course of University in a College started in Bombay will depend upon the Bombay University accepting our recommendation to start degree in physical education. If, however, the College is located in Poona it can be run as a University College of Physical Education. The University is yet to come into existence and hence it will be easy to introduce Physical Education as a degree course in the Poona University which can run this College as a residential institute. The Government having paid for the capital expenditure, the new University will not find it difficult to run this as a University Residential College of Physical Education.

13. *Equipment.*—The College should be fully equipped and adequate facilities should be created in the form of buildings, library, laboratories, museums, playgrounds, gymnasia, swimming pools, workshops, craftrooms, etc. No effort

should be spared for making this College a model institution of physical education for higher training and research.

14. *Other Recommendations Regarding the College—*

(i) The minimum qualification for admission to the College should be Matriculation or an equivalent examination.

(ii) During the first four years of the College, Diploma holders of the Training Institute for Physical Education, Kandivli, may be admitted to the College, if they are below the age of 35 and are found fit otherwise. Such entrants can be given an exemption for the first two years, but must be required to complete the course of Military Training prescribed for the first two years.

(iii) Candidates other than Diploma holders must be above 16 and below 21 years of age and must be physically fit.

(iv) The total number of students to be admitted each year should not exceed 100, and 40 per cent. of the seats should be reserved for women. Seats not filled by women should be allotted to men and *vice versa*.

(v) Tuition at the College should be free.

(vi) Twenty-five per cent. of the student body in each class should be awarded stipends, the amount of the stipend being Rs. 300 for a year to be paid in two equal instalments.

(vii) The College should be entirely residential.

15. *Making Physical Education Career Attractive.*—Partly because of tradition, partly because of prejudices and also partly due to the setback, the physical education movement received at the hands of Bombay Government during their recent regime, physical education as a career has ceased to be attractive. However, as physical education is the very backbone of our nation, Government must make a determined effort to make it attractive. Even the best facilities created for training teachers of physical education will be of no avail, unless attractive salaries are offered to people who wish to seek employment as teachers in physical education. We, therefore, recommend that—

Graduates of the proposed College when taken in Government service should be assured of the following salary scales—Rs. 150—5—200—E.B.—10—250. We very strongly advise Government to give the recommended assurance even before the College is started. The College must attract the very best material that is available in India.

To achieve this object Government should guarantee appointments to those students who obtain in the final examination at least 50 per cent. of the total marks, subject to a maximum of such posts being 25 per cent. of the candidates passing any one year. This arrangement should be in force for a period of five years in the first instance.

16. *The Training Institute for Physical Education.*—As we have devoted a separate Chapter to this Institute, nothing remains to be said about it here.

17. *The Short Term Course in Physical Education for Secondary Teachers—*

A. *Nature and History of the Course**.—The Short Term Course was intended to make every class room teacher in a Secondary school physical-education-minded. It was thought that unless the class-room teacher co-operated with the physical

*Government Resolution regarding Short Term Course in Physical Education for Secondary School Teachers is quoted in Appendix IX-B.

education teacher on the play-ground and elsewhere, the real object of physical education would not be served. So far there have been six sessions of this Course and about 828 teachers have been trained. The Course generally lasted for ten to twelve weeks, at the end of which a Departmental certificate of attendance was given to the trained teachers who attended this Course. Government bore all the expenses of the teachers. The Course was conducted Departmentally under the supervision of the Principal of the Training Institute for Physical Education, Kandivli.

For the purpose of running this Course, Government have erected suitable buildings near the Training Institute for Physical Education and have developed separate play-grounds. These buildings and play-grounds were taken over by the Military Department for some years, but are now released. In addition to the original buildings, Government have retained some buildings erected by the Military Department which were found to be useful for the purposes of the Short Term Course. The previous arrangement was for accommodating 200 teachers. The number that can be accommodated at present is 250.

Teachers trained in this Course have been found to do useful work in their respective schools.

B. Need for Continuing and Intensifying the Short Term Course.—As stated in the previous paragraph, 828 Secondary school teachers have been trained in this Course. There are yet about 2,000 non-graduate Secondary school teachers below the age of 35 who have had no training in physical education. If our ideal of physical education is to be realised and realised as early as possible, these teachers must be given advantage of the Short Term Course within the next five or six years.

Taking into account the additions that would be made to this number during the next few years, Government must make arrangements to train about 2,500 teachers of this type in five or six years, that is, to train about 500 teachers every year. The arrangements at Kandivli are for 250 at a time. Hence it is imperative that there should be two sessions every year, admitting 250 teachers each time. Each session should last for 2½ months. The summer session should be held in March, April and May as usual. The other session should be in winter and should include the Diwali and Christmas vacations.

The winter session is not likely to cause much dislocation in the teaching of schools from where the teachers would be deputed. First of all the session will include four weeks of vacation. Again small schools will be deputing only one teacher to this Course. The management should be in a position to spare one teacher for some weeks in the year. We are of the opinion that in the interest of the younger generation, it is desirable that schools should unhesitatingly arrange for the deputation of their teachers. We, therefore, recommend that—

The Short Term Course in Physical Education for the Secondary school teachers should continue as before and that there should be two sessions of 2½ months each every year, one in winter and the other in summer. The total enrolment for each session should be 250.

C. The Course Should be Run by Government.—Government has spent liberally for this Course by erecting buildings, laying out play-grounds, and providing equipment. Government has undertaken to pay all the expenses of the trainees. The teachers under training get the advantage of the expert supervision of the Principal of the Training Institute for Physical Education. Deputations to be equitably distributed over the different schools in the Province, must be arranged through

Government machinery. When we take into consideration all these factors, we come to the conclusion that the Course should continue to be held by Government. We, therefore, recommend that—

the Short Term Course for Secondary school teachers should be conducted by Government on the Short Term Course premises at Kandivli under the supervision of the Principal of the Training Institute for Physical Education, and that Government should continue to bear the financial responsibilities that they have already undertaken to run the Course.

D. The Teaching Staff for the Course.—

(i) *The Chief Instructor.*—In our inquiry we have found that although the actual session of the Short Term Course lasts for ten to twelve weeks, the official and administrative work in regard to this Course has to start some six weeks earlier and ends six weeks after the close of the session. That is to say, the official and administrative work for each session of 2½ months and the session itself, will together cover some five months. As there are to be two sessions in a year the total work will be for ten months or one complete academic year.

The nature of the official and administrative work that precedes and follows every session of this Course may be summed up as follows. Long before the session starts, information regarding the Course has to be sent out, applications have to be received and selection made, and intimation regarding admission has to be given to the candidates. Besides this, the residential quarters and play-grounds have to be ready, tenders for catering have to be invited and the right contractor selected. After the close of the session travelling allowances claims of teachers have to be received, travelling allowances bills have to be prepared and arrangements have to be made for paying the bills by money-orders. Further, Certificates of attendance have to be prepared, signed and posted to respective candidates.

This work at the two ends of every session is heavy and we think the Principal and the ordinary clerical staff of the Training Institute for Physical Education should not be saddled with it. Now that there are to be two sessions the work will continue for one complete academic year. We, therefore, recommend that—

a Diploma-holder of Kandivli in Government service should be put in charge of all the official and administrative work regarding the Short Term Course for Secondary school teachers for five or six years and should be designated as Chief Instructor; and that the Principal of the Training Institute for Physical Education should be entrusted merely with supervisory work.

(ii) *Other Instructors.*—The present arrangement of providing instructors for the Course is as follows:—

Some of the Assistant Deputy Educational Inspectors for Physical Education working in the Province, are diverted to Kandivli for the session of the Course and they work as Instructors. According to our information this arrangement has not worked well. First of all the number of these Inspectors is inadequate, and diversion of some of them to teaching, severely affects the inspection of physical education in the Province. Further having been used to inspection work throughout the year, these Inspectors are not quite in form for physical activities. Hence we are of opinion that the present arrangement of providing

instructors for the Short Term Course for Secondary school teachers should be discontinued and the following arrangement should be substituted.

Instructors for the Short Term Course for Secondary school teachers should be requisitioned from among Men and Women trained at Kandivli who are working as teachers in Government Educational Institutions. The order of requisitioning should be planned for a period of two or three years in advance. A set of six Men and Women teachers should be deputed for each session of the Course. This set should revert to its original work as soon as the session is over and another set deputed for the next session. In order to avoid inconvenience to the educational institutions from which these Instructors are to be drawn, selection of Instructors should be made only from those institutions where there are more than one Man or Woman trained at Kandivli.

(iii) *Establishment*.—The Chief Instructor throughout his tenure of office, should have a clerk and a peon working under him.

(iv) *Syllabus*.—The syllabus that has already been adopted for the Short Term Course for Secondary school teachers is satisfactory and we recommend that—the same should continue hereafter [Syllabus given in Appendix I-C (i)].

18. *Certificate Course in Physical Education*.—According to our recommendation the Degree or the Diploma Course is intended to supply teachers of Physical Education to be in charge of Secondary schools, and a degree-holder may even take charge of a welfare centre. The class-room teachers trained in the Short Term Course will be of help to these physical education teachers. But the training of these class-room teachers will be of a moderate type. Hence the physical education teachers will require, to work under them, one or more assistants who can claim expert knowledge of physical activities along with some grounding in the theory of physical education. It is to supply such assistants that we are recommending the Certificate Course.

As the minimum qualification for admission to this Course is to be a Matriculation Certificate or its equivalent, under-graduates and even graduates may be attracted to it. All these can work also as class-room teachers at least in the lower standards of Secondary schools.

But it is not only in schools that these Certificate-holders will be required. Their services would be needed at big welfare centres to assist the person in charge and they will also be required to take charge of small welfare centres. We have recommended quite a net-work of recreation centres throughout the Province. Hence a large number of these certificate-holders will be necessary for organising the welfare centres in small villages. When physical education has found its proper place in Primary schools, the Province will require a large number of inspecting officers. The Certificate-holders can be taken up for this inspection work. Besides these there will be several other fields where the services of a Certificate-holder in Physical Education will be desirable. Hence we recommend that—

Government should, at an early date, institute a Certificate Course in Physical Education lasting for one academic year, the actual duration of the Course being ten months.

We further make the following recommendations regarding the Certificate Course—

(i) *Qualifications for Admission*.—The course should be open to Matriculates or to persons having equivalent educational qualification, with physical education background.

(ii) *Salary Scale for Certificate-holders.*—The salary scale of a Certificate holder in Government service should be Rs. 60—5—100—E.B.—10—150.

(iii) *Recognition of Private Institutions for Teaching the Certificate Course.*—As far as possible private institutions should be encouraged to take up the work of teaching the Certificate Course. However, if no private institutions come forward to undertake the work before the end of 1949, Government should make arrangements to run the Course themselves. Conditions to be observed by private institutions wanting recognition are given in Appendix No. XII.

(iv) *Grant-in-Aid.*—(a) Such institutions should be entitled to 50 per cent. grant of the annual recurring admissible expenditure, as certified by the appropriate Inspecting Officer of the Department.

(b) Non-recurring grant for sites, buildings, equipment, library, etc., shall be paid at the rate of 50 per cent. of the total admissible expenditure, and shall be subject to the conditions laid down by the Department regulating payment of such grants to educational institutions. This grant shall be assessed in consultation with the Board of Physical Education.

(v) *Syllabus for the Certificate Course*—The Syllabus given in Appendix I-D should be followed.

19. *Physical Education in B.T. and T.D. Courses.*—We are of the opinion that every person who takes up the teaching profession should possess some training in physical education. To make this possible, we recommend that—physical education should be a compulsory subject included in the B.T. (Bachelor of Teaching) and T.D. (Teacher's Diploma) Courses.

20. *Every Teacher to be Qualified in Physical Education.*—We expect that every teacher working in Secondary schools should get some qualification in physical education through any one of the courses we have recommended in this Chapter. The success of the scheme of physical education in schools depends on having every teacher thus qualified. We recommend, therefore, that—

after 1950, no person should be recruited as a teacher in a Secondary school unless he possesses some training in physical education.

21. *Short Term Courses in Physical Education for Primary Teachers*—A. *General.*—According to the latest figures available the total number of teachers in all Primary schools in the Province is over 46,000 (37,000 men and 9,000 women) of whom 22,000 are trained, and about 24,000 untrained. These untrained teachers have received no training in physical education. Even if we exclude teachers above the age of 35, there will approximately be about 20,000 teachers who will have to be given some training in physical education, if this subject is to receive proper attention from the Primary stage of education. According to the plan we are recommending for giving physical education to Primary teachers, the 20,000 teachers below the age of 35, can be trained within three years.

At present over 2,000 new teachers are recruited every year to make good the normal wastage as well as to provide for expansion. To balance this recruitment the output of trained teachers in the Province is about 2,200. Under the conditions prevailing at present, we could have successfully solved the problem of having all teachers, below the age of 35, trained in physical education by making physical education a compulsory subject for all Teachers' Qualifying Examinations, and by implementing the plan we have recommended here for three years. After three years every teacher newly recruited would then have been trained in physical education.

The conditions regarding Primary Education are not, however, going to be static. Government have definitely declared their intention of making Primary education compulsory in the Province and introducing compulsion throughout the Province within a period of about eight years. According to Government calculations this plan will require a supply of about 6,000 new teachers every year in addition to the 2,000 teachers that are to-day being annually recruited into the service. Government are earnestly exploring the ways in which they could acquire this additional supply of trained primary teachers; but they have not yet developed any definite plan. Under these circumstances, it is difficult for us to make such recommendations as would, if implemented, offer a permanent solution of the problem of having every primary teacher below the age of 35 trained in physical education.

We are sure, indeed, that the plan we are suggesting here will work satisfactorily for three years and may be useful even thereafter. But looking to the contemplated expansion of Primary Education, we recommend that—

the question of training Primary teachers in physical education should again be reviewed after three years in consultation with the Board of Physical Education then holding office. In the meantime, the plan that we have recommended here should be implemented.

B. Plan for Training Teachers to have adequate Training in Physical Education.—There are at present 54 training institutions for Primary teachers of which twenty are maintained by Government and the remaining thirty-four are maintained by private bodies. It is just possible that many more training institutions will spring up hereafter. Teachers trained at these institutions must get the advantage of training in physical education. In order to insure this, we recommend that—

every institution that trains Primary teachers must have a Diploma-holder in Physical Education trained at Kandivli, on its staff. The course of studies must include the subject of physical education which should be an examination subject at all stages. There must be provision in the regular time-table for imparting physical education. The Syllabus given in Appendix No. I-F should be followed.

C. Plan for Training the Untrained Teachers in Physical Education.—We have stated above that there are above 20,000 untrained Primary teachers below the age of 35 in our Province. We take it that out of these some 12,000 are working in district and taluka towns and 8,000 in villages. We recommend the following plan for giving physical education to these teachers to be carried out in two stages :—

(i) *The First Stage.*—The Province has twenty districts with an average of ten talukas in each district. During the first year of putting the plan into operation four teachers from each taluka, selected for their educational qualification, smartness and background of physical activities, should be assembled for training either at the District Headquarters or some other suitable centre within each district. One of the Inspectors of Physical Education of the district, should be responsible for the training of the teachers in each centre. The period of training should be for two months.

In conducting the classes, the Inspecting Officers for Physical Education should take the help of the local gymnasias.

When this is done, there will be 800 special Primary teachers trained in physical education at the end of the first stage.

(ii) *The Second Stage.*—The Primary Teachers specially selected and trained during the first year should conduct classes in their respective talukas for Primary Teachers both from the villages and the urban areas. Fifty teachers, twenty from villages and thirty from the urban areas, within the taluka, should be admitted to such classes. The classes should last for two months during the summer vacation the usual one month's vacation being extended to two months. If there are about ten centres in each district or 200 centres in the Province, annually a number approximately 10,000 can be trained. The plan is intended to equip every primary teacher to give physical education to his pupils. Hence the course to be followed in this plan should be modelled on the syllabus framed for the Primary Teachers' Training College as given in Appendix I-C (ii). In this way, 20,000 teachers can be trained within three years after the plan is put into operation.

At present there is an arrangement which empowers Local Bodies to conduct Short Term Courses for untrained Primary Teachers under the supervision of the Assistant Deputy Educational Inspectors for Physical Education. As this arrangement has not worked satisfactorily, we recommend that it should be discontinued hereafter.

CHAPTER V

PHYSICAL EDUCATION IN SCHOOLS

1 We believe that the measures recommended by the 1937 Committee have neither been generally carried out, nor the Committee's expectations fulfilled. In fairness to a few schools it must be said that they have taken up physical education seriously and with enthusiasm, and have organized their programmes comprehensively by putting the whole work in the hands of able teachers. In most schools, however, and particularly in a very large number of Secondary schools, we found physical education either indifferently organized or sadly neglected.

We are recommending several measures in this and other Chapters to improve the position. The ultimate status and contribution of physical education, however, will depend not on rules and regulations which are introduced and enforced, but on the spirit of co-operation and faith extended by the school managements and even more, on the support given to it by the public and the parents.

2. *Status of Physical Education*—(i) Physical education should be a subject included in the curriculum of all schools. There is nothing new or revolutionary in this proposal. But at present there is no effective regulation to enforce this.

We recommend that—

the Grant-in-Code of the Department of Education should be amended to include physical education among the compulsory subjects in schools seeking recognition. Recognition of a school for grant should depend on the provision of adequate playgrounds, equipment and qualified staff.

(ii) There was difference of opinion, whether physical education should be an examination subject, among people whom we met and whose judgment and opinion command respect. Some of us also doubt the value of placing undue emphasis on examinations. This method of enhancing the importance of any subject, particularly of physical activities, which for normal children should be spontaneous, is repugnant to us. However, on reviewing the existing methods and procedures in education in the country and keeping in mind the very great influence examinations wield on pupils, teachers and parents, we feel that such an emphasis is essential at this stage. If physical education is not treated as an examination subject we fear, with justification from what we have seen, that it will be treated as an extra-curricular activity and neglected as all extra-curricular activities generally are. We, therefore, recommend that—

Physical Education should be an examination subject and should have the status of a major subject. 60 per cent. of the marks should be allotted for attendance and for participation and 40 per cent. for achievement.

3. *Daily Physical Education Periods*.—During our tours we saw schools where only a single period per week was provided for physical education in the time-table. We also saw schools where regularly one period was devoted to physical education every day for every class. Heads of such schools were enthusiastic about the arrangement, and said that they were able to manage this without encroaching on academic instruction. We were also pleased to hear that the Matriculation results in these schools—the accepted touch-stone by which the efficiency of a school is judged by many—did not in any way suffer by the arrangement. The Central Advisory Board of Education has expressed the view that every day some period, during school hours, should be devoted to organized physical activity. Physical exercises should be a daily habit if health is to be maintained, and not something

that should be indulged in seasonally or at one's convenience. This idea should be inculcated into the growing generation. We recommend that—

a daily period lasting at least forty minutes must be provided for every pupil in the school time table.

4. *Strength of Classes for Physical Education.*—The old idea of collecting the pupils of the whole school in the morning or in the evening and giving them some mass exercises is not physical education. Physical education, as conceived now, involves teaching of skills and setting up of situations where the individual child will learn to react in ways that would benefit him and teach him to adjust himself to others. Mass drills have a place in physical education, but mass drill is not the whole of physical education. During the physical education periods instruction should be provided for learning and practising various skills, and also for participating in them. To make this possible it is essential that classes reasonable in number should report for instruction. We recommend that—

(i) the number of pupils in a class taking instruction in physical education should not exceed 40 ;

NOTE.—In addition to the school periods, provision should be made for activities, after the school hours, under the supervision of competent leaders. During such after school activity every help and guidance should be rendered for specialising in games and activities of the pupil's choice. A modern programme of physical education should provide larger participation through inter-class (intra-mural) and inter-school (extra-mural) activities.

5. *Time for Physical Education.*—In a tropical country like ours, strenuous physical activities should be confined to either the morning or the evening. The middle of the day is generally oppressively hot and physical strain at that time would be a discomfort. We, therefore, recommend that—

organized physical activities should be conducted before 9 a.m. and after 4 p.m. as far as possible.

6. *School Timing.*—(i) To adopt the above recommendation, a change in the present school timing will be necessary. In this connection the remarks of the 1937 Committee regarding school timing are worth quoting. The Committee says "A large volume of vocal public opinion has been demanding that schools be held twice a day, 7-30 to 10-30 a.m. and 2-30 to 5-30 p.m., with slight seasonal variations". But the opinions of those who are working in schools appear to be indecisive. Those who favour the change emphasise particularly the harm done to children by starting intellectual work immediately after a full meal. Those who object to the change emphasise particularly the impracticability of the measure so long as social customs do not change. This particularly applies to big cities where the Government and other offices start work at 11 a.m. or about that time and 10 a.m. is the time for the mid-day meal. In smaller towns and villages the conditions are different, but the public there like to imitate the customs prevailing in cities. The majority of the Committee would like the schools to adopt this change and Government may also help the change by changing the office hours wherever possible. Whether it be in a school, an office, or a business firm, we feel that, in a tropical country like ours, a change in the present hours of work would be a change for the better. We recommend that—

as far as schools are concerned they should be held in two sessions—7-30 to 10-30 a.m. and 2-30 to 5-30 p.m.

(ii) As an alternative to the two sessions mentioned above, to which we would give first preference, we recommend that—

schools may be held in a long single session from about 7-30 a.m. to 12 noon or 12-30 p.m.

Some of the difficulties experienced in the two session day may be avoided in such a single morning session. However, arguments may be brought forward to prove the inconvenience that would be caused by this arrangement. We would point out that, in a number of schools in certain districts, this practice is followed to-day during the summer months. Also several schools in cities like Bombay, Poona, etc., when faced with the problem of congestion during the war years, successfully adopted the two shift arrangement where the first shift was during the hours we suggest.

If these hours are adopted, some physical education classes, especially for those whose homes are at a distance, can be conducted in the morning and for the others these classes can be arranged, in the evening. In the evening in addition to the regular classes, optional activities can be organized for pupils according to their interests. There are, in this arrangement, very good opportunities to use the school building for the recreational, educational and social activities of the adult population. Utilisation of school buildings and school facilities for just a few hours of the day involves a great waste. With so much constructive work to be launched in our country we would like to see much greater use being made of the existing school buildings.

7. *School Year*.—Another recommendation we would make in this connection is a change in the present academic year. Instead of working educational institutions from June to the end of March or April, we recommend that—

the academic session should commence after the Divali vacation, towards the end of October or early in November, and carry on till about the middle or end of September, thus ending the year with the Divali vacation.

That we think would help to attract many more to games and outdoor activities. Our reasons are:—(i) The months which precede the Divali vacation are monsoon months which prevent or at least seriously interfere with outdoor activities. Three to four months are thus almost lost to physical education unless ample indoor facilities are available, which, comparatively very few schools possess. (ii) The annual examinations in schools take place in March or April. This is a period that is preceded by intensive studies. Pupils, teachers and parents think that games are an interference to examination work and pupils begin to desert the play-grounds from as early as January or February. This leaves only two to three months (November, December and January) for unrestricted activities. (iii) In Bombay the months from November to March, being cool, are pleasant months for outdoor activities. These months must be kept free from the bogey of examinations. The monsoon months which are not well suited for physical activities could be utilized for preparations for examinations which will take place in September or October. The two wastages we have now—one due to the monsoon and the other on account of the preparation for the annual examination coming in March or April can be synchronised and reduced to one. (iv) The early months of the school year have a lighter load of studies providing a greater sense of freedom for the pupils, the very months which are climatically the best for games and outdoor recreation.

We do not see why Government should not introduce this change immediately in the schools. The University may have to make adjustments in terms of other

Universities. If there is any difficulty regarding the Matriculation examination which may have to be conducted in March, the Matriculation class can be held as at present from June onwards. Later on in this Chapter, while discussing 'Camping' we are pointing out a way of gainfully using the period between the end of the Pre-Matric class—(the usual sixth standard) and the beginning of the Matriculation class. Before concluding this topic we would like to mention that years ago the academic session was on this very plan, but was changed, we are told, to adjust the academic year to the English Universities to suit the few who wished to go there for prosecuting their studies, and to suit those professors whose homes were in Great Britain and who wanted a longer summer vacation to go home.

8. *Staff for Physical Education in Schools.*—(i) In Primary schools specialists in physical education are not necessary. The activities to be taught are simple and can be done by the class room teacher himself provided he has received a special training. We have already indicated how this training is to be imparted to primary school teachers.

(ii) In Secondary schools every teacher, the younger teachers particularly, should help to conduct and supervise the physical education classes. But in view of the variety of activities to be taught, the skills required and the detailed organization which will be necessary, there is need for employing qualified teachers of physical education. For the time being, the present Kandivli Diploma holders can very well be appointed for this. However, we feel that Diploma holders who are now available, generally speaking, lack skills and the essential enthusiasm that would make them good teachers of physical education. We hasten to say that we did come across some who were highly competent but they were few and far between. It is to improve this position and make available highly qualified men and women that we have recommended the establishment of a College of Physical Education. In course of time every school should have graduates of this College on its staff to organize and conduct the physical education programme. If the school is large one more than one specialist should be on the staff. One specialist, whether he is a degree holder or a Diploma holder will, with the help of pupil leaders and class room teachers, be able to look after the programme of about 250 pupils at the most. We, therefore, recommend that—

Every school should employ one or more qualified teachers of physical education, the proportion being one such qualified teacher for 250 pupils on the roll.

Girls should receive instructions from Women teachers. In a number of mixed schools girls even senior girls are taught by Men teachers, or even worse, they are often left out of the physical education programme. We recommend that—

Girls should receive instruction in physical education from Women teachers and the type of exercises and activities should be suited to their needs and interests.

9. *Work, Status and Emoluments of Physical Education Teacher.*—(i) *Work.*—We came across cases where physical education teachers were required to do a full load of class-room teaching and were, in addition, made responsible for physical education also. This is certainly unfair to the teacher and detrimental to his work,

whether academic or otherwise. We recommend that—

The load of work of the physical education teacher should be the same as that of the other class-room teacher, and further the work a physical education teacher has to do in organizing and supervising physical activities, during or after school hours, should be counted as a legitimate part of his load of work, and his other work must be reduced to that extent.

We have just discussed the case of the over-worked physical education teacher. There is the other extreme of the "never worked" physical education teacher. We were told of cases where qualified Diploma holders in physical education had little or no share in the physical education work of the school. In some cases this was so perhaps because the Diploma holder himself wanted to avoid the work which involved physical strain and also detention in school after school hours. In many more cases it was so because the school management wanted to get the services of these teachers, who were graduates and often trained graduates, more in the class-room than outside it

Physical education in such schools was left to a Drill Master or a Short Term trained teacher. The employment of the Diploma holder was to satisfy Departmental demands and not for the promotion of better physical education. This is very unfortunate.

The physical education teacher should teach not only on the play-ground or in the gymnasium but also in the class-room. He is qualified to do this. Similarly the class-room teacher should be capable of looking after and influencing the pupils also on the play-ground. Even though we teach the child in various environments, we must bear in mind that the child is one. To make every situation a teachable situation, and to break the barriers between what is happening in the sanctity of the class-room and the open freedom of the play-ground to influence the whole child, is the sort of co-ordination we would like to see achieved. This is integrated education and can be accomplished only when teachers cease to be trained and think in compartments. We, therefore, recommend that—

Physical education teachers should be entrusted with the teaching of academic subjects as well as play-ground activities and further the Department should see that this is strictly enforced.

(ii) *Status*.—A physical education teacher should enjoy the same status as that—enjoyed by other graduate teachers on the school staff. We recommend that if a physical education teacher's other educational qualifications and record of work are satisfactory, he should be eligible, along with other teachers, for promotion to the higher posts in the school or in the Department.

(iii) *Emoluments*.—We are convinced that qualified teachers of physical education should be paid attractive salaries. This will prove an encouragement to those who are already working as physical education teachers and further, will be an inducement to other suitable young men and women to specialise in physical education. It is not the quality of training alone that decides ultimate results, it is also the type of work that is done by those trained. A dissatisfied workman is an inefficient workman. By this extra salary we hope to get these people out of their present despondency. As for new recruits, we feel that the additional remuneration will prove an attraction to them. The selection of a profession in our country is much influenced by financial considerations, and a young graduate is not likely to take up this training, which involves hard physical strain and strict and rigid discipline, unless he sees adequate remuneration in it. If, Rs. 5 per month is the only additional salary offered, as is done by Government at present, a graduate

would rather choose the B.T. Course than the Diploma Course in Physical Education. The profession of physical education needs physically fit and athletically skillful people. Graduates with these qualifications are so much in demand in other services, such as Police, Customs, Forests, etc., where handsome salaries are paid, that they do not become available to physical education. If this is to be remedied better salaries must be paid. In fact, we believe that one of the important reasons for the poor enrolment for the Diploma Course so far is the unsatisfactory remuneration paid to the Diploma holders. The success or failure of physical education will primarily depend on the type of leaders who are entrusted with it. We are convinced that men and women of high calibre will not take to this work unless really attractive salaries and better conditions of service are offered. Our recommendation, therefore, is that—

by virtue of his qualification a Diploma holder in physical education should be entitled to an additional salary of Rs. 25 per month, over and above what he would otherwise be entitled to for his qualifications and experience. His total load of work should, however, be the same as that of the other teachers in the school.

10. *Syllabus*.—The activities suggested by the 1937 Committee in its Report are sufficiently comprehensive. However, the way they have been taught has been unsystematic. We observed that properly balanced and regulated lessons were not worked out. Activities were taught in a haphazard and erratic fashion. We do not believe in a rigid and inelastic syllabus. A competent teacher can develop his own plan of instruction to suit the conditions which he has to deal with. At the same time certain general indications will be found desirable for the general guidance of a teacher.

(i) *Syllabus for Secondary Schools*.—A Syllabus of Physical Education for Secondary Schools, prepared by the Old Students' Association of the Training Institute for Physical Education, Kandivli, based on the activities recommended by the 1937 Committee, was placed before us. This Syllabus, arranged in the form of lessons for each class, should serve as a good guide to the teachers in Secondary schools. We recommend that—

The Syllabus of Physical Education for Secondary schools prepared by the Old Students Association of the Training Institute for Physical Education, an outline of which is given in the Appendix I—D should be adopted for Secondary schools as an initial measure. Activities like boxing, wrestling, malkhamb, gymnastics, on apparatus, lakdi, Fari-gadga and swimming are not mentioned in the syllabus. However, schools should make every effort to include these as a required part of the instruction to boys of the upper standards.

(ii) *Syllabus for Primary Schools*.—For the Primary schools, the activities described in the Syllabus of studies for Primary schools prepared by the Department, and already in use, should be followed. Here again there is need for working out a suitable syllabus in the form of lessons for the Primary classes. We recommend that—

(a) the work of framing a syllabus for Primary schools should be taken up by the Board of Physical Education with the help of teachers and workers connected with physical education and primary education,

(b) in the meantime the twenty lessons given in the Syllabus of Physical Education (1933) of the Board of Education in England, which has been translated by the Department of Education into the regional languages of the Province, should be followed in the lower classes of the Primary schools. For

the upper classes of Primary schools, lessons given for the first three standards of the Secondary schools in the Syllabus given in the Appendix I—D, should be followed for the present.

11. *Camping.*—(i) *Camp at Pre-Matriculation Stage.*—All our boys and girls should experience group living under camping conditions. This would help our youth to learn to put up with inconveniences, withstand hardships, be more self-reliant, develop close friendships and mutual appreciation, and above all, help one to adjust one's actions in terms of common group interests. Camping is a very useful and valuable educational experience. This should be organised as frequently as a school chooses.

Many of the buildings and sites developed for war purposes will prove excellent camp sites. Wherever possible Government should preserve those for school camps. We also see great possibilities of old discarded Maratha hill fortresses as camp sites for individual schools or groups of schools. These places will prove excellent for camping because of their location, and added to that is the inspiration the young generation can draw from the memories associated with such places. The fortresses, many of which are fast being reduced to a state of complete ruin, can receive the care and attention of the campers. Camps may also be organised near villages, farm lands, etc. We recommend that—

(a) every school must organize a camp for all pupils of the pre-Matriculation class during the holidays immediately following their annual examination ;

(b) the duration of the camp should be at least one month ;

(c) government should reserve sites such as buildings and grounds developed for war purposes, old forts and grounds in the vicinity of villages for school camp and should allot such sites to individual schools or to groups of schools.

(ii) *Intensive Camp.*—In an earlier paragraph discussing the need for a change in the academic year, we had stated that, if the University authorities do not change the Matriculation Examination dates, thereby compelling this class to work from June to March, a useful way of utilising the intervening period between the end of the sixth standard and the beginning of the seventh, could be suggested. This period starts with November and continues till about the end of April, after which the May vacation falls due. This is a total period of about six months. We see many possibilities in utilizing this period. Social service in villages, construction of roads, bunds, tanks etc., reclamation of land, agriculture, learning a trade or craft, helping in liquidating illiteracy, etc., are all projects in which the youth of the country can help. That our education at present is too academic is well known. The educated groups tend to drift away from the rural areas. A false dignity against manual work and physical labour is gradually being ingrained in our High school pupils. An experience such as the one we suggest, we believe, will help to combat this.

When the suggestion about conscripting the services of students for promoting literacy was discussed in the Bombay Provincial Assembly, on a motion by Shrimati Lilavati Munshi, some members objected saying that this would interfere with the continuity of studies of a student, and further that conscription had inherent dangers in it. It is realised that for the liquidation of illiteracy and for the development of universal Primary education an army of teachers will be required. Our proposal will, without conscription and without an appreciable break in the studies, help to get the service of fairly mature young men and women to help in this project. A part of the period can be utilized for giving instruction in teaching methods, or

methods of handling any other job, and the remaining part in doing the job itself. All the activities should be treated as a part and parcel of high school education itself.

Funds for this can be met from collections from campers, from grants made by Government, and from wages which may be paid by Government in terms of the work done.

If the University does not change its academic year our recommendation is that the period of nearly six months thus available between the end of the sixth standard and the beginning of the seventh standard (Matriculation Class) should be utilized not only for camping but also as a period when our youth can render some constructive national service.

Even if the University adjusts the Matriculation academic year to the suggested school year, we recommend that—

(i) two to three months including the May vacation should be devoted to such camping, training and service at the end of pre-Matriculation Class ;

(ii) expenses for camping should be treated as expenses for physical education and should be admissible for Government grant.

12. *Playgrounds.*—(i) One of the serious impediments in the development of physical education in schools is lack of adequate play-grounds as can be seen from the statement given in Appendix VIII. This is most acute in Bombay and Ahmedabad. Some of the institutions we saw in these places, judged from their location and construction, have no right to be called centres of education. The average parent in our country does not stop to think about the quality of education as long as it is cheap and easily available. He may, therefore, be excused for patronising such schools by sending his children there. But Government cannot escape the responsibility of laying down and enforcing conditions regarding play-grounds, buildings, and equipment. Cheap education may ultimately deteriorate into inferior education. The plan of physical education which we envisage, and which we want to see adopted in all schools, cannot be launched without that essential facility—space. However much the scheme is adopted or modified to suit local conditions, which vary widely, physical education needs a certain minimum area of open space. If a school in Bombay City claims exemption from this subject on the plea of congestion and inability to provide space, similar exemptions may be claimed by schools elsewhere. Bearing in mind the financial condition of a large majority of schools we see the dangerous possibility of a good number of schools claiming various exemptions. It will, we are afraid, ultimately boil down to making our recommendations unworkable. Therefore, we recommend that—

(a) schools must procure play-grounds within a stipulated time failing which recognition should be withdrawn ;

(b) a school must have in the immediate vicinity or within a ten minutes walking distance a minimum of three acres of play-ground for an enrolment up to 250. It should further provide at the rate of one and a half additional acres for every 250 pupils above the first 250.

(ii) Activities such as wrestling, malkhamb, gymnastics, etc., are better adapted for indoor participation. Moreover, with the heavy monsoon affecting many parts of the Province, an all-year-round programme would not be possible unless there is a roofed shed, hall or gymnasium. We recommend that—

Secondary schools must in addition to the play-grounds have a covered gymnasium.

(iii) *Acquisition of Play-grounds.*—We are aware that schools would be put to great hardship to come up to the standards we have laid down. Left to themselves most of them will find it impossible to attain them. We recommend that—

Government must help the schools in the following ways—

(a) If the land, a school wants, belongs to Government, the school should apply for the land and Government should, if possible, give the required land to the school to be used for physical activities on long lease at a nominal rent. In the allotment of such open land to any agency Government should give first preference to the needs of a school.

(Note.—There is a standing Government Resolution, Educational Department, No. 7022 of 3rd December 1940, saying that open Government land should be given to schools for play-grounds if required. However, in practice, very few schools have been able to obtain land on this basis, even though, as stated to us, applications were addressed to Government.)

(b) If the land wanted by a school is private land, and the owner is unwilling to sell the land to the school, Government should acquire the plot, in accordance with the Land Acquisition Act, and give it to the school for a price fixed. To help the school financially, Government should advance as a loan the whole or a part of the required sum according to the schools' need. This loan should carry an interest of not more than 3 per cent. per annum, and should be repayable in each annual instalments within a period of twenty-five years.

(c) If the school authorities can procure land from an owner, negotiations for fixing the price of the land should be undertaken jointly by the school authorities and a representative of the Government, provided a loan is to be advanced by Government.

(iv) *Play-grounds in Congested Cities.*—We recommend that—

(a) in congested cities Government should immediately make a survey of all open plots and reserve these with a view to convert them into play-grounds for schools, or recreation centres for the public. Sites suitable for use as school play-grounds should be allotted to schools on the same conditions as described in paragraph 12, sub-para (iii) above;

(b) in all future town-planning schemes Government must see that ample areas are reserved for schools 3 to 5 acres for a Primary school and 7 to 15 acres for a Secondary school being the recommended standards;

(c) as an immediate measure, for schools with no play-ground at all, indoor class room space must be made available for physical education. Such indoor space should satisfy the following conditions—

I. Taking the enrolment of the school as a whole, 5 square feet of indoor space per pupil, other than passages and verandhas, should be left unoccupied. For a school with 250 pupils, 1,250 square feet must be left vacant.

II. The minimum area where a physical education class is to be conducted must not be less than 600 square feet, the figure being arrived at on the basis of 40 pupils in one class and a physical education space of 15 square feet for each pupil. In a school with 250 pupils there should be two such areas of 600 square feet.

III. The area of 600 square feet should be in the same hall or room. However, if this is found to be impossible, two adjoining rooms with a door in between may be used.

(*Note.*—We realise that the suggestion to leave 5 square feet of indoor space vacant for each child would compel school managements to vacate school-rooms which are now used for accommodating classes. We regret this; but it is unavoidable. The management should either reduce the total enrolment or work the school in two shifts.)

IV. The solution suggested above should be treated purely as an emergency and temporary measure, and should not be continued beyond a period of ten years. Within this period, schools compelled to adopt this measure, should shift to better sites or procure the prescribed space in the vicinity. After the ten years' limit recognition of schools which do not satisfy the requirements laid down in paragraph 12, sub-paragraph (i) above, should be withdrawn by Government.

This may appear harsh, but if Physical Education is to be promoted on a satisfactory basis, there is no other alternative.

V. *Use of Blind Alleys for Physical Education.*—We considered the possibility of using streets and blind alleys of big cities for play purposes during certain hours of the day, as is done in some of the congested cities of the United States. Climatic and social conditions weighed with us in ruling this out.

VI. *Use of Municipal and Private Open Spaces.*—There are a number of open plots maintained by municipalities, private gymkhanas and clubs which, when not otherwise used, can be used by schools. We recommend that individual schools should seek the co-operation of the Municipal or gymkhana authorities for permission to use their play-grounds by school boys, when not otherwise used. Government should render every help to the school authorities in this connection.

VII. We have two separate and specific recommendations to make regarding Ahmedabad and Bombay.

(a) *Ahmedabad.*—In this City we were told that the old city walls are being demolished, and a wide open area is becoming available all round the city. We examined one such plot. It will be a wise step if the area thus gained is preserved and developed into recreation areas which can be used by schools as well as the public. Apart from the recreational advantage it will be a step which will have very beneficial effects on the health and the morale of the people of that city. Government should take up with the Ahmedabad Municipal authorities the matter of the open area round the city of Ahmedabad being preserved and developed into play-grounds for schools and recreation centres. All temptations to sell the land or build even public buildings on it should be resisted.

(b) *Bombay—A School Town or Boys' Town.*—We are convinced that the problem of play-grounds for the schools of Bombay City is not easy to solve. We have given a great deal of thought to this because we felt that if only physical education can be made successful in the capital of the Province, it will be taken up with greater earnestness by the rest of the Province. On the other hand concessions and compromises made in Bombay would be naturally demanded in other parts of the Province. The following scheme is suggested for the consideration of Government which, if acted upon, we feel will not only permanently solve

the difficulty, but the City will simultaneously launch one of the finest projects in education ever attempted in this country. The scheme in a nut-shell is to shift all the Secondary schools in the city to a new site—a School Town—specially selected and developed for the purpose. Government should acquire a plot of ground one to two thousand acres in area, in or near one of the suburbs of Bombay, either on the B. B. & C. I. or the G. I. P. Railway lines. For example, to the east of the B. B. & C. I. Railway line, within about half a mile, between Bandra and Santa Cruz, such a plot may be available. All the Secondary schools of the city should be required to shift to this site within a prescribed period of say about ten years. If schools require financial aid Government should advance loans on low interest and on easy return payment plan. Each school should be given an area according to its requirements, the minimum being about seven acres.

Common facilities such as a central library, museum, health clinic, canteens, stadiums, co-operative stores, etc., available for the whole town may be provided from a common fund. Every school that is constructed here should be built according to approved standards, and will have ample grounds for physical education or other activities. Education will take place in an environment that is planned for it. Railway extension can be laid to the Town and school specials run into a central station in the Town, from the city and suburbs.

Another possible development from such a project will be the availability of the school buildings within the city, now housing Secondary schools, for Primary schools. These buildings can be acquired by the Municipality for housing Primary schools. A majority of the city's Primary schools, are now located in unsuitable buildings and the further growth of Primary Education in the city is hampered due to lack of school buildings. Here is a way out.

A project of this kind will also help indirectly to reduce the present residential congestion in the city. With their children's education in the suburbs, parents themselves will naturally be attracted to come and live in the suburbs. This is a feature which would be of great advantage for the further development of Bombay as a commercial city. We have mentioned only some of the possibilities and advantages inherent in such a scheme. Government's financial investment need not be high as we think a loan can be floated for advancing the money to schools, which would ultimately be repaid by the schools. We recommend that—Government should appoint a Committee to study the scheme of a School Town or Boys' Town for the city of Bombay, in all its aspects and make suitable recommendations.

13. *Uniform.*—We would very much like to see a complete change of clothing into an appropriate light athletic uniform when pupils report for physical activities. The present practice of turning up on the play-ground in the class-room clothes, complete with coat and cap, is not conducive to a physical education setting and unrestricted and vigorous work, and is also unhygienic. Taking into consideration the prevailing conditions we cannot go to the extent of saying that a change of clothes should be made compulsory even though this is most desirable. We recommend that—

(i) every school should take steps to see that pupils, as well as teachers doing physical activities wear shorts. An immediate beginning can be made, in the case of boys, by encouraging them to wear shorts, and play bare bodied. It is the healthiest and most appropriate costume for tropical conditions ;

(ii) in the case of girls, shorts or an appropriate athletic tunic should be worn.

14. *Washing and Changing.*—It is an unpleasant sight to see children, after a period of vigorous outdoor activities, coming into the class-room wet with perspiration and smeared with dust. It is unhygienic, it is unæsthetic. A few water taps with an open washing platform, a trough or a few tubs full of water with several dippers, a well with several pulleys, buckets and ropes are all possible arrangements within the reach and purse of various schools. If a school can afford more up-to-date and elaborate fittings, they should be provided. We recommend that—

(i) all schools should make some arrangements, however simple, to enable pupils to have a wash after physical activities ;

(ii) some convenience should be made available for a change of dress for physical activities. This is all the more necessary in the case of girls. A vacant class-room with sufficient privacy, or a cloak room which can also serve as rest-room, may be used for the purpose. Every school must strive to provide a place for washing and bathing with attached changing rooms and sanitary conveniences. These may be, with advantage, attached to the gymnasium.

15. *Physical Education Fees.*—The money that is being spent by a school for physical education, at present, is very meagre. The amount comes from three sources—games fee collected from pupils, contribution from management, and Government grant. Government grant is poor ; many school managements hesitate to make any contribution, and the fees collected from pupils is low, in fact as low as two annas per month. This must change as, without funds, a rich, and varied programme will not be possible. We are, in a later paragraph, making our recommendations for an enhanced rate of Government grant. We can reasonably hope that such an increase may be an incentive for the school management to make larger contributions. We recommend that—

(i) as for the fee collected from pupils, this must not be less than eight annas per month per pupil as far as Secondary schools are concerned ;

(ii) the fees collected as physical education fees should not be utilized for purposes other than physical education which of course includes games, sports, athletics and other play-ground activities.

We are compelled to make this recommendation because it was brought to our notice that money collected as games fees in some schools, is not spent for the purpose, but is added to the general funds which, in the case of proprietary schools, go to fill the purse of the proprietor. We further recommend that—

expenses on costly games like cricket and tennis should not be admissible for Government grant if such expenditure exceeds ten per cent. of the total expenses under physical education.

We put this restriction as we feel that there are several schools to-day which spend most of their games fee on the cricket eleven, a procedure that leaves the rest of the pupils starved of equipment and activities. We further recommend that—

much money should not be spent on trophies and prizes.

16. *Grant-in-Aid.*—(Recurring and Non-Recurring). The 1937, Committee had recommended that “ even when a school or a local body is not receiving the full quota of the ordinary Grant-in-Aid, Government should agree to pay 25 per cent. of the reasonable expenditure on physical education incurred by a Secondary school.”

Though the Government accepted this recommendation, no school has yet, during the last eight years, received this promised grant. Actually, the rate of disbursement has been from ten to fifteen per cent. only. This has made managements disappointed and bitter, and they have been vehement in pointing out how Government have not fulfilled their part of the contract but have, on the other hand, brought pressure on them and even threatened them with cuts in the grants. It was pointed out to us that a large number of Secondary schools have a precarious financial existence, and the stability of a school and its good work cannot be ensured without greater aid from Government.

The question of paying an enhanced rate of general grant is worthy of Government's consideration. As for physical education, we are convinced that a much more liberal grant than what is now being paid should be made to Secondary schools. We recommend that—

the rate of grant must be 50 per cent. of the admissible expenditure under physical education, whether recurring or non-recurring.

Suggestions were made that the physical education grant need not be separate, but should be merged into the general grant of the school. We do not favour this view as we think that physical education still needs the special care of Government and should be paid larger grants.

17. *Inspection and Promotion.*—In 1939, Government appointed eight Inspectors of Physical Education, two for each of the then existing four Divisions, designating them and giving them the status of Assistant Deputy Educational Inspectors, in the Subordinate cadre of Assistant Masters of the Educational Department. They were to inspect physical education in all schools, including Primary schools, and tender advice and help to the school authorities. Even though the inspection of physical education in Primary schools also came within the scope of their duties, in actual practice most of their time had to be devoted to the inspection of Secondary schools. This was because of the very large number of Secondary schools in their jurisdiction, which jurisdiction covered several districts and involved long distances. In addition to their inspection work they were also required to conduct Short Term classes lasting one to two months for Primary school teachers. On the whole, in the face of the many handicaps, these Inspectors have done good work. Some of the handicaps they put up with are (1) The Inspectors are too few in number. (2) There is no agency to co-ordinate their work and give them guidance when such guidance is needed. (3) Being members of the Subordinate Service they command scant respect in Secondary schools, particularly in Government schools. (4) The grant they recommend and over which they have control is very small, thus making managements comparatively indifferent to suggestions offered. (5) They are required to undertake the training of Primary school teachers, and occasionally of Secondary school teachers, when their inspection duties alone are heavier than they could bear. Beyond making the appointment of these eight Assistant Deputy Educational Inspectors for Physical Education, the Department did very little to understand their work or difficulties, or to strengthen their hands.

We feel, that, next to the co-operation given by the public and school authorities, the success of physical education will depend upon the interest taken, guidance given and supervision exercised by Government. These can be best ensured through an efficient and adequate staff of Inspectors. When using the popular term "Inspector", we have in mind a person who not only inspects what is being done

but also effectively guides and advises to improve flaws which may be observed, or initiate changes which are worthwhile. The Inspector should be a promoter, an organizer and a propagandist. He must possess a sound knowledge of physical education gained through training and practical experience. To bring into existence an inspectorate of the kind visualised by us which should function effectively and cover the whole Province, attending not only the Secondary schools but also the Primary schools, and further becoming available for consultation and advice by any one who may be interested in physical education, we recommend that—

(i) a Provincial Officer in charge of physical education should be appointed. He should be subordinate to the Director of Public Instruction. His office should be attached to the Director of Public Instruction's Office. He should be available to the Director of Public Instruction for consultation on all routine matters connected with physical education in schools. His jurisdiction should cover the whole Province. All the other Inspectors of Physical Education should be directly accessible to him. He should be the co-ordinator of the work of physical education and its inspection going on throughout all the schools in the Province. This Officer must be a member of the Bombay Educational Service, Class I. He should be highly qualified, academically and technically, and must possess the necessary background and ability to discharge his onerous duties.

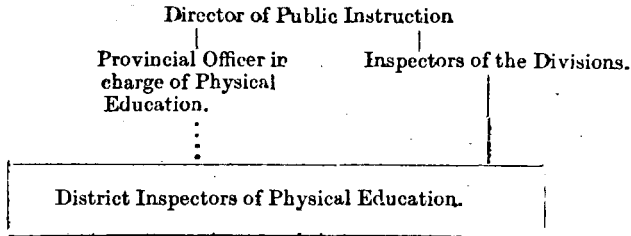
In this connection it will be helpful to point out the recommendation of the Central Advisory Board of Education in its report on Post-War Educational Development. The Board says "The Educational Department headquarters staff should include a well qualified and experienced officer to organize the scheme for physical instruction in schools and colleges." The Health Survey and Development Committee appointed by the Government of India, with Sir Joseph Bore as its Chairman, expresses the same views when it says that "At the Provincial headquarters there should be a highly qualified physical educationist with the rank of an Assistant Director of Public Instruction who would act as the advisor to the Director of Public Instruction."

(ii) Regarding other Inspectors, the Central Advisory Board of Education is of the view that there should be one Inspector for Physical Education in each District, while the Health Survey and Development Committee says "In our opinion not only should there be one such officer for each District but one for each Tehsil." It may be pointed out that this Committee desires these officers to encourage and promote village games and sports clubs for adults also. We recommend that—

(i) three Inspectors of Physical Education should be appointed in each District, one of them being a woman. They should be responsible for the promotion and inspection of physical education in Primary Schools, secondary schools and primary training colleges, and also should render every help in initiating and organizing physical education in such institutes wherever necessary, within their allotted jurisdiction. An Inspector should, if required, visit an institution several times in a year and perhaps spend several days there, to help the management, the staff and the pupils. The hurried annual visit accompanied by a superficial inspection and some general and vague remarks should give place to patient study and constructive advice.

(ii) these inspectors should be members of the Bombay Educational Service, Class II, their maximum salary being restricted to Rs. 350 per month. They should be selected from among those possessing the requisite qualifications now serving under the Department (or elsewhere).

(iii) The District Inspectors of Physical Education should administratively be under the Educational Inspector of the Division. On matter needing clarification, regarding the work of these Inspectors, the Division Inspectors should consult the Provincial Officer in charge of Physical Education. If there are points of disagreement between a Divisional Inspector and the Provincial Officer, the Director of Public Instruction shall be the deciding authority. The following is a diagrammatic presentation of the relationship between the Inspecting Officers of Physical Education and other Departmental Officers :—



.....Guidance only.
 —————Guidance and control.

18. *Military Training in Schools.*—(i) Several witnesses we interviewed impressed upon us the importance of military training and the need for military preparedness to meet national emergencies. They expressed the view that physical education should be for military ends and that the programme of physical education would best serve this purpose by accepting military methods and military activities. We cannot subscribe to this extreme view. However, we agree that all education, and particularly physical education, must help to “foster in our youth personal and civic virtues which would make them better citizens, whether they choose to be civilians or soldiers in after life.” With the impending political changes and the increasing responsibility that would devolve on the growing generation, for the maintenance of internal order and prevention of external aggression, we would be failing in our duty if we do not point out a way to familiarise our young men with activities and procedures which would help them to play their proper role when the occasion arrives. There we recommend that the following activities and exercises should be emphasised in the programme of physical education for boys of the upper high school classes :—

- (a) exercises and activities selected and adapted to develop in them toughness, endurance, courage, discipline and “esprit de corps” ;
- (b) exercise of the military physical training type done with precision, emphasizing discipline and implicit obedience ;
- (c) activities such as wrestling, lathi-fight, boxing gymnastics, climbing, running, clearing difficult obstacles, body contact and tackling games such as hu-tu-tu and foot-ball, swimming, life saving, camping, etc.

(ii) *Junior Cadet Corps.*—We believe that there will be a section of the boys who have a liking for military drills and exercises. For such we recommend the institution, in High schools, of a Junior Cadet Corps organized on the following lines.

Scheme.—All High schools should be encouraged to start Junior Cadet Corps for students in the Matric and Pre-Matric classes. It should be a voluntary organization and students willing to take elementary military training should be admitted in this Corps. A student wishing to join such a Corps should be asked to pay a fee of Rs. 10 per year.

Object—Training given in such Corps in an atmosphere of rigid discipline will inculcate a sense of discipline, spirit of patriotism and qualities of leadership among the students. It will also prepare them for higher military training in the University Officers' Training Corps when they join the College for University Education or create the desire to take up a military career in life.

Organization—Individual schools or groups of schools if desired, will organize such units with instructors selected from among the Ex-service men preferably with a satisfactory educational background. The schools will have to provide uniforms to the members of the Corps and secure adequate grounds for parades. It would be desirable if two or three schools in the same locality combine their resources for this kind of activity.

The schools will have to be given 75 per cent. grant of the expenditure incurred by them on this account. They will have to be provided with D. P. Rifles and equipment for Drill purposes and 0·22 Rifles for musketry practice. This will have to be done by Government at their cost.

Training—Members of this Corps should be trained in—

- (i) Physical Training.
- (ii) Drill with and without arms up to and including company drill
- (iii) Musketry practice and firing with 0·22 rifles and
- (iv) Signalling with Morse Code (with Buzzer).

The training period should be for two years from June to December every year with a ten days camp in the X-mas vacation. Six periods per week outside the school time tables for academic subjects should be devoted to this training. Students who join the Corps will of course be exempted from the routine Physical Training in the class in the school.

The units in the different schools will be trained independently by the school authorities but whether uniform training on current lines is being given or not will have to be periodically inspected by a suitable organization.

19. *School Volunteer Corps*.—School pupils who so desire should get an opportunity to render, social service. Inspired and challenged by a growing sense of the needs they are around them, youth—boys and girls—like to be of service to the people among whom they live. To satisfy this desire, and to train them for such and greater social duties, we recommend that—

every high school should endeavour to start and maintain School Volunteer Corps. Membership should be open only to boys and girls of the higher standards. Members should meet outside school hours and undergo a training that would fit them to carry out duties demanded of them, with orderliness and efficiency. Expenses incurred on this, including the cost of the uniforms supplied to the members, should be admissible for grant under physical education.

20. Before we conclude this Chapter, we would like to say that we are aware that a number of recommendations we have made herein are merely repetitions of circulars and orders issued to schools by the Educational Department, during the past few years. The fact that they have been reiterated by us shows how indifferently and inadequately schools have responded to them, and how ineffectively they have been enforced by Government. This strengthens our plea that Government must take up the question of Physical Education without hesitation, delay or compromise.

CHAPTER VI.

HEALTH OF THE SCHOOL CHILD.

1. *Introduction.*—All round education and intellectual education have, until the early twenties of this century, been considered synonymous terms. The other educations viz. physical, aesthetic, ethical, vocational, social and spiritual were admitted by courtesy as extra-curricular activities, to round of the defects noticed in the education of those days. The phrase *Total Education* based on the analogy of *Total War*, is now-a-days finding much favour among the educationists, who insist that the other six educations should, as a matter of right, though not to the same extent, find a place in the regular school curriculum.

Various studies made in Western countries have shown the beneficial influence of health, physical education, play activities, recreation, morning school hours, rest hours, the arrangement of the time-table, shorter lecture periods, full and half holidays, hostel life and nutrition on general education. The Education Act of 1944 (England), is a public acknowledgment of the influence these factors yield, if intellectual education is to be a success. A similar beneficial influence of the above environmental factors is noticed in industries, where the quantity and quality of work turned out enables the employers of labour to calculate the returns they obtain, from the expenditure they incur on the welfare movement among their labour population.

Physical education until recent times was looked down upon and was referred to with contempt whenever there was occasion for it, both by the educationists and the public. Even when its importance was realised, it was accepted rather on sufferance than with grace. Little attempt has been made in this Province to render full justice to this subject and probe the possibilities it offers, as an aid to intellectual education and to the building up of the child as a whole organism and as a useful unit of the nation.

2. *Factors in Health.*—One of the aims of physical education is perfect health. Health requires the consideration of many other factors, if the results are to be in any way commensurate with the efforts made. Good food, sufficient in quality and quantity, ranks first on the list and has to be supplemented by fresh air, sunshine, good housing, and by personal and communal hygiene. Shrewd industrialists have accepted the responsibility of health of their employees in all its bearings and have never regretted the step. We are still waiting for shrewd educationists who would accept the responsibility of the *Total Child* and provide everything it requires for its education and development, under one roof.

3. *School age—the Best Period for Health Education and Inculcation of Health Habits.*—“The Education of man begins in the cradle”, says a philosopher and brilliant results can be achieved if the parents become the baby’s first preceptors. It is impossible for many parents to do this, for lack of proper education and for want of knowledge of the method of imparting the same. Most children have, therefore, to wait for their education, until they join a school, when highly trained and willing hands are ready to mould their intellect and habits, in a congenial atmosphere or perhaps ideal surroundings. The lessons learnt and habits formed in this early period of life leave almost an indelible impression on the child’s mind.

It is essential, therefore, that whatever is taught to the child in this period, is of the best, and of permanent benefit. The habit of an open-air care free life in congenial surroundings among his equals in age, the spirit of camaraderie engendered

by group games, the inculcation of healthy habits both by example and by precept in the class-room and in the play-ground, are as important educational items as the facts of history or geography, or of any other academic subject.

Many school text-books now contain splendid and graduated lessons in health and hygiene and it is for the teacher to lay adequate stress on each of them and to devise many more, which his education and experience suggest.

4. *Parents and Educationists.*—The happy day is yet to dawn when residential schools and universities will be a permanent feature to India. Till then, the educationist must share his responsibility with the parents and do the best he can in his sphere of activity. In any scheme of betterment of the pupil therefore, one has to consider the educationist who is eager to help the child or can be compelled to do so, and the parent who is often incapable of being compelled to do so.

5. *Measures Formulated.*—Educational authorities have always insisted but without much success on good schools with plenty of ventilation and sunshine, plenty of floor space for each child, cleanliness and such other hygienic conveniences as would be required under the circumstances and have further incorporated lessons on health and hygiene, in their graded text-books for pupils. The items they had perforce to leave out were nutrition, medical examination and physical education because of the extra personnel and heavy finance required to carry out the same.

A beginning has been made during the last decade to tackle these problems. Even partial nutrition has been attempted in stray institutions, but the efforts have always been half-hearted on account of the cost involved and the wide implication of the schemes.

NUTRITION.

6. *Mal-nutrition.*—Any one with eyes to see cannot but be struck by the fact that Indians are as a rule underfed and the various nutrition surveys carried out by eminent medical authorities amply support these observations. No wonder, therefore, that this Committee, during its tours and discussions with responsible people was struck by the lamentable state of health and nutrition among the pupils both in the Primary and Secondary schools, particularly in the former, when the child is growing rapidly and is facing the risk of infection from various diseases incidental to childhood.

Frequent feeding, frequent medical inspection, and not indiscriminate encouragement, but judicious guidance in play-activities, in addition to the factors of sunshine, fresh air, etc., mentioned above, are the chief requirements of this age. It is obvious that physical education requiring strenuous physical activities cannot be recommended to a child who is ill-nourished or is medically unfit for such activities.

The problem of nutrition plays an important role in Total Education; and has to be tackled with earnestness and thoroughness if any success is to be achieved in education in the school. The usual food a child eats is deficient both in quantity and quality and the lower the economic scale the child comes from, the greater the deficiency in quality of food and the greater the proneness to deficiency diseases and a retarded mentality.

Stunted growth, anaemia, hollow chest, weak heart, tendency to abnormalities of lymphoid tissue, tired feeling, inattention, vague pains in the body, low fever,

burning sensations, are some of the symptoms the pupils show before any pronounced characteristics of diseases begin to appear. Some of these symptoms, and consequent absence from school, are mistaken for truancy, and are often punished by additional home-tasks which the child can hardly cope with. One of the reasons for want of originality in the majority of the children may perhaps be the dulling of the intellect, on account of the illbalanced and inadequate diet and its consequences.

Adequate nutrition and medical care are, therefore, the bed-rocks on which the super-structure of physical education has to be set up, before it can prove of any use in bringing the child to a satisfactory state of health, and without which it would be a waste of time and money to impart any education, even though it be ethical or spiritual. Physical education cannot be usefully imparted to children unless they are healthy and adequately nourished.

7. *The Food*.—We feel that 800 calories should be available on the average to each child and milk should be the main-stay of every feeding scheme; every primary school child, whether urban or rural, should receive at least 12 ounces of milk per day. We are aware of the difficulties that have to be met with, in making such a provision but we hope that natural or reconstituted milks would be available soon to meet the requirements of the children who should receive priority along with expectant and nursing mothers.

If this be impossible, a start should be made on the lines of the Madras Municipal Corporation and the Madras Educational Department, to give either a substantial one course meal or a handful of nuts, parched rice, gram and gur, bananas or any other fruit that may be in season and which is not very expensive.

The preparation of meals, observance of caste prejudices, the engagement of cooks and servants, provision of kitchens, dining halls, utensils, etc., are matters which can easily be tackled by a local committee.

We desire that every child should be made—*Nutrition-Conscious* and also *Health-Conscious*; we also want it to benefit from the socialising influence of the preparation, the serving and the partaking of the meal in large groups.

8. *The Schools Periods and Feeding Times*.—There are three types of schools in our Province. (1) One-session schools, i.e., those that receive children from 7-30 a.m. to 12 noon, (2) two-session schools, i.e., those that receive children both in the morning and in the evening, and (3) the day schools which start at about 11 a.m. and continue till 5 p.m. Times of meals have, therefore, to be adjusted to the nature of the food given and the habits of the children.

For the one-session schools milk should be given in the morning as soon as the child arrives and a second instalment with gruel should be given in the recess at 10-30 a.m. For two-session schools the same procedure should be observed but with milk and sweet gruel in the afternoon recess. The gruel can be made from any of the cereals available.

For day-schools a mid-day meal at about 1 p.m., followed by a glass of milk in the evening accompanied by ground nut, cashew nut, sesame seeds or gram toffee. Gur is a good sweetening agent. Chiki, Gudadani and Revadi toffee are other forms liked by children.

9. *Canteens and Central Kitchens*.—Every Secondary School should run a canteen of its own wherein the children, especially girls, should learn the art of cooking a variety of dishes on approved lines. No pupil should be allowed to bring

his lunch from home, and every pupil should contribute to the canteen his mite in coin or grain, as payment for the lunch he partakes. Smaller schools, if they are within a short distance of each other, should combine and run a central canteen of their own from which hot dishes could be transported as required.

10. *Financial Considerations.*—If education has to yield any successful results, nutrition, therefore, must receive first consideration. It is easy to say "must", but is exceedingly difficult to achieve unless adequate finance is forthcoming.

This is a question of high politics and financial liability must rest with those who attach a value to the child as a prospective asset of either the family, the society or the nation. Russia, Germany, America and now England, are considering the child as a national liability and are spending the most they can on nutrition, health and education. India can do no worse than follow the path blazoned out by these countries and spend the utmost it can, for laying the foundations of the future nation on a firm soil. First, nutrition and then education are the crying needs of the day.

The schools in our Province are mostly Government-aided ones and the finances of these schools are none too flourishing. They are mostly conducted on the basis of self-sacrifice from the teachers, who have to strain every nerve to make both ends meet by taking up as many private tuitions as they possibly can. The money must come, therefore, from the parents indirectly through increased school fees, or directly by providing adequate lunch or meals to the child during its school hours. Most of the parents are so poor that they can give the child just two meals during the day and nothing more. Since many of the schools and many of the parents cannot afford adequate nutrition, the child needs must look up to the nation for the help it sadly lacks.

The Madras Government has set a bold example and has, perhaps, taken the lead in the whole of India, in feeding its school children throughout the Province. Their expenditure on this item is Rs. 20 lakhs approximately, and will mount up to Rs. 418 lakhs during the next five years when they hope to cater for the whole of their Province.

We feel that it would be difficult in the initial stages for our Government to tackle the nutrition problem throughout the whole Province and for all the children. The scheme should, therefore, be introduced in two stages. First for the under-fed, ill-fed and medically deserving, the poor children and secondly for all the rest. The services of an Almoner would always be helpful in deciding the economic conditions of the parents. The scheme may further be introduced in those districts which are traditionally the homes of famine and people are almost always on the verge of starvation.

We also feel that Government should pay in full for the feeding of all the poor children, should bear 50 per cent. of the charge in cases of middle class children, and should enforce full payment in cases of the upper classes.

11. *Cost per Child.*—It is difficult to mention the cost of such a lunch when prices are varying from day to day. In pre-war days when the food-index was 100, the net cost of such a lunch of 800 calories was Rs. 1-6 per pupils per month, excluding the cost of condiments, fuel and service. Taking the present food-index as 300 the present-day cost would be Rs. 4-2. The conditions regarding milk supply, whether natural or artificial, are changing so rapidly that any calculations made would be out of date before the ink is dry on this paper.

12. *Financial Sources.*—India is famous for its temple charities and Sadavartas and the feeding of Sadhus is considered a meritorious deed. Education alone can wean away the people from this obsolete mode of thought and turn these charities to objects which really deserve help. War-time legislation has put a stop to this promiscuous feeding and we feel that the power so assumed by Government, should not be given up at any future date and the moneys so conserved should be handed over to the Educational Department for equitable distribution among the various schools as a contribution for the feeding of poor children.

13. *Medical Inspection.*—Medical Inspection has been carried out during the last ten or twelve years in almost all schools of this Province in the hope that advantage would readily be taken of it by the parents and by the students in Secondary schools and colleges, to remove the defects noted at the Inspection. The hope has not, materialized and the Inspection is regarded even by college students more as a nuisance rather than as a blessing and a means of keeping themselves fit. Even the teachers regard it in some schools as an imposition that must be tolerated. The Inspection has so far failed to give relief and has been of no value from the educational point of view. The absence of favourable results may partly be due to the selection of medical officers who are not adequately trained to appraise the health of the school child.

The inspection is carried out at present rather perfunctorily. This may be due to want of adequate training of the medical man, or to a sense of frustration and of the uselessness of the work, or to inadequate payment for the service rendered, and the sooner all this is remedied the better for the morale of all concerned.

The inspection should have the value of regular class-room work when the physical education teacher, the class-room teacher, the almoner and perhaps the parents, are expected to be present to learn the results of the inspection and the measures to be undertaken to remedy the defects indicated. The inspection has more of an indirect educative and propaganda value rather than a direct one on health. There should be a continuity in the study of each individual case and advice should be tendered in accordance with the improvements or deterioration observed. Whenever possible, the reasons for the various methods of examination should be explained to the child in simple language in order to get him interested in the subject and to teach him to observe the changes that occur in himself.

The inspection should in all cases be a complete one and should be supplemented by a miniature skiagram of the lungs. The inspection should be held at least thrice in a child's school career, once in primary school stage and twice in the secondary school period. It may be as frequent as twice a year in cases where defects have been noted.

14. *Follow-up-Work.*—This must be always insisted upon if medical inspection is to bear any fruit. The work is carried out at present only by the Bombay Municipal Corporation for its pupils in the primary municipal schools and is proving of immense benefit both to the pupils and the teaching staff.

One remarkable instance regarding the value of medical inspection and follow-up-work should make every educationist sit up and acknowledge the bearing of any disease on health and intellect. Hook-worm disease had been rampant in many parts of the world as also in India and Ceylon. The Rockefeller Foundation with cute foresight, blazoned the path of its eradication and proved to all the world that the removal of this insignificant looking tiny intestinal worm, which not only undermined health but dulled intellect as well, made the family physically strong, intellectually alert and economically prosperous. On what small threads does our happiness hang in this world!

Removal of defects of sight and hearing, even adjustment of light for reading purposes makes the child intellectually different, brighter and more cheerful.

Naming a defect helps no one, unless there be the will behind it to remedy the same. Follow-up-work derives its inspiration from the brilliant and for reaching results obtained from apparently trivial observations.

Follow-up-work, therefore, is an important part of the medical scheme. A centre should be established, which may in some cases form a part of an existing hospital, for each group of schools where the child can be quickly examined and returned either to the school or to its home under the supervision of a nurse or an almoner. The centre should provide help in diseases of teeth, mouth, throat, nose, ear, eye, skin and in pediatrics under expert guidance. Treatment should also be available in the centre for any minor medical and surgical complaint.

The starting of such treatment centres is a matter which needs special study. We are of opinion that it is necessary to appoint a special committee to study the question of school clinics and to make recommendations for starting them along proper lines in the Province. The Committee should consist mainly of medical men but should also have on it educationists and physical Educationists.

15. *Health Surveys*.—One more sorry state of affairs regarding medical inspection is the absence of composite health reports from schools either individually or collectively, according to districts or divisions of this Province. There is also no attempt made at correlation of the vast amount of information collected in the successive annual medical reports of the schools, to find out whether any improvement or deterioration in health has occurred among the children or among communities during a successive period of years. Investigations carried out by one of us show that —

(a) In one of the middle-class schools in Bombay, the conclusions based on twenty thousand observations indicate that the heights and weights of our school children are less by 10 to 20 per cent. than those found in British children of the same age. The children of the same school from non-vegetarian communities like the Muslims and the Parsees, show better height and weight records than of those from vegetarian communities, e.g., the Hindus.

(b) The records of college students collected by the Bombay University show the same results, viz., of lesser heights and weights both in boys and girls. The number of students in "A" class is gradually decreasing and the figures for mal-nutrition and mal-development are continually on the increase. In one college in Bombay the mal-nutrition was as high as 73 per cent. and mal-development as high as 67 per cent.

(c) 35 to 40 per cent. of the college students have vision and eye defects; 7 per cent. of them have ear-nose-throat trouble and 13 per cent. have caries of teeth.

Surveys are mile-stones in a journey's end. If the value of medical inspection, of physical education and of adequate nutrition has to be assessed year after year, earnest attention will have to be paid to the study of the data so conscientiously collected. The medical report forms of individual children are excellent in their own way; what is sadly needed is their study, as an aid to the education of the child as a whole organism.

16. *The School Teacher*.—Teachers cannot hereafter afford to remain indifferent spectators of the efforts that are being made to improve the health of the child and

to make it physically fit for all ordinary emergencies of life. We have insisted in this report that all teachers, though not holding a Physical Education Diploma, must have some training in physical education and must show some proficiency in one or two games useful to the child. Medical inspection and follow-up work are an education in themselves; the teachers should, therefore, be conversant with the elements of inspection and of treatment, and be able to detect, isolate and advise such stray outbreaks of diseases as are likely to occur in the absence of the medical staff.

The maintenance of the Health Record in between the inspection periods and the supervision of the daily Health Parade are duties which are likely to devolve on him as a class teacher, for it is he, who will have the longest and the closest contact with the child during its school days. He must do this work under the guidance of the physical education teacher.

17. *The School Almoner.*—The services of this Lady Officer are finding increasing scope in every institution where welfare work is carried out, whether it to be in an industry, a factory, a school or a hospital. This Officer should preferably be an educated woman who is also a trained nurse. She performs the duties of a Health Visitor and a social worker. She should be able to evaluate the conditions in a home and advise the parents, especially the mothers, accordingly. She should bring their difficulties to the school and medical authorities so that adequate adjustments may be made in the periods of rest, exercise, recreation, school lessons, medical treatment and nutrition of the child. She is the bond of sympathy between the school and the home, so that the efforts of both in the interest of the child may be co-ordinated. Her help is thus invaluable both in reclaiming a delinquent or backward child, as well as in encouraging one which is on the high road to progress.

18. *The School Medical Officer.*—The School Medical Officer should be a specially trained person well versed in the requirements of the child, both in the school and on the play-ground, and in the hygiene of the school and its appurtenances. He should supervise the teaching of health and hygiene in schools, visit homes when necessary, and organise propaganda and exhibitions in his area as a matter of routine for the education of the parents.

19. *School Medical Service.*—As individual schools cannot afford to have their own medical officers or treatment centres, they will have to be grouped both for the sake of economy and of specialization in this particular line of work. The service will have to be a paid, full time and permanent one and will have to be organized on a provincial basis under the direction of the Educational Department.

To make a beginning in the Province a chief medical officer for the Province and one district school medical officer for each district should be appointed. Under the direction of the District School Medical Officer in his district, the services of as many qualified medical officers, employed or practising privately in Taluka and District places, should be enlisted on a part time basis. He must be responsible for the organization, supervision and guidance of the school medical work in the early stages. He should not be entrusted with the work of conducting medical inspection. The services of part time doctors which are recommended to initiate the scheme should be gradually replaced by full time medical officers as they become available.

The various District School Medical Officers should organize and supervise one or more Units in charge of a Unit Officer.

The Unit should consist of (1) Inspecting Officers who are in charge of about 5,000 pupils, (2) clinicians, specialists, orthopaedicians, (3) the school almoner, and (4) a well staffed and well equipped treatment centre and a laboratory.

It should comprise in its area one or more schools grouped according to the number of pupils they contain and the distances that may have to be covered to approach them. In scattered areas with smaller schools, a mobile unit would be of great advantage both from the point of view of economy and efficiency. It would also be advantageous in many district towns to establish cordial and co-operative relations with the civil hospitals and dispensaries and the personnel in charge of the same.

The School Medical Service is the greatest social development in western countries. These inspections have revealed defects which have led to their treatment and amelioration; disease has been checked and death postponed; parents' interest has been awakened; the individuality of the child has been enhanced; the teacher knows the physical and intellectual capacity of his pupils individually and tries to impart suitable education. The growth of the child, physical intellectual and moral is now the criterion of this service.

This service has been the means of introducing directly or indirectly school clinics school-canteens, school baths, child-guidance clinics, school-hygiene, sanitary and health equipment of school buildings, school nurses, special schools for defective children, vocational classes for selected children, stammering classes, open air schools, school gymnasia, play-ground classes, camps, care-committees, free spectacles, little-mother classes, nursery schools and mother craft classes.

Systematic cleanliness surveys and nutrition surveys are carried out in England every year or half year.

There were in England in 1937, more than 2,000 school clinics providing every variety of treatment, 4000 school nurses at work and 264 school feeding authorities. The ever widening sphere of school clinics brought the realization of encouraging schools for mothers and supporting maternity and child welfare schemes.

20. *The Diploma in School Medicine*.—If it be decided to establish such a School Medical Service, a degree or a diploma examination in School Medicine should be instituted on the same lines as has been done for dentistry, ophthalmology, pediatrics, gynaecology and obstetrics. Every aspirant to this service should also be expected to possess a degree or diploma in physical education so that he can understand the practical value of the medical measures he institutes, in terms of health and physical fitness.

If the principle is accepted, a special committee will have to work out the various details of qualification, personnel equipment, etc., of this School Medical Service.

21. *Legislation*.—Houses of bad reputation, gambling, and betting booths, picture houses and theatres should not be allowed to be constructed and no hawking of food-stuffs should be permitted in the vicinity of the school area; and on the other hand, no permission should be granted to open a school in the above localities.

The unwritten Charter of Rights of a child includes besides the item of Total Education, improved sanitation, medical protection and adequate nutrition.

22. The institution of the State School Medical Service implies the addition of a fourth independent service in addition to the (1) curative service and (2) the medical educational service under the Surgeon General, (3) the preventive service under the Director of Public Health. A Co-ordination Committee of the heads of these three departments should be set up to avoid overlapping of work and to work out new lines of improvement.

CHAPTER VII.

THE BOARD OF PHYSICAL EDUCATION.

1. Introduction.

Up to the year 1938, the direction of physical education in this Province was entirely in the hands of the Director of Public Instruction. There was no officially recognised public agency or semi-public agency, which could influence the physical education policy of the Government of Bombay. The result was that no serious effort was made by Government to introduce physical education in schools or to get teachers of physical education properly trained. It was not that the educational authorities had not realised the seriously deteriorating effects of their school curriculum upon the health of the school-going population. The Quinquennial Report of the Director of Public Instruction for the years 1907-12 clearly—brings out the contrast between the radiant health of the new entrant in the Primary school and the impaired health of the senior student of the same school. It remarks—

“ You look at the little new scholar with bright eager eyes and straight, plump, little body, and turn to the boys who have spent six long dreary years in this school. Can it be a matter for surprise that you see lolling forms, round shoulders narrow chests, and vacant lustreless eyes ” ?

But the realisation of these harmful effects of a purely intellectual education, did not move the Educational Department, to counteract these effects by introducing physical education in schools. No doubt some perfunctory and spasmodic attempts were made on two or three occasions, but it would be no exaggeration to say that for nearly four decades, that is from 1900 to 1938, physical education was grossly neglected by the Government of Bombay. The 1937 Physical Education Committee thought, and thought rightly, that unless and until the pressure of public opinion is brought to bear upon the physical education policy of Government, no substantial reform was possible. Hence the 1937 Committee recommended, amongst other things, the establishment of a “ Standing Advisory Committee ” to advise the Minister for Education on all matters of Physical Education, connected with school-going children as well as others. The Standing Advisory Committee was recommended to have six non-official members as against three officials, one of the non-official members being the Chairman of the Committee. It will be realised that the preponderance of nominated non-official members on the Committee, would naturally influence the deliberations of the Committee, even though they were nominated by the Minister for Education, as all of them were influential members of the public.

The 1937 Committee had further recommended that the Chairman of the Standing Advisory Committee was to be its Propaganda Officer also, and he was to organise the educative propaganda, with the help of the Chief Inspector of Physical Education.

2. The Establishment of the Board of Physical Education. Its Constitution and its Powers and Duties.

The popular Government of 1937-39, lost no time in giving effect to the recommendations of the 1937 Committee, and in May 1938, brought into existence the present Board of Physical Education by an executive order, modelled on the lines

laid down by the 1937 Committee. The Executive order was contained in the Government Resolution, Education Department No. 5310 of 2nd May 1938. The first and the fourth clauses of the Government Resolution, which define the constitution and the powers and duties of the Board respectively are reproduced here. (The Whole Government Resolution is given in Appendix IX-A).

Clause (1) "Government have decided that a Board of Physical Education shall be constituted to advise them on matters concerning physical education. The Board should consist of six non-official members to be nominated by Government from time to time, with the Director of Public Instruction, and the Director of Public Health, for the Government of Bombay, as ex-officio members. The Principal of the Training Institute for Physical Education, which is proposed to be started by Government shortly, should also, when appointed, be an ex-officio member of the Board and act as its Secretary."

Clause (4) "The powers and duties of the Board shall be regulated as follows:—

- (i) The Board shall advise on all matters pertaining to the physical education of school-going children as well as others.
- (ii) The Board shall have no control over the administrative work of the Educational Department. Its work will be of a purely deliberative and advisory nature.
- (iii) The Educational Department shall consult the Board on all matters, relating to the general policy to be followed in the development and administration of physical education in the Province.
- (iv) Appointments to the teaching staff for training teachers in physical education shall be made in consultation with the Board, so far as it does not affect the statutory functions of the Public Service Commission, Bombay-Sind, to make the selection of candidates for appointments, laid down in the Public Service Commission Function Rules.
- (v) The Board shall also advise Government in regard to the acquisition of play-grounds and play-fields, for gymnasias, as well as for schools.
- (vi) The members of the Board shall be entitled to inspect physical education work in Government, as well as aided institutions, and to give such advice to the authorities concerned as they deem necessary.
- (vii) The Board shall frame courses of physical education, for the different training institutions, and also for the Primary and Secondary school pupils in the Province.
- (viii) The Board shall be entitled to be supplied with all the information, that it requires for its deliberations from all the Departments.
- (ix) The Board's advice shall be taken in framing the Annual Budget for Physical Education.
- (x) The Chairman of the Board shall be the executive and administrative officer of the Board so far as educative propaganda, described in the Report of the Committee is concerned, and he shall be helped by an efficient staff, to enable him to discharge his duties properly. In the performance of his duties, the Chairman shall be guided by the Board.

- (xi) The selection of the staff for the office of the Board of Physical Education, should be made with the approval of the Chairman of the Board so far as it does not affect the statutory functions of the Public Service Commission, Bombay—Sind, to make the selection of candidates for appointments, laid down in the Public Service Commission Function Rules”.

3. Contribution of the Board to the Cause of Physical Education.

As the Board began to function, serious defects were discovered in its Status, Constitution, Powers and Duties. We shall point out these defects later and show how our recommendations are intended to remove these drawbacks and make the Board more stable, efficient, effective and representative of the different interests in the Province. In this paragraph we shall briefly survey the work of the Board and see what contribution the Board has made to the cause of physical education during the eight years of its existence.

The Board rendered valuable help in the establishment of the Training Institute for Physical Education, Kandivli, and in drawing up suitable courses of studies for the Institute. Selection of the proper site, working out the details of the requirements on the site, approval of plans, selection of the staff and many other details became special responsibilities of the Chairman. Government, on the recommendation of the Board, laid down rules regarding admission of students belonging to Native States and other Provinces to the Institute. The form of the Diploma and Certificates to be given to students completing courses in physical education, was also decided by Government on the Board's recommendations. The Board rendered valuable help in planning Short Term Course for Secondary School teachers, Heads of Secondary schools and Training institutions, and non-Matric Drill Instructors. Every necessary detail such as the selection of the site for the camp, arrangements for accommodation, number of admissions, courses of studies, etc., was carefully attended to by the Chairman and other members of the Board. From time to time the Board brought to the notice of Government the need for repeating such courses.

(ii) The 1937 Committee had brought to the notice of Government the national importance of the gymnasia in the Province. The Board recommended that the gymnasia should be given Government recognition and should be paid grant-in-aid. Detailed rules for recognition of and grant-in-aid to gymnasia were framed by the Board which were subsequently adopted by Government, and now grants are being paid from year to year to these institutions.

(iii) The Board pointed out to Government the need of creating an Advisory and Inspecting Staff for physical education and also tendered advice regarding the strength, qualifications, status, etc., of this staff. The recommendations of the Board have been implemented by Government and an inspecting and advisory staff is doing its work in the Province.

(iv) For the physical training of Primary teachers, the Board recommended to Government that Local Authorities and private agencies should be encouraged to undertake the conduct of Short Term Course in Physical Education for primary teachers and also recommended the conditions to be fulfilled and the courses and studies to be followed by such private institutions. These recommendations of the Board were accepted by Government.

(v) The question of medical inspection of schools and suitable forms for recording the findings and recommendations of the medical officer were placed before the Board several times. After a very careful study of the different sub-questions brought before the Board, the Board made its recommendations. These recommendations have been accepted by Government.

(vi) Holding tournaments in the different parts of the Province is an effective method of rousing public interest in physical education. There were already a few organisations in the Province which were successfully holding tournaments every year. The Board thought it necessary to encourage these organisations by paying them grant-in-aid subject to certain conditions. Government have accepted these suggestions and grants are being paid to some organisations every year for conducting tournaments.

(vii) The Government Resolution, Education Department, No. 5310 of 2nd May 1938 has (See Appendix IX-A) made the Chairman of the Board responsible for conducting educative propaganda for physical education, especially because of the new orientation of that subject and of the new policy initiated by Government in 1938. Accordingly he sent his personal Assistant to different parts of the Province to hold discussions with the heads of schools and gymnasia and also with prominent members of the public who took interest in physical education. This work of the Personal Assistant was of considerable help in presenting the new policy of the Government in its proper perspective to the educationist in particular.

(viii) The 1937 Committee had recommended that Physical Education Days should be observed throughout the Province. The Chairman of the Board took up this question as early as 1939. His idea was to get school boys all over the Province to perform mass drills on the same day, at the same hour and at words of command given from a central place like Bombay over the radio. Unfortunately, for want of proper facilities, this was not possible. In spite of this, for the last three years, mass drills of the type have been performed by school boys and girls on a particular day and at a particular hour throughout the Province as part of the Physical Education Day Celebrations. Although the Board does not get reports from all the centres, figures based on reports officially received show that every year about 150,000, pupils took part in these demonstrations and that a fairly large number of girls was among those who participated. The school authorities and the pupils are feeling progressively interested in the Physical Education Day Celebrations.

(ix) The Board recommended to Government that convenient sites all over the Province, which were being vacated by the military authorities, should be acquired by Government along with suitable super structures, fixtures, equipment and other useful facilities therein and set apart for 'physical education purposes such as camping, outing, etc.

(x) Besides the work described above, the Board is helping Government in framing the annual budget for physical education from year to year.

From what has been said so far, it will be seen what useful work has been done by the Board of Physical Education, under the guidance of Swami Kavalayananda who has been its Chairman since 1938, to maintain and improve physical education under most discouraging circumstances. On various occasions even reasonable and necessary recommendations of the Board were turned down by Government on some excuse or another. During the period of War, this unremunerative activity

might have been much more neglected and the progress of Physical Education would have received a greater set-back had it not been for the indefatigable efforts and personal influence of the Board's Chairman.

We feel that the educative work done by the Chairman, by presiding over many physical education functions, delivering lectures at several physical education gatherings, personally attending various physical education tournaments, in addition to the work that was done by and through his Personal Assistant is also noteworthy.

4. Government's Disregard of some Vital Recommendations of the Board.

This brief survey of the work done by the Board given in the last paragraph supplies ample evidence to justify the existence and need of such a Board. We, however, cannot help, but remark that the Province would have been benefitted on a larger scale, and the cause of physical education, would have progressed much more had Government given effect to some of the vital recommendations made by the Board from time to time. We give below a few cases in which Government grossly disregarded the Board's recommendations apparently without any justification and at times even against their own undertaking.

(i) The Training Institute for Physical Education, Kandivli, was started in 1938 by Government as a key institution, which would vitalize the physical education in our Province. But the repeated recommendations of the Board on the Training Institute for Physical Education such as its permanence, status of diploma holders, etc., were set aside by Government. This has mainly been responsible for the enrolment at the Institute dwindling to a minimum. Had Government accepted the advice of the Board, we feel that the problem of supplying at least one diploma-holder to each of the High schools would have been solved.

(ii) The Short Term Courses in Physical Education for Secondary school teachers which were enthusiastically started in 1939, were held in abeyance by Government for two years in 1942-44 without any adequate justification. No doubt, the site for the Short Term Course at Kandivli, was occupied by the Military Department. But Government should have found alternative site for running the courses instead of holding them in abeyance. As Government did not move in the matter the Chairman of the Board went out of his way and with his Personal Assistant examined different sites for conducting the Short Term Courses. The site of the Fergusson College in Poona was selected in agreement with the Fergusson College authorities in 1942-43, and the Chairman of the Board requested Government to arrange for the Short-term Course of that year to be run there. But Government pleaded that there would be difficulty of finding food supply for the hundred and odd teachers, and, on these grounds, did not run the course. In this connection, it is to be noted that according to Government Resolution, Education Department, No. 5310 of 25th May 1938 (See Appendix IX-B), the responsibility of feeding the teachers attending the Short Term Courses rests with the Government. The Chairman of the Board again made an effort in 1943-44 to help Government to conduct the Short-term Course, with no better result. In 1945-46 too, for one reason or another, the Short-term Course was not conducted. Thus opportunities for training some 350 Secondary school teachers were lost.

(iii) The Board was always of the opinion that private initiative should be encouraged if proper agencies would undertake to train physical education

instructors. With this idea in view the Board recommended in 1942-43 to Government that a Physical Instructor's qualifying examination should be instituted. The Board framed a graded course, laid down rules regarding admissions for the said examination, fixed dates and centres for conducting these examinations and recommended a particular standard of efficiency for passing the examination. Government were also advised to appoint a Board of Examiners in this connection from time to time. Government however, have paid no heed to this recommendation of the Board, and have thus indirectly discouraged private initiative and public enthusiasm in the field of physical education. Had Government accepted this recommendation of the Board, there would have been a substantial number of candidates qualifying for this examination. This would have helped to remove the dearth of qualified physical instructors, for schools, gymnasias, etc. It would have to some extent satisfied the demand of private institutions who wanted to have a share in training teachers for physical education.

There has been a persistent demand on the part of some private institutions of physical culture to be recognized for conducting the Short Term Course for Secondary school teachers. The question came before the Board more than once. In its deliberations the Board was mainly guided by the following consideration. Government by their Resolution No. 5310 of 25th May, 1938 (see Appendix No. IX-B) had undertaken the responsibility of conducting this course and bear all the expenses of the trainees that would be deputed by schools. Therefore, the Board did not think it desirable to allow Government to throw this responsibility upon others, even in part, and so recommended that Government alone should run the Short Term Course for Secondary school teachers. But when the Board found that Government suspended the Short Term Course for three years for unsubstantial reasons, it framed rules and regulations for recognizing private agencies to run the said Short Term Course and submitted these in December, 1945 to Government for acceptance. The Board had recommended even relaxation of some of the rules with a view to enable private institutions to conduct the course in question, even in the summer of 1945. It is to be regretted that Government has not yet taken a decision on this.

(iv) In 1938 a separate grant on admissible expenditure in physical education, was promised by Government and was fixed at 25 per cent., irrespective of the percentage at which the general grant was paid to Secondary schools (*vide* clause 2-VI of Appendix IX-B). In spite of this clear promise, in 1940-41 the grant for expenditure on physical education paid on an average to Secondary schools was as low as 10 per cent. and during the last seven years was never above 15 per cent. During the course of our tours instances were pointed out where schools received grants as low as 5 per cent. of the admissible expenditure. At every budget meeting the Board protested against this low percentage and reminded Government of their own undertaking, but Government could not find their way to carry out their Resolution.

(v) If the Board was to tender advice to Government it was necessary that it should be acquainted with the progress of physical education in the Province, and should have regularly received summaries of the inspection reports from the Physical Education Inspecting Officers. The Board accordingly requested the Director of Public Instruction in 1939, to arrange for the submission of such reports to the Board. But the Director of Public Instruction could not see his way to accede to this request of the Board and the Board remained ignorant of the physical education work in the Province. The only way open to the Chairman of the Board to

be in touch with the physical education work in the Province, was to get his Personal Assistant to tour and submit his reports to the Board. But questions were raised as to whether the Chairman's Personal Assistant was at all a Touring Officer and Government went to the length of retrenching the Personal Assistant's post without consulting the Chairman. Although the retrenchment orders were cancelled by Government later because of the strong representation made by the Chairman, the fact remains that the Board was left without adequate means of obtaining information regarding the work of physical education in the Province.

(vi) In March, 1940, the Board received a communication from the Director of Public Instruction expressing Government's desire to include Military Drill, Route Marches, etc., in the syllabus of physical education in Secondary schools. As the matter was of considerable importance, the Board referred the question to its Standing Sub-Committee. The Chairman collected information regarding courses in Military Education from all the Universities and Military Institutions in India. On the strength of this information the Board recommended to Government that the subject of Military Training deserved serious attention of Government, and that Cadet Crops should be established for Secondary schools at suitable centres. The Board was, however, informed by the Director of Public Instruction on 19th December, 1940, that Government had decided that no action regarding the establishment of a Cadet Crops need be taken until after the termination of the war. Had Government accepted and implemented the Board's recommendation and established Cadet Crops, we feel that by now some 5,000 trained cadets would have become available from Secondary schools.

5. The Status, Constitution, Powers, Duties, etc., of the Board of Physical Education.

Our study of the work done by the Board of Physical Education during eight years of its existence, and of the defects in its original and changed constitutions (the original constitution of the Board was changed twice in eight years), has convinced us that there must be a radical change in the status, constitution, powers and duties of the Board, if the Board is to be of real help to Government in implementing our recommendations contained in this Report.

Our recommendations are :—

(i) *The Status of the Board.*—The Board shall be a Statutory Body.

(ii) *Membership.*—The Board shall consist of 16 non-official members including the Chairman, nominated by the Minister for Education, three members working ex-officio, and two co-opted by the Board subject to the approval of the Minister for Education.

(a) *Non-Officials*—

1. The Principal of a College affiliated to the Bombay University. When other regional universities come into existence, this representation will be by rotation along with the Bombay University.
2. The Head of a non-Government Secondary school.
3. One Assistant teacher working in a non-Government Secondary school.
4. The Principal of a Primary Training College.
5. One diploma or degree holder in physical education, trained in the Bombay Province.

6. One member of Associations controlling various sports and athletics.
7. One member of one of the recognised gymnasia.
8. One Head mistress of a non-Government Secondary school.
9. One non-official medical man.
10. One member of one of the social welfare agencies working in the Province.
11. One member of the Ahmedabad or the Bombay Mill Owners' Association, nominated alternatively.
12. One representative of the Bombay Municipality.
13. One officer from the University Officers' Training Corps, not below the rank of a Major.
- 14 and 15. Two members of the Legislative Assembly, one of whom should be a lady.

(b) *Ex-officio*—

16. The Director of Public Instruction, Bombay Province.
17. The Director of Public Health, Bombay Province.
18. The Principal of the Government Training Centre for Physical Education.

(c) *Co-opted*—

- 19 and 20. Two members coopted by the Board subject to the approval of the Minister for Education.

(d) *The Chairman of the Board*—

21. The Chairman of the Board shall be non-official and nominated by the Minister for Education.

(iii) *Nomination of the personnel of the Board*—

The personnel of the Board should be nominated every five years.

(iv) *Functions, Powers and Duties of the Board*—

- (i) Government as a rule shall consult the Board on every matter concerning physical education and recreation in the Province.
- (ii) The Board shall tender advice on all matters relating to the development and administration of physical education. It shall be obligatory on the part of Government, as far as possible, to carry out the advice tendered by the Board.
- (iii) The Board shall be entitled to be supplied with all information that it requires for its deliberations from all the Departments.
- (iv) The Board shall be entitled to get information regarding inspection in physical education either from the Chief Inspector of Physical Education or from the other Inspectors of Physical Education in the Divisions. The Board shall have powers to suggest suitable measures for improving the inspection work of physical education.

- (v) The members of the Board shall be entitled to inspect centres of Physical Education, including Government and aided schools with the previous consent of the Board, and to give such advice to the authorities, as they deem necessary.
- (vi) The Board shall frame and revise courses of physical education for the different training institutions, and also for the Primary and Secondary schools, whenever necessary. Government shall not introduce any changes in the syllabi of physical education in different educational institutions including training colleges, without getting the changes approved by the Board of Physical Education.
- (vii) Whenever new courses for training teachers of physical education are to be instituted or periodical sessions of any such courses in physical education are to be held, Government will request the Board to frame rules and regulations and work out other details regarding these courses, for their acceptance.
- (viii) Appointments to the teaching staff in the Government training centres for physical education, shall be made in consultation with the Chairman of the Board, and the Head of the Government Training Centre concerned, so far as it does not affect the Statutory functions of the Public Service Commission to make selection of candidates for appointments laid down in the Public Service Commission Function Rules.
- (ix) The Board shall advise Government in regard to the acquisition of play-grounds and playing-fields for gymnasia as well as for schools.
- (x) The Board's advice shall be taken by Government in framing the annual budget for physical education.
- (xi) The Board should be the agency to undertake wide and intensive propaganda for promoting and popularising physical education and recreation. For this a staff of full-time propagandists and publicists should be appointed under the Board. Propaganda and publicity should be undertaken through cinemas, broad-casting, pamphlets, lectures, rallies, demonstrations, etc.
- (xii) The Board shall be responsible for assessing and disbursing grants to gymnasia, private bodies and other organisations promoting physical education and recreation, for the non-school going population.
- (xiii) The Board should be entrusted with the organisation and promotion and control of recreation for the adults and non-school-going population. The Board shall prepare the necessary budget for recreation, for payment of grants, and for propaganda, and submit it directly to Government. As soon as possible, a separate Department of Physical Education and Recreation should be brought into existence directly under the Government for looking after the recreation of adults and the non-school-going population. When the Department is brought into existence, the functions of the Board shall be advisory.

6. Staff and Office of the Board.

If the Board is to discharge its administrative, executive and advisory duties satisfactorily, it must have the following staff as a minimum :—

I. The post of the Personal Assistant to the Chairman should be abolished, and a post of a full-time paid Secretary should be created. This Secretary shall be the Executive Officer of the Board with adequate clerical and other assistance. The Secretary should not be a member of the Board. There should be two officers working under the Secretary—

(a) A Recreation Officer in charge of recreation. This Officer shall have a staff stationed in various district centres throughout the Province for promoting recreation.

(b) A Propaganda Officer in charge of propaganda, and publicity with an adequate staff.

II. The Secretary's post shall be the superior post and he shall be an Officer in the Bombay Educational Service Class II with a starting salary of not less than two hundred and fifty rupees per month plus other allowances. The officers in charge of recreation and propaganda shall be touring Officers in the Bombay Educational Service Class II. The Secretary may be permitted to tour in the Province if required.

The Office of the Board shall be in Bombay.

7. How We Justify our Recommendations Regarding the Board.

We have recommended that the status of the Board should be statutory for the following reasons.

The Board of Physical Education was first created by an executive order of Government. Within five years, its constitution was twice changed. Original proportion of official and non-official members was 3 : 6. The Board's work was getting on smoothly. In 1940, however, this proportion was disturbed in favour of the official element by appointing one more official to the Board. Again in 1943, the Board was reconstituted by Government and as there was no specific binding upon Government to see that the different interests concerned were equitably represented on the Board, the Government appointed four Head Masters of Secondary schools three working and one retired, in a group of eight non-officials. The iniquity of the distribution of representation is still more glaring in so far as all the three working Head Masters belonged to Bombay proper. There was no non-official lady and the Northern and the Southern Divisions had no representations, on the Board. Such inequitable representation of interests concerned and such uncalled for changes in the constitution shake the confidence of the public in the Board with the result that the public became indifferent to the working of the Board. If the constitution of the Board and the representation of the different interests on it is fixed, and the representation is equitable, the Board's work will be efficient and carry more weight with the Government and the public. This is possible only if the Board is statutory. Hence we have recommended a statutory status for the Board. Further we are of the opinion that Government would less easily disregard the advice given by the Board, if the Board is statutory.

(b) Another recommendation is that all the members of the Board including the Chairman should be nominated by the Minister for Education. In this we have

followed the constitution of the Education Act of 1944 of Great Britain and that too for very sound reasons. Every Ministry when it comes to power has its own programme for education including physical education. If the Minister for Education is to get sound and constructive advice from the Board, the Board must consist of people who have faith in that programme and such people can come on the Board only by nomination and not by election. Again the Minister for Education is himself an elected member of the Legislature, nay, the whole Ministry consists of elected members and all of them enjoy the confidence of the public. Under the circumstances we do not think it necessary to introduce an additional elective element in the formation of the Board. Hence we have recommended nomination and not election of the members of the Board and its Chairman.

(c) In a third recommendation we have fixed the duration of the personnel of the Board to be five years. This has been done with a view to enable every new Ministry to nominate a new personnel to the Board. We believe even under the forthcoming Provincial Constitution, the Legislature will have a five years' life.

(d) In our recommendations we have assigned executive and administrative powers to the Board. It will be seen that these powers are to be exercised in fields which lie outside the perview of the Educational Department. We have greatly emphasised the need of organising recreation for the non-school going population throughout the Province as an activity inseparably connected with physical education. Gymnasia and associations controlling tournaments and sports are vitally connected with recreation. As there is to-day no well constituted body to take charge of the administrative and executive work for these activities, we have recommended that the Board should be entrusted with his work. Educative propaganda was already the administrative duty of the Chairman of the Board. In our opinion it would not be advisable to make the Educational Department responsible for adult recreation and allied activities. We also feel that when this work of the Board expands, a separate Department of Physical Education and Recreation for adults will have to be constituted, directly under the Government.

(e) We have recommended representation on the Board for a large number of interests. When it is remembered that physical education and recreation of both school-going and non-school-going population is to come under the direct or indirect control of the Board and further when the different aspects of these activities are clearly perceived no explanation will be deemed necessary for these varied interests to be represented on the Board.

(f) The administrative machinery that we have recommended for the Board is the minimum that is necessary. To organise and to promote recreation for the non-school going population in the whole Province is a stupendous job and requires an intelligent man at the head with competent assistants in various districts.

8. Co-ordination of the Different Educational Boards of the Province.

We are of the opinion that the different Boards working in the field of Education in our Province should be co-ordinated so that each Board may understand the view points of the other Boards and conduct their deliberations accordingly. This question was discussed at the Educational Conference held in Poona on 22nd and 23rd June, 1946 and presided over by the Prime Minister, Government of Bombay.

At this Conference, need for co-ordination was admitted on all hands. We make the following recommendation for this co-ordination :—

The Minister for Education should convene a conference of the Chairmen and Secretaries of the different educational Boards and, in consultation with them, chalk out a plan for their co-ordination.

9. An All India Board of Physical Education.

Though divided in different Provinces India is an indivisible unity. We are of the opinion that this national unity of India is to be preserved and promoted by every Provincial Government by every means at their disposal. The unifying capacity of sport and physical education is universally admitted. If sports and physical education were organised on a harmonious basis in different Provinces, leaving ample opportunity for individual development, it will greatly help the preservation and promotion of national unity. This harmony can be brought about, if there is an All-India Board of Physical Education co-ordinating the activities of different Provinces in the field of physical education. We, therefore, recommend that—

The Government of Bombay should take the initiative and make an earnest effort to bring into existence an All-India Board of Physical Education for co-ordinating the work of physical education in the different Provinces of India.

10. Some Members of the Board to Visit Foreign Countries.

As a result of World War II and the experience gained therein, every nation is busy with new plans of education including physical education. It is essential for some members of the Board to have first-hand information of the plans and programmes that may have been already evolved or are in process of evolution, if Government are to be benefitted by the world's experience and knowledge. No doubt in nominating members to the new Board, the Minister for Education will exploit the most up-to-date knowledge of physical education that is available in the Province. But even then we are afraid, the Board may still be lacking in first-hand knowledge of the latest methods followed in other advanced countries, so far as systems and procedures of physical education go. We, therefore, recommend that—

At least four members of the prospective Board of Physical Education should be deputed by Government to travel in foreign countries, such as England, America, Russia and Germany, for getting first-hand knowledge about physical education. The members of the deputation should be assisted by a suitable staff. The information obtained by this deputation will be of great use in planning details abouts the proposed College. The tour of the deputation should last for four to six months.

If Government implement all our recommendations regarding the Board, we feel sure that the Board will prove to be an efficient instrument for promoting the physical welfare of our Province.

CHAPTER VIII.

RECREATION FOR THE PUBLIC.

“The universal impulse to play is a divinely ordered thing. If God gives the instinct, man ought to provide the playground.”—JOSIAH STRONG.

1. No report on Physical Education can be complete without the inclusion of one important aspect of it and that is recreation for the public. Much has been said about the school child in the previous chapters, but all the recommendations and suggestions put forward so far are applicable only to 20 per cent., of the population. In other countries provisions for adult recreation has been a thing apart from provision of recreation for children which has been the concern of the schools and the Education Department. But in other countries, every child is a school going child, and recreative facilities are available for all children till about the age of 15 years. In India conditions are different and hence in this respect, the problem of recreation for the public differs from that in other countries. Not every child is a school-going child, far from it. There are masses of children of school-going age who will never be able to avail themselves of opportunities for recreation provided in schools. Recreation for the public therefore, will include the adult as well as the non-school-going youth, and this forms about 80 per cent. of the population of India. No schemes of physical education can ever prove effective if this large percentage is neglected and nothing is done for its health, welfare and happiness.

2. It is hardly necessary to enter into the reasons why recreation is essential. The objectives have been reiterated several times already earlier in this Report. Health, welfare, fresh vigour and strength, character formation, citizenship, the enjoyment of the right use of leisure, the development of the team spirit and the social spirit need not be enlarged upon. Mass recreation has many characteristics of crowd behaviour and it involves an abundance of emotional response which form social and moral values. Social processes of competition, co-operative accommodation, assimilation and other adjustments to situations in life are exhibited. There is much maladjustment in life due to rapid social changes. Social problems have a tendency to centre in slums and over-crowded areas, and juvenile delinquency, disorderliness and criminal offences are common. Recreation provides opportunities for character building, respect for rules and laws, respect and consideration for others, leadership and self-government through group participation and it also gives a healthy outlet for the excess energies of adults and children. No other better words can sum up the reasons and the necessity for recreation than Schiller's who says—“Man plays only when he is a human being in the fullest sense of the word, and he has reached his full humanity only when he plays”.

3. Play, therefore, is universal, play is as old as human nature. That the remotest of civilizations like Egypt and Babylonia played, we know from the toys and other excavations of archaeologists. Play among primitive peoples is well known as exhibited in their dances and festivals. Play and recreation in ancient India centering round the old ‘Akhadas’ needs no comment. But play in an organized form is of recent origin. The modern play movement in the countries where it is most advanced is only a little more than half a century old. Each country had its own peculiar beginning and developed

according to the social and economic trends existing there. In most of the Western countries organized play for the adult and the child has become a State responsibility. A short survey of a few outstanding recreation movements may be enlightening.

4. The Recreation Movement in England.

The type of physical education of any nation usually reflects the customs, ideas, beliefs and needs of a nation. The British have been known for their interest in organized games, especially team games, and "playing the game" has almost become a national motto. The recreation movement in England was entirely sponsored by private agencies and voluntary enterprise. It is only recently that it has become centralised and co-ordinated. The figures of 1925 reveal some interesting facts which may form an interesting parallel to our own conditions. In this year, in 94 towns with a population of about seven million there was only one foot ball ground for every 8,000 people and one children's play-ground for every 11,000 people. *In 20 years, thousands of acres of land have been added for playing fields and recreation grounds. Holiday centres, play centres, clubs, camps and industrial recreation have been organised. Besides outdoor physical activities in the form of sports and games, other recreative features of art work, musical and dramatic activities and folk dancing, have been included in the adult recreation programmes. Leaders have been trained, associations have been formed to advise local bodies and encourage the right use of leisure. Every locality has a Playing Fields Association and the aim has not been merely to provide open air activity but also other facilities for recreation in the life of the workman and the labourer. The Youth Hostel Movement and the National Playing Fields Association have been mainly instrumental in encouraging and organizing recreation for the population. The Workers Travel Association has arranged for cheap and comfortable holidays for thousands of people. The Co-operative Holiday Association has provided, erected and leased guest houses at various health resorts both in England and outside. Thus health and social recreative needs of children and adults have received a tremendous impetus and support.

5. The Recreation Movement in Germany.

Germany was one of the first countries to develop a systematic programme of physical education in schools, but the play movement in Germany started only in 1892, when it was realized that the public play-grounds where recreative ideals should be kept permanent, were necessary. The German ideals stand in contrast to the English ideals of national recreation and national fitness. While the English aim has been a recreation programme for the joy of it, the German ideal has been development of strong bodies with one aim in view—service to Germany. Physical education in German schools and colleges is of major importance and is considered to be a preliminary to military training and the laying of a foundation for the national army and a greater Germany. National Socialism took over physical education as the chief medium through which it could carry out its political and military programme. How well this aim was fulfilled World War II has proved, but it has also proved how disastrous it is to regiment leisure for military purposes. Let us for a moment forget the aims behind the German recreation movement and only examine the results. Ample provision has been made for the recreation of the

*Sir Noel Curtis Bennet—"Contributions of Sport and Recreation to British Life and Character."

adults as well as the children in the German scheme of recreation. Play grounds, gymnasia and public swimming baths are numerous and well equipped. Walking, hiking facilitated by the establishment of Youth Inns, and mountain climbing have become national sports. Music festivals, dramatic clubs and folk dancing form a vital part of German life. Athletic Associations voluntary organizations are, fully or partially, subsidised and the National Committee of Physical Education centralises and co-ordinates all sports, clubs and play-grounds.

6. The Recreation Movement in Russia.

The aim of Russian Physical Education can best be described as follows—
 “Proletarian physical culture in the U. S. S. R.aims at the restoration of health of the working classes and tries to combat the one sided and often mutilated efforts of implements(it) should not only strengthen the health increase labour productivity.....(it) should also train in them certain occupational habits and accustom them to distribute their energies regularly during the working day” Panov. That Physical Education in the U. S. S. R. has been the means of raising the productivity of the factory workers has been amply proved. The dangers of the Revolution of 1917 made the Russians realise the value of such qualities like health, strength, discipline alertness and presence of mind. These qualities have been instilled not only, in the members of the Red Army but the civil population. How severely Russia was tested for her stamina and endurance and how well the Russians stood this test only the epic of St. lingrad can prove !

Two organisations control the physical education and recreation of the people of Russia. The Pioneer Organization which controls the physical education of school children up to the age of 14 to 23 years. There is also the Supreme Council of Physical Culture that came into existence in 1929, and which controls and co-ordinates the needs and interests of the adults. State laws and State control predominate every where. In every way the nation is directed to a tremendous programme which includes all ages from six to sixty. Participation in physical education in the U. S. S. R. is merely a matter of individual choice but it is a rigid requirement directed to the accomplishment of purposes which are synonymous with strength and military power, race betterment and increased production. Of special interest to us in India is the fact that the movement in Russia for national health takes the form of educative propaganda in social hygiene and anti-tobacco and anti-alcohol campaigns.

7. The Recreation Movement in America.

The play-ground movement in America, had a very small beginning with an imitation of the German sand-garden which was supervised play for the very young children. It is not more than 60 years old and in 1900, there were only 10 centres which had play-grounds under leaders. Each city had its own independent movements which were sponsored for the most part by philanthropic and private bodies. But the growth of the movement was phenomenal. The movement soon development from the sand-garden to the play-ground, the small park, the recreation centre, the Civic Art Centre, and Welfare Centre, the Neighbourhood Organisation to the Community Service*. Purchase of play-ground fields in cities and large

* ‘The Play Movement in the U. S. A.’ by Claude Rain-water.

amounts spent on these created a great deal of public enthusiasm, and it was sponsored by private agencies. The year 1906 marks a historic stage in the movement as it was in this year that the Play-ground Association of America (now the National Recreation Association) was formed. This was the first attempt at concerted action towards co-ordination of the movement into a national movement. Gradually, it was realised that municipal support was necessary. School buildings began to be utilised for evening recreation for adults. Lectures and physical activities began and soon developed into clubs, story telling and dramatic clubs, dances, games and athletics. These become more and more a part of the amusement provided for the public. World War I stimulated the movement and recreational facilities of the whole country were mobilised during the period, which resulted in a gigantic recreational programme in the hands of a trained personnel.

The problem of public recreation is no longer handled by private bodies or semi-official agencies. Municipalities, counties and State Governments as well as the Federal Government itself are concerned with the provision for public recreation. State owned parks, recreation areas, swimming facilities, winter sports have been developed a great deal. All institutions, parks, play-grounds, etc., are tax supported. The idea of the State providing and making provisions for play and recreation areas is now an accepted necessity. The movement has assumed national proportions and the play-ground idea has become an integral part of American life.

8. India.

The history of organised recreation in other countries has shown that the State has often encouraged voluntary organisations by financial help. In India recreation has never been organised on a large scale. Whatever has been organised has been done by voluntary bodies, clubs, organisations, gymkhanas, athletic associations, etc., and they have promoted foot-ball, cricket, tennis, hockey, athletics, etc. The Indian Princes have, from time to time given a fillip to sport of various kinds and have patronised and supported sport by handsome financial gifts. These clubs, gymkhanas and associations have been confined to large cities, and towns only, and have been taken advantage of by the higher strata of society as these have been chiefly maintained by high fees. The factory worker or mill-hand or even the middle class have never had an opportunity of taking advantage of them.

In rural areas the voluntary organizations have been the local "Akhadas" and Gymnasias which have produced some excellent material in spite of their being devoid of any financial help from the States. These Akhadas still have voluntary and honorary workers and are run on a philanthropic basis. To the sophisticated urban mind the old "Akhada" may appear to be a crude and primitive institution, but, perhaps very few people realise how great a part these have played and are playing in the promotion of healthy and pleasurable recreation for the villagers and in keeping him fit and active. The type of activities conducted in these Akhadas are indigenous in nature Dandas, Baithakas, the use of clubs, lathis, malkhamb, and wrestling, etc. During the recent tours undertaken, the Committee was impressed by the following:— The excellent service these institutions are rendering in spite of grave handicaps like lack of space, buildings and lack of finances. These Akhadas are still extremely popular with both children and adults, who sometimes travel long distances after a hard day's work to get their physical exercise and even relaxation. The spirit of service is an outstanding and admirable feature of these "Akhadas". They have been maintained mostly by donations and collections as practically no fees are charged from the pupils. Since 1938, Government have

been-alloting a separate Annual grant to these "Akhadas" and gymnasia, but the amount set aside for the purpose does not satisfy even the bare requirements of these institutions. Further, for this meagre grant "Akhadas" have to maintain registers, records, accounts and submit themselves to inspection from Government. A good few of them have thought it better to do without this grant rather than submit to such irksome restrictions.

While appreciating the service of these institutions which are even to-day fulfilling an urgent and popular need, we felt that most of them suffered from lack of systematic organisation and direction and from proper administration. In places like Poona, Amraoti, Baroda etc., they were well organised and well conducted units under a proper staff, but in most of the other institutions, curricula etc., were not well graded, and in almost all, the adult and the child was not separated for his activities and relaxation.

In addition to the efforts of clubs and athletic associations in large towns, and the "Akhadas" in the rural areas, there is a third aspect where initiative for public recreation has been taken by large cities like Calcutta, Madras and Bombay. This has been the maintenance of public play-grounds by Municipalities. This has been of recent inception and is more in line with the modern developments in public recreation in other countries. A brief survey of the play-ground movement in Bombay city, will help to illustrate what has been accomplished.

9. Bombay City.

Till the year 1923, no directed play centres existed in the city of Bombay, where the working class or the non-school-going children could obtain any kind of healthy recreation in the form of physical exercises through games or gymnastics. Nor could they take advantage of the existing clubs and institutions, because most of them would not accept the working class as members. Even where no restrictions of this kind existed, their finances would not permit them to avail themselves of the facilities offered by these clubs.

In 1923 the Bombay Municipal Corporation took the initiative and started three play centres in the most congested areas of the city. The Y. M. C. A. undertook the general supervision of these centres and appointed Physical Directors to be in charge of each centre. The cost of maintenance, apparatus and the pay of these Physical Directors is borne by the Municipality and it gives an annual grant of approximately Rs. 5,000. Experience has shown that these centres have been a great boon to the inhabitants of these localities. An improved health, a higher civic sense and morale has been noticed among those who have constantly utilized these centres for their recreation. In spite of their success and the immeasurable benefits no more centres have been added. This has been stated to be mainly due to lack of funds. Besides these, a few labour welfare centres have been established in the City by the Government. This can hardly be considered adequate for Bombay where the population continues to be on the increase. Though finance has been the main reason for the play-ground movement in Bombay remaining static during the last twenty-three years, the scardakus disposal of land by the Municipal Corporation, the permission granted for buildings without any consideration beyond the protection of the commercial interests of the capitalists, may be justifiably criticized.

In 1872, the area of the City was 11,930 acres and the population 6,44,405 laks. As a result of various expansion and reclamation schemes carried out from time to time the area has increased to 16,761 (about 17,000) acres but the population has also increased to 15 laks (1941 census). In 1946 the population figure is nearer 25 laks. The total area of open spaces, gardens recreation grounds is now 434 acres, of these 378 are maintained by the Bombay Municipality. These open spaces are very unevenly distributed all over the city. Localities like Girgaum and Bhuleshwar cannot breath because of the lack of these 'lungs of the city'. The table given below will give at a glance the position regarding these open spaces :—

Name of Ward.	Number of open spaces.	Area of ward in acres.	Population 1941 census.	Area of Municipal open spaces in acres.	Area per thousand population.
1	2	3	4	5	6
A	11	2,589	1,02,239	136	1.33
B	9	608	1,35,012	4.5	0.03
C	3	441	2,11,902	3.0	0.01
D	5	1,786	2,44,376	23	0.09
E	12	1,147	2,63,843	97	0.37
F	29	5,778	2,21,252	42	0.19
G	11	4,412	3,11,229	72.5	0.23
Total	80	16,671	14,89,853	378	0.33

This table illustrates two main facts, one the unequal distribution of open spaces e.g. A Ward with a population of roughly one lakh has 136 acres of open space, giving a little over one acre per 1,000 population. Even this falls short and very much so of the minimum laid down of four acres to 1,000 population*. In the case of C Ward for instance, the provision is most inadequate where the area of open spaces for over two lakhs of people is only three acres and the open spaces per thousand is 0.01 acre.

Standards at present in European countries vary from four to seven acres per thousand population. According to this standard at least 10 per cent., area of the town must be preserved permanently as public open spaces. Compare Bombay to cities like Wolverhampton or Manchester, which are also industrial and highly congested cities. Wolverhampton has 2.30 acres of open space per 1,000 population and Manchester has 3 acres. This is regarded by that Government as most inadequate. The average of open space in Bombay per 1,000 population works out only to 0.5 (See Appendix No. X).

*Bombay City and Suburbs Post War Development Committee—Preliminary Report, 1946.

The recommendations of the "Bombay City and Suburbs Post War Development Committee", as laid down in their "Preliminary Report of the Development of Suburbs and Town Planning Panel, 1946" are worth mentioning. They say "We recommend that a standard of four acres per 1,000 population be adopted in the preparation of the Master plan for the City proper. Taking the present population of the City as 25 lacs, the open spaces required as per this standard works out to 10,000 acres. We are recommending this low standard because we are convinced that the cost of acquisition of land in the city would be very high. We further recommend that the standard for the suburban area should be seven acres per 1,000 population as the value of land in this region is not high".

There are about 80 open spaces (378 acres) in the city to-day maintained by the Bombay Municipality. Besides these there are about 35 other spaces maintained by the P. W. D., the Port Trust, the Railways and other bodies. At least 40 per cent., of the spaces maintained by the Municipality are large enough to be utilised for athletics, gymnastics, wrestling and for small area games, major games. These facts are sufficient data to illustrate how much can and still remains to be done to promote public recreation even in a congested city like Bombay.

In view of what has been stated above, in view of the necessity for public recreation and in view of the existing conditions, we make the following recommendation for the immediate development and planning of recreation for the public in the Province of Bombay.

10. Recommendations.

(i) That play-grounds and open spaces must be made available to every rural and urban area for the recreation of the public. The minimum requirement for a beginning should be at least four acres per 1,000 population*. In rural areas the provision should be more liberal, seven acres per 1,000 population.

(ii) That school play-grounds and school buildings and public buildings, wherever possible, should be utilised to the maximum for the recreation of the public under directed leadership.

(iii) That provision for play-grounds and open spaces must form an important feature in future town-planning schemes.

(iv) That the Provincial Government should, through legislation, make it obligatory on all municipalities and local bodies to make adequate provisions for the recreation of the public in the form of leadership of play-grounds, play centres, equipment and finances.

(v) That the maintenance, supervision and direction of such play-grounds and open spaces should be as much a responsibility and concern of municipalities and local bodies as maintenance of hospitals and sanitation.

(vi) That wherever possible, private enterprise must be encouraged for the starting and running of suitable centres. The expenses incurred by these should be admissible for a Government Recreational grant.

(vii) That municipalities and local bodies should be empowered by legislature to levy taxes for the meeting of expenditure incurred on the provision for public recreation.

(vii) That Government should pay a grant of 50 per cent. to these local bodies towards expenditure on public recreation.

(ix) That to provide for this additional expenditures in the budget, the entire proceeds of the Entertainment tax levied by Government should be diverted towards the provision of recreational facilities and physical education. The Entertainment Tax however should be substantially enhanced and should be supplemented by a grant from the Central Government.

(x) That private gymnasia should be treated as institutions providing recreation.

(xi) That old "Akhadas" gymnasia should be revived and reconstructed on more scientific and modern lines and should be liberally supported by Government grants—in no cases such grants being less than 50 per cent.

(xii) That some attempts should be made particularly in large cities like Bombay, by various sports and athletic associations to form a Federation where individual and united efforts can be made towards the establishment and organization of public recreation.

(xiii) That Recreational facilities for industrial workers should be provided for by their employees. In addition Government should start and maintain Model Recreation Centres.

(xiv) Till such time that an ideal of a separate Department of Recreation can be established, the promotion of public recreation should be controlled by the Board of Physical Education and its officers. The duty of this Board will be to explore all possible fields of propaganda to make healthy recreation popular among the masses, to inspect and supervise recreation centres and to offer technical advice to any individual or agency regarding physical education and recreational activities in the Province.

(xv) That a Provincial Recreational Officer be appointed and should be assisted by a staff of District Officers. The duty of these officers would be to promote and popularize recreation and to render all possible help to local and other private bodies by giving the necessary technical advice.

(xvi) That a satisfactory co-ordination between the Board of Physical Education and the Municipal and Local Bodies and the Government Welfare and Labour organizations in the matter of public recreation must be established.

(xvii) Finally the ideal to be aimed at in the field of public recreation is an entirely separate "Department of Recreation" which must be brought into existence as soon as possible. Every district town and Taluka head quarter should have grounds where organised games, sports, competitions and tournaments will be possible. These facilities must also be extended to the villages.

The above recommendations only aim at making a beginning towards the popularization and promotion of healthy recreation for the public. Much will have to be accomplished before facilities can become available to every individual in the Province who wishes to take advantage of some kind of recreation. If there is an immediate, deliberate and willing effort, the Department of Recreation as we visualise it should materialise within the next decade. This is the ideal that must be aimed at with suitable modifications from time to time to meet changing conditions and suit local peculiarities.

11. The Department of Recreation.

The Province of Bombay must have a Department of Recreation with a competent staff and an adequate machinery to organise and execute measures for public recreation. Intensive propaganda about recreation with a view to making the public health-conscious and play-conscious must be its first concern. This may be done by means of the screen, the radio, newspapers, publications of literature and bulletins, organisation of carnivals, athletic meets, and by personal contact. Adequate recreational planning must be undertaken with a trained executive to organize and direct programmes of activities according to localities. The Department must requisition every available open space and must work out plans for the utilisation of school play-grounds and other buildings, for the recreation of adults. The Recreation Department must help to train leaders, it must be able to secure satisfactory equipment for play-grounds, and help local and private enterprise. Besides helping private bodies it must inspect and control the work of these voluntary agencies. Scientific surveys for the needs of the country so as to make available the largest possible number of recreational opportunities must be carried out. Apart from encouraging physical activities and games, the Department must undertake responsibility for other recreation in the form of libraries open air and otherwise, hobby clubs, art clubs, indigenous folk dancing, and music, in connection with local festivals and celebrations. They may also undertake adult education and dissemination of knowledge on civic matters.

The Recreation Department must maintain a Service and Information Bureau. Advice must be available for all types of recreational activities with regard to size of fields for particular games and sports and equipment. It must be able to provide information on hiking tours, on camping sites, on picnic spots on cheap vacation places. It must encourage camping activities, boating and hiking clubs. The Recreation Department can render sterling service to schools. Grounds must be made available to schools for their athletic meets. Schools may be loaned costumes and stage scenery for their celebrations at a low cost. A list of plays which are suitable for production may also be made available. These are some of the ways in which a Department of Recreation can serve the Province. Most of all, the Director or Commissioner who heads the Department must be a man with a vision, whose staff has "esprit" and who has an executive which can, not merely administrate play-grounds and play centres, but can organise human life!

12. Industrial Recreation.

The industrial worker needs recreation for exactly the same reasons as any other member of the community, perhaps a little more, for industrialization tends to dehumanise the life of the worker in a factory or a mill. Machine-run industries tend to eliminate the creative instincts and factory work fails to offer opportunities for self expression. There can be little joy of work where labour in industry is under unhygienic conditions amidst nerve racking vibrations and where work is often a repetitive task of placing nuts on bolts or watching for a thread to break amidst the fantastic revolutions of a gigantic machine! Labour and leisure cannot be treated as two separate departments of life. They act and re-act on one another in various ways. Leisure is a safety valve which civilization has devised and if used rightly can result in happiness, efficiency, self experience and cultural advancement of the worker. A few happy hours spent in wholesome recreation of the physical and cultural type will bring a worker refreshed to his daily task. To-day

the leisure hours of the worker are often ill-spent in dissipation, drink and drugs, which temporarily give him the exhilaration he so badly needs or the leisure is catered for by commercialised and professional forms of recreation.

The number of large industries in India that have organised recreation for their workers number very few. The time has gone when it was a question of waiting for the good will and enterprise of the employer. Legislation and legislation alone can and must enforce minimum provision to be made by employers for the the health, welfare and happiness of their employees. Added to this Government must organise industrial recreation on a large scale.

Gymnasia, athletic fields, swimming pools, children's play-grounds, camps, play-ground directors and camp directors are some of the provisions made in cities in the U. S. A. for employees of industrialist concerns. In some cases the employee themselves contribute towards the upkeep of these recreation areas. In other places money collected from factory workers on the basis of production is utilised for welfare and recreational purposes. In England for example the Miner's Welfare Fund levies half penny for every ton of coal that mined. The annual collection amounts to almost five million rupees and this is spent on the sport and recreation of the miners and their families. With standards of living so low and with wages so poor in India we cannot expect to achieve this on a larger scale; but the large dividends reaped by capitalist employers can help to provide some relief in this direction.

Prohibition that is being contemplated cannot be enforced by legal measures alone. Popular counter-attractions must be provided to engage the leisure time of all classes. Recreation and physical education will be one of the effective counterattractions that can be suggested.

Finances directed to the establishment of centres of recreation and the provision for a healthy outlet for the energies of the workers would definitely be a better method of controlling the evils of drink.

Besides providing wrestling pits, gymnasia, play-grounds and opportunities for physical recreation and sport, facilities must be provided for intellectual and cultural recreation. Local festivals and bank holidays can be utilized for the promotion of cultural activities among the employees. These would also give facilities to the families of the workers and encourage a social spirit of 'camaraderie'. Individual industries could even make these programmes monthly events.

To run a successful programme of recreation, it is essential that the recreation centres must be within a short distance of the houses of the workers and within the 'locale' of the industry. The time for these activities must be the leisure hours of the workers and there must be considerable amount of freedom in the choice of recreation on the part of the workers. Interest of all kinds must be catered for, if the final aim of building up an inter-family and inter-communal fellowship is to be realised. Crowds and masses can thus be turned into communities through joyous recreative activities, activities such as festival celebrations, folk dances, community songs and other indigenous modes of recreation.

A note of warning may be struck in connection with all organised recreation conducted by an employer for his employees. It has already been mentioned that industrial recreation should have as its objective joy and happiness and health and amusement. This will naturally increase the efficiency of the workers, but

it would be disastrous for an employer to set this as a conscious aim before his workers. Recreation can become a drudgery if there is an attempt by an employer to force upon his employees a programme of recreative activities for utilitarian reasons or as an increased efficiency plan. Study of organised recreation in industry in other countries which have advanced a great deal in this direction, has shown that very often one of the chief causes of failure has been the misdirected zeal of employers whose plans have been formulated for selfish reasons.

The ideal community or recreative centre would be that where democracy is in action, where employees themselves have a hand and a share in planning and guiding their recreative activities, where building up of personal relationships, co-operation, esprit-de-crops will contribute finally to the repair of "Damaged humanity," which as Dr. L. P. Jacks has described is "a peculiar product of life in cities and which constitutes an enormous debt in the books of society and if allowed to go unchecked may ultimately prove the bankruptcy of civilization."

CHAPTER IX.

SUMMARY OF RECOMMENDATIONS.

CHAPTER II—*Ideals of Physical Education and some Aspects of the Scheme.*

1. The ideal of physical education should be national and world citizenship.
2. The programme of physical education should aim at preparing the students for a civil and a military career.

CHAPTER III—*Training Institute for Physical Education, Kandivali*

3. The Training Institute for Physical Education, Kandivali, should continue to function till the graduates of the proposed College of Physical Education are available. In the meantime, Government should try their best to make good the many short-comings from which the Institute is at present suffering.

4. The Institute should be shifted to the site proposed for the College of Physical Education.

5. The present site of the Institute should be reserved as a camping site for educational institutions.

6. As long as the Institute continues to function on the present site, the following steps should be taken to improve the conditions prevailing there :—

(a) Effective measures should be adopted to check malaria.

(b) A bus should be provided for the Institute.

(c) An Initial expenditure of Rs. 5,000 on the Library as well as on the Laboratory should be sanctioned and a recurring annual grant of Rs. 1,500 and Rs. 500 respectively should be provided for each separately.

(d) An extension of the telephone should be fitted to the Principal's bungalow.

(e) A separate telephone should be provided for the students' hostel.

(f) Charges for the mess establishment should be borne by Government.

(g) The dispensary, Women's hostel and the Lady Assistant's quarters should be fitted with electricity.

(h) Arrangements for adequate water supply should be made.

7. Diploma holders in Physical Education should get a flat increment of Rs. 25 in their scales of salaries, their total load of work being the same as that of other teachers.

8. (a) The Principal's post and the posts of the staff of the Institute should be reconstituted as recommended in paragraph 7—(iv) of this Chapter.

(i) The Principal's post to be in B.E.S. Class I. Mr. P. M. Joseph to continue as the Principal but in B.E.S. Class I on a salary of not less than Rs. 600 per month *plus* the usual allowances.

(ii) The Senior Assistant to be in B.E.S. Class II on Rs. 250 per month *plus* the usual allowances.

(iii) The Junior Assistants to be in B.E.S. Class II, with the usual allowances.

(b) The reconstituted posts of the abovementioned Assistants should be filled in temporarily by the present incumbents.

(c) The present staff to be replaced by persons with higher academic and technical qualifications when the College is started.

(d) The present staff should then be absorbed in the Educational Department. Their absorption should precede their relief from their posts.

(e) Three experts in physical activities should be appointed as full-time workers.

9. Changes in the syllabus of the Diploma Course should be made as given in paragraph 8 of this Chapter.

10. Arrangements for Practice Teaching should be made in selected local schools under the supervision of qualified physical education teachers of such schools, these teachers being paid at Rs. 1-8-0 per lesson.

CHAPTER IV—*College of Physical Education and Other Institutes for Training Physical Education Teachers.*

11. The Government of Bombay should persuade the University to institute a Faculty of Physical Education and offer a degree in that subject.

12. The University of Bombay should further be invited to encourage post-graduate research in Physical Education.

13. *College of Physical Education.*—

(i) The Government should immediately establish the recommended College of Physical Education.

(ii) The Course of the College of the Physical Education should be spread over four years. There should be bifurcation at the end of two years—one branch specialising in physical education and the other in recreation.

(iii) The syllabus framed for the College as given in Appendix I—A should be followed.

(iv) Military training of the standard required for the 'B' Certificate examination should be completed in the first two years' course.

(v) There should be nine months of instruction at the College, and one month of camp.

(vi) As a temporary measure a highly qualified staff for physical education should be recruited for the College on a contract basis.

(vii) For the permanent staff, suitably qualified persons should be recruited, trained in India and abroad, and then posted on the staff of the College.

(viii) The scales of salaries for the staff should be attractive as recommended.

(ix) The College should be located in Bombay on the site of the Lloyds Recreation Ground and an adjacent plot near Church Gate station or in Poona on a suitable site.

(x) The College should be fully equipped with the required buildings, laboratories, libraries and other facilities.

(xi) Qualification for admission to the College should be Matriculation or an equivalent examination.

(xii) Diploma holders of the present Institute may be admitted to the College with two years' exemption. This facility should be given only in the first four years of the College.

(xiii) Age for admission should be above 16 and below 21.

(xiv) The number of students in each class should be 100, 40 seats being reserved for Women students.

(xv) Tuition should be free.

(xvi) 25 per cent. of the students should get stipends amounting to Rs. 300 each, per year.

(xvii) Salary scale for the graduates in physical education should be Rs. 150—5—200 E.B. 10—250.

14. *Short Term Course in Physical Education for Secondary School Teachers.*—

(i) Two sessions should be conducted every year, 250 candidates being admitted to each session.

(ii) The duration of the session should be two and half months.

(iii) The Courses should be conducted by Government.

(iv) This Course should be conducted for five years.

(v) A Chief Instructor should be appointed in charge of the Course.

(vi) Suitable Diploma holders from Government Educational Institutions should be deputed to work as Instructors for each session of the Course.

(vii) The syllabus already in use and given in Appendix I-C (i) should be followed.

15. *Certificate Course for Physical Education.*—

(i) Admission to the Course should be open to Matriculates or candidates with equivalent qualification.

(ii) The scale of salary of a Certificate holder in Government service should be Rs. 60—5—100 E.B. 10—150.

(iii) Private Institutions should be recognised for conducting the Course and recognition should be granted subject to rules given in Appendix XII.

(iv) The duration of the Course should be one academic year.

(v) Institutions conducting the Course should receive 50 per cent. grant on the recurring as well as non-recurring expenditure.

(vi) The Syllabus for the Course should be followed as given in Appendix I.-D.

(vii) If private agencies do not come forward to conduct the Course before the end of 1949, Government should conduct the Course themselves.

16. *Training of Primary Teachers in Physical Education.*—

(i) Every Primary training institution should include physical education as a compulsory subject in its curriculum and the syllabus given in Appendix I-F should be followed.

(ii) Short Courses for physical education for Primary teachers should be conducted as recommended.

(iii) This scheme should be continued for a period of four years.

17. Physical Education should be made a compulsory subject for the B.T. and T.D. Courses.

18. After 1950 no teacher who is not qualified in one of the courses recommended should be recruited to the teaching profession.

CHAPTER V—*Physical Education in Schools.*

19. Physical Education should be included among the compulsory subjects given in the Grant-in-Aid Code of the Department of Education.

20. Physical Education should be an examination subject with the status of a major subject.

21. A daily period of at least forty minutes should be allotted to physical education for every class.

22. The number of pupils reporting for physical instruction under one teacher should not exceed 40.

23. In addition to instruction during the school time, facilities and leadership should be provided for participation and specialization after school hours. Intra-mural and extra-mural competitions should be organised for all pupils.

24. Physical education activities are to be conducted in the morning or in the evening.

25. Schools should be conducted in two sessions in the morning and late afternoon, leaving the hot hours of noon for rest and relaxation; or the school may be conducted in a single morning session.

26. To enable more time to be devoted to physical education, the academic year should begin in November, immediately after the Diwali vacation instead of in June after the summer vacation as at present.

27. In Primary schools, class-room teachers must teach and promote physical education.

28. In Secondary schools, physical education teachers should be appointed at least in the ratio of one teacher per every 250 pupils. Women teachers should take classes for girls.

29. While the physical education teacher is to take class-room subjects also, his total load of work including physical education work should be on a par with the load of work of the other teachers.

30. A qualified teacher of physical education employed by a school should necessarily be given a share in organizing and teaching it.

31. The ideal of co-ordination between class-room teaching and physical education can be brought about when class-room teachers help in physical education work, and physical education teachers take some class-room subjects.

32. A physical education teacher should enjoy the same status and privileges enjoyed by the other trained graduate teachers.

33. A physical education teacher should be entitled to an additional salary of Rs. 25 per month by virtue of his special qualification.

34. The syllabus of physical activities prepared by the Old Students' Association of the Kandivali Training Institute should be used as a suitable syllabus for Secondary schools, as an initial measure.

35. The Board of Physical Education should take up the preparation of a similar syllabus for Primary schools on the basis of lesson plans.

36. Camping should form an essential part of school programme. No pupil should be allowed to complete the High School Course without completing at least one month of camping.

37. Suitable sites should be developed for school camping.

38. As a part of camping, it will be possible to introduce programmes involving some national service such as liquidation of illiteracy or contribution of labour for some nation building activities like road building, land reclamation, etc.

39. Every school with a total strength of 250 pupils or less should have a minimum play-ground area of 3 acres and for every additional 250 pupils $1\frac{1}{2}$ acres of play-ground should be added. Government should aid schools to get the necessary land by instituting land acquisition proceedings wherever necessary and also by arranging to give loans when necessary to school managements on the basis of an easy repayment plan.

40. Secondary schools should have a gymnasium of their own to carry on activities during the monsoon, and to promote certain types of activities conducted in an indoor setting.

41. Schools which are now situated in congested areas and have no adequate play-grounds should as an immediate but temporary measure, provide vacant class-room space for conducting physical activities.

42. In future Town-Planning Schemes, provision should be made for sites for Primary schools to the extent of three to five acres and for Secondary schools seven to fifteen acres.

43. A Committee should be appointed to investigate the possibility of establishing a School Town for Bombay City Secondary Schools.

44. The open space obtained in Ahmedabad, by breaking the City wall should be reserved for play-grounds and recreation centres.

45. Pupils and teachers should participate in physical activities in an appropriate uniform.

46. Facilities should be provided for washing and changing after physical activities.

47. Expenses on costly games like cricket and tennis should not be admissible for Government grant if such expenditure exceeds ten per cent. of the total expenses under physical education.

48. Grant-in-Aid on physical education—recurring and non-recurring—should be 50 per cent. of the admissible expenditure.

49. A Provincial Inspector of Physical Education should be appointed with his office attached to the Director of Public Instruction's Office. He should be assisted by three Physical Education Inspectors in each district, one of them being a woman.

50. Activities of a military type involving strict discipline toughening and daring should be included in the physical education programme for the boys of the upper classes of the High school.

51. Junior Cadet Corps should be organized in schools, membership to which will be voluntary.

52. School Volunteer Corps, other than the Junior Cadet Corps, may be started in Secondary schools to train and enable those intending to render social service, and service in times of emergency.

CHAPTER VI—*Health of the School Child.*

53. School text-books should contain progressive lessons in health and hygiene and it should be the duty of the class teacher to see that these lessons are continually put into practical use.

54. Mal-nutrition is rampant among all school children and as the children are exhausted by long periods of study they must be supplied with adequate food to the extent of about 800 calories per day. A part of this diet should be milk.

55. Feeding should be arranged to suit the school hours.

56. The responsibility of such feeding should rest entirely with Government where the poor are concerned. The middle class and the well-to-do should, however, be asked to contribute according to their means.

57. Temple charities and Sadavartas should be compelled by law to divert their resources to the feeding of school children.

58. Medical inspection should rank next to nutrition as a factor in building up the health of the school child.

59. Medical inspection should be carried out in the school during school hours and in the presence of the Almoner, physical education teacher, class teacher and if possible, the parents. The physical education teacher should keep himself in touch with the medical record of each child under his charge. Every record should be discussed by the Medical Officer with the physical education teacher and the class teacher in order to hasten the all-round development of each child.

60. Routine medical inspection should be carried out on entry into the Primary school at approximately the 6th year, and at the ages of 11 and 14, whether the child is in the Primary school or the Secondary School and again at 17, if the pupil is still in school.

61. In cases of abnormalities, medical examinations should be carried out every six months.

62. A duplicate medical record should be maintained for each child and one copy should accompany the child from school to school.

63. Height and weight records should be taken by the physical education teacher and the class teacher not less than twice a year and absence of progress should be notified to the Medical authority.

64. There should be a conference between the parents, the teacher, the medical officer and the teacher of physical education whenever a pupil requires help.

65. Annual or six monthly conference of the parents and the children should be held by the class teacher and the physical education teacher in order to get all of them interested in the development of the child as a whole.

66. Follow-up work has not received the appreciation it deserves from both the teachers and the parents. The former should consider it his prime duty to get the child attended to at the follow-up centre when established, and as frequently as may be possible and to keep the parents informed about the same through the Almoner. The parents should cooperate with the teachers and should make the home conditions as favourable as possible, both for the physical and intellectual development of the child.

67. The medical profession should be adequately paid for the services rendered. The service should be free to all children who have not the means to pay. The middle class and the well-to-do should, however, be requested to pay according to their means.

68. A School Medical Service with its manifold departments of examination, treatment, operations and follow-up work should be established under the aegis of the Educational Department for each district of the Province.

69. A Chief School Medical Officer should be appointed for the Province to administer the School Medical Service which should contain a sufficient number of doctors for the administrative and executive duties of medical inspection and treatment of school children.

70. The Provincial Medical Officer should have under him a Statistics Department for examination of figures obtained at the Medical Inspections.

71. The District School Medical Officer should be entrusted with the organization, supervision and administration of the personnel in his district.

72. The services of local practitioners should in time be replaced by full time diplomated medical inspectors and clinicians as trained personnel becomes available.

73. A diploma or a degree course in school health on the lines of the diploma or degree in hygiene, dentistry, ophthalmology, etc., should be instituted by the medical training institutes or by the University.

74. A similar diploma should also be instituted for the Almoners who would be the liaison officers between the school and the home.

75. A committee consisting of medical men and educationists should be appointed to make recommendations regarding the starting of school clinics.

76. An extension of a group of clinics should be established as a convalescent centre for such cases as show promise of early recovery.

77. To co-ordinate School Medical Service with the Health and the Medical Departments, a Co-ordination Committee should be set up.

CHAPTER VII—*Board of Physical Education.*

78. The Board should be a statutory body.

79. The Board should consist of (a) the Chairman, nominated by the Minister for Education, (a non-official), (b) fifteen non-officials nominated by the Minister for Education, (c) three ex-officio members and (d) two co-opted members.

80. The personnel of the Board should be nominated every five years.

81. *Functions, powers and duties of the Board.*—

(a) Government shall consult the Board on all matters, concerning physical education and recreation in the Province.

(b) The Board shall tender advice on matters relating to development and administration of physical education.

(c) The Board shall be entitled to receive all the information it requires from the other Departments.

(d) The Board shall be entitled to receive information regarding the inspection of physical education, and shall have power to suggest measures for its improvement.

(e) The members of the Board shall be entitled to inspect centres of physical education including Government and aided schools.

(f) The Board shall frame and revise courses in physical education. Government shall not introduce any change in the syllabi without consulting the Board.

(g) Rules and regulations regarding the training courses in physical education shall be worked out by the Board.

(h) Appointments to the teaching staff in Government Training Centres for Physical Education shall be made in consultation with the Chairman of the Board and Head of the Training Centre concerned.

(i) The Board shall advise Government on matters regarding acquisition of play-grounds.

(j) Annual budgets for physical education shall be framed by Government on the advice of the Board.

(k) Educative Propaganda for physical education shall be one of the functions of the Board.

(l) Grants to gymnasia and other organisations promoting physical education and recreation for the non-school-going population, shall be disbursed by the Board.

(m) Until a separate Department for Recreation is brought into existence, the Board shall be entrusted with the organisation and control of recreation in the Province. After the creation of the Department of Recreation, the Board's functions in this connection shall be advisory.

82. The Board should have a full-time paid Secretary with an adequate staff.

83. The Office of the Board shall be in Bombay.

84. The Minister for Education should take steps to co-ordinate the work of the different Boards of Education in the Province.

85. The Government of Bombay should take the initiative to establish an All-India Board of Physical Education.

86. A deputation consisting of some members of the Board with a staff should be sent abroad for getting first-hand knowledge and experience.

CHAPTER VIII—*Recreation for the Public.*

87. Play-grounds and open spaces should be made available to every rural and urban area for the recreation of the public.

88. School play-grounds, school buildings and public buildings, wherever possible, should be utilized for the recreation of the public.

89. Provision of play-grounds should form an important feature of future Town-Planning Schemes.

90. The Provincial Government, through legislation, should compel municipalities and local bodies to make adequate provision for recreation.

91. Maintenance and supervision of play-grounds and open spaces should be a responsibility of the local bodies.

92. Private enterprise should be encouraged for starting centres for recreation—expenses being admissible for Government grant.

93. Local bodies should be empowered to levy taxes for recreation.

94. Government should pay a grant of 50 per cent. to local bodies on expenditure on recreation.

95. The entire proceeds of the Entertainment Tax should be diverted for recreation and physical education, and this should be supplemented by a contribution from the Central Government.

96. Private gymnasia should be treated as institutions providing recreation.

70. Old Akhadas should be revived on modern lines and liberally supported by Government.

98. A Federation of Sports and Athletic Associations in the large cities of the Province should be formed to promote recreation.

99. Recreational facilities for industrial workers should be provided by their employers.

100. Until the formation of a separate Department of Recreation, the Board of Physical Education should be entrusted with the work of promoting and controlling public recreation.

101. An adequate staff for the promotion of recreation should be appointed under the Board of Physical Education.

102. Co-ordination between the various agencies promoting recreation should be established.

103. As soon as possible, a Department of Recreation should be brought into existence.

104. Every district town and taluka headquarters and village must have play-grounds and facilities for recreation.

Bombay, 29th September, 1946.

(KUALAYANANDA)	Chairman.
[MARGARET AHMADI (<i>nee</i> BENJAMIN)]	}
(K. S. MHASKAR)	
(V. K. BHAGWAT)	
(N. K. MIA)	
(G. R. KELKAR)	
(N. M. SHAH)	
(P. M. JOSEPH)	} Members.
	} Member and Secretary.

Note by Mr. N. M. Shah :—

I agree with the conclusions of the Committee in general. I have however, grave doubts about the utility of one morning session only for schools from 7-30 a.m. to 12 or 12-30 p.m. so long as the office hours for a large majority of parents are what they are today. Children will return home too late for their meals with the family. It is also doubtful whether we can profitably insist on physical training of all pupils kept in the schools from 7-30 a.m. till 12 or 12-30 p.m. unless Government assures the public that they will insist on some sort of nutrition being provided to the pupils between these hours. The scheme of physical education recommended by us is inevitably linked with our scheme of nutrition for the building up of a strong and virile nation and I would not like Government to accept the recommendation regarding one session from 7-30 a.m. to 12-30 p.m., if it is not prepared to accept the nutrition scheme as well.

Similarly I am doubtful whether merely making physical education a major subject in school examinations will serve the purpose the Committee has in view unless Government Inspectors refuse to recognise schools which do not provide adequate facilities for proper physical training to all their pupils on the lines recommended by us in the report. Today, I am informed, physical education is compulsory according to departmental rules and yet, as I know, there are many schools in the Province which have no facilities worth the name for imparting physical education of the proper type to their pupils and still enjoy recognition from Government.

I regret my inability to accept the alternative recommendation of the Committee that the College of Physical Education should be started in Poona. This suggestion was made at a very late stage and was not the original recommendation of the Committee. The alternative has been added at the stage of drafting the final report. If the College of Physical Education proposed is to cater for the needs of the whole province, and Government can hardly afford to start two such colleges at the same time, my submission is that that college should be located in the greater Bombay if the site suggested in the Fort area is not available.

Personally I do not think any difficulty would be raised by the University of Bombay in starting a Faculty of Physical Education and conferring a degree in physical education provided it is assured of at least one college, properly equipped, of physical education started by Government or some other agency within the territory under its jurisdiction. The University of Bombay has made Physical Education compulsory for the first two years of its college courses and compelled affiliated colleges to appoint properly qualified physical instructors whose appointments are subject to the approval of the Syndicate. This should convince the Government that the University of Bombay is equally keen on physical education for the upbringing of the nation and it has done what it could for the last ten years and more, even though its scheme of physical education costs the University some thousands of rupees every year. The University should, therefore, welcome the coming into existence of a College of Physical Education of the type recommended by us and I see no difficulty in the way of the University in starting a Faculty of Physical Education and conferring a degree in the subject.

Surat, 4th October, 1946.

(Sd.) N. M. SHAH.

APPENDIX No. I—A.

SYLLABUS FOR THE COLLEGE OF PHYSICAL EDUCATION.

First Year Course—Part I—Theory.

1. English—(Two Papers—Total marks 150)—
 - (i) Text—Prose and Poetry (100 marks—3 hrs.).
 - (ii) Composition—Essay (50 marks—2 hrs.).
2. Basic Hindi—(One Paper—100 marks—3 hrs.).
3. Indian Administration—(One Paper—100 marks—3 hrs.).
4. Physics—(One Paper and Practicals—Total marks 150)—
 - (i) Theory—(One Paper—100 marks—3 hrs.).
 - (ii) Practicals—(50 marks—3 hrs.).
5. Chemistry—(One Paper and Practicals—Total marks 150)—
 - (i) Theory—(One Paper—100 marks—3 hrs.).
 - (ii) Practicals—(50 marks—3 hrs.).
6. Biology—(One Paper and Practicals—Total marks 150)—
 - (i) Theory—(One Paper—100 marks—3 hrs.).
 - (ii) Practicals—(50 marks—3 hrs.).

Detailed Topics—

1. English—
 - (i) The paper in prose and poetry shall be on prescribed texts.
 - (ii) The paper in Composition shall consist of an essay.
2. Basic Hindi—

The paper in Basic Hindi shall be on prescribed texts.
3. Indian Administration—

<p>The Secretary of State for India. The Government of India. The Provincial Governments. District Administration. Village Organization. Legislative Councils.</p>	<p>Municipal and Local Self Government. Finance. Land Revenue. Law and Justice. Police and Jails. Education.</p>
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4. Physics—Theory.

Properties of Matter; Laws of Motion; Gravitation—Centre of Gravity; Equilibrium; Machines—Lever; Pulley; Common Balance; Surface Tension; Density; Specific Gravity; Atmospheric Pressure.

Heat:—Temperature; Measurement of Heat; Transference of Heat; Heat and work: Nature of Heat; Change of State; Radiation.

Light:—Rectilinear Propagation of Light.

Mirrors and Lenses—(a) Reflection of Light.
(b) Principle Focus.
(c) Formation of Images.

Dispersion of Light by a Prism.
Relation between Light and Radiant Heat.
Ultraviolet Light.

Sound:—Production and Transmission of Sound.
Loudness:—Pitch.

Magnetism and Electricity:—Magnetic Attraction and Repulsion; Magnets; Magnetic Force; Electrification by Friction and Induction; Conductors and Non-Conductors
Electric Potential; The Friction Machine; the Wimshurt's machine.

Physics—Practicals.
Experiments based on the above topics.
- Chemistry—Theory—

Indestructibility of Matter; Pure and Impure Substances; Elements and Compounds; The Atmosphere; Oxygen; Acids; Bases; Salts; Hydrogen; Water; Solution and Crystallization; Laws of Chemical Combination; Endothermic and Exothermic Reactions; Atomic Theory; Valency; Kinetic Theory of Molecules; Avogadro's Hypothesis;

Osmotic Pressure; Diffusion; Boyle's Law; Electrolysis; Nitrogen Cycle in Nature; Carbon; Carbon Dioxide; Combustion; Chlorine; Phosphorus; Sulphur; Sodium; Potassium; Calcium; Manganese; Iron; Copper; Tin.

Chemistry—Practicals.

Experiments based on the above topics.

6. Biology—Theory—

General—

Living bodies as opposed to non-living. Protoplasm and its properties. Division of living organisms into plants and animals.

Scope and aim of the Science of Biology and its main sub-divisions.

Cellular structure of plants and animals. Tissues, organs and systems.

Elementary knowledge of organic evolution.

Plants—

Reproduction in plants:—(a) Vegetative, (b) Asexual, (c) Sexual.

Plants and diseases caused by Bacteria and Fungi.

Plants as food producers. Their importance to man and other animals.

Relations of plants with their environment. Plants in relation to water. Plants in relation to climate. Plants in relation to other plants, animals and man.

Animals—

General survey of the different forms of animal life. Nutrition—Organs of nutrition and growth. Circulation—organs of circulation and circulating fluids. Respiration and organs of respiration. Excretion and organs of excretion. Regulation of heat. Reproduction—Its different modes and the organs. Development—Different modes of development and larva stages. Nervous system—Different types of nervous systems and their functions. Phonation and the organ of senses. Locomotion—Modes and organs of locomotion. Habits of animals and parental care. Animals in relation to man—Animals injurious to man, e.g., house-fly mosquito, round-worms, snakes; animals helpful to man, e.g. bees, silk-worm, domestic animals, etc.

Note.—The lectures should be illustrated by dissected specimens lantern slides, wall-pictures, diagrams, etc., with special reference to rabbit.

Biology—Practicals.

Experiments based on the above topics.

Second Year Course—Part I.—Theory.

1. English—(Two Papers—Total marks 150)—
 - (i) Text—Prose and Poetry (100 marks—3 hrs.).
 - (ii) Composition—Essay (50 marks—2 hrs.).
2. Civics and Economics—(One Paper—100 marks—3 hrs.).
3. Anatomy—(One Paper and Oral—Total marks 150)—
 - (i) Paper (100 marks—3 hrs.).
 - (ii) Oral—(50 marks).
4. Physiology—(One Paper and Oral—Total marks 150).
 - (i) Paper—(100 marks—3 hrs.).
 - (ii) Oral—(50 marks).
5. Scouting and First Aid—(One Paper and Practical—100 marks).
 - (i) Theory—(50 marks—2 hrs.).
 - (ii) Practical—(50 marks).

Detailed Topics—

1. English—

- (i) The paper in prose and poetry shall be on prescribed texts.
- (ii) The paper in Composition shall consist of an essay.

2. Civics—

N.B.—Only elements of the subject with special reference to Indian conditions shall be studied. The treatment should be in the main descriptive.

The Meaning of Civics; Civics and Life; Society and State; Society and Individual; State and Individual Citizenship; Rights and Duties of Citizens; the meaning of Self-Government.

The State and its Machinery with special reference to Citizenship; Forms of the State and Systems of Government. The Legislature, the Executive and the Judiciary and their inter-relations.

Local Self-Government; Sphere, Function and Machinery. Modes of raising and spending Revenue.

Social Institutions; Marriage and Family. Caste and Classes. Property.

Economics—

N.B.—Only elements of the subject with special reference to Indian conditions shall be studied. The treatment should be in the main descriptive.

General Notions; Wealth and Welfare.

Environment: Geography and Climate; Natural Resources; India's Resources; Social and Religious outlook with reference to economic progress.

Quantity and Quality of Population; Density; Rate of Growth, Age, Composition, Education and Efficiency.

Division of Labour. Machinery and its Social and Economic effects.

Economic Organization; Agriculture, Small Scale and Large Scale. Tenures and Tenancy Laws. Industries; Handicrafts, Domestic and Factory Industry, joint Stock Companies Combinations. Trade: Internal and External. Transport: Road, Rail, Sea and Air.

Laws of Demand and Supply. The Pricing Process. Prices under Competition and Monopoly. Free and Regulated Economy. Factors of Production—their remuneration.

Nature and Functions of Money, Metallic and Paper Money. Banks and the Money Market. Main types of Banking.

National Income and its Distribution. Income from Work and Income from Property. Standard of Life.

Public Finance: Raising and spending of public Revenue. Public Debt. Main items of Revenue and Expenditure in Indian Central and Provincial Finance. State and Economic Welfare.

3. Anatomy—Theory—

Bones—

Form and general structure of bones including important muscular and ligamentous attachments (Os Calcis calcaneous), astragalus (talus), cuboid and scaphoid (of foot) in detail, (other bones of hand and foot in articulated state only).

Skull—

As a whole. Names and general position only of constituent bones required, except for muscular and ligamentous attachments on mandible and occipital bones, and squamozygomatic part of temporal bone. Foramina of 5th, 7th, 10th and 11th cranial nerves and of main vessels.

The cranial cavity in relation to parts of the brain.

General development and growth of bone. The significance of epiphyses and epiphyseal lines (actual dates of secondary classifications not required).

Joints—

Simple classification only required into synovial and non-synovial joints. In non-synovial joints the varying types of union correlated with function should be noted, specific names, e.g. "syndesmoses", not required.

Gross structure, including important ligaments of all joints.

Stress should be laid on movements and their limiting factors in each joint.

Fascia—

General arrangements of superficial and deep fascia.

Muscular System—

General structure (not microscopic details) of striped and unstriped muscle. Distribution of these two types of muscle in the body. The neuro-muscular mechanisms underlying muscular activity (i.e. movement muscle tone and posture).

Group action of muscles. (When studying individual muscles the function of each should be considered in the light of the part it plays in group action).

Position, origin, insertion, nerve supply and direction of fibres of skeletal muscles.

Position and arrangement (but not exact attachments) of:—pre-vertebral muscles, and muscles deep to the second layer of back muscles.

The following not in detail:—Muscles of expression, infra- and supra-hyoid groups of muscles, attachments to carpus and tarsus of short muscles of hand and foot, muscles of perineum.

Nervous System—

The neurone as the structural and functional unit.

Central Nervous System—

The parts of the brain (names and position only).

Form, position and general structure of the spinal cord.

Outline of membranes of brain and spinal cord.

General arrangement of neurones (afferent, etc.) in the central and peripheral nervous system.

The reflex arc. The Principal ascending and descending pathways of brain and spinal cord.

Peripheral Nervous System—

Cranial nerves. Distribution of 5th, 7th, 10th and 11th. Names and functions of others.

Spinal Nerves. Roots, divisions and plexuses. Courses and distribution of nerves derived from plexuses. General distribution of remainder.

Autonomic nervous system. Position, general outline and function.

Circulatory System—

Heart (see Viscera).

Arteries. Course of main vessels.

Veins. Chief superficial and deep veins, (omit) intro-cranial veins and venous sinuses.

Lymphatics. Thoracic duct, course, position. Main groups of glands and areas drained thereby.

Viscera.

Thoracic and abdominal. Position, form, gross structure and chief relations.

Pelvic. Form, gross structure and relative positions. Ductless glands.

Position, form and gross structure.

Anatomical Regions—

Formation and principal contents of:—Anterior and Posterior triangle of neck, axilla, antecubital fossa, scarpa's triangle, popliteal space, inguinal canal.

Surface Anatomy—

Relations of bones and muscles to the surface of the body. Surface markings of thoracic and abdominal viscera, main vessels, and main nerve trunks.

Anatomy—Practical—

It is expected that the student will have attended a minimum of six demonstrations on dissected parts of the human body, in order to become familiar with the appearances of fascia, joints, muscles, nerves, vessels, and to view the position *in situ* of the viscera.

Attention should be directed also to the following points:—

- (1) The serious cavities of the body and the general disposition of pleura and peritoneum.
- (2) The anatomical facts explaining the conditions of inguinal, femoral and ventral hernia (details not required).

Disarticulated bones and the articulated skeleton should be fully used in class work, and it is suggested that animal material (sheep's heart, etc.) might usefully supplement the demonstrations on human parts.

Note.—The oral examination will include an examination in surface anatomy on a living model. Further, the candidate's knowledge of muscular movement and posture will also be tested by reference to a living model.

4. Physiology—

The following syllabus should be so interpreted as to emphasize the application of the principles of physiology to every day life and their bearing upon physical education:—

General Introduction to Physiology.

The Cell as a biological unit.

Use of terms—cell, tissue, organ.

Essential properties of living matter.

Minute structure of Elementary Tissues including muscles.

Circulation—

General features.

Physiological anatomy of blood vessels and heart.

Cardiac cycle.

Circulation—*contd.*

Blood pressure and its variations. The pulse beat.
Adaptation of circulation to the needs of the body, with special emphasis on muscular exercise.

Blood and Lymph—

Composition and function of blood and lymph.

Respiration—

Physiological anatomy of respiratory apparatus and mechanism of inspiration and expiration.

Regulation of respiration.

Influence of respiration on circulation.

Respiratory functions of blood.

Effect of exercise on respiration.

Digestion—

Simple chemistry of proteins, fats and carbohydrates.

Minute structure of alimentary canal.

Composition of digestive secretions.

Digestion of proteins, fats and carbohydrates.

Movements of alimentary canal.

Absorption of food stuffs.

Minute Structure and Function of Liver.

Metabolism—

General metabolism.

Metabolism of proteins, fats and carbohydrates.

Muscular Contraction—

Properties of muscle and changes occurring during contraction.

Conditions affecting muscular contraction—fatigue, loading etc.

Ductless Glands and their Influence.

Nutrition.

The principles underlying the composition of a normal diet, and diet in its relation to growth, training, etc.

Body Temperature—

Control and regulation.

Structure of skin.

Excretion—

Minute structure and function of kidney.

Skin and lungs as excretory organs.

Nervous System—

Nerves and nerve cells.

General structure of central nervous system.

Principal ascending and descending tracts.

Reflex action.

Tonus and mechanism of muscular co-ordination.

Functions of spinal cord.

Functions of cerebrum and cerebellum.

Autonomic nervous system.

Organs of special sense.

Cutaneous and proprioceptive senses.

Reproduction—

General outline.

Minute structure and functions of ovary and testes.

Practical Work.

Note.—(i) This syllabus is designed to give enough practical work in Physiology to ensure realisation of the body, and a more detailed knowledge of and acquaintance with the practical methods of a study of the circulatory and respiratory functions.

(ii) As many experiments as possible should be performed by the candidates, but it is understood that some part of the work will be in the form of demonstrations by the lecturer.

Histological.

The microscopic appearance of the following tissues and organs:—muscles; nerve cells; nerve fibres and ending; blood; areolar tissue and adipose tissue, bone and cartilage; spinal cord; trachea, lung; tongue, salivary glands, oesophagus, stomach, small, and large intestine, liver, pancreas; kidneys; ovary, testes; thyroid; skin; lymphatic gland; blood vessels.

Experimental.

Muscle and Nerve—

Preparations from frog to show:—Records of ordinary contraction and tetanus. Effects of temperature, load, fatigue (with and without circulation). Stimulation, direct and through nerve; different stimuli.

Circulation—

Examination of sheep's heart. Harvey's experiments of valves.

Frog's heart—records, effects of temperature, circulation in web.

Man. Pulse, blood-pressure, normal heart sounds, effects of exercise and posture on pulse and pressure. Rate of recovery of pulse-rate after exercise. Influence of training on fatigue.

Blood—

Effects on corpuscles of salt solutions of different concentration. Haemolysis.

Comparison of oxygenated and 'reduced' blood.

Respiration.

Stethograph records; lying, sitting, standing postures, swallowing, talking, exercise.

Effects of excessive ventilation.

Spirometer observations. Respiratory measurements (e.g. vital capacity, tidal, complementary, supplemental air.)

Analysis of expired and alveolar air. Use of Douglas bag and valves. oxygen consumption, rest and exercise.

Central Nervous System.

Examination of brain.

Experiments on reaction-time, influence of fatigue.

Ergograph.

Simple experiment demonstration reflex action.

Special senses.

Eye.—Model. Dissection of ox eye. Man: blind-spot. colour vision, field of vision, accommodation for far and near points (experiments with ordinary lenses to illustrate long and short sight).

Ear.—Model. Localisation of sound, range, effects of fatigue.

Cutaneous.—Tactile discrimination. Hot and cold spots (specificity) Effects of pressure and temperature on weight discrimination.

Chemical.

The following tests—

(i) A colour test for protein;

(ii) Fehling test for sugar;

(iii) Iodine test for starch.

Simple tests for chief elements in foods (bread, flour, milk, meat, cheese, eggs.)

Action of ferments and chief digestive juices.

Urine. Reaction, Specific gravity. Simple tests for normal constituents.

5. Scouting and First Aid.—(one paper and Practicals—100 marks).

Theory—Suitable texts to be prescribed—(one paper 50 marks).

Practicals—based on the Theory—(50 marks).

First and Second year course—Part II—Physical Activities.

During the first two years the following activities should be included as required work for all students.

(i) Gymnastics and body building activities.

(ii) Athletics.

(iii) Fundamental rhythmic activities including Lezim.

(iv) Fundamentals of combative activities including boxing, wrestling and Lathi.

(v) Swimming.

(vi) *Elementary Military Training (for Men students). Dancing (for Women students).

(vii) All popularly played major games and a large number of minor games.

*The course of instruction in Military training should include the subjects—(a) Drill, (b) Weapon training, (c) map Reading, (d) Gas training and (e) Field Craft and Section Leading.

Camping.—There should be a military camp at the end of the first year and another at the end of the second year for the Men students. Students at the end of the second camp should complete the training of the 'B' Certificate Course.

The Women students should have special Service Camps in place of the Military Camps and special attention should be paid to teaching mother-craft and infant care.

Third Year Course—Part I—Theory.

1. Psychology. (One paper—100 marks—3 hours).
2. Sociology. (One paper—100 marks—3 hours).
3. Hygiene and Sanitation. (One paper—100 marks—3 hours).
4. Dietetics and Nutrition. (One paper—100 marks—3 hours).
5. Materials and Methods in Physical Education. (One paper—100 marks—3 hours).

For students specialising in Physical Education.

6. History and Principles of Physical Education. (One paper—100 marks—3 hours).

For students specialising in Recreation.

7. History and Development of Recreation Movement. Principles of Recreation work. (One paper—100 marks—3 hours).

Fourth Year Course—Part I—Theory.

For students specialising in Physical Education.

1. Organisation and Administration of Physical Education. (One paper—100 marks—3 hours).
2. Health Education. (One paper—100 marks—3 hours).
3. Physical Examination and Corrective and Remedial Exercises.
One paper—100 marks—3 hours.
Practical—50 marks.
4. Treatment of Athletic Injuries and Massage.
One paper—100 marks—3 hours.
Practicals—50 marks.
5. Theory of Gymnastics, Coaching and Refereeing.
One paper—100 marks—3 hours.
Practical—50 marks.

For Students specialising in Recreation.

1. Labour Legislation—Central and Provincial. (One paper—100 marks—3 hours).
2. Trade Union Movement and Trade Union Law. (One paper—100 marks—3 hours).
3. Duties of Labour Officers. (One paper—100 marks—3 hours).
4. Organisation and Administration of Recreation and Welfare work. (Two papers—Total marks—150). (Two papers, each of 3 hours—75 marks each).
5. Village Life and Village Recreation. (One paper—100 marks—3 hours).
6. Social Study Methods. (One paper—100 marks—3 hours).

Third and Fourth Year Course—Part II—Physical Activities.

During the third and fourth years students must be required to specialise in games and participate in activities as detailed below.

A. *Compulsory Activities.*

- (a) Athletics.—All students must be required to practise and participate in athletics during the third and fourth year.
- (b) *Other activities.*—Rhythmic activities and Gymnastics (Apparatus work, tumbling etc. selected separately for men and women).
This is compulsory for all students.

Games for specialisation.

1. Major games :—

Major games for men are to be divided into three groups as follows.

- (a) Small area Western games.—*tennis, basket ball, volley ball, *net ball, *badminton.
- (b) Large area Western games.—*Hockey, football, cricket, *soft ball.
- (c) Indian games.—Huttutu, *Khokho, Ataya-pataya, Simplified Hututu (for women).

*The activities marked with asterisk can also be selected by the women students.

Note.—For specialisation one activity should be selected both by men and women from each of the above three groups (a), (b) and (c).

B. *Optional Activities.* [For students specialising in Physical education].

- 1. *Individual Combative Activities.*—(Sword fighting, Fari-gadga, Lathi fight, Jambia and fencing.)
- 2. Swimming, diving and life-saving.
- 3. Wrestling.
- 4. Boxing.

Note.—Any two out of the above mentioned four activities must be selected for specialisation.

B. *Optional Activities.*—(For students specialising in Recreation.)

Any two activities from among the following Arts and crafts—Basketry, weaving, needlework, carpentry, cooking, drawing, painting and photography.

- 2. A hobby collection of some articles such as stamps, coins, flowers, leaves of medicine plants, moths, butterflies, etc., etc. in consultation with the staff members.

Note.—Women students, doing the Physical Education Course, may, if they so desire, take one or both subjects from this Course in place of the activities from among the optional Activities offered for the students, specializing in Physical Education.

Camping.

At the end of the third year a labour camp lasting one month should be arranged where various kinds of labour projects in selected rural areas are to be undertaken by the campers, both Men and Women students.

Part III—Practice Teaching Work.

During the third and fourth years students who are specializing in Physical Education will be assigned practice teaching work in selected Educational institutions, and those who are preparing themselves for recreation and adult physical education will be assigned suitable field-work in recreation and social centres.

Examination in Part II for all the years.—

Three hundred marks will be allowed for physical activities including tests and final examinations at each year of the College Course. The division of marks will be as follows :—

- (i) One hundred marks for the year's work.
- (ii) Two hundred marks for the tests and final examinations.

Allotment of total marks for each year's examination—

The marks allotted for each part of each year's course will be as follows :—

1st year	I—	Theory	...	...	80
	II—	Physical activities	...	...	300
2nd year	I—	Theory	...	...	650
	II—	Physical activities	...	...	300

3rd year	...	I—	Theory	...	...	700
		II—	Physical activities	...	...	300
		III—	Practice Teaching or Group Work...			100
4th year	...	I—	Theory	...	...	650
		II—	Physical activities	...	...	300
		III—	Practice Teaching or Group Work—			100

Results.

The results will be declared in the following classes:—

III Class.	II Class.	I Class.
40 per cent. or over up to 50 per cent. of the total marks.	50 per cent. or over up to 65 per cent. of the total marks.	65 per cent. or over of the total marks.

The details regarding rules of Examinations and their results should be worked out in due course.

APPENDIX No. I-B.

SYLLABUS FOR THE TRAINING INSTITUTE FOR PHYSICAL EDUCATION.

A. *Theoretical Part.*

(1) *Principles of Education, Health Education and Physical Education.*—Meaning of Education, Physical Education, Physical Training, Physical Culture, Health Education and such other terms. Aim and objectives of Physical and Health Education with reference to the aim and objectives of education. Biological, Psychological and Sociological foundations of physical education. Historical survey of Physical Education in India and other countries and the lessons to be learnt from them. Programme of physical education—natural and formal types. Programme of health education. Principles underlying methods of teaching. Leadership in physical and health education. Ethics of the profession. Various systems of physical education.

(2) *Organisation and Administration of Physical Education.*—Plans of organisation of physical education.—in Schools and Gymnasias, District and Province. Standards of equipment, Gymnasia and playgrounds. Construction of Time-Tables; classification of pupils; classification of activities; curriculum construction. Training of leaders; budgetting; purchase and care of equipment; testing and grading; current problems in physical education.

(3) *Material and Methods in Physical Education.*—Rules of various games; coaching, officiating and training hints; methods of organizing various kinds of tournaments and sports meets; planning and laying out of play fields; methods of class control, management and instruction in various activities; efficiency tests; group competitions; methods of conducting demonstrations and exhibitions; lesson planning; Intra-mural and Inter-School competitions.

(4) *Anatomy, Physiology and Physiology of Exercise.*—Knowledge of the various systems and organs of the body and their normal functions. Peculiarities of development at various age levels. Influence of exercise on the functions and development of the human organism. Rational and irrational activities.

(5) *Health Education, Hygiene and Sanitation etc.*—Care of the various organs of the body, skin, eyes, ears, teeth, gums, bowels, etc. Importance of pure air and water. Posture, common mal-postures and their causes. Common ailments of school children and how to control them. Infections—communicable diseases and how to combat them. Cleanliness of surroundings. Disposal of wastes and refuses.

(6) *Dietetics.*—Constituents of food. Vitamins and their importance. Common articles of diet and their food values. Danger of undernourishment and overfeeding. Common beverages, alcohol and its effect on the human body. Planning suitable diet.

(7) *First Aid, Physical and Medical Examinations, Massage.*—Complete course of the St. John's Ambulance First Aid Examinations. Ordinary athletic injuries and their care. Physical and medical examination—how to assist in. Massage—various strokes and their application.

(8) *Mother Craft, and Infant Care (for women students).*—(1) Physiology of pregnancy. (2) Common diseases of pregnancy and their early recognition and prevention. (3) Ante-natal examination and its importance. (4) Hygiene of pregnancy.

Care of the Infant.—(1) Common disease of the newly born child and its prevention. (2) Normal feeding (breast feeding). (3) Artificial feeding and its various methods. (4) Weaning. (5) Clothing of the baby. (6) Common ailments of the child.

(9) *Psychology.*—Psychology as a Science. Its usefulness to Physical Directors. Psychological basis of Physical education. Characteristic of an organism. Instincts; emotions; educational use of instincts. Laws of learning. Types of learning. Learning of neuro-muscular skills. Transfer of training. Heredity, environment and education. Age characteristics at various stages of growth. Theories of play; education through play; psycho-analysis. Study of the normal, abnormal and subnormal child. Development of character and personality.

(10) *Camping and Scouting.*—A practical course of training in Camping and Scouting for ten days

B. *Physical Activities.*

The following activities are to form the required part of the Diploma course :—

1. Atyapatya, Khokho, Hututu, Langdi, Lagoriya.
2. Football, Hockey, Playground ball, Basket ball, Volley ball, Net ball (Women), Throw ball (Women).

Note.—(From among the games—under 1 and 2 the student should choose 2 out of the first set and 2 out of the second set for purpose of being graded for the Diploma).

3. Games of low organisation including Relay games, Minor games, Circle games, Combative games, Free play, Story plays.
4. Calisthenics, Light apparatus work, Asanas, Pranayama, Dands and Baithaks, Indian clubs, Marching, etc.
5. Combative activities:—Lathi, Jambia, Wrestling, Farigadga.
6. Malkamb.
7. Track and Field sports.
8. Tumbling, Pyramids, Stunts, etc.
9. Rhythmic activities: Tipri, Folk-dances, Gymnastic dances, Lezhim, etc.
10. Camping and Hiking.

C. Practice Teaching.

Each student should complete 20 supervised lessons.

APPENDIX No. I-C (i).

SYLLABUS FOR SELECT TERM COURSE IN PHYSICAL EDUCATION FOR SECONDARY SCHOOL TEACHERS.

A. Theory.

- (1) Elementary Anatomy and Physiology with special reference to physical activities,
An elementary knowledge of various systems of the body and their functions.
- (2) *Health Education*—
 - (a) Co-ordination of Health Education and Physical Education.
 - (b) Health Service—Medical Inspection, Follow-up work, prevention of communicable diseases in schools.
 - (c) Health Supervision—Care of school premises, provision of Sanitary facilities, etc.
 - (d) Health Instruction—Elementary hygiene—personal and community. Nutrition and dietetics knowledge of food values and balanced diets. Good posture and its importance.
 - (e) First-Aid—How to render it.
- (3) Psychology and Principles of Physical Education.
 - (a) Modern interpretation of Physical Education. Its relation to education and its place in schools. Its aim and objectives.
 - (b) Needs and interests of Secondary school children and activities and programmes to meet these needs.
 - (c) Nature of the school child and the influence of physical education on this.
 - (d) Play tendency and its significance to the teachers.
- (4) Organization and Administration of Physical Education.
 - (a) Scheme of organization in a school.
 - (b) Time-table.
 - (c) Leadership in physical education and the part of the class-room teacher in the promotion of physical education.
 - (d) Need for a planned course of study.
 - (e) Methods of checking progress of pupils in Physical Education.
- (5) Materials and Methods in Physical Education.
 - (a) Lay out and care of play-grounds.
 - (b) Care of equipment.
 - (c) Methods of teaching various types of physical activities.
 - (d) Lesson plan in Physical Education.
 - (e) Methods of organizing Group Competitions, Efficiency Tests, Tournaments, Sports meets, Intra murals, Demonstrations, Health Days, Play Days, Picnics, Excursions, etc.
 - (f) Rules of important Major Games.
- (6) Scouting—An elementary course in Scouting.

B.—B. *Physical Activities.*

(1) Introductory activities. (2) Marching. (3) Exercises of Calisthenics. (4) Light Apparatus Drills. (5) Lezim. (6) Lathi. (7) Asanas. (8) Thumbling, Stunts and Pyramids. (9) Imitations, Story Plays and Action Songs. (10) Rhythmical Activities. (11) Games of Low organization. (12) Athletics. (13) Major Games.

Note.—Activities under the above heads should be selected from the detailed Syllabus suggested for Secondary schools.

C. *Practice Teaching.*

As many supervised lessons as possible. Not less than six such lessons.

APPENDIX No I-C(ii).

SYLLABUS FOR SHORT TERM COURSE IN PHYSICAL EDUCATION FOR PRIMARY TEACHERS.

The course of instruction should include both theory and practical work. The syllabus should be as under :—

A. *Theoretical Work*.—

- (1) Elementary Anatomy and Physiology.
- (2) First Aid.
- (3) Hygiene and Sanitation.
- (4) Dietetics.
- (5) Physical, Mental, Emotional and Social Characteristics of the Primary School Children and the influence of Physical Education on these.
- (6) Aims, Objectives and values of Physical Education
- (7) Play—Its meaning and its place in the life of children.
- (8) The parts of a physical education lesson. How to plan them.
- (9) Methods of presenting a lesson.
- (10) Things to be avoided and things to be encouraged during Physical activities.
- (11) How to teach (a) Games, (b) Formal work and (c) Rhythmic work.
- (12) Physical Education equipment for primary schools, their selection and care.
- (13) How to lay out play-fields and care for them.
- (14) Pupil leadership.
- (15) Methods of conducting competitions.—(a) Tournaments, (b) Relay races, (c) Athletic meets, (d) Group Competition, (e) Drills.
- (16) Notes on activities taught (daily some time and help should be given to enable the students to take down notes on activities taught.)

B. *Practical Works* :—

- (1) Free play.
- (2) Simple imitations, story play, dramatization, etc.
- (3) Minor games including simple relay races.
- (4) Games leading on to major games.
- (5) Informal calisthenics and some formal work.
- (6) Balance exercises.
- (7) Fundamental movements like running, walking, hopping, etc.
- (8) Tumbling and stunts.
- (9) Simple combative activities—duel or group.
- (10) Rhythmic activities—simple rhythms—various fundamental movements done to a rhythm (Zimma, Phuygdi, Garba, Tipryas, etc., for women teachers, if any).
- (11) Dumbbells, Wands, Lezim, Lathi, Indian clubs, etc. (only simple movements).
- (12) Asanas, Dands, Baithaks, Namaskars (simple ones which can be done by the Primary school children in the higher classes.)
- (13) Model lessons to consist of three parts—(i) Introductory, (ii) Instruction in exercises or light apparatus work, (iii) Games part with minor games, story play etc.
- (14) Langdi, Hututu, Khokho, Atyapatya, Viti Dandu.
- (15) Practice teaching—Not less than 6 supervised lessons.

APPENDIX I-D.

SYLLABUS FOR THE CERTIFICATE COURSE IN PHYSICAL EDUCATION.

I Theory.—There should be two periods daily, of instruction in theory, each period being of 50 minutes. The following subjects should be included under this head :—

1. Elementary Anatomy, Physiology, Hygiene, Sanitation, Dietetics and First Aid.
2. Principles, Organisation and Administration of Physical Education.
3. Materials and Methods in Physical Education.
4. English Composition.

II Physical Activities.—5 to 6 hours must be devoted daily to physical activities. The trainees must attain satisfactory efficiency in every activity prescribed for the College course (Appendix I-A). No difference should be made between activity and activity for specialisation. However facilities should be created and leadership provided outside the regular time-table for those students who wish to improve their efficiency still further.

III Practice Teaching.—Each candidate should complete 12 supervised practice teaching lessons.

IV Camping.—During the year, there would be 15 days devoted for one camp.

APPENDIX No. I-E.

SYLLABUS OF PHYSICAL EDUCATION

for

SECONDARY SCHOOLS.

Note.—Activities like Boxing, Wrestling, Malkhamb, Gymnastics on apparatus, Lakdi, Fari-gadga and Swimming are not mentioned in the Syllabus. However schools should make every effort to include these as a required part of the instruction given to the boys of the upper standards.

STANDARD I.

1. *Introductory Activities*—

(a) *General Activities.*—(1) Running, Hopping, jumping, skipping, galloping etc., freely, and with a partner. (2) Following the teacher running, hopping, jumping, etc. (3) Partner chase. (4) Chasing the teacher. (5) Running in place and raising knees. (6) Steer your own course. (7) Imitations of movements of frogs, rabbits, monkeys, etc. (8) Feet astride, holding ankles and moving about. (9) "Here, there, everywhere".

(b) *Marching.*—(1) Marking time in place and clapping. (2) Marching forward in a loose group and keeping time by clapping. (3) Falling in a line, dressing, numbering, stepping, turning, etc. (4) Marching in a single file. (5) Wheeling to left and right while marching. (6) Marching in twos, changing direction etc. (7) Double marching in a loose group.

2. *Calisthenics.*—

(a) *Informal exercises.*—Trunk, balance, jumping and other exercises done informally. (1) As tall as possible as small as possible. (2) Walking, running etc., on tip-toe and on heels, freely. (3) Jumping on spot, turning while jumping. (4) Jumping to attention, stand-at-ease, etc. (5) Cross-legged sitting and touching forehead to the ground, and also to left and right knee alternatively. (6) Jumping to open order forward and sideward. (7) Jumping feet astride. (8) Clapping one knee and touching forehead to it. (9) Running, hopping, etc., freely and stopping, holding a certain balance position on signal. (10) Folding Holding one leg behind and jumping round and round. (11) Jack in the box. (12) Jumping feet astride and touching the ground between the feet. (13) Jumping forward and backward covering increasing distances. (14) Follow the leader on tip-toe and crouch when he turns back. (15) Crook sitting. (16) Thread and needle.

(b) *Formal exercises.*—Eight exercises as given in lessons, XI, XIII, XV, XVII and XIX.

3. *Apparatus Exercises*—

Dumbbells: Ten exercises as given in lessons XII, XIV, XVI, XVIII and XX.

4. *Rhythmics (Girls)*—

- (1) Zimma, (i) Talicha Zimma; (ii) Pankhi Zimma; (iii) Pher Zimma.
- (2) Phugdi (i) Donhatachi; (ii) Dandachi; (iii) Choughinchi; (iv) Nakhulya.
- (3) Garba, (i) Talicha; (ii) Chutkicha.
- (4) Agota Pagota.

5. *Recreative activities.*—

(a) *Minor games.*—(1) What is the time Mr. Wolf? (2) Crows and cranes. (3) Crusts and crumbs. (4) Big A, little A. (5) Bogey ball. (6) Farmer and rabbits. (7) Mother bird. (8) Odd man. (9) Free play with a ball-kicking, throwing, catching, etc. (10) Blind man's buff. (11) Cat and rat. (12) Fire on the mountain. (13) Soldiers and brigands. (14) Keep the ball up. (15) Magic ring. (16) Informal Foot-ball. (17) Touch and run. (18) Wild Horses. (19) Chase your partner. (20) Hopping tag. (21) Mrs. Bond, and her ducks. (22) Informal Hu-tu-tu. (23) Langdi.

(b) *Imitations and Story Plays.*—(1) Visit to a zoo. (2) Building a house. (3) Modes of travel (4) Imitating horse galloping, frog jumping etc. (5) Circus. (6) House on fire. (7) At the sea-shore. (8) The fox and the grapes. (9) Capture of Sinhagad (a fort). (10) Alibaba and forty thieves.

(c) *Singing games.*—(1) Ring a ring a roses. (2) A hunting song (shikar karu ya apan waghachi). (3) A song about rains (Pani Aya Douda Doudo). (4) A play hour song (Ai chenduphalicha khel Majedar). (5) A wood-cutter's song (Ham bane Kattayya Ajchale). (6) A song about sparrows (Ya chimanyano ya ga ya). (7) A riding son (Dadano Dangoro lidho). (8) A play-song (If I were a rider etc.). (9) A play-song (Johun hou pankhidu Nanu). (10) A play hour song (Ba kitu ba).

(d) *Athletics.*—(1) Running 50 yards. (2) Hopping 25 yards. (3) jumping widening distances. (4) Jumping over a rope. (5) Potato race. (6) Standing Broad Jump. (7) Tennis ball throw. (8) Standing spring. (9) Skipping with a rope.

STANDARD II.

I. *Introductory Activities*—

(a) *General activities*.—(1) Walking, running, hopping, skipping, galloping, etc., freely and in twos etc. (2) Follow the teacher. (3) Steer your own course, imitating movements of vehicles, etc. (4) Chasing the teacher. (5) Imitating Kangaroo, rabbit, bear, frogs, etc. (6) Walking on heels and toes, etc. (7) Crow hop. (8) Skip jump. (9) Sparrow hop. (10) Maze running. (11) Giant strides across the play-ground. (12) Running and clapping to keep the rhythm. (13) Astride jumping. (14) Here, there, everywhere.

(b) *Marching*.—(Use *Hindi Commands*).—(1) Marching in place in file. (2) Turning left, right about, while marking time. (3) Marching sideward in a file (*Baye ya Dahine tal*). (4) Marching, in a file and changing direction to left and right. (5) Marching in twos and changing direction. (6) Marching quick and double time in a file in changing direction.

II. *Calisthenics*—

(a) *Informal exercises*.—(1) Trunk bending forward, sideward and downward. (2) Elbow circling. (3) Hopping on spot with alternate knee raising. (4) Crouch down and jumping upward. (5) Cross-legged sitting, and touching forehead to ground, knees etc. (6) Trunk rolling. (7) Walking about with clasped ankles. (8) Crouch position, legs stretching, alternately sideways. (9) Crouch Position, extending legs alternately backward. (10) Running, hopping, etc. and holding a balancing position on signal. (11) Hopping forward and alternate knee raising.

(b) *Formal Exercises*.—Nine exercises as given in lessons VIII, XI and XVIII.

3. *Apparatus Exercises*—

Dumbbells.—(1) Upper neeche thok. (2) Kamar zuk thok. (2) Age peeche thok. (4) Baye dahine thok. (5) Adhanga-age thok. (6) Adhanga baju thok. (7) Chaupher thok. (8) Upper guthan thok. (9) Kudantal thok. (Upper niche).

4. *Rhythmics*—

(a) *For Girls*.—(1) Zimma—(i) Pher Zimma. (ii) Khande Zimma.

(2) Phugdi—(i) Ek hatachi. (ii) Bas phugdi.

(3) Kikiche pan. (4) Latya. (5) Kombada. (4) Tipri—Fundamental positions and four steps.

(b) *Rhythmics*.—(1) Clapping hands to rhythm. (2) Walking, hopping and jumping to rhythm with or without clapping, alternating. (3) Marching in place with heavy steps and marching forward with or without clapping, alternating. (4) Running to rhythm. Running in pairs, in threes, in fours with and without clapping alternating. (5) Skipping to Rhythm, skipping with a partner, in threes, in fours with clapping and without clapping alternating. (6) Two simple Folk Dances.

5. *Recreative Activities*—

(a) *Minor games*.—(1) Ordinary tag. (2) Ostrich tag. (3) Shadow tag. (4) Mount tag. (5) Back to back tag. (6) Whip tag. (7) Aba dabi. (8) Pagalwala. (9) Come along. (10) Numbers change. (11) Dacoit. (12) Two dogs and a bone. (13) Bear in the pit. (14) King of the circle. (15) Free and caught. (16) Bhaski Khel. (17) Policemen and thieves. (18) Inge va. (19) Street horse and a keeper. (20) Where is the coin? (21) Hound and rabbit. (22) Fire on the mountain. (23) Come with me. (24) Dodge ball. (King or queen of the circle). (25) Forming groups by numbers. (26) Dodge ball (individual). (27) What did you see.

(b) *Relay races*.—(1) Langdi or hopping relay. (2) Khokho relay. (3) Shuttle running relay. (4) Potato race relay. (5) Ball pass relay.

(c) *Lead-up games*.—(1) Whip Hu-tu-tu. (2) Keep away (football). (3) Hopping tag. (4) Kho-kho-chase.

(d) *Major games*.—(1) Langdi. (2) Khokho. (3) Hu-tu-tu. (4) Informal Football.

(e) *Athletics*.—(1) Running 50 yards. (2) Hopping 25 yards. (3) Standing Broad Jump. (4) Standing Spring. (5) Running Broad Jump. (6) Standing High Jump. (7) Throwing a tennis ball, cricket ball, play-ground ball. (8) Obstacle race. (9) Three-legged race. (10) Rope skipping (Girls). (11) Potato race.

STANDARD III.

1. *Introductory Activities*—

(a) *General Activities*.—(1) Walking, running, jumping, hopping, skipping, etc. in a loose group and with partners. (2) Jumping forward, backward, sideward, in a loose group. (3) Running, hopping etc., and on signal, running to respective corners forming files, ranks, etc. (4) Maze running. (5) Follow the leader. (2) Running hopping, etc. and on signal, forming rings of fours, fives, etc. (7) Giant Strides. (8) Touching various objects and returning to the teacher. (9) Merry-go-round. (10) Steer your own course imitating vehicles. (11) Astride jumping, facing all directions. (12) ...Here, there, everywhere. (13) Crow hopping. (14) In spoke formation, slapping on thighs, jumping upward. (15) Age pav, Peeche pav. Baju pav. (16) Daud vaja baithak.

(b) *Marching*.—(1) Marking quick and double time and turning left, right, about etc. (2) Marching forward in a loose group and turning left, right, etc. (3) Marching quick time in

twos. (4) Forming threes or fours by threes or fours, left or right march. (5) Marching in threes and changing direction to left and right. (6) Changing from quick to double and vice versa.

2. *Calisthenics*—

Formal Exercises.—Eight exercises given in lessons I, III, V and VII.

3. *Apparatus Exercises*—

(a) *Wand drill*.—(1) Fundamental position and commands. (2) Twelve Exercises as given in Lessons No. 11, 13, 15, 17 and 19.

(b) *Lezim*—

(i) Fundamental position and commands.

(ii) Exercises.

(1) Char awaj. (2) Ek jagah. (3) Adhi lagav. (4) Do-mi kh. (5) Gajcl. (C) Age phalang. (7) Peeche phalang. (8) Johor chal. (9) Do-mal. (10) Domal baithak.

4. *Rhythmics*.—(Boys and Girls)—

(1) Gymnastic dance (Running three steps forward and clapping on fourth count changing to sideward, etc. (2) School Boys' Frolic—1 Jumping Jack, 2. Wrestling, 3. Clapping. 4. Head Pull and push. Tipri (Girls)—Four steps.

5. *Recreative Activities*—

(a) *Minor games*.—(1) Mount tag. (2) Ostrich tag. (3) Cross tag. (4) Hook arm tag. (5) Cat and rat. (6) Fanatic. (7) Free and caught. (8) Una una savali. (9) Numbers change. (10) Poison circle. (11) Foxes' tail. (12) Master of the ring. (13) Circle rush. (14) Bear in the pit. (15) Wrestling Royal. (16) Horses and riders. (17) Circle ball pass-competition. (18) Hit the dodger. (19) Pagalwala. (20) Spud ball. (21) Dodge ball. (22) Inge va. (23) Moon light, star light. (24) Chhapu-pani. (25) Sur kathi. (26) Luggage van. (27) Two deep. (28) Policeman and thief.

(b) *Relay races*.—(1) Shuttle running relay. (2) Shuttle skipping relay. (3) Potato race relay. (4) Shuttle standing Broad Jump. (5) Khokho relay. (6) Langdi relay.

(c) *Lead-up Games*.—(1) Whip Hututu. (2) Releasing the prisoner (Hututu). (3) Number football. (F.B.). (6) Keep away (F.B.). (7) Crossing patis (Atya P.). (8) Ten passes. (B. B. & Net ball).

(d) *Major Games*.—(1) Langdi. (2) Khokho. (3) Hututu. (4) Atyapatya. (5) Informal Football. (6) Teni koit (Girls).

(e) *Athletics*.—(1) Running 50-75 yards alone, and in competition. (2) Hopping 25 to 35 yards. (3) Rope skipping (Girls). (4) Standing Broad Jump. (5) Running Broad Jump (Boys). (6) Standing High Jump. (7) Running High Jump (Boys). (8) Obstacle race. (9) Throwing the Cricket ball and play-ground ball. (10) Three-legged race. (11) Shot put, 8 lbs. (Boys). (12) Potato race. (13) Standing spring.

STANDARD IV.

1. *Introductory Activities*.—

(a) *General Activities*.—(1) Walking, running, hopping, jumping, skipping, galloping etc., in a loose group and in twos, threes, etc., (2) Maze running. (3) Follow the Leader. (4) Jumping across a line and in and out of a square. (5) Skip jump. (6) Leap frog. (7) Astride jumping in two and four counts. (8) Crow jump. (9) Finding your partner. (10) Vaulting over, crawling under, running round and riding. (11) Tug-of-war holding hands. (12) School Boys' Frolic. (13) Dodge and mark.

(b) *Marching*:—(1) Forming three or fours to the left and right using English and Hindi commands. (2) Marching forward in threes or fours. (3) Changing direction while marching in threes or fours, by left or right wheeling. (4) Turning left, right or about while marching in threes or fours. (5) Rear marching. (6) Fours left, (right) marching on spot.

(1) *Formal exercises*.—

2. *Calisthenics*.—

Eleven exercises as given in lessons XI, XII, XIII and XV.

(b) *Special Exercises*.—(1) Ordinary Dands (Boys) (12). (2) Sarak Baithaks (Boys) (20). (3) Ashtang Dands (18 boys and 12 girls.).

3. *Apparatus Exercise*.—

(a) *Lezim*.—(1) Revision of exercises taught in standard III. (2) Chandravat. (3) Chandravat. Baithak. (4) Gol chal-do. (5) Dast pao. (6) Pavitra. (7) Sher Dhaj.

(b) *Wand drill*: (Kathi Kavayat).—(1) Fundamental positions and commands. (2) Kamar zuk. (3) Kukhani. (4) Tirehhe hool-ek. (5) Tirehhe hool-do. (6) Pawpatak ek. (7) Pav patak do. (8) Kamar kas ek. (9) Kamar Kas domukh. (10) Pachpher Kukh.

(c) *Lathi drill*:—(1) Fundamental positions and commands. (2) Sidha hath. (3) Ulta hath. (4) Ghum jao. (5) Do-ruk. (6) Age phalang. (7) Peeche-phalang. (8) Jang moh. (9) Bagal moh. (10) Ekeri Bel.

4. Rhythmics.—(Boys and Girls).—

(1) Gymnastic dancing. School Boys' Frolic. (i) Churning. (ii) Lifting. (iii) Slapping. (iv) Hook arm and turn.

5. Recreative Activities.—

(a) *Minor games*.—(1) Sindur tipa. (2) Mount tag. (3) Couple tag. (4) Cross tag. (5) Whip tag. (6) Fisherman's net. (7) Flying Dutchman. (8) Finding out the leader. (9) Back to back tag. (10) Poison pass. (11) Last couple out. (12) Luggage van. (13) Kul pari. (14) Spud ball. (15) Couple spud. (16) Bombardment. (17) Ball tag. (18) Pinch-ho. (19) Crows and cranes. (20) Three deep. (21) Langdi-Hututu.

(b) *Relay Races*.—(1) Double riding stick relay—three varieties. (2) Khokho relay. (3) Foot ball dribble relay. (4) Serpentine relay. (5) Potato race relay. (6) Hockey dribble relay. (7) Centipede relay. (8) Leap frog relay. (9) Circle relay. (10) Over and under relay.

(c) *Lead-up games*.—(1) Ten passes (B. B. and Net ball). (2) Tem Dodge ball. (3) Number foot ball. (4) Keep away (F.B.) and Net ball. (5) Pin ball (B. B. & Net ball). (6) Soft ball cricket (7) Play-ground ball overtake. (8) Captain ball (B. B. & Net ball). (9) Whip Hututu. (10) Releasing the prisoner. (11) Hyderabad ball.

(d) *Major games*.—(1) Khokho. (2) Hututu. (3) Lagorya. (4) Atyapatya. (5) Informal Football. (6) Langdi. (7) Volley ball (Boys). (8) Throwball (Girls).

(e) *Athletics*.—(1) Running 50-75 yards. (2) Standing Broad Jump. (3) Running Broad Jump. (4) Standing High Jump. (5) Running High Jump. (6) Standing spring. (7) Throwing Cricket ball (Boys), Volley ball, Playground ball (Boys and girls). (10) Skipping (Girls). (11) Sit ups (Girls).

STANDARD V.

1. Introductory Activities.—

(a) *General Activities*.—(1) Running round the field or the building. (2) Follow the leader. (3) Astride jumping in files. (4) Spoke formation—astride jumping with clapping over-head on spot, moving forward eight counts and returning eight counts. (5) Finding your partner. (6) Maze running. (7) Double circle formation, marching-quick and double time, skipping, jumping, etc. (8) In files, clapping on thighs, back of the front person, jumping about, etc. (9) Vaulting over, crawling under, running round and riding. (10) Circle chase, elimination. (11) Walk stand position-alternate jumps. (12) Hopping in place with alternate knee raising and arms swinging forward. (13) Cock fighting (Boys). (14) Squat thrusts. (15) Chain tag. (16) Trunk exercises in a circular formation—children holding each other by waist. (17) Dodge and mark.

(b) *Marching*.—(Use Hindi commands).—(1) Marching threes or fours left, right on spot. (2) Marching forward in threes or fours, changing direction to left or right. (3) Turning left, right, about while marching. (4) Marching quick time, changing to double time and *vice versa*. (5) Threes or fours left, right, about marching while marching. (6) Marching forming threes or fours to left or right. (7) Marching left or right by file.

2. Calisthenics.—

(a) *Formal Exercises*.—Eight exercises as given in lessons XII, XIV, XVI and XVIII.

(b) *Special Exercises*.—

(i) *Dands (Boys)*.—(1) Ordinary dands (20). (2) Seedha dand. (3) Gardan Kas. (4) Ghutan dand. (1) Khadi. (2) Punja. (3) Sarak (25).

(ii) *Baithaks (Boys)*.

(iii) *Asanas (Boys and Girls)*.—(1) Bhujangasan. (2) Ardh Shalabhasan. (3) Vakrasan-Baye and Dahine.

(iv) *Ashtang Dand (Boys and Girls)*.—(24—Boys and 18—Girls.)

3. Apparatus Exercises.—

(a) *Lezim*.—(1) Revise exercises taught in IV standard Teach (1) Putala. (2) gold Chal. (3) Chakra gol. (4) Gol Baithak.

(ii) *Ghati Lezim*.—(1) Fundamental positions in Ghati Lezim. (2) Atha awaj. (3) Talse kadam. (4) Pavitra.

(b) *Lathi*.—(1) Revision of exercises taught in standard IV. (2) Salami do. (3) Lathi Jorse. (4) Sidhi bel. (5) Ulti bel. (6) Do mukhi. (7) Do-mukhi bel. (8) Choumukhi do. (9) Doheri bel. (10) Jang bel. (11) Bagal bel.

(c) *Indian Clubs*.—(I) Fundamental positions and commands; (II) Exercises; (1) Bagli. (2) Doheri Bagli. (3) Bagal lapet. (4) Shiri. (5) Doheri shiri. (6) Ekeri zoleदार. (7) Doheri zoleदार. (9) Rumali-ek. (9) Rumali-do. (10) Pavitra Do-rukhi.

4. Recreative Activities.—

(a) *Minor games*.—(1) Spud ball. (2) Partners. (3) Three deep. (4) Hen and chickens Dog ball. (5) Cart wheel. (6) Couple spud. (7) Circle ball pass. (8) Dribble spud. (9) Dog and the bone. (10) Circle run. (11) Where is the coin? (12) Stop, no more moving.

(b) *Relay Races*.—(1) Dumbbell push relay. (2) Shuttle relay. (3) Tunnel ball relay. (4) Wheel barrow relay. (5) Khokho relay. (6) Arch ball relay. (7) Crawl under relay (Boys). (10) Sedan chair relay. (11) Football dribble relay (Boys). (12) Double hopping relay. (13) Potato race relay. (14) Serpentine relay. (15) Jump the stick relay.

(c) *Lead up games*.—(1) Releasing the prisoner (Hututu). (2) Crossing the Court (Hututu). (3) Zigzag running relay (Khokho). (4) Policeman and thief (Khokho). (5) Crossing the patis (Atyapatya). (6) Team spud (B. B.). (7) Teachers ball (B. B.). (8) Captain ball (B. B. and Netball). (9) Ten passes (B. B. and Net ball). (10) Centre base. (11) End ball. (12) Number Football. (13) Pin ball (B. B., Net ball). (14) Bat ball. (15) Keep away. (F. B.). (16) Football, Baseball. (17) Soft ball Cricket.

(d) *Major games*.—(1) Hututu. (2) Khokho. (3) Atyapatya. (4) Lagorya. (5) Volleyball. (6) Throwball (Girls). (7) Netball (Girls). (8) Football (Boys). (9) Hockey (informal). (10) Tenikoit (Girls).

(e) *Athletics*.—(1) Running 75-100 yds. (2) Running Broad Jump. (3) Running High Jump. (4) Standing hop, step and Jump (Boys). (5) Putting the shot—8 lbs. (Boys). (6) Throwing the Cricket ball (Boys). Playground ball (Boys and girls). Netball (Girls). (7) Pull-ups (Boys). 8 Dips on Parallel bar (Boys). (9) Potato race. (10) Obstacle race. (11) Three legged race. (12) Standing Spring. (13) Sit-ups (Girls). (14) Squat thrusts.

STANDARD VI.

1. Introductory Activities.—

(a) *General Activities*.—(1) Maze running. (2) Follow the leader. (3) Running round the school building, or the playground in one or two files. (4) Astride jumping with clapping overhead in two counts moving forward and backward, eight counts each. (5) Running, hopping, skipping, etc., in a circle, keeping rhythm by clapping on eighth, fourth or second count. (6) Vaulting over, crawling under, running round and riding. (7) Walking and running in a circle, alternately clapping on eighth or fourth count. (8) Chain tag. (9) Crows and cranes. (10) 'Here, there, everywhere'. (11) Partner chase. (12) School Boys' Frolic. (13) Dandas and Baithaks. (13) Forming groups of twos, threes, fours, etc., while running, hopping, etc. on signal.

(b) *Marching*.—(1) Marching quick and double time in twos, threes, etc., changing direction. (2) Changing quick to double time and vice versa. (3) Marching fours left, right and left or right about. (4) Marching left or right by file. (5) Forming from a file, twos, fours, eights, etc., by left and right and alternate marching, joining up in the centre. (6) Marching to a song. (7) Marching for a March past saluting by 'Eyes-right'.

2. Calisthenics—

(a) *Formal Exercises*.—(1) Zole hafii. (2) Kamar pavitra-ek. (3) Shiri-do. (4) Chatta chowdan. (5) Kamar pavitra-do. (6) Arms thrusting forward, sideward, upward in eight counts.

(b) *Special Exercises*—

(i) *Dands* (boys). (1) Sher dand. (2) Seedhe dand. (3) Saf-suf-ek. (4) Seena Kas. (5) Ordinary dand—24.

(ii) *Baithaks* (Boys).—(1) Sapate lagav-ek. (2) Sapate lagav-do. (3) Putki. (4) Kudan. (5) Sarak Baithaks—30.

(iii) *Asanas*.—(1) Dhanurasan. (2) Shalabhsan. (3) Paschimtan. (4) Vipareet karani.

(iv) *Ashtang dand*.—Boys—30; girls—24.

3. Apparatus Exercises—

(a) *Lezim*.—(1) Momilaph. (2) Vajedar Baithak. (3) Vajedar-do. Ghati Lezim.—(1) Revise the exercises taught in V Std. (2) Age-chal. (3) Pav-chakra. (4) Neem chakra. (5) Poota chakra. (6) Hool-age-chal. (7) Choukat formation. Baithak (kneeling for girls). (7) Figure of eight movement.

(b) *Lathi*.—(1) Revise the exercises taught in Std. V. (2) Jang choumukhi-ek. (3) Bagal choumukhi. (4) Choumukhi-ek. (5) Doheri-do. (6) Salami-ek. (7) Ani-kat. (8) Alimadat pavitra. (9) Salami or guredeo vande. (10) Ladhant-ek (boys). (11) Elementary lathi chhute (boys).

(c) *Indian Clubs*.—(1) Revise the exercises taught in Std. V. (2) Vajedar ulti. (3) Seedhi kalai mooh. (4) Vajedar Kalai marod. (5) Kalai lapet. (6) Phekan mondha kas. (7) Phekan Doheri kalai lapet.

(d) *Jambia (Girls)*.—Attack and defence of (1) Bahera. (2) Tamacha. (3) Sheer. (4) Kamar.

4. Recreative Activities—

(a) *Minor games*.—(1) Stealing sticks. (2) Finding the leader. (3) Push ball. (4) Couple spud. (5) Dribble spud. (6) Hurly burly. (7) Dodgeball. (8) Spud ball. (9) Who has gone out of the circle? (10) Crossing no man's land. (11) Teacher ball. (12) Hyderabad ball. (13) Cock fighting (boys). (14) Push out of the circle. (15) Inge va. (16) Chinese wall. (17) Circle pass ball.

Relay Races.—(1) Over and under relay. (2) Roll ball relay. (3) Potato race relay. (4) Chariot relay. (5) Jump the stick relay. (6) Human burden relay (boys). (7) Run and throw relay. (8) Basketball dribble relay. (9) Netball passing relay. (10) Leap frog relay, (boys). (11) Arch ball, straddle over and run relay, (boys). (12) Centipede relay.

(c) *Lead up games (boys)*.—(1) Team spud. (B. B. & Netball). (2) Keep away, (F. B., boys). (3) Keep it up (V.B.). (4) Pin ball (B.B. or Netball). (5) Three court Dodgeball. (6) Ten passes (B.B. or Netball). (7) Softball Cricket. (8) Captain ball (B.B. or Netball). (9) Playground-ball overtake. (10) Releasing the prisoner (Hututu). (11) Police and thief (Khokho).

(d) *Major games*.—(1) Hututu. (2) Khokho. (3) Atyapatya. (4) Football (boys). (5) Basketball (boys). (6) Volleyball (boys and girls). (7) Netball (girls). (8) Throwball (girls). (9) Hockey (boys and girls). (10) Playground ball (boys and girls). (11) Push ups (Girls). (12) Sit ups (girls). (13) Potato race. (14) Walking for speed.

STANDARD VII.

1. *Introductory Activities*.—

(a) *General Activities*.—(1) Maze running. (2) Follow the leader. (3) Competitions in walking running, hopping, etc., in groups of fours, etc. (4) Running round the playground. (5) Here, there, everywhere. (6) Crows and cranes. (7) School Boys' Frolic. (8) Vault over, crawl under, run round and ride.

(b) *Marching*.—(1) Marching in threes or fours, quick and double time. (2) Route march to music or a song. (3) Marching in a file and forming twos, fours, eights, etc., by wheeling left, right and alternate marching. (4) Marching forming file by a left or a right turn.

2. *Calisthenics*—

(a) *Formal exercises*.—Army P. T. table—Nine exercises as given in lesson I and IV.

(b) *Special exercises*—

(i) *Dands* (boys).—(1) Sher dand. (2) Gardan kas. (3) Mayur dand. (4) Ordinary dands—30.

(ii) *Baithaks* (boys).—Lahera. (2) Sapate lagav-do. (3) Sarak baithaks—40.

(iii) *Asanas*.—(1) Shalabhasan. (2) Vipareet Karani (boys and girls). (3) Sarvangasan.

(4) Sheershasan.

(iv) *Ashtang dand*.—Boys—36; girls—24.

3. *Apparatus Exercises*—

(a) *Lezim*.—Continuously a variety of exercises. Boys—5 minutes and Girls—3 minutes.

(b) *Lathi*.—(1) Lathi ladhant (boys). (2) Lathi ehute (boys). (3) Continuous swinging variety of exercises. Boys 5 minutes and Girls 3 minutes.

(c) *Jambia* (Girls).—Counter vars and defence of Bahera, Tamacha, Sheer and Kamar.

4. *Recreative Activities*—

(a) *Relay Races*.—(1) Human burden relay (boys). (2) Leap frog relay (boys). (3) Tunnel ball, and straddle over relay, (boys). (4) Arch ball (girls). (5) Football dribble relay (boys). (6) Roll-ball relay (Girls). (7) Jump the stick relay. (8) Potato race relay. (9) Shuttle relay

(b) *Major games*.—(1) Hututu. (2) Khokho. (3) Atyapatya. (4) Volleyball. (5) Throw-ball (girls). (6) Netball (girls). (7) Basketball (boys). (8) Football (Boys). (9) Hockey. (10) Lagorya. (11) Playground ball.

(c) *Athletics*.—Running 100 yards. (2) Running Broad jump. (3) Running High Jump. (4) Running Hop, Step and Jump. (5) Shot put 12 lbs. (boys). (6) Throwing the cricket ball and playground ball, (boys). (7) Throwing the football, (girls). (8) Potato race. (9) Standing Spring. (10) Pull ups (boys). (11) Push ups (girls). (12) Dips (boys). (13) Sit ups (girls) (14) Walking for speed.

APPENDIX No. I-F.

SYLLABUS OF PHYSICAL EDUCATION FOR PRIMARY TRAINING COLLEGES.

A. Theory :—

(1) Elementary Anatomy and Physiology with special reference to Physical Activities. The various systems of the body and their functions.

(2) Health Education—

- (a) Hygiene—personal, school and community—elements of.
- (b) Nutrition—Components of a balanced diet. Functions of each part, common food-stuffs, and their nutritional values.
- (c) Health Examination or Medical Inspection—The teacher's share in the follow-up work as well as in the case of the health of school children.
- (d) First-aid, how to render it.

(3) Principles of Physical Education—

- (a) Modern Interpretation of Physical Education—Its relation with education, and its place in schools. Its aim and objectives.
- (b) Characteristics of the Primary school child and the influence of Physical Education on the child.
- (c) The close relationship of Health Education and Physical Education.

(4) Materials and Methods in Physical Education—

- (a) Care of play-grounds and equipment.
- (b) A lesson plan in Physical Education.
- (c) Methods of teaching various Types of physical activities.
- (d) Methods of organising Group Competitions, Efficiency Tests, Matches, Tournaments, Sports, Health Days, Demonstrations and Play Days.
- (e) Rules of important Major games and umpiring.

B. Physical Activities—

Note.—The activities given in the Syllabus for Primary schools should be taught. Picnics, Camp fires, Excursions, etc., should be organised for the teachers.

C. Practice Teaching—

Not less than twelve planned lessons should be taken under the supervision of a qualified teacher of Physical Education.

APPENDIX No. II-A.

PHYSICAL EDUCATION COMMITTEE, 1945.

Questionnaire to collect Information regarding Physical Education in the Province.

- Notes.*—(1) The questionnaire is exhaustive and covers the various matters referred to the Committee by Government. You are requested to give replies to those questions in which you are particularly interested, and to which you can give helpful answers.
- (2) It is hoped that the Heads of Institutions will take into account the experience and suggestions of the Physical Education teachers under them.
- (3) If there are points, not covered in this Questionnaire but which you think ought to be placed before the Committee, you are requested to send your suggestions along with the answers to the Questionnaire.

I. *General Information regarding an Institution or an Individual—*

(A) What is your name and address? (in case of Individuals only).

(B) (i) What is the name of your institution and place?

	Boys.	Girls.	Men.	Women.
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(ii) What is the number on the roll?

II. *Staff for Physical Education—*

(i) What is the strength of the staff of your institution?

(ii) Please submit the details regarding the Physical Education staff of your institution, according to the table given below:—

No.	Name.	Qualifications.		Periods of work per week.	
		General.	Physical Education.	Physical Education.	Other subjects.

(iii) What recognition has been given by your institution to (a) the Diploma in Physical Education, (b) the Certificate of attendance at the Short Term Course in Physical Education for Secondary Teachers and (c) the Certificate of attendance at the Drill Instructors' Course, in respect of pay and/or additional remuneration, and confirmation to teachers holding either of (a), (b) and (c)?

(iv) What steps would you suggest to remedy the present position of inadequate staff for Physical Education?

III. *Play-ground Equipment, etc., for Physical Education—*

	Acres.	Sq. yds.
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(A) (i) What is the area of your play-ground?

(ii) How far is it from the site of your institution?

(iii) It has been Departmentally circulated that each institution should provide one acre of land within ten minutes' walking distance as a minimum playspace for every 250 pupils. Does your institution satisfy this requirement?

(iv) If not, what measures would you suggest to provide your institution with at least the minimum playspace required for the conduct of the Physical Education programme?

(v) Is your institution provided with a shed, a hall, or a gymnasium?

(vi) If so, what are the dimensions of it?

(vii) If not, what measures would you suggest to provide this arrangement?

(B) Please supply the information regarding the equipment for Physical Education as per the columns given below :—

Name of the article.	Quantity.
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IV. Organisation of the Physical Education Programme—

- (i) Is a syllabus for Physical Education framed and followed in your institution? (If so, a copy of same may be attached.)
- (ii) If no syllabus has been framed, have you got a statement regarding the activities and games taught throughout the year to the different classes? (If so, a copy of the same may be attached.)
- (iii) Are you in favour of having a common syllabus for school-going children? If so, what suggestions would you offer in framing the same?
- (iv) What are your observations regarding the response of pupils to the present programme of Physical Education?
- (v) How can you secure greater co-operation from them?
- (vi) Are organised games played in your institution after the school hours? What interest do pupils and teachers take in such Voluntary programmes?
- (vii) How many periods of Physical Education are provided for each standard? What is the duration of such periods?
- (viii) Does Physical Education form a part of your regular school work all through the year,—from June to the end of the school year?
- (ix) Have you made Physical Education an examination subject? If so, what are your reactions?
- (x) If not, are you in favour of making Physical Education an examination subject? What ways would you suggest for conducting an examination in Physical Education?
- (xi) Is Physical Education in your school correlated and controlled by medical examination and medical advice regarding diet, rest periods, medical treatment, suitability of exercises, etc.?
- (xii) What are the standards or measurements or tests, you adopt for finding whether a student has benefited or not, and to what extent? Do you keep progress cards for each student?
- (xiii) What suggestions would you offer to ensure a change of clothing for Physical Education work for the pupils as well as teachers in charge, and also to provide bathing or at least washing facilities after a Physical Education class?
- (xiv) Should swimming form a part of the Physical Education in schools? If so, what arrangements would you make for introducing swimming in your institution?
- (xv) Should wrestling and boxing be taught to all pupils or should these be taught only to those who are specially interested?

V. Budget for Physical Education—

- (i) Please supply the details regarding the Budget for Physical Education of your institution, as per the columns given below :—

No.	Item.	1942-43.	1943-44.	1944-45.
1	Income by way of fees (Rate of games fee per pupil) ...			
2	Income from other sources, if any			
3	Contribution of the institution, if any			
4	Government grant			
5	Total income.			

No.	Item.	1942-43.	1943-44.	1944-45.
Expenditure incurred on—				
1	Equipment ...	...	...	...
2	Playground ...	...	...	...
Purchase of—				
Maintenance, repairs of—				
3	Salary of P. E. teachers and/or remuneration, if any ...	...	...	...
4	Medical Inspection ...	...	...	...
5	Inter-institution matches and tournaments ...	...	...	...
6	Miscellaneous and other items not covered by 1 to 5 ...	...	...	...
7	Total expenditure ...	...	...	...

(ii) What should be, in your opinion, the rate of Government grant for Physical Education? Should it be a separate grant apart from the general grant, as is paid at present? What suggestions, in general, have you to make regarding the present grant-in-aid system for Physical Education?

(iii) Are you in favour of expenditure on expensive games such as Cricket, Tennis, etc. being admitted to Government grant?

VI. *Medical Inspection—*

(i) Are pupils in your institution medically examined? How often do you have such routine medical examination?

(ii) Do you use the medical examination forms prescribed by the Department?

(iii) In what ways do you carry out the follow-up work after the medical inspection of pupils is conducted?

(iv) What is your opinion regarding the appointment of school Medical Officers and the starting of the school medical clinics?

(v) Would you favour feeding of children in schools? Who should bear the expenses of school feeding?

VII. *Inspection of Physical Education—*

(i) What are your reactions regarding the present inspection arrangements for Physical Education? Is the present staff of two Inspectors per Division adequate?

(ii) Would you favour the appointment of a Divisional Inspector for each division and a Provincial Inspector for the Province to coordinate Physical Education in the Province as a whole?

(iii) What suggestions would you give to make the present system of Inspection more helpful and effective?

VIII. *Training Institute for Physical Education—*

(i) What are your impressions about the Diploma course in Physical Education conducted at the Training Institute for Physical Education, Kandivli?

(ii) What modifications or amplifications would you suggest in the existing course of studies and the working of the Training Institute for Physical Education?

(iii) Are you in favour of conducting the Diploma Examination in all parts—Theory, Teaching, and Skills—on present lines? If not, what changes would you make in it?

(iv) Are you in favour of having a College affiliated to the University working for a degree course in Physical Education? Are you in favour of converting the present Training Institute into such a College? What are your suggestions in regard to qualifications for admission to, duration and syllabus, etc., of such a Course?

(v) Would you like to have only one such a Central College conducted by Government or private societies, or would you like to have several such colleges—say one in each division ?

(vi) Are you in favour of Short Term Course in Physical Education for Secondary teachers to be conducted Departmentally in future also, as is being done at present ?

(vii) If not, do you think it advisable to hand over the conduct of such a Course to private agencies ? If so, what conditions should be imposed on private institutions for being eligible to take up the work ?

(viii) There is a general suggestion that a Certificate Course lasting for a year and available to Matriculates should be instituted by Government. Do you feel the necessity of instituting such a Course ?

(ix) What should be the respective status in regard to pay, qualifications, etc. of—

- (a) a Degree holder in Physical Education,
- (b) a Graduate Diploma holder in Physical Education,
- (c) a Matriculate Certificate holder in Physical Education,
- (d) a Matriculate Short Termer, and
- (e) a Non-matriculate Short Termer.

(x) Are you in favour of including Military Education in the syllabus of the Course followed at the Training Institute for Physical Education ? If so, what suggestions would you make for including this subject in the Course of studies for the Diploma or the Degree in Physical Education ?

IX. Board of Physical Education—

(i) What, in your opinion, should be the functions of the Board of Physical Education ?

(ii) Should the Board be a statutory body ?

(iii) What should be the constitution and duties of the Board of Physical Education ?

(iv) Should the Board be entrusted with functions such as publicity, propaganda, etc. ?

(v) Should the Board consist of members exclusively nominated by Government, or partly nominated by Government and partly elected by the public, or exclusively, elected by the public ? In case, election is to be introduced, what should be the nature of the Electorate ?

(vi) Should the Board be purely advisory or should it have executive power to control and guide educational institutions so far as Physical Education is concerned ?

(vii) Should the Inspecting agency be controlled by the Board of Physical Education ? If so, what suggestions would you make for exercising proper control over the Departmental Inspecting agency of the Physical Education work ?

X. General Points regarding Physical Education—

(i) (For Heads of Institutions only).

What briefly are your impressions on the scheme of Physical Education that is at present worked out in schools and other institutions ? Any suggestions ?

(ii) (For Physical Education Teachers only).

What suggestions would you briefly make on—

- (a) syllabus for Physical Education,
- (b) allotment of work-Physical Education as well as other subjects,
- (c) facilities for properly organising the Physical Education in your institution with special reference to ways of overcoming the difficulties you have experienced, if any, in the conduct of the same.

(iii) What is the effect of the present method of Physical Education on the health of school-going children and their intelligence.

N.B.—Where the space provided for the replies in the questionnaire is found inadequate, additional space may be made available by using extra paper.

APPENDIX No. II (B).

Questions concerning Recreation among the Masses—

- (i) How can Physical Education be promoted among the masses ?
- (ii) Can the existing Gymnasias, Akhadas, etc., do this ?
- (iii) What improvement would you suggest to enable such institutions to provide Physical Education and Recreation, which will attract the people ?
- (iv) How can Government induce the starting of such Centres on a large scale by individuals and voluntary organisations ?
- (v) Are you in favour of a Department of Recreation which will promote and control the recreation of the people in the Province ?

APPENDIX No. III.

List of persons invited by the Physical Education Committee for personal interviews. (Those marked with asterisks, could not be interviewed).

1. Mr. Agarkar, A. J. Bombay.
2. Mr. Ahmadi, D. I. Superintendent, Municipal Gardens, Bombay.
3. Mrs. Aho, B. Lady Superintendent, Mahila Vidyalaya, Belgaum.
- *4. Dr. Balsara, J. F. Deputy Municipal Commissioner, Bombay. (Submitted a written Statement).
5. Mr. Bapat, S. J. Dharwar.
6. Mr. Bhat Vasudeo Ahmedabad.
- *7. Mr. Bhide, R. V. Kalyan.
6. Mr. Bhoot, S. H. Secretary, Bombay Provincial Olympic Association, Bombay.
9. Mr. Bhopatkar, L. B. Pleader, Poona.
- *10. Sir Chandavarkar, V. N. Bombay.
11. Mr. Chapekar, L. N. Head Master, A. B. High School, Chalisgaon.
- *12. Dr. Dass Gupta Municipal Health Officer, Bombay.
13. Mr. Dave, M. J. Assistant Deputy Educational Inspector for Physical Education, Northern Division, Ahmedabad.
14. Prof. Deodhar, D. B. Poona.
- *15. Dr. Desai, C. M. Broach.
16. Dr. Desai, H. V. Ahmedabad.
17. Mr. Desai, M. K. Head Master, New English High School, Jalgaon.
- *18. Dr. Desai, R. K. Surat.
19. Mr. Dhabe, S. W. Pleader, Nagpur.
20. Mr. D'Souza, L. V. Divisional Superintendent of Education, Nagpur.
- *21. Fr. Fell Joseph St. Xavier's College, Bombay.
22. Mr. Franklin, E. W. Divisional Superintendent of Education, Amraoti.
23. Mr. Fyzee, A. A. A. Principal, Government Law College, Bombay.
24. Lt.-Col. Gajendragadkar, A. B. Bombay.
25. Mr. Gandhe, V. V. Superintendent, L. N. S. High School, Jalgaon.
26. Mr. Ganu, P. B. Secretary, Kahate Gokhale Vyayam Shala, Nagpur.
27. Mr. Garde, N. P. Assistant Deputy Educational Inspector for Physical Education, Bombay Division, Bombay.
- *28. Mr. Ghaskadbi, Y. K. Pleader, Dhulia.
29. Mr. Ghate, V. D. Educational Inspector, Northern Division, Ahmedabad.
30. Dr. Ghogre, P. R. Dhulia.
31. Mr. Godbole, S. G. Poona.

32. Mr. Godse, A. K. Assistant Deputy Educational Inspector for Physical Education, Central Division, Poona.
33. Dr. Gokhale, V. B. Poona.
- *34. Dr. Golvalkar Madhavarao Nagpur.
35. Dr. Hardikar, N. S. Hubli.
36. Dr. Jha, V. S. Director of Public Instruction, Nagpur.
37. Mr. Jog Abba Sahib Bombay.
- *38. Mr. Joglekar, J. C. Do.
39. Dr. Kabbur, N. B. Dharwar.
40. Mr. Kagalkary M. N. Amraoti.
41. Mr. Kale, G. P. Assistant Deputy Educational Inspector for Physical Education, North East Division, Thana.
42. Mr. Kalvit, V. N. Head Master, D. S. High School, Bhusawal.
43. Dr. Kane, S. K. Yeotmal.
44. Mr. Kanitkar, K. R. Principal, Pratap College, Amalner.
45. Mr. Kar, R. P. Educational Inspector, North East Division, Thana.
46. Mr. Karandikar, B. Amalner.
- *47. Mr. Karkare Jalgaon.
48. Mr. Khadye, K. M. Principal, M. E. Society's College of Arts and Sciences, Poona.
49. Mr. Khair, G. S. Superintendent, Anath Vidyarthi Griha, Poona.
50. Mr. Khan, A. Educational Inspector, Southern Division, Dharwar.
51. Mrs. Khan, M. Head Mistress, Anglo Urdu High School for Girls, Poona.
- *52. Miss Khandwalla, K. Secretary, Municipal Schools' Committee, Bombay.
53. Mr. Koppikar, R. C. Head Master, New English School, Hubli.
54. Dr. Krishnayya, G. S. Educational Inspector, Bombay Division, Bombay.
- *55. Mr. Kulkarni, T. A. Principal, H. P. T. College, Nasik.
- *56. Mrs. Laiwala Surat.
57. Mr. Lobo, J. Deputy Director of Public Instruction, Madras.
58. Mr. Mahabal, K. B., Nasik.
59. Dr. Mahajani, G. S. Principal, Fergusson College, Poona.
- *60. Mr. Maitra, J. C. Bombay Chronicle, Bombay.
61. Capt. Mangrulkar, K. Y. Nagpur.
62. Professor Manik Rao, Raja Ratna Baroda.
Raja Priya.
63. Mr. Marulkar Nagpur.
64. Mr. Meherban, N. A. Labour Officer, Government of Bombay, Bombay.
- *65. Mr. Mehta, M. H. Godhra.

63. Miss Mehta, S. ... Assistant Inspectress of Girls' Schools, Northern Division, Ahmedabad.
67. Dr. Mehta, J. M. ... Commissioner for Education, Baroda.
- *68. Mr. Merchant Vijay, B. ... Bombay.
- †69. Mr. Modak, V. G. ... Administrative Officer, District Local Board, Jalgaon
70. Rao Bahadur Mohani, D. K. ... Deputy Director of Public Instruction, Nagpur.
71. Lt.-Col. Mohindra Singh ... Commandant, Army School of Physical Training, Ambala.
- *72. Rao Bahadur Dr. Mone, R. V. ... Civil Surgeon, Dharwar.
73. Mr. Mudholkar, V. R. ... Principal, K. E. Board's Primary Training College, Dharwar.
- *74. Sir Mudliar, A. L. ... Vice-Chancellor, Madras University, Madras.
- *75. Dr. Munje, B. S. ... Nasik.
76. Mr. Mundkur, U. A. ... Wilson College, Bombay.
77. Mr. Naik, B. K. ... State Physical Director, Baroda.
78. Mr. Naik, J. P. ... Secretary, Development Department, Kolhapur.
79. Mr. Naralkar, N. G. ... Bombay.
80. Mr. Nurullah, S. ... Principal, Secondary Teachers' College, Bombay.
81. Dr. Natu, M. N. ... Poona.
82. Prof. Pandya, P. A. ... M. T. B. College, Surat.
83. Mr. Paranjpe, D. R. ... Satara.
- *84. Mr. Paranjpe, G. R. ... Retd. Principal, Royal Institute of Science, Bombay.
85. Mr. Patel, R. C. ... Anand.
86. Mr. Patil Bhau Rao ... Satara.
87. Dr. Patwardhan, S. G. ... Amraoti.
- *88. Mr. Pendse, Lalji ... Bombay.
- *89. Mr. Pendse, R. M. ... Bombay.
90. Mr. Pillay, K. N. ... Superintendent, H. D. High School, Sholapur.
- *91. Principal, St. Joseph's Convent High School ... Belgaum.
- *92. Mr. Prithvi Sing Sardar ... Andheri (Submitted a Written Statement).
93. The Hon'ble Mr. Justice Puranik, W. R. ... Vice-Chancellor, Nagpur University, Nagpur.
94. Dr. Rehman, M. B. ... Principal, Ismail Yusuf College, Andheri.
95. Mr. Rizwi, S. H. R. ... Officer on Special Duty (Education), Nagpur.
96. Miss Rustomji, A. B. H. J. ... Inspectress of Girls' Schools, Bombay Division Bombay.
97. Mr. Sakhedev, N. R. ... Belgaum.
- *98. Miss Sarabhai Mridulaban ... Ahmedabad (Submitted a Written Statement).
99. Mr. Sarkari, T. A. ... Bombay.

*100.	Secretary	...	...	Hindustan Scout Association, Nagpur.
101.	Mr. Shah, C. C.	...	...	Surat.
102.	Mr. Shiggaon, H. A.	...	...	Assistant Deputy Educational Inspector for Physical Education, Southern Division, Dharwar.
103.	Mr. Singh, A.	...	...	Physical Director, Hislop College, Nagpur.
104.	Mr. Talyarkhan, A. F. S.	...	...	Bombay.
105.	Mr. Tawade, S. R.	...	...	Educational Inspector, Central Division, Poona.
106.	Miss Thomson	...	...	Principal, St. Andrew's High School, Poona.
107.	Mr. Thornback, F. W.	...	...	Times of India, Bombay.
108.	Mrs. Tilak, S. D.	...	...	Lady Superintendent, N. E. I. Girls' High School Nasik.
109.	Mr. Tirodakkar, V. S.	...	...	Chairman, Head Masters' Association, Bijapur.
*110.	Mr. Turner, E. J.	...	...	Secretary, W. I. F. A., Bombay.
111.	Miss Twells, H. V.	...	...	Inspectress of Girls' Schools, Central Division, Poona.
*112.	Mr. Vaidyanathan, V. G.	...	...	Hon. Provincial Secretary, The Hindustan Scout Association, Bombay.
113.	Mr. Vaze, K. G.	...	...	Poona.
114.	Mr. Wad, G. M.	...	...	Amalner.
*115.	Sir Wadia, B. J.	...	...	Vice-Chancellor, University of Bombay, Bombay. (Submitted a Written Statement).
116.	Mr. Wani, D. C.	...	...	Nandurbar.
117.	Mr. Yardi, R. K.	...	...	Head Master, New English School, Sinner, District Nasik.

† Appeared for interview, as a representative of the Chairman, District Local Board, Jalgaon, who was invited but could not come for the interview.

APPENDIX No. IV.

List of Institutions in the Province visited by the Physical Education Committee.

BOMBAY DIVISION.

1. Alexandra Girls' English Institution, Bombay.
2. Indian Education Society's High School for Girls, Dadar.
3. Gamadia Girls' High School, Bombay.
4. Anjuman-I-Islam High School, Bombay.
5. Aryan Education Society's Boys' High School, Girgaum.
6. C. L. Boys' High School, Dadar.
7. J. N. Petit Parsi Orphanage, Parel.
8. Orient High School, Girgaum.
9. Robert Money High School, Grant Road.
10. South Indian Education Society's High School, Matunga.
11. St. Stanislaus High School, Bandra.
12. Vanita Vishram Training College for Women, Bombay.
13. Mrs. Broacha's Physical Training Class, Y.W.C.A., Bombay
14. Samarth Vyayam Mandir, Dadar.
15. Zoroastrian Physical Culture League, Bombay.

CENTRAL DIVISION.

16. High School for Indian Girls, Poona.
17. St. Annes Convent High School, Poona.
18. Modern High School, Poona.
19. Nutan Marathi Vidyalaya High School, Poona.
20. Saraswathi Vidyalaya, Poona.
21. Sardar Dastur Hoshang Boys' High School, Poona.
22. Shivaji Preparatory Military School, Poona.
23. Government Primary Training College for Men, Poona.
24. Pratap High School, Amalner.
25. Maharastriya Mandal's Vyayam Shala, Poona.
26. Samartha Vyayam Mandal, Poona.

NORTHERN DIVISION.

27. Girls' Own School, Ahmedabad.
28. I. P. Mission's Girls' High School, Surat.
29. City High School, Ahmedabad.
30. Sir J. J. English School, Surat.
31. Tutorial High School, Surat.
32. T. and T. V. Sarvajanic Boys' High School, Surat.
33. Training College for Women, Ahmedabad.
34. Municipal Vyayam Vidyalaya, Ahmedabad.
35. Shri Balaji Vyayam Mandir, Surat.

NORTH EAST DIVISION.

36. Government Girls' High School, Thana.
37. Government Girls' High School, Nasik.
38. Sevasadan Girls' High School, Nasik.
39. Kamalabai Girls' High School, Dhulia.
40. Behranji Jeejabhai High School, Thana.
41. General Education Institute's High School, Thana.
42. Anglo Urdu High School, Nasik.
43. Bhonsala Military High School, Nasik.
44. Parsi Boarding School, Nasik.
45. Pethe High School, Nasik.
46. Rungta High School, Nasik.
47. Garud High School, Dhulia.
48. J. R. City High School, Dhulia.
49. A. M. S. S. Mandal, Nasik.
50. Ahilyaram Vyayam Prasarak Mandal, Nasik.
51. Gulalwadi Vyayam Shala, Nasik.
52. Vijay Vyayam Mandir, Dhulia.
53. Shree Yashavant Vyayam Shala, Nasik.

SOUTHERN DIVISION.

54. A. K. Girls' High School, Dharwar.
55. Bassel E. Mission High School, Dharwar.
56. Karnatak High School, Dharwar.
57. Raja L. Sardesai High School, Dharwar.
58. Primary Training College for Men, Dharwar.
59. Primary Training College for Women, Dharwar.
60. Karnatak Vyayam Vidyapith, Dharwar.
61. Mallasajjan Vyayam Shala, Dharwar.

APPENDIX No. V.

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APPENDIX No. VI.

*Statement Regarding Percentages of undernourished Pupils in Secondary Schools in the Bombay Province.**(Note.—These percentages are calculated from the figures supplied by 444 Secondary Schools.)*

No.	Division.	Number of Secondary Schools in each Division from whom the information was sought.	Number of Secondary Schools supplying information.	Percentage of undernourished pupils needing 100 per cent. free help.	Percentage of undernourished pupils needing 50 per cent. free help.	Percentage of undernourished pupils needing no help.	Percentage of total No. of undernourished pupils.
				per cent.	per cent.	per cent.	per cent.
1	Bombay Division	167	110	15	13	3	31
2	Central Division	122	84	12	9	1	22
3	Northern Division	139	92	20	10	9	39
4	North-East Division	126	78	17	9	6	33
5	Southern Division	93	80	15	10	5	30
	Total	647	444	16	10	5	31

APPENDIX No. VII.

Statement Showing Enrolment of the Training Institute for Physical Education, Kandivali, from 1938-39 to 1945-46.

Year.	Candidates deputed by Government			Candidates deputed by Non-Government Institutions			Private Candidates		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
1938-39	14	5	19	42	3	45	21	1	22
1939-40	21	2	23	34	3	37	11	2	13
1940-41	5	5	10	51	6	57	11	7	18
1941-42	9	3	12	35	6	41	7	2	9
1942-43	24	11	35	24	5	29	4	4	8
1943-44	23	6	29	14	1	15	7	1	8
1944-45	20	5	25	9	1	10	2	1	3
1945-46	23	..	23	4	2	6	..	1	1
Total	139	37	176	213	27	240	63	19	82

	Candidates deputed by States			Candidates coming from outside Bombay Province			Total		Grand Total.
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	
1938-39	2	..	2	..	1	1	79	10	89
1939-40	..	..	..	..	2	2	66	9	75
1940-41	2	..	2	..	..	..	69	18	87
1941-42	1	2	3	1	..	1	53	13	66
1942-43	..	1	1	..	..	..	52	21	73
1943-44	1	..	1	..	1	1	45	9	54
1944-45	8	1	9	..	..	..	39	8	47
1945-46	7	2	9	..	..	..	34	5	39
Total	21	6	27	1	4	..	437	93	530

APPENDIX No. VIII.

Statement of Percentages Showing the extent of Playgrounds attached to Secondary Schools in the Bombay Province.

No.	Division.	Number of Secondary Schools in each Division from whom the information was sought.	Number of Schools supplying information.	Percentage of Schools having playgrounds according to the requirements of the Department viz., 1 acre for every 250 pupils.	Percentage of Schools having some play space, but not satisfying the Departmental requirements.	Percentage of Schools with no playgrounds.
				Per cent.	Per cent.	Per cent.
1	Bombay Division ..	167	110	16·8	64·3	13·9
2	Central Division ..	122	84	53·3	42·9	33·8
3	Northern Division ..	139	92	32·2	55·6	12·2
4	North-East Division ..	126	78	47·9	45·3	6·8
5	Southern Division ..	93	80	60·0	22·7	17·3
	Total ..	647	444	42·0	46·2	11·8

APPENDIX No. IX-(A).

Physical Education
Board of —
Constitution of,

GOVERNMENT OF BOMBAY.

EDUCATIONAL DEPARTMENT.

Resolution No. 5310.

Bombay Castle, 2nd May 1938.

RESOLUTION OF GOVERNMENT.

Government have decided that a Board of Physical Education shall be constituted to advise them on matters concerning physical education. The Board should consist of six non-official members to be nominated by Government from time to time, with the Director of Public Instruction and the Director of Public Health for the Government of Bombay as *ex-officio* members. The Principal of the Training Institute for Physical Education, which is proposed to be started by Government shortly, should also, when appointed, be an *ex-officio* member of the Board and act as its Secretary.

2. Government are also pleased to nominate the following persons as non-official members of the Board for a period of two years with effect from the date of this Resolution :—

CHAIRMAN.

(1) Swami Kuvalayanand of Lonavla.

MEMBERS.

(2) Mr. C. B. Purani, M.L.A., Ahmedabad.

(3) Dr. V. R. Bhoosrath, Bombay.

(4) Mrs. Faiz B. Tyabji, M.L.A., Bombay

(5) Mr. V. N. Jog, M.L.A., Dharwar.

(6) Mr. Lalji Goculdas Kapadia, Advocate (O. S.), Bombay.

3. The question of the location of the office of the Board is under the consideration of Government. In the meanwhile the Director of Public Instruction should be requested to make the necessary arrangements in this connection and to entrust the work of making arrangements for the meetings of the Board to some responsible officer of the Educational Department pending the appointment of the Principal of the Training Institute for Physical Education.

4. The powers and duties of the Board shall be regulated as follows :—

(1) The Board shall advise on all matters pertaining to the physical education of school-going children as well as others ;

(2) The Board shall have no control over the administrative work of the Educational Department. Its work will be of a purely deliberative and advisory nature ;

(3) The Educational Department shall consult the Board on all matters relating to the general policy to be followed in the development and administration of physical education in the Province ;

(4) Appointments to the teaching staff for training teachers in physical education shall be made in consultation with the Board so far as it does not affect the statutory functions of the Public Service Commission, Bombay-Sind, to make the selection of candidates for appointments, laid down in the Public Service Commission Function Rules ;

(5) The Board shall also advise Government in regard to the acquisition of play-grounds and playing fields for gymnasias as well as for schools ;

(6) The members of the Board shall be entitled to inspect physical education work in Government as well as aided institutions and to give such advice to the authorities concerned as they deem necessary ;

(7) The Board shall frame courses of physical education for the different training institutions and also for the primary and secondary school pupils in the Province ;

(8) The Board shall be entitled to be supplied with all the information that it requires for its deliberations from all the Departments;

(9) The Board's advice shall be taken in framing the Annual Budget for physical education;

(10) The Chairman of the Board shall be the Executive and Administrative Officer of the Board so far as educative propaganda described in the report of the Committee is concerned and he shall be helped by an efficient staff to enable him to discharge his duties properly. In the performance of his duties, the Chairman shall be guided by the Board.

(11) The selection of the staff for the office of the Board of Physical Education should be made with the approval of the Chairman of the Board so far as it does not affect the statutory functions of the Public Service Commission, Bombay-Sind, to make the selection of candidates for appointments, laid down in the Public Service Commission Function Rules.

5. The Director of Public Instruction should approach Government with concrete proposals for sanction to the necessary funds in connection with the working of the Board. In the meanwhile, he may make temporary arrangements if necessary regarding the inferior staff and the clerical establishment required in that connection pending the approval of Government. The prior approval of Government before actually engaging the clerical and inferior staff should however be obtained wherever possible.

By order of the Governor of Bombay,

V. S. BHIDE,

Secretary to Government.

APPENDIX No. IX-B

Physical Education.

Primary and Secondary Schools.

Recommendations of the Physical Education Committee appointed by Government.

GOVERNMENT OF BOMBAY.

EDUCATIONAL DEPARTMENT,

Resolution No. 5310,

Bombay Castle, 25th May 1938.

RESOLUTION OF GOVERNMENT.

Government have considered the report of the Physical Education Committee, 1937, and the remarks of the Director of Public Instruction thereon and are pleased to pass the following orders or the various recommendations of the Committee as summarised in Chapter IX of the Report (pages 38-39 of the report):—

Summary of the recommendations.

Orders of Government.

- | | |
|--|--|
| <p>(1) <i>Recommendations Nos. 1 and 5.</i></p> <p>(a) Physical Education should be looked upon as an integral part of general education.</p> <p>(b) Physical Education should be considered as a compulsory subject. The minimum period of tuition should be laid down as five hours instead of four per day.</p> | <p>(1) (i) Government agree that physical training should be compulsory for all children. Satisfactory medical arrangements should be made to examine each pupil medically at the beginning of every year to determine his or her fitness to receive such training. An amount of Rs. 1,716 proposed by the Director for expenditure involved in making satisfactory arrangements to examine each pupil medically in Government educational institutions is sanctioned.</p> <p>(ii) It is not necessary to alter the hours of secular instruction per day laid down in the Grant-in-aid Code and in the Primary Education Rules.</p> <p>(iii) Regarding change in school-time referred to in paragraph 19 of the report Government desire that the schools should be at liberty to choose the periods which suit them best.</p> |
|--|--|

APPENDIX IX-B—*contd.*

Summary of the recommendations	Orders of Government.						
<p>(2) <i>Recommendations Nos. 2 and 3.</i> (a) Full share in grant-in-aid for expenditure on Physical Education. (b) Expenditure on games like tennis and cricket should not be admitted for grant.</p>	<p>(2) (i) The recommendation of the Committee that the grant for physical education should be separate from the ordinary grant for general education is accepted. (ii) As regards payment of grants to schools, etc., on account of Physical Education the grants may be paid during the current year as a special case on a provisional basis on estimated approved expenditure on the understanding that whatever amount is paid will be subject to adjustment later when the actuals are known. Government consider it desirable to fix some maximum amount per capita for the purpose of giving grant for Physical Education. The Director should consider the matter and submit his suggestions to Government for final approval at an early date. (iii) Government agree with the Committee that expenditure on games like tennis and cricket should not be admitted for grant. (iv) Expenditure on scouting, camping, medical inspection and physical apparatus should be admissible for grant. (v) In the case of secondary schools no grant should be paid unless the school levies a reasonable games or physical education fee. (vi) The scales for the payment of grants to schools on approved expenditure on Physical Education should be as follows :—</p>						
	<i>Grant.</i>						
	<table border="0"> <tr> <td>(1) Secondary Schools (whether Recognised or Registered),</td> <td>25 per cent. of the admitted expenditure.</td> </tr> <tr> <td>(2) (a) Primary Schools (under the Local Authority Municipalities).</td> <td>50 per cent. of the admitted expenditure.</td> </tr> <tr> <td>(b) Primary schools (under the District Local Boards)</td> <td>66 per cent. of the admitted expenditure.</td> </tr> </table>	(1) Secondary Schools (whether Recognised or Registered),	25 per cent. of the admitted expenditure.	(2) (a) Primary Schools (under the Local Authority Municipalities).	50 per cent. of the admitted expenditure.	(b) Primary schools (under the District Local Boards)	66 per cent. of the admitted expenditure.
(1) Secondary Schools (whether Recognised or Registered),	25 per cent. of the admitted expenditure.						
(2) (a) Primary Schools (under the Local Authority Municipalities).	50 per cent. of the admitted expenditure.						
(b) Primary schools (under the District Local Boards)	66 per cent. of the admitted expenditure.						
(2) <i>Recommendations Nos. 2 and 3—</i> contd.	<p>The amount available every year for this purpose should be distributed subject to the maximum limit specified above and subject to a maximum per child as may be fixed later whichever is less. During the current year the amount sanctioned for the purpose is as shown below :—</p> <table border="0"> <tr> <td>Rs. 20,000 (recurring)—for grants to secondary schools.</td> </tr> <tr> <td>10,000 (non-recurring)—for grants to secondary schools on account of expenditure on physical education for kit and apparatus, etc.</td> </tr> <tr> <td>30,000 grants to local authorities for expenditure on Physical Education in Primary Schools.</td> </tr> </table>	Rs. 20,000 (recurring)—for grants to secondary schools.	10,000 (non-recurring)—for grants to secondary schools on account of expenditure on physical education for kit and apparatus, etc.	30,000 grants to local authorities for expenditure on Physical Education in Primary Schools.			
Rs. 20,000 (recurring)—for grants to secondary schools.							
10,000 (non-recurring)—for grants to secondary schools on account of expenditure on physical education for kit and apparatus, etc.							
30,000 grants to local authorities for expenditure on Physical Education in Primary Schools.							
(3) <i>Recommendation No. 4—</i> Provision of play-grounds.	<p>(3) (i) A list of schools without play-grounds should first be drawn up. An amount of Rs. 10,000 is sanctioned during the current year for this purpose and it may be distributed to some schools which need it most as soon as the list proposed to be drawn up is ready. (ii) As regards the recommendation of the Committee to acquire plots, Government consider that in the beginning at least the schools may be asked to get the plots <i>on lease</i> if possible as it would be difficult otherwise to cope with the demands for grants for the plots to be acquired.</p>						
(4) <i>Recommendation No. 6—</i> The majority of the class-room teachers should be physical instructors and should be able to control the classes on the play-ground as well as in the class rooms.	(4) Government agree that all teachers who are fit should receive training as physical instructors.						

APPENDIX IX-B—*contd.*

Summary of the recommendations.	Orders of Government.
(5) <i>Recommendations Nos. 7 and 16—</i> (a) Establishment of the Training Institute for Physical Education. (b) Location of the Institute.	(5) (i) Orders regarding the establishment of the Training Institute and the staff required for it, admissions, etc., to the Institute have been issued in Government Resolution, Educational Department, No. 5310, dated the 14th May 1938. Orders regarding the clerical and inferior establishment required for the Institute have also been issued in Government Resolution, Educational Department, No. 5310, dated the 20th May 1938. The details of the expenditure sanctioned for the current year in connection with the Institute are given in the accompanying Schedule "A". (ii) The question of the location of the Institute is at present under the consideration of Government.
(6) <i>Recommendation No. 8—</i> .. Establishment of a College of Physical Education.	(6) This question will be considered later after some experience is gained of the working of the scheme.
(7) <i>Recommendation No. 9</i> .. Creation of a special Inspecting Agency.	(7) The question will be considered later.
(8) <i>Recommendation No. 10</i> .. Institution of short-term courses (i) for secondary teachers, (ii) for primary teachers in rural areas and (iii) for primary teachers in district towns.	(8) The recommendation to start short-term courses for secondary teachers is accepted. The Committee recommended that five batches of 200 teachers each should be trained in a year. July and August have been omitted by the Committee for this purpose as months of heavy rain. Government consider that the months of June and September also would not be suitable for the same reason. Government also consider that every batch should receive training for three months and not two months as recommended by the Committee and that every batch should consist of 300 teachers. One batch of 300 teachers should be trained for three months from November during the current year. The expenditure sanctioned for this purpose for the current year is detailed in the accompanying Schedule "B". (ii) The recommendation of the Committee to start similar short-term courses for primary teachers (i) in rural areas and (ii) in district towns is accepted by Government. It is however not proposed to start short-term courses for primary teachers in rural areas during the current year as recommended by the Committee. The Director should submit detailed proposals in due course in consultation with the Board of Physical Education for starting these courses from the next year.
(9) <i>Recommendation No. 11—</i> Legislation to prevent the approach of hawkers to the streets where schools are situated during the time of the day when schools are in session.	(9) This question should be considered in due course in consultation with the Board of Physical Education.
(10) <i>Recommendations Nos. 12 and 13—</i> Standing Advisory Committee and its functions.	(10) Orders regarding the constitution of the Board of Physical Education and its functions, etc., have been issued in Government Resolution, Educational Department, No. 5310, dated the 2nd May 1938. The accompanying schedule "C" indicates the expenditure sanctioned for the current year in connection with the work of the Board and for expenditure on the establishment sanctioned for it in Government Resolution, Educational Department, No. 5310, dated the 20th May 1938.

APPENDIX IX-B—contd.

Summary of the recommendations.	Orders of Government.
(11) <i>Recommendation No. 14</i> — Grant to gymnasia.	(11) Government agree with the Committee that gymnasia should receive help from Government. An amount of Rs. 10,000 is sanctioned for giving grants to gymnasia during the current year. The regulations to be observed by the gymnasia in this connection should be drafted by the Director of Public Instruction and submitted to Government for approval at an early date.
(12) <i>Recommendation No. 15</i> — Hindi (i.e., Hindustani) to be used when commands are given in Physical Training exercises.	(12) Government desire that Hindustani should be used when commands are given in Physical Training exercises.
(13) <i>Recommendation No. 17</i> — Physical Education Syllabuses.	(13) The courses should be prepared in consultation with the Board of Physical Education and the staff of the Training Institute for Physical Education.
(14) <i>Recommendation No. 18</i> — Physical Education Days, Weeks and Months to be observed.	(14) This work should be left to the Board of Physical Education to manage.
(15) <i>Recommendation No. 19</i> — Formation of Volunteer Corps to render social service.	(15) Government do not think that sufficient attention is being paid to this at present and desire that it should be emphasised in future.
(16) <i>Recommendations Nos. 20-23</i> — (a) Distribution of pamphlets on diets. (b) Preparation of text-books on dietetics. (c) Educative propaganda for organising charity and supplying milk free of cost to school-going children. (d) Control of Sadavartas and other endowments.	(16) Government desire that these questions should be entrusted to the Board of Physical Education to deal with. A sum of Rs. 4,000 is sanctioned for distribution of pamphlets and educative propaganda during the current year. A sum of Rs. 10,000 is also sanctioned for expenditure by the Board on the preparation of text-books on dietetics.

2. The charge during the current year should be met from the lump provision of Rs. 32,92,000 made in the budget under "37-Education-E-General-R-Miscellaneous" for new schemes of educational expansion and improvement.

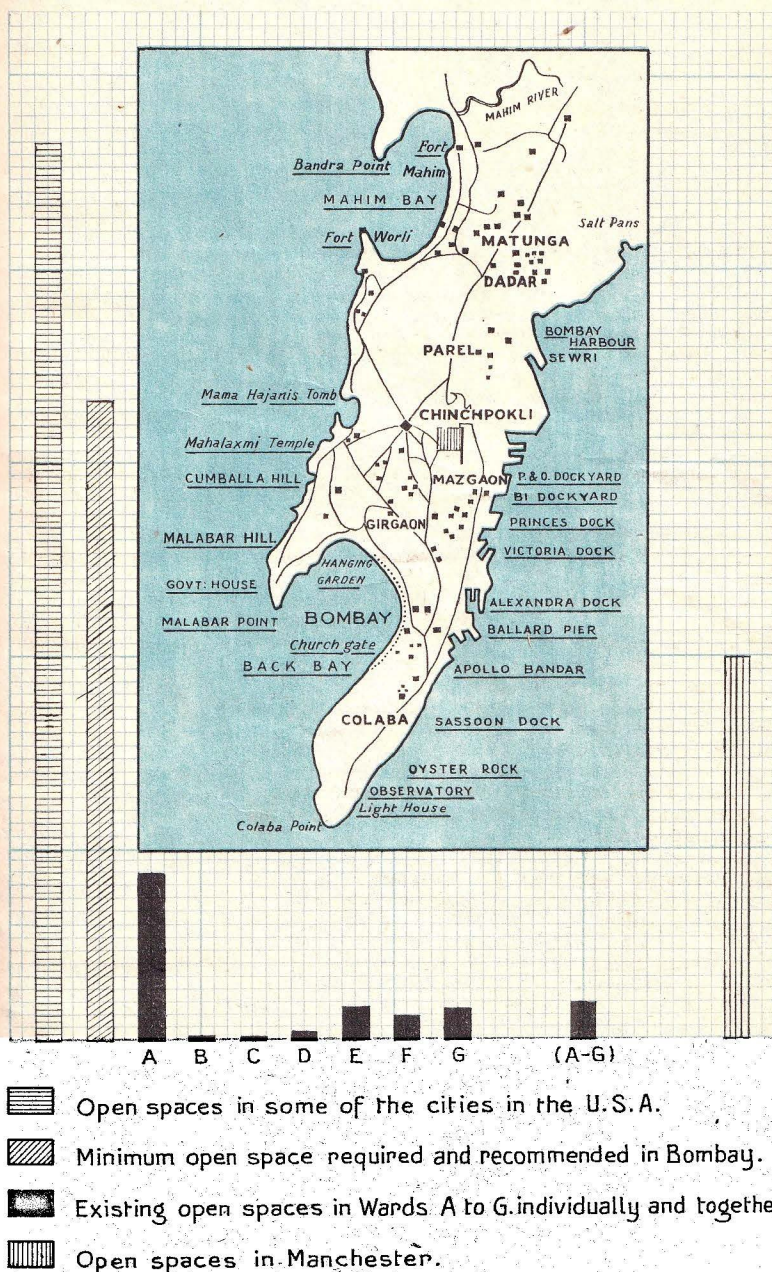
3. This Resolution with the accompaniments should be published in the *Bombay Government Gazette* and the Director of Information should be requested to issue a Press Note on it to bring the scheme to the notice of the public.

4. The Secretary, Legislative Assembly and the Secretary, Legislative Council, should be requested to place this Resolution and the other Resolutions quoted in it on the Assembly and Council Tables for the information of the members of the Legislative Assembly and of the Legislative Council respectively.

By order of the Governor of Bombay,
V. S. BHIDE,
Secretary to Government.

APPENDIX No. X

Illustrating area of Open Spaces per 1000 inhabitants in comparison with the same in some cities in the U.S.A., the minimum as recommended in Bombay, and that in Manchester, with a Map showing the uneven distribution of the inadequate number of open spaces in Bombay City. The black dots indicate the open spaces.



APPENDIX No. XI.

PHYSICAL EDUCATION IN SOME OF THE STATES AND OTHER PROVINCES IN INDIA.

(As collected from information received by the Committee.)

A.—Indian States :—

1. *Aundh*.—The schools in this State are held in two sessions. The morning session starts with Surya Namaskaras, an exercise which is compulsory for all pupils irrespective of age, sex, caste or creed. The afternoon session closes with a programme of games, drills, etc. A graded syllabus of physical activities is in force in Primary schools. Physical education is as important as any other examination subject.

Every year big Jamborees are held at a central place in a Taluka on the occasion of the visit of Shrimant Rajasaheb, the Ruler of the State who himself is a keen exponent of Surya Namaskaras and Indian gymnastic activities. The programme includes mass drills, march past, competitions in games, wrestling, Malkhamb, etc. Special prizes are awarded by the Rajasaheb to the winners of the competitions. The Local Bodies co-operate with these projects and spend on the meals of the students. The old habits of Akhada going and the love of exercise are being revived among the youths of villages. Old gymnasia are being repaired and new ones are being constructed.

2. *Cochin*.—The State is keen on physical education and is taking necessary steps to implement a fairly comprehensive scheme. The Government deputed men and women graduates to the Y.M.C.A. College of Physical Education at Madras, and later on puts them in charge of physical education in High schools and colleges. In Teacher Training Institutions physical education has been made one of the compulsory subjects, instruction being given in theory as well as practice parts. The teachers trained in this way help the Physical Directors in their work. A special institution called 'Kalalayam' trains women in Folk Dances, which is a speciality in the State.

All the State Colleges, most of the High schools for boys and girls and Training Institutions have now Physical Directors on their staff. The Cochin Athletic Association and Cochin Teachers' Associations organize sports for boys, girls and teachers. In Primary schools, play-days are organized. The Government is at present taking up the question of providing playgrounds to schools. The recommendations of the Playgrounds Committee specially appointed for the purpose are gradually being implemented. It is hoped that within a few years all the High schools will possess well laid out playgrounds, gymnasia as well as necessary equipment. The Government gives suitable contributions to physical education and also spends for the feeding of needy children.

Different syllabi of physical activities suitable for Secondary schools and Training Institutions have been drawn up. Besides physical activities, medical and physical examination with follow-up work, immunization programme, health instruction, etc., form a part of the syllabi. In the case of teachers, Anatomy, Physiology, Theory of Physical Education, Methods of Physical Training, Health Education, First Aid are also taught.

Besides these facilities for students, there are several associations and clubs which provide for the recreation of the public. For the industrial workers, however, adequate facilities for recreation do not exist at present. The Panchayaths in villages are charged with providing recreation to the rural population. Scouting is also a popular activity with boys, all over the State. Facilities for military training do not exist.

Physical education is a curricular subject, and not less than four periods a week are devoted to it. Instruction periods, not more than two per week, are followed by participation periods which come towards the end of the school hours. Coaching of teams intramural and inter-school activities and competitions are usually organized during the games periods.

3. *Gwalior*.—Since 1940, graduates are deputed to Madras for training in physical education. Provision has now been made by the State to provide a trained physical education teacher in every State High school, and College. In Middle schools, drill masters with a military training background, are in charge of physical education. The Education Department have appointed a Games Inspector and an Inspectress to organize physical education in the State schools. These officers visit the schools, organize sports, and conduct short term classes for teachers. Small area games requiring no equipment, organized play and calisthenics are some of the activities promoted. The Boy Scout and the Girl Guiding activities are popular, in almost all the institutions. Teachers in charge of these are paid a bonus on the basis of their work. The authorities are now contemplating to amalgamate scouting with physical education and establish an independent department for the same.

In the State college, the military training corps has proved a popular activity. The Scindia Public School has elaborate arrangements for physical education.

4. *Jaipur*.—Every High school has a qualified physical Instructor, with a degree in Botany and Zoology. He is assisted in his work by a Drill Master. In the A. V. Schools, physical instructors are demobilized soldiers. In Primary schools, physical instruction is imparted by teachers who are trained in physical education while at Training Schools. An officer called the Superintendent of Physical Education supervises the whole programme of physical education.

5. *Jodhpur*.—The State is keen on physical education. Facilities in the form of playgrounds and trained leadership are made available to colleges and High schools. But the most important feature of physical education in this State is that it is not merely compulsory in A. V. Schools but is also an examination subject for the Marwar Middle School examination. A candidate failing in physical education is declared to have failed at the whole examination. A regular syllabus of physical activities is drawn up and followed.

6. *Mysore*.—The circular issued by the Director of Public Instruction in May, 1943, is a Charter of Physical Education. While deploring the 'appalling' physical illiteracy prevalent among the pupils in spite of physical education being included in the Secondary School Leaving Certificate Scheme, it lays down certain important fundamentals of physical education, such as systematic and regular training for one hour from 5-30 to 6-30 p.m. on four days a week, instructions regarding suitable dress, starting of school canteens, the uplifting of the general physical level of the pupils and not of a few prize winners, etc.

The Department has drawn up a detailed syllabus of formal physical exercises suitable for boys and girls of the middle and the high schools stages. Indigenous exercises such as Bhaskis and Dandals are also included therein.

For trained teachers, the State depends on the College of Physical Education at Madras.

The Mysore University has a well planned and an elaborate scheme of physical education for its students. For the Intermediate classes, the students are required to put in 80 per cent. of attendance. Games, sports, gymnastics, wrestling, swimming are some of the activities promoted in the colleges. Annual tournaments in games and athletics provide an excellent opportunity for healthy emulation among the colleges.

A thorough system of medical examination seems to be a special feature of this University. Interesting and valuable statistical information and data collected in this respect, is of considerable help in planning programmes for improving the health of this section of the population.

Military training of the preliminary type has been introduced since 1939. The Indian Air Training Corps has also been established in colleges at Mysore and Bangalore. Yogasanas are also promoted.

7. *Porbandar*.—A physical culture expert in Indian gymnastics and wrestling is appointed by the State to tour all over the State and give instruction to teachers and boys. All the schools have introduced various physical education activities for their pupils.

Vasant Panchami is a special occasion on which annual sports and tournaments are held, according to a well laid out scheme. The earlier rounds are held at mofussil places while the semi finals and finals are held at the State headquarters. Physical education of girls is looked after by mistresses trained for the purpose. There are four gymnasiums at Porbunder. Though they are managed by different communities, admission is open to all. The State gives them annual grants. The public takes a keen interest in athletics particularly the Marathon Race which is held every year on Hanuman Jayanti day. The Marathon runners from Porbunder have won creditable places in the Bombay Provincial and the All India Olympic games. Scouting and cricket, are other popular activities. Police and military sports are held for the public on certain festival days. His Highness the Maharaja is keen on physical education of his subjects. The State spends Rs. 10,000 annually on physical education.

8. *Travancore*.—The Travancore Education Reorganization Committee in its Report published in 1945, have recommended a scheme of Health and Physical education for the educational institutions in the State. Provision of full facilities for medical inspection of school children (each district to have a School Medical Officer for Primary schools), opening of school clinics, provision of free midday meals to needy children, the introductions of hygiene as an important subject in the training schools, are some of the features of the scheme. The High schools are required to have a fully trained graduate physical instructor on their staff. The establishment of a college of physical education to train leaders is also contemplated.

B. Provinces.—

1. *Assam*.—The Inspectors of Physical Training trained at Madras and Calcutta hold training camps for teachers of all grades and also otherwise help in the promotion and organization of physical education. Physical education is compulsory but it is not an examination subject, except in Normal Training Schools. In Primary and Secondary Schools, graded syllabus of physical activities is followed. Boys are grouped and their activities are supervised by teachers. Group leaders are also trained. Hygiene is a class-room subject but health parades, cleanliness, competitions etc., are held. The Inspectors of Schools have issued several circulars on cleanliness, organization of physical education, etc., from time to time. A hand-book for the use of teachers is provided. There is a special woman Inspector of Physical Education to look after the programme for girls.

2. *Bengal*.—The Bengal College of Physical Education was started in 1932 with a view to train teachers of physical education. The Principal of the College is also the Physical Director for the whole Province. The course at the College runs for nine months. Graduates below the age of twenty-five are admitted. A College of Physical Education for Women is also started.

Physical education is compulsory in all the Primary and Secondary schools and colleges, four periods a week being devoted to it in the High schools. Most of the Government and about 300 aided schools and colleges have trained teachers. Teachers in Primary schools are also given training in physical education. The Government have initiated a scheme called "Youth Welfare Scheme" since 1938. Youth Welfare Councils are established in all the districts. These Councils control such organizations as the District Sporting Associations, Inter-school Sports Association, Bratachari Movement, Scout and Girl Guiding activities. The District Magistrate is the President and the District Organizer of Physical Education is the Secretary of the Council. Government gives grants to all these organizations.

Clubs (Akharas) about 1,200 in number have been started in the Province. Training of club leaders is also undertaken. These also receive grants from Government. Colleges and schools receive grants for physical education, medical inspection, etc. Tiffin grants of Rs. 45,000 are given to non-Government schools.

The Government plans for the future are (i) to establish a Provincial Youth Welfare Council, (ii) to raise the status of the district organisers and lecturers in the college, (iii) to increase grants to institutions and various other sporting organizations, (iv) to establish district sporting associations to run competitions throughout the year. Special posts for the organizers of physical education are proposed to be created.

3. *Bihar*.—Physical education is not an examination subject but all the Infant and Secondary Schools recognized by Government give a course of Physical training to their pupils. Qualified teachers are in charge of physical education. Weekly four hours are devoted to physical training in the Infant schools. This period finally reduces to 1½ hours in the higher grades of the Secondary schools. Government colleges and Secondary Training schools have trained Instructors. Those working in the latter also tour in different divisions and direct the work of the District Teachers, who are either trained Matriculates or vernacular final. They also do class training work.

4. *North-West Frontier Provinces*.—A Physical Supervisor trained at Madras visits, inspects and advises schools on how to organise physical education, since 1936. He also conducts training camps for Drill Instructors in Secondary schools and teachers in Primary schools. Formerly the Drill Instructors used to be illiterate men. Attempts are now being made to attract literate and better men to do the work by improving the scales of pay. It is further intended to appoint one Supervisor for each District.

Physical education has been given its proper place in the school curriculum and is now compulsory. District Boards and Local Bodies have been requested to constitute sub-committees to be responsible for (i) physical education for school students and villages and (ii) take necessary steps to provide playgrounds for schools.

5. *Orissa*.—Boys are required to practice open air drill throughout the year. Where facilities such as playgrounds exist, attendance at school games is compulsory. In some schools boys attend gymnastic classes. In Secondary Training Schools, drill, games, gymnastics are second subjects. In some of the district headquarters, inter-school tournaments are conducted by Athletic Associations. Annual sports are held in urban as well as rural areas. Scouting, Cubbing, Rovering, Girl Guiding, Red Cross, Ambulance and such other activities are also encouraged in schools. Health records are maintained.

6. *Punjab*.—The Punjab College of Physical Education and Scouting has reopened after four years of War Service. The College trains experts in Physical education. The Diploma Course admits graduates below 30 years in age and is of one year's duration. The Certificate Course admits Matriculates and is also of the same duration. Refresher courses of six weeks are organized for those who are already Physical Training Instructors.

In all the Teacher Training Institutions, physical training forms an essential part of the training. The District Officers of Physical Education organize Short Training Courses for teachers in districts. They also look after physical education in general in the schools.

Physical recreation amongst villagers is promoted by the starting of "Young Farmers' Clubs" by the Provincial Youth Organiser. In 1945, there were about 335 such clubs with a total membership of 8,070. These clubs seek (i) to bring together the village youth for social, cultural and recreative purposes and to teach them intelligent use of leisure, (ii) to develop their personality and character, through healthy pursuits and self-discipline and assist them to become useful citizens of their country and the world, (iii) to encourage among the village youths knowledge and skill in scientific farming, cottage industries and stimulate a sense of importance of country-side and agriculture. The programme includes besides games and sports, scouting, hiking and camping, such activities as agricultural, industrial and health exhibitions, training in cottage industries, scientific farming, cattle breeding, etc.

Under the clubs, Students Training Camps in mountaineering, Rock Climbing, Snow and Ice Climbing, Forestry are also organized.

District, divisional and provincial tournaments and atheletic tests are also conducted.

7. *The United Provinces*.—Physical education is a compulsory subject in all the A. V. institutions and a new system of exercises called "the Agility Exercises" has been introduced for VIII to XII classes of High Schools since 1940. These are described and printed in the syllabus of physical training published by the Department of Public Instruction, United Provinces. The Department has also prepared graded tables of exercises according to age groups which are taught in lower classes and vernacular schools.

Several Special Three Months' Courses were organized to train teachers in the "New Agility Exercises" at the College of Physical Education, Lucknow and Training College, Allahabad. The Government have recently opened a College of Physical Education at Allahabad. The College runs (i) a Diploma Course of one year for graduates, (ii) a Certificate Course of two years for under-graduates. A centre for training women teachers has also been opened at Allahabad. The course there is of two months' duration.

The draft scheme for issuing Certificates of Physical Efficiency to candidates of the age group of 13-15 and 15-17 who would attain certain prescribed standards in items such as walking, sprinting, high jump, long jump, swimming, throwing a weight, etc., published in 1943 by the Department has been approved now. It has been made compulsory for the candidates appearing at the examinations conducted by the Board of High Schools and Intermediate Education, United Provinces, to possess the the Junior or the Senior Physical Training Certificates according to the age groups to which they belong

APPENDIX No. XII.

Conditions to be Observed by Private Institutions Wanting Recognition to Conduct the Certificate Course in Physical Education.

1. Rules—

(i) The Institution shall be under the management of a regularly constituted Governing Body registered under the Society's Act. The Head of the Institute shall be a member of the Governing Body. The financial position of the Institute shall be such as to make provision for its continued maintenance.

(ii) The qualifications of the teaching staff, and the conditions governing their appointment and terms of office shall be such as to ensure proper teaching of the various subjects given in the prescribed curriculum.

(iii) The buildings in which the Institute is located shall be suitable for its work. Hygienic and sanitary provisions shall be made on the Institute premises for the Physical welfare and safety of the students.

(iv) Adequate provision shall be made in the form of play-grounds, gymnasium and equipment to enable proper instruction and practice of the activities prescribed for the Course. The necessary aids to teaching, in the class-room, such as charts, specimens, models, shall be provided.

(v) Due provision shall be made for a library, both for the teachers and the staff.

(vi) The staff shall be adequate so that no class in physical activities under one Instructor shall exceed 30, or during class-room teaching 100.

(vii) The Head of the Institute shall, in addition to being a Graduate, be an experienced leader in the field, and shall hold a Diploma or a Degree in Physical Education of a recognized and well-known Institution in or outside India. He shall be a full-time worker.

(viii) The Institution shall generally make due provision for the residence of students not residing with their parents or guardians. Such residential quarters shall be under the supervision of a member of the staff of the Institution.

(ix) Suitable provision shall be made for the Practice Teaching of students in schools and/or gymnasias or public recreation centres.

(x) The Institution authorities shall make provision to ensure discipline among the students both within and without the Institution premises.

(xi) The recognition of a new Institution shall be subject to the consideration as to whether there are other similar institutions in the same region or locality, and whether such recognition will not be injurious to the interests of physical education and discipline.

(xii) Fees, if charged, shall be such as may not involve unfair competition with other similar institutions.

(xiii) The Institution shall follow the Course of Studies laid down by the Department. If additional subjects or activities are taught, it shall be without hindrance or prejudice to efficient instruction in the prescribed Course.

(xiv) The Institution shall furnish such returns, reports, and other information as the Department of Education or the Board of Physical Education may demand from time to time.

(xv) It shall keep records of admission, attendance, accounts, etc., which shall be subject to inspection from time to time.

(xvi) The Institution shall be subject to inspection from time to time by the Department and the Board of Physical Education. The Department may call upon any Institution so inspected to take within a specified time such action as it considers necessary. Failure to carry out such instruction shall involve the reduction in or discontinuance of payment of Government grants, or may even lead to the withdrawal of recognition.

2. Procedure for Obtaining Recognition—

(i) The Director of Public Instruction shall, on receipt of the application, refer it to the Board of Physical Education and request the Board to make the necessary enquiries and to send a report whether the Institution may be recognized or not.

(ii) The Board shall then appoint a Committee of three people and depute it to visit the institution and to conduct a local enquiry to find out full details about the Institution.

(iii) The Committee shall submit its report to the Board, and the Board shall, after duly considering the report, recommend the Institution to the Director of Public Instruction, for recognition, or offer such suggestions and remarks about conditions which should be fulfilled before recognition could be granted or recommend the rejection of the application.

(iv) The Director of Public Instruction will then give a decision in the matter. A copy of his decision shall be sent to the Board for its information.

APPENDIX No. XIII.

STATEMENT No. 1.

Financial statement giving the Annual Cost of the Scheme calculated approximately, for the first five years.

No. of Item.	Item.	1st year.	2nd year.	3rd year.	4th year.	5th year.
		Rs.	Rs.	Rs.	Rs.	Rs.
I	<i>Training Institute for Physical Education—</i>					
	<i>Non-recurring.</i>					
	Improvement at—	30,000	....	....	....	....
	<i>Recurring</i>	80,000	80,000	80,000	80,000	80,000
	Total	1,10,000	80,000	80,000	80,000	80,000
II	<i>Short Term Course in Physical Education for Secondary School Teachers</i>	75,000	75,000	75,000	75,000	75,000
III	<i>Short Term Course in Physical Education for Primary Teachers</i>	44,000	4,00,000	4,00,000	....	..
IV	<i>College of Physical Education—</i>					
	<i>Non-recurring.</i>					
	Building etc.	10,00,000	8,00,000	4,00,000	3,00,000	....
	Training of staff arranged in three batches	6,000	21,000	36,000	36,000	6,000
	<i>Recurring.</i>					
	Contract Staff, four members at Rs. 1,000 .. ..	....	48,000	48,000	24,000	....
	Regular Staff .. ..	....	....	....	20,000	40,000
	Special Instructors .. ..	....	3,600	7,200	7,200	7,200
			(two instruc-	(four instruc-		
			tors).	tors).		
	Special Part-time Instructors .. ..	....	1,800	3,600	3,600	7,200
	Stipends .. ..	....	7,500	15,000	22,500	30,000
	Allowances .. ..	....	3,000	4,000	5,000	5,000
	Contingencies .. ..	....	20,000	30,000	40,000	50,000
	Total	10,06,000	9,02,900	5,43,800	4,58,300	1,45,400

APPENDIX No. XIII—*contd.*

No. of Item.	Item.	1st year.	2nd year.	3rd year.	4th year.	5th year.
		Rs.	Rs.	Rs.	Rs.	Rs.
V Grants to Schools—						
	(a) Secondary Schools at 50 per cent. (No provision is made for expansion as this is not known)	3,00,000	3,00,000	3,00,000	3,00,000	3,00,000
	(b) Primary Schools	80,000	1,00,000	1,20,000	1,40,000	1,60,000
	Total	3,80,000	4,00,000	4,20,000	4,40,000	4,60,000
VI Inspection of Physical Education—						
	<i>Staff.</i>					
	Provincial Inspector	3,600	3,840	4,080	4,320	4,560
	District Inspectors (80 Inspectors in 5 years)	48,000	72,000	96,000	1,20,000	1,44,000
	<i>Establishment.</i>					
	Head Clerks, Clerks and peons	21,160	24,100	30,500	37,500	39,500
	Travelling allowance	18,000	20,000	25,000	30,000	35,000
	Contingencies	13,000	15,000	20,000	20,000	22,000
	Total	1,03,700	1,34,940	1,75,580	2,11,820	2,45,060
VII Board of Physical Education—						
	<i>Non-recurring.</i>					
	Tour of members to foreign countries	44,000	....	....	....	....
	<i>Recurring.</i>					
A.	Pay of officers	9,000	9,000	10,000	10,000	10,000
	Establishment	5,400	5,700	6,000	6,500	6,500
	Travelling allowance	10,000	10,000	12,000	15,000	15,000
	Contingencies	5,000	6,000	7,000	8,000	10,000
	Total	73,400	30,700	35,000	39,500	41,500

APPENDIX No. XIII—*contd.*

No. of Item.	Item.	1st year.	2nd year.	3rd year.	4th year.	5th year.
		Rs.	Rs.	Rs.	Rs.	Rs.
VII	<i>Board of Physical Education—contd.</i>					
	<i>Recurring—contd.</i>					
B.	Salary of Propaganda Officers ..	9,000	12,000	15,000	15,000	15,000
	Allotment for propaganda ..	6,000	8,000	10,000	12,000	12,000
	Total ..	15,000	20,000	25,000	27,000	27,000
C.	District Recreation officers ..	6,000	12,000	24,000	36,000	48,000
	Recreation (village centres for each centre) ..	Rs. 100 ..	5,00,000	7,00,000	10,00,000	15,00,000
	Towns ..	2,00,000	4,00,000	6,00,000	8,00,000	10,00,000
	Gymnasias ..	40,000	50,000	50,000	50,000	50,000
	Total ..	7,46,000	11,62,000	16,74,000	23,86,000	30,98,000
	Total for Item VII ..	8,34,400	12,12,700	17,34,000	24,52,500	31,86,500
VIII	<i>Medical Inspection and Services—</i>					
	<i>Non-recurring.</i>					
	Buses—transport ..	50,000	50,000	50,000	50,000	....
	<i>Recurring—Staff.</i>					
	Medical ..	11,000	20,000	30,000	40,000	50,000
	Establishment (clerks, peons) ..	5,000	7,000	12,000	20,000	28,000
	Travelling allowances ..	3,000	5,000	8,000	12,000	18,000
	Allowances to private practitioners..	10,000	20,000	30,000	40,000	50,000
	Contingencies—Medicines, bus maintenance, etc. ..	20,000	35,000	55,000	75,000	95,000
	Total ..	99,000	1,37,000	1,85,000	2,37,000	2,41,000

APPENDIX No. XIII—*concl'd.*

No. of Item.	Item.	1st year.	2nd year.	3rd year.	4th year.	5th year.
		Rs.	Rs.	Rs.	Rs.	Rs.
IX	<i>Nutrition—</i>					
	Primary School Full feeding (60 per cent. of the pupils at Rs. 4-2-0 a month for 7 months for 9,30,000 pupils).	50,00,000	1,00,00,000	1,50,00,000	2,00,00,000	2,70,00,000
	Secondary Schools At the above rate for 6 months for 1,20,000 pupils.	5,00,000	10,00,000	15,00,000	22,00,000	30,00,000
	Total	55,00,000	1,10,00,000	1,65,00,000	2,22,00,000	3,00,00,000

STATEMENT No. 2.

Consolidated Statement of the cost of the Scheme based on Statement No. I.

No.	Item.	1st year.	2nd year.	3rd year.	4th year.	5th year.
I	Training Institute for Physical Education	1,10,000	80,000	80,000	80,000	80,000
II	Short Term Course in Physical Education for Secondary school teachers	75,000	75,000	75,000	75,000	75,000
III	Short Term Course in Physical Education for Primary Teachers	44,000	4,00,000	4,00,000	.....	.....
IV	College of Physical Education	10,06,000	9,03,900	5,43,800	4,58,000	1,45,400
V	Grants to Schools	3,80,000	4,00,000	4,20,000	4,40,000	4,60,000
VI	Inspection of Physical Education	1,03,700	1,34,940	1,75,580	2,11,820	2,45,060
VII	Board of Physical Education	8,34,400	12,12,700	17,34,000	24,52,500	31,66,500
VIII	Medical Inspection	99,000	1,37,000	1,85,000	2,37,000	2,41,000
IX	Nutrition	55,00,000	1,10,00,000	1,65,00,000	2,22,00,000	3,00,00,000
	Total	81,52,100	1,43,43,540	2,01,13,380	2,61,54,620	3,44,12,960