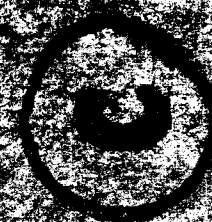


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Y.M.C.A. College of Physical Education, Saidapet, Madras.

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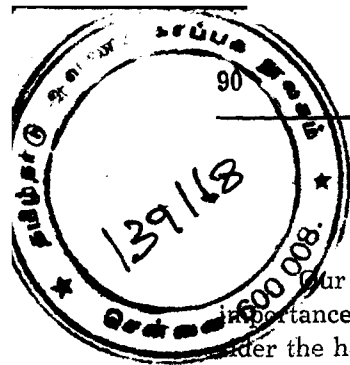
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Editorials

HEALTH EDUCATION

Our readers will notice that we are again giving a place of major importance to the subject of health education. We do this because we consider the health problem to be one that should claim the immediate and active attention of every intelligent person. In particular it should be the concern of teachers who have the greatest opportunity for shaping the lives of the future citizens and for radiating ideas and ideals of healthful living. In this issue we publish some facts illustrating what marvelous improvements can be brought about by means of health education. The same could be done in India if we would only put our heads, hearts and hands to the task. It is not necessary for India to continue to be burdened with so much illness and disease, it is not necessary for India to continue to be content with such an appallingly low average length of life. Most of the illnesses and diseases of India are preventable, and science has placed before us the truth to enable us to develop such health practices as will make it possible for us to live wholesomely anywhere.

We need not wait for elaborate schemes and huge expenditures of money by Government and various philanthropic organizations. The place to begin is in the schools by developing there proper habits of personal and environmental cleanliness. From the schools and colleges the health influence will radiate into homes, villages, towns and cities.

But teachers must not get the idea that mere storing of knowledge about health is going to get results. It is only when knowledge is translated into practice that it is of any value. And so we wish to emphasize the fact that in health education the important thing is the development of health habits, and these are developed only by practicing health.

The following recent remarks by Mr. John Sargent, Educational Commissioner with the Government of India are worthy of consideration in this connection:—

“Another thought arising is the great importance of the physical side of education in the widest sense. Most of us grown-ups when we are feeling physically uncomfortable, even if not actually ill, find it difficult to give our whole attention to what we are doing. Why then should we expect children, who are ill-nourished or have tooth-ache or ear-ache or are suffering from any of the many childish ailments, to concentrate on their work when we cannot do so ourselves in similar circumstances?”

“I want to see a much wider development of the school medical service and a much closer co-operation between the school and the home. I emphasize the need of this particularly at the early stage because experience has shown the surprisingly large proportion of children between 4 and 7 who

are suffering from some physical defect usually not serious in itself but likely to cause serious trouble later on if neglected”.

“We shall never plant the seeds of sound learning of the love of Knowledge in small boys and girls, or in bigger boys and girls for that matter, unless we make our schools places where it is easy for them to work happily, play happily and become conscious of the joy that comes from co-operative tasks successfully performed”.

COMPULSION IN PHYSICAL EDUCATION

The newspapers bring to us several reports that physical education recently has been made compulsory in educational institutions in various parts of the country. This is good news in that it indicates clearly that there is a growing consciousness of the need for physical education for all. But a note of warning is necessary because we are aware that some of the compulsory physical education has failed. It has failed because of the unwillingness on the part of some schools and colleges to allot sufficient time for physical education to make it succeed. Like all other subjects physical education requires well organized time-tables, small groups reporting to well qualified teachers sufficiently often, actual teaching of physical activities rather than mass attendance, and proper records kept and standards of proficiency required. Waiting until 5 P.M., and then turning the entire pupil body on to the playground at one time will never get results, regardless of whether such procedure is compulsory or voluntary.

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Some Observations on Physical Education in India

By

DR. ELMER BERRY, M.P.E., Ed.D.

Physical Education in India is "on the march." Not because of the "spirit of the times," not as a war preparation, but rather as a result of solid pioneering work done during the last twenty years.

In this time the Madras Y.M.C.A. College of Physical Education, under the leadership of Principal H. C. Buck, has trained nearly a thousand teachers. These have scattered all over India and their work begins to bear fruit. A tour of Northern India during the past summer gave me a chance to sense this effect and to "feel the pulse" of this new life.

A year ago the Bombay Presidency established its new Government Institute of Physical Education and called P. M. Joseph, an "Old Boy" and a member of the staff of the Madras Y.M.C.A. College of Physical Education and an M.P.E. from the Springfield Y.M.C.A. College, as their new Principal. Last April there were at the Institute ninety students (80 men and 10 women) of B.A. caliber completing the first year's training. In addition three hundred regular academic teachers were completing a three month's course of special training in physical education. This is to be followed yearly by one hundred physical education students and six hundred regular academic teachers until the educational system of the Bombay Presidency becomes thoroughly trained in the physical education programme. The budget for this year appropriates Rs. 300,000 for this purpose. At Kandivalee the old government rehabilitation plant is being renovated, turned into gymnasias, class rooms, library, hostels, administrative offices, etc., while athletic fields are torn out of the rocky hills, levelled, graded, and surfaced with natural amphitheatres surrounding them, producing an equipment that will eventually be magnificent.

A conference with playground workers at the Bombay Y.M.C.A. showed that the educational authorities were not a whit ahead of the recreational leaders of that section.

At Lahore, Henry Lall, Director of Physical Education for the University of the Punjab, outlined a physical education programme embracing fifty colleges and fifty thousand or more students. Like Bombay the Y.M.C.A. and recreational leaders were also alert and decidedly "on their toes." And the enthusiasm of Mr. Hogg and Sir Douglas Young over their new Institute for training teachers of physical education in connection with the Provincial Boys Scouts Training School was inspiring. Here with a fine equipment and the approval and backing of the Punjab Provincial Government, eighty physical education teachers were expected to be in attendance in October.

At the Lucknow Christian College Mr. Mumby has also organized a training course for teachers of physical education.

Mr. Buchannen is likewise developing a Training College for Calcutta. During his leave to attend the "Lingead" and to study physical education in other countries, Mr. Roy, his Assistant, and an "Old Boy" from Madras carries on.

Several other Provinces have definite plans for additional institutes for training teachers. It is evident from all this that the enthusiasm for physical education from an educational standpoint is running high.

Likewise the All-India Olympic and the Provincial Olympic Associations are carrying on a well organized and well planned programme of competitive athletics. Though the standard of performance leaves something to be desired in some cases in track and field the Indian teams give splendid exhibitions in hockey and football.

Everywhere home individual tennis courts are found and tennis is rapidly reaching high grade performance. "Tennis Teas" are great social functions throughout India and as practically a year-round game it is a great source of popular recreation.

Municipal playground and recreational facilities and equipment are being rapidly provided and compete with private clubs and organizations in furnishing recreation for the masses. The village play movement, sponsored in Salem and other places by the Collector and other officials to assist the prohibition movement, has had remarkable success.

Behind all this must be remembered the old indigenous Indian games and exercises and the Yogi system the extent of which can only be guessed. Couple all this with the fact that India is still a highly agricultural and human labour country and one realizes that India is a land in which primitive muscular exercise still predominates. India may be thankful that she has not yet reached—may fortunately avoid—the nerve racking, irritating, killing speed mania of the West. She is still a quiet, philosophical big-muscle people with an interest in and a love for exercise. She is not over specialized in highly organized competition, professionalism and record making. Fortunately those problems are more or less avoided. But others must be met.

Perhaps the first is the debilitating and enervating effect of a continuously hot climate. It requires a great deal of moral determination to keep up ones needed exercise and sport in temperatures regularly above 90° F. with a humidity often 70% or more. Even all possible labour is avoided.

Further a great mass of people in India never have adequate nutrition either in kind or amount. 'Hungry people will not exercise.'

Add to both of the above a great ignorance of and inattention to hygienic measures and sanitation and the stage is set for epidemics, plagues and staggering health losses which indicate the important lines of effort with which physical education in India must concern itself.

First of all it should be a great health education movement. The task of physical education in India is not to train high grade athletes to break records, or to turn out championship hockey, football or other teams but to teach the children in the schools, the villagers in their cottages the common, elemental facts of wholesome living. This is the most important thing that can be taught in the schools of India and the most needed thing. No teachers have such contacts and such opportunities for this as have those who lead the games and direct the physical activities of the people. These may inspire the people with a desire and a will and a determination to live more abundantly. They need not train professional athletes, propagandise for a totalitarian government, supply "cannon fodder," spread a system or reach standards. In a remarkable and peculiar way the production of the abundant life is the opportunity of physical education in India.

Health Instruction in the Public Schools of the U. S. A.

PART II

By

C. C. ABRAHAM, B.A., M.P.E.

In general there are two main types of instruction used in health education at the elementary, junior, and senior high school levels in the U.S.A. The first of these is the so-called direct method.

The Direct Method.

This method attempts to instill the various health habits and attitudes by centering attention very directly upon them through discussing and illustrating them. It involves memorising and reciting health creeds, health slogans, health verses, pledges and golden texts that suggest these outcomes. It attempts the development of health through the presentation of carefully selected and systematically presented health concepts, precepts, ideals, codes, pledges, and rituals. The direct method aims primarily at the acquaintance with and knowledge about certain graded, selected health habits and practice. It assumes that such knowledge will inevitably carry over into action, into conduct, that health knowledge will serve as control of behaviour.

The Indirect Method.

The second is popularly known as the 'indirect method.' This method of health instruction does not begin with a consideration of a desirable health habit or attitude, but with a situation which will stimulate the practice of a wholesome health habit under wise guidance. Guidance is an important part of this device. Its aim is to help the pupil to act in accordance with accepted standards, but the actual practice is the pupils' own part. The attempt is to supply settings and situations as native and normal as possible that will stimulate healthful behaviour.

According to the indirect method of health instruction, health is the inevitable outcome of all the activities of the pupil—in the home, the school, the playground and the gymnasium. Ordinarily school activities may have to be interrupted to inculcate some particular health habit or attitude as opportunities arise. Health Schedules are prepared in a progressive manner and provided to the teachers in the various grades for teaching in a systematic way.

Instruction is the main technique adopted both in the direct and indirect method. Health education as instruction is designed to place the learner in possession of an organised body of knowledge. The test of health education becomes the amount of knowledge acquired and the certainty of

its recall. The technique of health instruction is to transmit knowledge from adults to the immature mind.

Secondly, the direct and indirect methods of health instruction use the technique of training in teaching health habits, attitudes, and ideals. This training is predetermined by adult standards and adult decisions. It is a process brought about for the young and upon the young by external authority and influence. One of the chief problems in this technique is to get the learner to desire the habit or ideal taught. What the pupil should do is predetermined for him apart from the dynamic experience of learning. The situation has to be manipulated through appeal to the already existing interests of the learner, and in the last resort through repetition under compulsion.

The Progressive Method.

There is, however, a new and progressive approach to the whole problem of health education which is of a very recent origin. There are certain frontier thinkers in the field of health education who level serious criticism against the methods now in use. They allege that the present methods of health teaching are artificial, negative, and unpsychological. They also allege that hundreds of thousands of dollars are being wasted each year in earnest but misguided attempts to promote health through teaching hygiene. They further go on to say that the present methods of promoting health by teaching so-called hygienic facts is a remnant of the Middle Age philosophy of scholasticism. This philosophy assumed that all the child needed in order to change behaviour was facts. Yet for years we have known the real basis of the change of behaviour centers around the individual's wants, desires, and wishes. Changes in behaviour take place more upon an emotional basis than upon a factual one—even when one has the facts.

Dr. Jay B. Nash, Chairman, Department of Physical Education and Health, New York University is one of the outstanding exponents of this new approach to teaching of health. Dr. Nash has summarised these ideas in his latest publication "Teachable Moments, a New Approach to Health," which should be read by every progressive educationist interested in the health education of boys and girls in Indian schools.

The keystone of health education according to the progressive view point is to provide boys and girls with a varied and rich experience in healthful living. It must be a process that takes place within growing boys and girls as a result of self-activity. Only such healthful experiences lead to healthful behaviour and attitude. It becomes the sum-total of the procedures in which the child is assisted in discovering the meaning and significance of all the bodily and mental processes of the organism, and an intelligent understanding of the fact that health is the outcome of various contributory factors such as good food, work, play, sleep, rest, relaxation, fresh air, sun-

shine, avoidance and prevention of infection, and stress and strains, and a wholesome mental attitude towards life and society. States Nash :

"Schools should be more than text books, but how many are ? How many schools are really dedicated to making desirable behaviour changes in the child ? We establish these schools in order that children may get help which they do not ordinarily receive at home. We are fully conscious that in helping these children, merely giving them information is not enough. The essential things such as spirit and attitude, are not things we teach. They emerge as by-product of wholesome experience; it is not absorbed through memory process teaching. On this basis, if the school is to influence behaviour, it must give its attention to organising experience. The way in which wholesome health behaviour is established is no exception to the rule."*

An enriched experience in healthful living and an intelligent understanding of health as the outcome of many different factors should therefore be the basis of health teaching in the schools. The primary essential is a wholesome physical environment for the school. The physical environment of the class-room and of the school as a whole should reach certain standards of esthetic satisfaction. Children spend the major portion of their working hours in this environment and it is very important that the school buildings, classrooms, school site, school playgrounds shall be as clean, and healthy as possible. Only such an environment can offer possibilities for the education of youth. For many children the school is the only safe and enjoyable place where they may play, experience proper sanitary conditions or where flowers, grass and shrubs may be seen and loved.

If health as a sum-total outcome of life cannot be taught in the conventional manner; if it does not lend itself to school room procedures, the question that immediately arises is, has teaching of hygiene and instruction in healthful living a place in the school curriculum ? This is the major issue that leaders in the field of education, particularly health education are facing in the United States to-day.

The answer to the question is "yes" and "no." Yes if the schools continue to exist as places of learning about subjects and about living; where methods of instruction and training will be the main techniques in use; where the school is considered as a filling station and the child a passive container into which all the knowledges are emptied into, pre-determined by adult standards and judgment; where schools continue to operate on the hope that knowledge imparted will ultimately result in changed behaviour and conduct.

"No" and a definite "no" if the schools become places of living instead of places of learning about living; where the child is an active participant in a learning situation; where the behaviour of the child the outcome of an in-

* J. B. Nash. Teachable Moments—A New Approach to Health, pp. 174-175, New York. A. S. Barnes and Company, 1938.

telligent understanding of a situation and where he takes full responsibility for his conduct, where the child's life is full of such enriching experiences of healthful living; where the practice of certain hygienic habits and skills is the result of some felt-wants and desires and where such practice will have meaning and significance to the child ; where the child at no time is self-conscious of the various health measures and procedures, and health the natural result of very many factors associated with good food, work, play, sleep, rest, relaxation, fresh air, sunshine, avoidance and prevention of infection, and stresses and strains, and a wholesome mental attitude toward life and society.

The realisation of such a school would seem a far cry. It would mean a complete reorganisation of the school system and a reorientation of its policy and improvement in the methods, techniques, practices and curriculum and above all, better trained teachers with the necessary educational background, knowledges, skills and a new vision, required to fulfill his responsibilities in the changed situation. That this is not an educational dream is being demonstrated in the rapid growth in number and popularity of the so-called "progressive schools". In a country like the U.S.A., where seventy-five percent of the taxes collected is invested on free and compulsory education for every boy and girl up to the senior high school standard; where continued research is conducted to make education economically sound, no mistake will be allowed to continue once it is discovered. Progressive educational methods have taken deep roots and have demonstrated their usefulness and it will not be very long when every school, elementary, junior and senior high and College will become a progressive institution.

The Y. M. C. A. College Hockey Team Inter-Collegiate Champions of 1939

BY

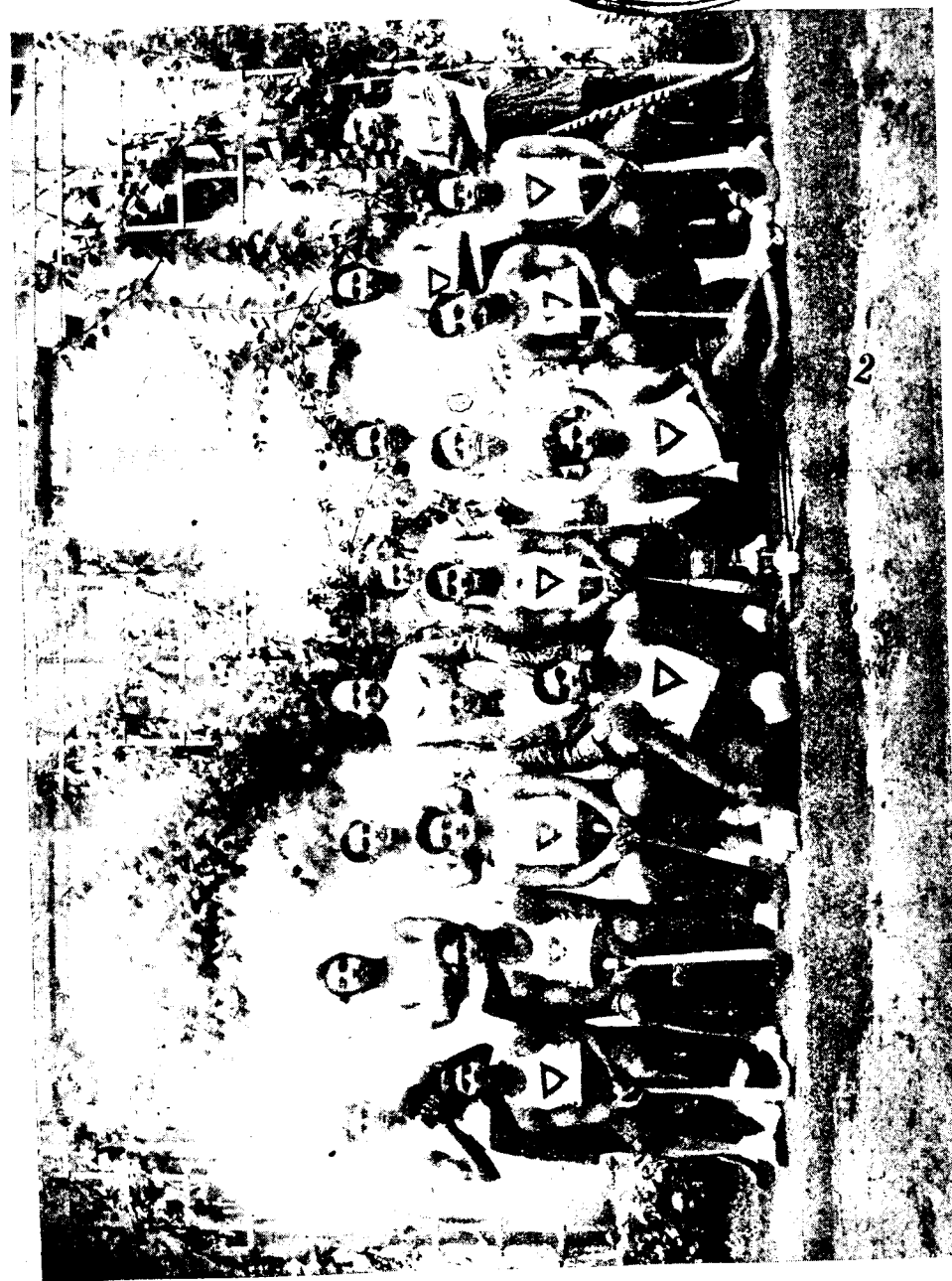
A. K. SINGH, B.A.

Our Hockey Team had a very successful season last term and it managed to tie for the Inter-Collegiate League Championship with Medical College.

Much credit for the victory of our team goes to Mathura Prasad, our centre-forward who has had the privilege of playing with Dhayan Chand and Roop Singh. The team goalie and the half-backs need mention as well, they are hard-working and enthusiastic. The team will go far if proper training is available, as we have talent, but owing to our heavy programme we cannot possibly specialise in any particular game. All our students must play all games.

There are a few short-comings as well which are the draw backs for a brilliant game. The backs badly need understanding and steadiness, the forwards would do well if they combine a little more instead of hanging round the ball so long. There is nothing like a quick finish which the team badly lacks. Much depends on the extremes who need to be well-versed in stick work and in accuracy of receiving passes and quickly centering them.

We look forward to the correction of these few but important points and hope that the team will give a still better account of itself in the near future.



Hockey Team—Y. M. C. A. College of Physical Education—1939-40



139168

Summer Courses in Physical Education and Health Education

At the Y.M.C.A. College of Physical Education Saidapet, Madras.

During the Month of May, 1940.

The following Four Short Courses will be conducted at the Y.M.C.A. College of Physical Education, Saidapet, Madras, from May 1st, 1940, until May 30th, 1940.

1. A Course in Physical Education for Elementary Schools and Rural Areas.
2. A Course in Physical Education for Secondary Schools and Public Playgrounds.
3. A Course in Coaching and Refereeing of Major Games and Sports.
4. A Course in Health Education and Safety Measures.

The purpose of conducting the above short courses is to serve class room teachers who do not find time to undergo long qualifying courses, but who wish to co-operate in the physical and health education programmes; and for physical education teachers desiring to take refresher courses.

The course in health education has been newly introduced because of the new emphasis that is being given to health education in schools, and because there is a desire on the part of Class Room Teachers and Physical Education Teachers to learn how to conduct Health Education. Schools and Colleges should depute Class Teachers and Physical Teachers to undergo this course.

It must be borne in mind however that none of these short courses are qualifying courses. They are only service courses and refreshers. Men desiring to qualify for appointments as Physical Education Teachers must undergo a full One Year Course, the Prospectus on which may be obtained for one Rupee at the College Office.

The Content of the Courses will be somewhat as follows:—

1. The Course in Physical Education for Elementary Schools and Rural Areas.
 - (a) Physical Activities suitable for Elementary Schools and for Rural Recreation.—
 - (1) 6: 30—8: 30 A.M.—Activities for Elementary Schools.
 - (2) 4: 30—6 P.M.—Indigenous Games and Small Area Games.
 - (b) The “What,” the “Why” and the “How” of Physical Education and Recreation for Elementary Schools and Rural Areas.

- (c) Elementary Hygiene and First Aid, including Rural Hygiene and Sanitation.
- (d) Principles and Methods of Health Education.
- (e) Practice Teaching.
2. The Course in Physical Education for Secondary Schools and Public Playgrounds.
 - (a) Physical Activities suitable for Secondary Schools and for Public Playgrounds.
 - (1) 6: 30—8: 30 A.M.—Activities for Secondary Schools and Play-Grounds.
 - (2) 4: 30—6 P.M.—Major Games, Sports, Indigenous Games.
 - (b) The “What,” the “Why” and the “How” of Physical Education for Secondary Schools and Public Playgrounds.
 - (c) Elementary Hygiene and First Aid.
 - (d) Principles and Methods of Health Education.
 - (e) Practice Teaching.
3. The Course in Coaching and Refereeing Major Games and Sports.
 - (a) Physical Practice.
 - (1) 6: 30—8: 30 A.M.—Practice in the Technique of Track and Field Athletics.
 - (2) 4: 30—6 P.M.—Playing and Refereeing Major Games.
 - (b) The Rules of Games and Sports.
 - (c) The Organization and Conduct of Tournaments, Leagues, Sports Meets, etc.
 - (d) Problems in Athletics and Recreation.
 - (e) Principles and Methods of Health Education.
 - (f) Experience in Coaching and Refereeing.
4. The Course in Health Education.
 - (a) Physical Activities.
 - (1) 6: 30—8: 30 A.M.—With any one of the other A.M. Groups.
 - (2) 4: 30—6 P.M.—With any one of the other P.M. Groups.
 - (b) Personal and Community Hygiene.
 - (c) School Hygiene and First Aid.
 - (d) Principles and Methods of Health Education.
 - (e) Projects in Health Education.

All of the Courses will begin on May 1st and continue throughout the entire month of May. They are open to all who wish to attend. Those who

desire to take advantage of this opportunity should fill in the attached application form for admission, submit a registration fee of One Rupee, and register for the particular course desired.

The College is ideally situated in beautiful grounds with excellent living quarters and unsurpassed facilities for recreation. We recommend to teachers a month's stay here as an enjoyable holiday as well as an opportunity to equip for more efficient service.

We prefer that all persons attending the Courses should reside and mess in the College premises. But some students may be permitted to reside and mess outside if acceptable reasons can be presented for so doing.

For those students who reside and mess at the College the total charge for lodging, lighting, water, scavenging, mess, tuition, etc. will be Rs. 30 per person for the month, payable in advance.

For those who reside and mess outside the total charge per person for the month will be Rs. 15, payable in advance.

The programme is of such a nature that residing outside makes matters very difficult, and we advise against it.

Each student should come equipped with suitable clothing for physical activities, and with note books and pencils.

Rule Books and other necessary books may be purchased after arrival at the college.

All Classes will begin at 6-30 A.M. on May 1st, and all candidates must report before that time.

H. C. BUCK, M.A., M.P.E.
Principal.

Health and Physical Education in the Scheme of National Education

By

DR. G. F. ANDREWS, B.A., L.T. (MADRAS), B.P.E., M.Ed.,
(SPRINGFIELD), M.A., Ph.D., (COLUMBIA),
Senior Physical Director, Saidapet, Madras.

(Paper submitted to the 15th All-India Educational Conference,
Lucknow).

I. HEALTH EDUCATION

(a) *Definition of Health Education.*

Health education has been defined as "the sum of experiences in school and elsewhere which favourably influence habits, attitudes and knowledge related to individual, racial and community health." The ideal of health is not mere freedom from obvious deformities and pathological symptoms. As Williams says, health is "a quality of life capable of enrichment or deterioration, but a quality of almost infinite capacity—that quality of life that enables the individual to live most and serve best."

(b) *Aim of Health Education.*

The aim of health education should be to provide the opportunities for realisation of favourable health experiences so that

- (1) the individual may live healthily and understand full well the ways and means of continuing to be healthy, and
- (2) the health consciousness thus created in every individual may be a positive asset to the development of racial and community health.

(c) *Procedures in Health Education.*

Health Education can be promoted only by emphasizing all aspects of health; physical, mental, social and moral and the procedures in health education therefore are manysided. These, in an effective programme of health education, are—

- (1) healthful living, i.e., actual practice of the laws of healthful and clean living, so as to make these practices become life habits.
- (2) health supervision, i.e., the overview of the sanitary and hygienic conditions so that healthful surroundings may abound, and the provision of those amenities like drinking water, light and ventilation etc.

- (3) health guidance in matters concerning one's health through conferences, discussions and demonstrations.
- (4) health service, i.e., thorough annual medical examinations, followed up by adequate follow up service in all possible directions, and
- (5) health instruction, i.e., imparting of knowledge in health subjects such as hygiene, sanitation, nutrition, physiology, anatomy etc.

II. PHYSICAL EDUCATION

(a) Definition of Physical Education.

Physical Education is defined as that aspect of education which uses bodily activities "selected as to kind and conducted as to outcomes" under intelligent and skilled leadership supplied with adequate facilities so as to "afford an opportunity for the individual or group to act in situations that are physically wholesome, mentally stimulating and satisfying and socially sound." Physical Education is "education of the body and through the body," and uses bodily activities to develop vitality and health, to enable the functioning of a sound mind on the foundation of a sound body, and to further the development of the character and conduct traits so essential to an efficient citizenry.

(b) The Aims of Physical Education.

The aims of physical education have been summarised by Buck as follows :—

- (1) The promotion of normal growth and organic development
 - (a) to conserve health
 - (b) to provide a fair degree of strength and endurance
 - (c) to secure an erect and self-respecting carriage of the body
 - (d) to develop the neuromuscular control required for prompt and accurate response and graceful and effective movements.
 - (e) to develop vitality or organic vigour.
- (2) The development of qualities relating to society :
 - (a) Acquisition of habits of obedience, subordination, reverence, self-sacrifice, co-operation, friendliness, respect etc.
 - (b) Loyalty, patriotism
 - (c) Capacity for leadership
 - (d) Proper spirit towards victory and defeat.
 - (e) Spirit of fair play; sportsmanship, civic pride and honesty.

(3) Development of those qualities directly related to the individual, and indirectly related to the community. These qualities have a mental and

moral value, and are derived from active games and athletics properly supervised.

Self confidence, self-control, mental and moral pose, good spirit, alertness, resourcefulness, decision, perseverance, courage, aggressiveness, initiative.

(4) To engender in youth an intelligent and healthful interest that shall lead to the life-long practice of forms of active exercise which favour a continued high level of efficiency and of stimulating social contact—

Regular habits of exercise and play

(5) To instruct youth in the science of health, the means by which it may be secured, and the formation in early life of those habits tending towards its conservation

Regular health habits.

(c) Procedures in physical education.

Physical education necessarily uses bodily activities for its program and includes the following:—

(1) Activities which use the big muscles and further the development of the fundamental racial skills of walking, running jumping, throwing, climbing and hanging. Among these are

- (a) activities in which individuals alone can take part such as athletics, games like tennis, handball, tenikoit etc.
- (b) activities, both indigenous and foreign in which groups alone can take part such as simple relays, minor group games, athletic relays, team games like Cricket, Hockey, Chedugudu, Atya Patya, Khokho, etc.

(2) Activities, which, though not exactly of the racial type contribute to growth and development and have an appeal because of their intrinsic values. Among these are

- (a) water activities like swimming, diving, wading, boating, water games etc.
- (b) stunts and self-testing activities such as tumbling, pyramid building, dundahls, bhaskis, suryanamaskars, exercises on gymnastic apparatus etc.

(3) Rhythmic activities such as folk dances, athletic dances, gymnastic dances etc.

(4) Combative and defensive activities like wrestling, boxing, fencing etc.

(5) Outing activities like hiking and camping.

The ethical and moral discussions arising out of the many situations where the above activities are used, the code of sportsmanship, the instruction in the why, and how of these activities are also definitely parts of a physical education programme.

III. HEALTH AND PHYSICAL EDUCATION ARE NOW IGNORED SUBJECTS

Though the above would indicate that health and physical education activities and programs have a definite contribution to make to further the physical, mental, and spiritual development of the individual, yet, the place given to this subject in the present educational scheme is insignificant. To say that health and physical education are ignored subjects would not be an exaggeration. Health education of the type discussed above does not exist. No annual medical inspection; no health service either by the teachers or any one else; no attention to the elementary principles of sanitation and hygiene; no provision for healthful living; no health guidance of any kind! Against this negative picture we have the desultory attempt at health instruction, the theory of hygiene and sanitation being taught in an indigestible way with practically no relation to the realities of life in general, or the daily needs of life in particular.

And physical education receives no better treatment. Its philosophy and principles are not understood, nor is there any attempt made to understand the same. It is given no place in the curriculum and becomes an extra curricular subject to be taught at the fag end of the day under the most harrowing circumstances by teachers poorly equipped for the task. It is unnecessary to go into the details. Anyone can go into our schools and colleges and find for themselves how students run away from physical education classes whenever possible and how the programme of physical education in many a school exists for the sake of the inspector and the annual inspection. The emphasis on intellectual education is so great, and the ignorance of the contribution of physical education activities to the making of men and women so profound, that it is no wonder that the physical degeneration that has set in is rapidly gaining strides, leaving us worse than a C3 nation.

IV. THE ENUNCIATED AIMS OF NATIONAL EDUCATION GIVE HOPE FOR THE FUTURE OF HEALTH AND PHYSICAL EDUCATION

At this stage when health and physical education does not seem to make any headway, the enunciation of the aims of national education give rise to new hopes. These, as stated in the draft outline scheme of national education are as follow:—

- (1) The aim of Indian National Education should be the realisation of the maximum growth of every individual with a view to evolving an efficient co-operative social order.
- (2) For the promotion of this aim the following objectives should be held in view at every state of education: (1) Physical well-

being; (ii) national solidarity; (iii) economic efficiency; (iv) cultural development; (v) ethical and moral consciousness.

- (3) The general scheme of National Education should ensure for every individual a maximum possible general cultural education and a preparation for occupational life, labour and handwork forming an essential part of general cultural education at every stage as far as possible.

The aims and objects and means of national education as stated above, are fundamental and vital to national progress. Inasmuch as health and vitality, and physical well-being are the necessary foundations on which national solidarity, economic efficiency, cultural development and ethical and moral consciousness can be built up, with the resultant efficient co-operative social order, the advocates of the scheme of national education as now adumbrated can ill afford to give health and physical education the "unsung, unwept and unhonoured" place these subjects have hitherto occupied.

V. STEPS THAT SHOULD BE TAKEN TO ENABLE HEALTH AND PHYSICAL EDUCATION PLAY THEIR PART IN THE SCHEME OF NATIONAL EDUCATION

Undoubtedly the authors of the scheme of national education do recognise the claims of health and physical education. To this extent a forward step has been taken. But this is to a large nullified by the subsequent silence and lack of any detailed reference re: health and physical education. Much is presumed and expected to be done even though a specific mention is made of what is expected. The following are some of the necessary details in health education that require immediate and careful attention:

- (1) The attitude of educators that instruction in hygiene is health education should be revolutionised.
- (2) Medical examinations and the follow-up on the right lines of the advice given at these examinations should be provided for.
- (3) It is not the learning but the doing and experiencing that is the matrix of true education. So, plenty of opportunities and facilities for healthful experiences should be provided through sanitary and hygienic surroundings, and health-habit formation set-ups.
- (4) Where instruction is necessary it should not be entirely theoretical or high above the intelligence of the several age groups but practical wherever possible, the knowledge being related to real life situations. A well-thought out syllabus for health instruction, which suits Indian conditions and which is related to the practical realities of life, should be evolved.

- (5) The necessary time and facilities for the various phases of health education programme should be provided.
- (6) Health clinics where the necessary advice, instruction, and help can be given individually and where remediable physical defects can be attended to should be introduced.
- (7) Every teacher should be qualified to handle physical education and to co-operate in the several phases of the programme which are not directly under his control. This requires that health education should be included as a compulsory part of the curriculum of training of teachers.

In physical education also, there is need for a change in attitude concerning the subject, from the purely physical one to the educational one, and that it is not extra-curricular subject, but a curricular one, demanding as much attention as any other curricular subject. This change in attitude is of vital importance because then other changes will follow. Some of these changes which are absolutely necessary are :

- (1) Provision of sufficient time in the timetables every day for every class. Physical activities to be beneficial should be participated in daily and not be fits and starts. The individual can get the proper mind-set for physical activities only when he is given opportunities for daily participation in these activities under proper supervision.
- (2) Suitable syllabuses of physical education for the different age levels should be evolved. Indigenous systems of exercise and play should be incorporated in these syllabuses to a greater extent than hitherto because of the country's economic condition. Natural activities should be emphasised and drill and formal activities reduced to the minimum.
- (3) Though specialists in this subject will be needed for a long time to come, yet the class room teachers should be trained and equipped to be able to co-operate effectively and efficiently with the specialist physical educator. Physical education and health education are not one-man jobs or the concern of the specialists only. Every class room teacher has his share in the work. To this end, the teachers while under training should be made health education and physical education minded by the incorporation of necessary courses of study—theoretical and practical—in the teacher training curriculum.

VI. HEALTH AND PHYSICAL EDUCATION ARE TWO SUBJECTS

Because of overlapping and results, it is common to speak of health and physical education as one subject. Though for administrative purposes this is desirable, the provision for these subjects in any scheme of physical

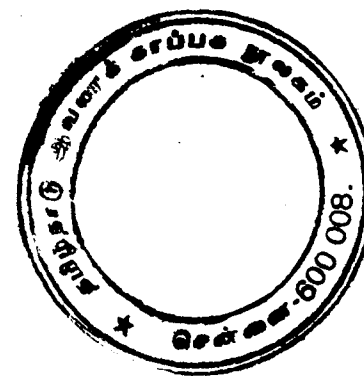
education should be separate. As much time and attention should be given to health education as to physical education. The procedures or programmes of these subjects are distinct from each other. The physical educator does require the services and findings of the medical officer of the health education department, and the health educator does need a programme of physical activities to further his work. Close collaboration between the two is very necessary from the administrative and education view points. But care should be taken not to mistake health education and physical education as one subject.

VII. CONCLUSION

The tendency in the past has been to take for granted that instruction in hygiene and provision of one or two periods a week for drill and exercises will meet the demands of the growing boy or girl. There is a danger that this attitude may continue and it is therefore necessary to remind ourselves that "to-day we define health and physical education in terms of an integrated personality, in terms of educational goals, in terms of the richness and fulness of the richest kind of living." The aims of health and physical education and of national education are not antagonistic. But, realisation of the maximum growth of every individual with a view to evolving an efficient co-operative social order" is possible only when the fullest opportunity is given to the individual for the optimum physical, mental, moral and spiritual development. Only then can he live best and serve most as an active member of an efficient co-operative social order. "A sound mind in a sound body" has been the slogan all these days. May we not change it to "a sound citizen in a sound social order" and harness health and physical education to the yoke of national education to realise this goal?

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Laying out a 400 Metre Oval Running Track

With the growing interest in the World Olympics and in adopting the same code of rules as govern the World Olympic Sports, many requests come in to us for advice regarding laying out a running track in metres. As you are well aware all sports items in the Olympic programme are measured in metres. This being so we have changed our running track at the Y.M.C.A. College and gladly give herewith the method followed by us in laying out our 400 metre track, so that those requesting information may have it for their guidance.

We also give herewith the diagram and dimensions of the running track of the 1936 World Olympics in Berlin.

The accompanying figures and diagrams should enable any person who understands sports, to lay out a track on which the modern programme of sports can be efficiently and satisfactorily conducted :—

1 Metre	..	..	3.281 ft.
100 Metres	..	..	328 ft. 1 1/5 in.
110 Metres	..	..	360 ft. 10 9/10 in.
400 Metres	..	..	1,312 ft. 4 4/5 in.

Now, if we make the length of each of the straights of the 400 Metre oval track to be 80.3 Metres, or 263.485 ft. (263 ft. 5 3/5 in.), then the running distance around each curve of the track will be 119.7 Metres or 392.735 ft. (592 ft. 8 4/5 in.).

You will thus find the total distance of the track to be :—

263 ft. 5 3/5 in. or 263.465 ft. or 80.3 Metres—One side.

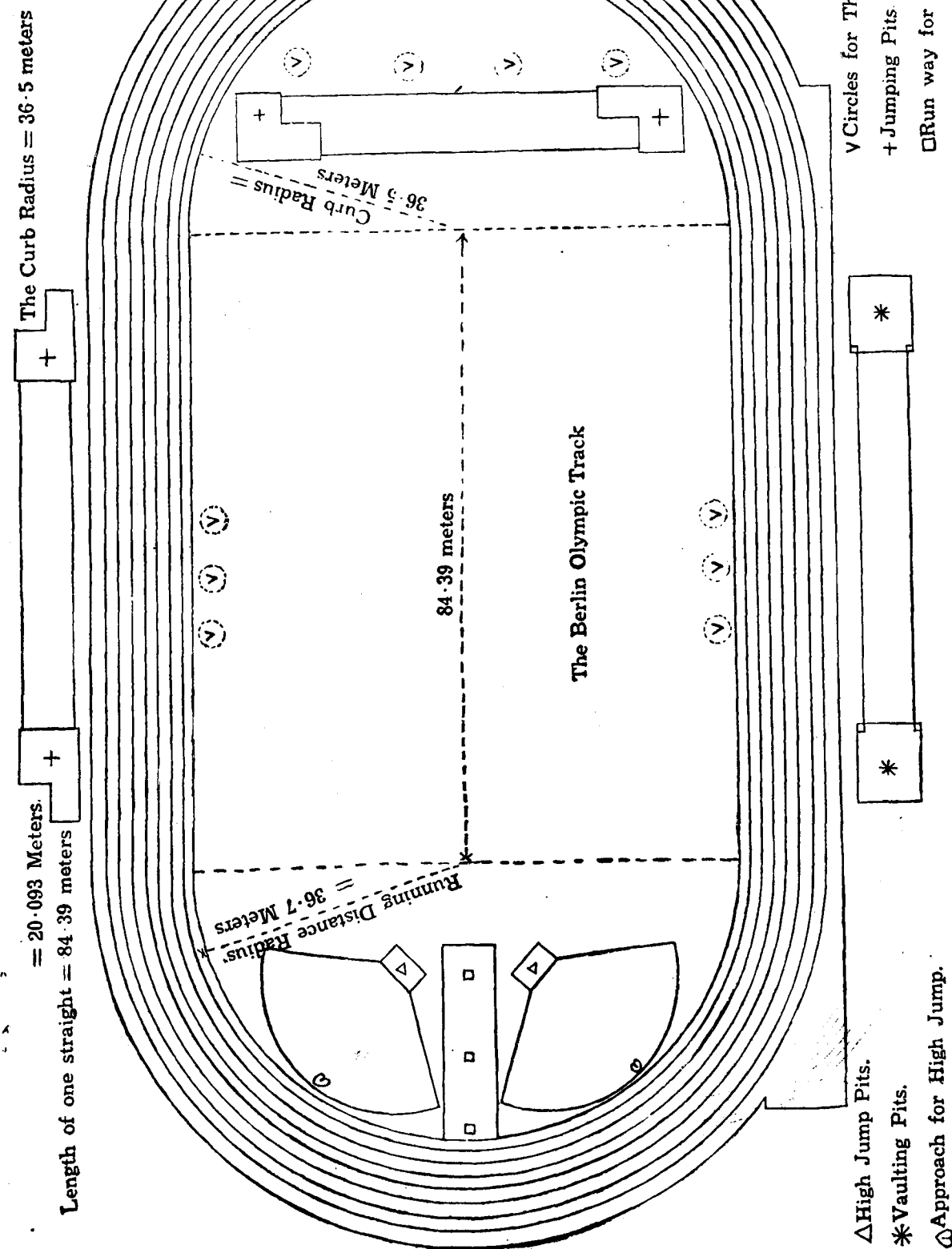
263 ft. 5 3/5 in. or 263.465 ft. or 80.3 Metres—Other side.

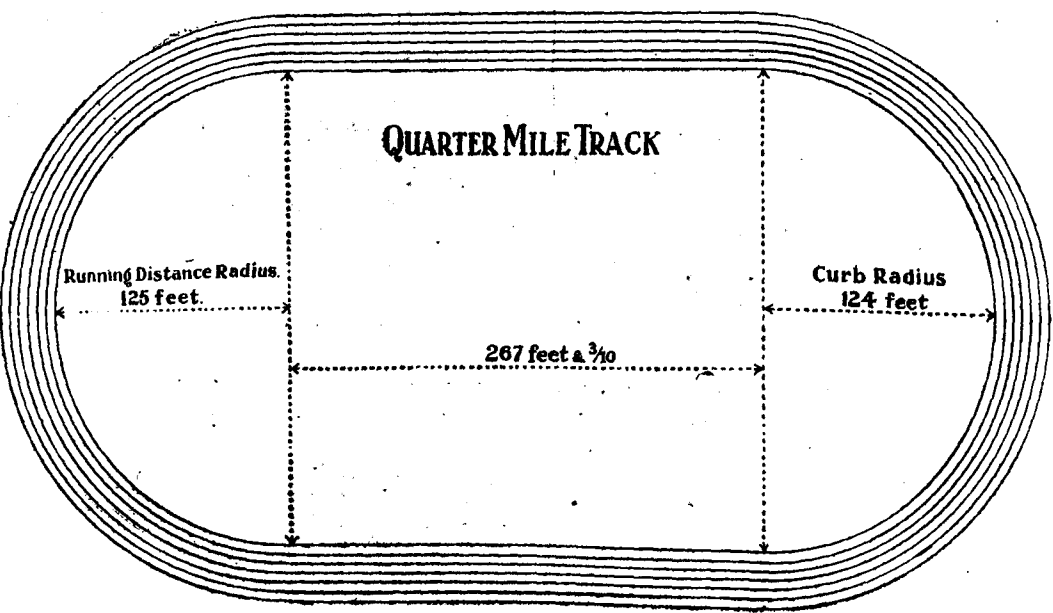
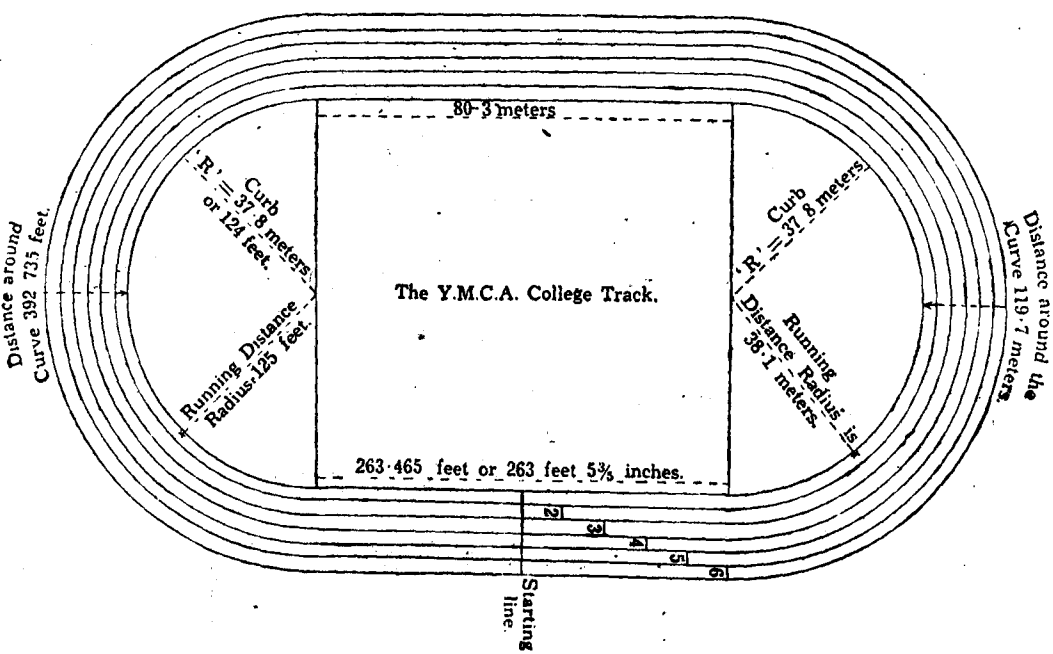
392 ft. 8 4/5 in. or 392.735 ft. or 119.7 Metres—One curve.

392 ft. 8 4/5 in. or 392.735 ft. or 119.7 Metres—Other curve.

1.312 ft. 4 4/5 in. or 1,312.400 ft. or 400.0 Metres—Complete track.

Now since the Running Distance around one curve is 119.7 Metres or 392.735 ft., your knowledge of Mathematics will enable you to figure out that the radius required for that is 38.1 Metres or 125 ft. This radius of 125 ft. is what is called the "Running Distance Radius". But the running distance on a track is measured not on the curb or chalk line of the track, but one foot away from it. Therefore for actually marking out the track we deduct one foot from the running distance radius, and use that distance for our "Curb Radius" or for actually marking the running track on the ground. For the particular running track in question we have found that the "Running Distance Radius" is 38.1 Metres or 125 ft. Therefore for actually marking the track we use a "Curb Radius" of 1 foot less. In this case our "Curb Radius" is 37.8 Metres or 124 ft.





RUNNING TRACK DIMENSIONS							
MILES	TOTAL LENGTH	LENGTH OF SIDE	CIRCUM OF END	B-END RADIUS	SAME IN FT+IN	C-CURB RADIUS	
1 "	5280'0"	1320'0"	2640'0"	420'169	420'-2 1/2"	419'-2"	
1/2 "	2640'0"	660'0"	1320'0"	210'084	210'-1 1/4"	209'-1"	
1/4 "	1320'0"	330'0"	660'0"	105'042	105'-1/2"	104'-1/2"	
1/8 "	660'0"	165'0"	330'0"	52'521	52'-6 1/4"	51'-6 1/4"	
1/16 "	330'0"	82'6"	165'0"	26'260	26'-3 1/8"	25'-3 1/8"	
1/32 "	165'0"	41'3"	82'6"	13'130	13'-1 1/16"	12'-1 1/16"	

A careful study of the diagram will clearly indicate how you should proceed to lay out your 400 Metre track.

The rules of sports require that in every race up to and including the 400 Metres, each runner shall have a separate lane of at least 1.22 Metres or 4 ft. in width. In a straightaway race this presents no problem, because from the starting line to the finishing line all lanes are of equal length. But when running races around a curve if all runners started abreast the runners on the outer lanes would be running greater distances than those on the inside lanes. Therefore the method of "staggered starts" is used to give each runner the same actual distance. These staggered starts are indicated in the six lanes represented on the 400 Metre track in the diagram. According to the rules of sports the distance of the first lane is measured 12 in. away from the curb line. But succeeding lanes are measured 8 in. away from their inside line. The measuring radius is therefore different and so your application of Mathematics will tell you to mark your starting lines for a 400 Metre race as follows:—

The man in the first lane starts scratch.

The man in the second lane starts at a mark which will be 23 ft. 1/2 in. in advance of scratch.

The men in the third and subsequent lanes start at marks 25 ft. 1 1/2 in. in advance of the 2nd, 3rd, 4th, etc., respectively.

Then in making staggered starts for the 200 Metre race the distance between starting marks would be just half that for the 400 Metres, the starting would be on exactly the opposite side in the centre of the running course and the finish line would be where the 400 Metres begins.

Why Health Education in our Schools ?

By

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The need for health education in our schools requires no special emphasis. It is a well known fact—although accurate figures for each province are not available—that the percentage of children with remediable and preventible defects is very high. A Simla Correspondent gives the following figures regarding physical defects: 81.6 per cent for boys and girls together in the North West Frontier Province; 77.1 per cent and 55.4 per cent for boys and girls respectively in the urban areas of Delhi Province; 29.3 per cent for boys in the rural areas of Delhi; 60 per cent and 34 per cent for children of both sexes together in the urban and rural areas of the United Provinces and 45.4 per cent for boys and girls together in Bihar as a whole. The health examination of 210 school children in Saidapet in 1935 revealed the following facts: undernourished 38 per cent; defective tonsils 32 per cent; defective vision 12 per cent; bad teeth 66 per cent; enlarged glands 43 per cent; skin trouble 29 per cent; defective hearing 6 per cent; phimosis 13 per cent; poor chest 12 per cent; unhygienic personal habits 40 per cent; suspected tuberculosis 8 per cent. What is true of the community in Saidapet could be considered true of most communities in Southern India. It may be better or worse. Only a systematic and thorough study will reveal the facts.

CHILDHOOD DEFECTS SHOW IN ADULT LIFE

That most of these remediable and preventable defects of childhood will show themselves in disease and incapacity in adult life, is a well established medical fact. To quote the Chief Medical Officer to the Board of Education, England and Wales, "Medical Science has proved with unmistakable clearness that disease and incapacity in adolescence and adult life find their source all too often, in the seed time of childhood. It cannot be doubted that much of the excess of sickness and mortality under 40 years of age must be attributed to this origin, and some of the maternal mortality, some of the time lost in industry, some of the lack of resistance to infective diseases may all derive from this same source".

Majority of the school health authorities in America are in agreement that children suffering from physical defects cannot attain their normal and potential achievements. A study by Harlan of 361 poorest and 387 best pupils in eight grades indicates that the poorest pupils show 29 per cent greater defectiveness. Health is put down as the first of the seven cardinal principles of education in U.S.A. It is more and more realised that since the school is increasingly responsible for the child's education, physical as

well as mental, efforts should be made to improve and protect his health as well as to develop his intellectual aptitudes, and that it is an unsound educational policy which strives to increase mental learning without regard for the presence of remediable physical defects.

MALNUTRITION IS OUR GREAT PROBLEM

There is even a greater challenge than this. It is the fact that thousands of our school and college going boys and girls are actually living below par. These boys and girls do not consult physicians, they are not found in hospitals, but they drag on, day after day, inefficient in their academic work, unable to enjoy even a recreational activity, unmotivated from the standpoint of facing to-morrow's challenges. Many of them are definitely malnourished. A large percentage of malnutrition is due to lack of the most elementary biological need—food. There are others because of the effects of worry and fear and the strain of economic pressure under which they are living. Thousands of children even in our well-to-do homes are malnourished and the cause is ignorance on the part of parents on some of the essentials of a balanced diet. Many of them do not know where to turn for advice. Many do not realise that health rests on a foundation of exercise, rest and sleep and a balanced diet. Many do not know that the simple, plain diet is the best and the cheapest and that the other fundamental needs of the body, exercise, rest and sleep, may be had without charge. Money is not the essential.

NEED FOR MENTAL HYGIENE AND SEX EDUCATION

There is no denying the fact that our boys and girls have great many mental or personality problems. Ignorance is the taproot of many of their difficulties, conflicts, fears, and superstitions. Boys and girls need help to develop a rational insight into their personality problems—their talents, interests, motives, handicaps, emotional and intellectual peculiarities, and the causes of their weaknesses or failures. A prime characteristic of a sound mind is that it attempts to discover, understand and evaluate itself.

The healthy mind adopts wholesome attitudes towards life's problems. It manifests a healthy interest in living and secures satisfaction from the mere process of living. A healthy mind shows itself in its willingness and ability to make successful adjustments to life's critical situations. Failure to adjust usually manifests itself in feelings of dissatisfaction, frustration, emotional disturbance, mental maladjustments, unwholesome habits of thought and conduct, excessive daydreaming, fears, worries, development of inferiority feelings, and various kinds of defence mechanisms and bad sex habits. The need for instruction in mental hygiene and education in matters related to sex is immense. This is yet another challenge to our schools and colleges, because the school and college are the only safe places where they can get these.

COMMERCIAL HEALTH PROPAGANDA

There is a growing health consciousness throughout our country. This is evident in the increasing number of commercial advertisements in our newspapers, magazines, railway platforms, and other public places, regarding food, sex, and other matters related to health. These advertisements have the health consciousness appeal. On all sides one hears, "Do this for health; go there for health; drink this; eat this; take this; take that; keep alkaline, get vitamins. All this leaves the public utterly confused.

We have to take our lesson in this matter from other countries. In Denmark all patent medicine advertising in the public press is forbidden. There has been in existence since 1932 a law which absolutely prohibits the advertising of goods purporting to have a curative, disinfecting or prophylactic effect. In Norway, a law has been in force since 1930 whereby no patent medicine or pharmaceutical product may be advertised in any way or even sold, without the authority of the Medical Board of the Ministry of Health. In Sweden, there are similar regulations which prohibit advertisements of products with exaggerated claims.

Health Education has a real task to perform; it has an essential place in the whole school and college program. Children as well as adults must be taught to recognise propaganda, they must be taught how to recognise truth from error. They must learn where to turn for advice, whom to trust and not to trust. Boys and girls must be taught some of the fundamental principles of how the body functions. They must be able to recognise the simple laws of life—the values of stimulating work, joyous exercises, food, rest, sleep and relaxation. Fundamental protective community sanitary rules must be enforced. Children must be exposed to a happy and joyous environment in which growth and development proceed harmoniously. All these are tasks for the educator.

WHITHER EDUCATION IN OUR SCHOOLS AND COLLEGES ?

One hears it often said by headmasters of schools and principals of colleges, and other educators "Well, we know our boys and girls are not all healthy; they need health and physical education. But the problem is an economic problem. Parents are poor and the school or college has no resources to draw from for such emergencies." That day of economic emancipation, that Utopian day when the parents will have money in their pockets and the schools and colleges are subsidized by government to meet these needs is yet to come. It may not come for a long time. To wait until such time comes, will mean a grave neglect of a great educational need. What is wanted is a revaluation and a reorientation of our educational principles, policy and objectives. It is about time we should stop and ask "Whither education in our schools and colleges? Do not most of our school and college graduates break down under the stress and strain of a very heavy curriculum of studies and examinations and later meet with complete frus-

tration when unemployment faces them? Is not education still thought of as the cultivation of the intellect? Is not the traditional in us hanging on like a parasite and eating into our very system?

A man's intellect does not operate separately from the rest of him. It both acts on and is acted on by his emotions, desires, fears, likes and dislikes and conditions of body chemistry which are related to his temperament, character and health. The cultivation of the intellect irrespective of these human urges and conditions will be only partially effective. It will not prepare the individual to act as a whole, in control of all his driving forces. When any part of man's organism is out of order, whether mind or body, both mind and body are likely to be disturbed. All of us know the difficulty of thinking clearly and easily when the common cold blocks breathing and causes a splitting headache. The use of insulin in shock treatment of certain mental diseases points to the close relationship of mind and body. We also know that a jaundiced body is accompanied by a jaundiced disposition. For this reason, we must define the function of education no less broadly than the cultivation of the whole man at his best, the development of a strong, virile, healthy, integrated personality.

LEADERSHIP IS ESSENTIAL

The preservation and promotion of the health of our children should become a great national concern. This is a task good enough for our statesmen, doctors, and educators. Health education in schools and colleges has a great part to play. This leads to the problem of leadership. No program of health education that could be considered worthwhile can go on without the help of service-minded doctors and well educated, trained leaders in health and physical education. Every classroom teacher in some degree has some contribution to make to school health education. Teacher's Colleges and Training schools for teachers should make health education a significant part of the training of all teachers.

PROGRAM OF HEALTH EDUCATION

A complete appraisal of the health status of every pupil should be the starting point. The usual medical inspection, where not more than 2 minutes are given for the examination of each child, is a farce and should be a thing of the past. On the other hand, what is wanted is a complete health examination, where a child's entire physical and mental personality is considered. This needs the services of a doctor and a qualified health and physical educator. They have to engage in a co-operative effort to get at all the data for a complete and satisfactory health appraisal of the individual. The findings of such examination should be carefully and systematically recorded in proper health records. Individual conference with each pupil must then be arranged, when his health status is discussed and definite plans are made to remove any preventable or remediable defects. Counselling and

guidance in health is an important phase of health education, because such a situation affords opportunity for instruction in health which will have significance to the child. If the man in charge is sympathetic and tactful, the whole life of the child may be opened up, and the opportunity for service will be just as large as he is able to make it. On the other hand, it is very easy to close the door between student and teacher, and when once closed it is often very difficult to open. Much more may be learned by securing the child's co-operation, confidence and friendship.

The basis of health education should be to provide such and as many other healthful experiences, such as clean and attractive school site, buildings, classrooms; and playgrounds, and where children can experience proper sanitary conditions. Our main problem in health education in schools and colleges will be to change behaviour. Mere instructions in health will not get us anywhere. Knowledge of facts does not change behaviour. To provide as many healthful experiences should be our aim. Our schools and colleges should increasingly become places of living where health becomes the natural result of very many factors associated with good food, work, play, sleep, rest, relaxation, fresh air, sunshine, correction and removal of all defects, avoidance and prevention of infection, and a wholesome mental attitude towards life and society.

What Health Education Can Accomplish ?

Some facts gathered from the statistical bulletin of the Metropolitan Life Insurance Company

By

H. G. BUCK

The health of the American people is getting better all the time, and their average length of life is increasing accordingly.

Since the turn of the century the average length of life of the white boy baby has increased by 12½ years; in 1937 his expectation of life at birth was 60.75 years, whereas in 1901 it was only 48.23 years. For the white girl baby the gain in average length of life over the same period has been even greater and amounts to 14 years, the improvement being from an expectation of life at birth of 51.08 years in 1901 to one of 65.08 years in 1937. Our women do better than our men by four years and four months.

These gains have been accomplished despite the World War, an influenza pandemic which destroyed even more human lives than did the War, and the greatest economic upheaval of generations, with its health-menacing potentialities. The expectations of life at birth and at selected ages of life for the general population of the United States in 1937 are shown in Table I. Comparisons of expectations of life at birth for certain periods since 1901 are given in Table 2.

An even more striking measure of the improvement in longevity since the beginning of the century than that provided by the expectation of life at birth is found in the proportions of the babies born who survive to later years of age. In 1901 less than nine out of every ten white male babies born alive survived to reach their first birthday. However, by 1937 health conditions had improved to such an extent that at least nine out of every ten newly born will attain age 24. Among white girl babies, too, less than nine out of every ten born in 1901 survived their first year of life; but in 1937 the conditions were such that nine out of ten babies will reach age 32. According to the situation prevailing in 1901, almost half of the white male babies would have died before attaining age 57, while the half-way mark on the basis of health conditions in 1937 was at 67 years. For white females the corresponding ages were 61 years in 1901 and 72 years in 1937. With half our womenfolk surviving beyond the 70-year mark, we can well understand why our population is rapidly growing older.

On the whole, the improvement in longevity since the opening years of this century was concentrated largely in its second and third decades. Thus it will be seen in Table 2 that among white males the improvement in the nine-year period from 1901 to 1910 amounted only to two years, the ex-

TABLE 1

Expectation of Life and Mortality Rate per 1,000 at Specified Ages for Total Persons (White and Coloured) and for White Persons by Sex, United States, 1937

AGE	EXPECTATION OF LIFE, YEARS			MORTALITY RATE PER 1,000		
	TOTAL PERSONS	WHITE MALES	WHITE FEMALES	TOTAL PERSONS	WHITE MALES	WHITE FEMALES
0	61.48	60.75	65.08	50.13	52.36	41.16
1	63.70	63.07	66.85	7.30	6.88	6.20
2	63.17	62.51	66.27	3.71	3.73	3.26
3	62.40	61.74	65.48	2.51	2.56	2.20
4	61.56	60.90	64.62	2.03	2.11	1.76
5	60.68	60.02	63.74	1.71	1.81	1.47
10	56.08	55.45	59.09	1.07	1.20	.86
15	51.42	50.82	54.37	1.74	1.78	1.26
20	46.95	46.33	49.77	2.73	2.55	1.96
25	42.62	41.93	45.29	3.35	2.97	2.46
30	38.34	37.56	40.85	3.85	3.52	2.85
35	34.10	33.26	36.45	4.96	4.69	3.55
40	29.99	29.09	32.12	6.45	6.36	4.51
45	26.00	25.07	27.87	8.34	8.93	6.01
50	22.18	21.28	23.77	12.04	12.98	8.59
55	18.58	17.74	19.85	16.31	18.26	12.12
60	15.17	14.46	16.14	23.53	26.67	18.53
65	12.10	11.53	12.78	36.51	40.49	30.25
70	9.44	8.99	9.85	53.29	58.25	46.49
75	7.12	6.79	7.32	82.62	90.05	76.02
80	5.28	5.08	5.32	123.22	131.95	118.06
85	3.75	3.63	3.72	185.02	190.66	186.61
90	2.62	2.49	2.63	280.05	295.11	284.57

TABLE 2

Expectation of Life at Birth Among Total Persons (White and Coloured) and Among White Persons by Sex, United States, from 1901 to 1937

YEAR	EXPECTATION OF LIFE AT BIRTH, YEARS		
	TOTAL PERSONS	WHITE MALES	WHITE FEMALES
1937*	61.48	60.75	65.08
1936*	60.81	60.18	64.36
1935*	61.37	60.72	64.72
1934*	60.79	60.24	64.18
1933*	61.26	60.86	64.40
1932†	61.07	60.69	64.38
1931†	60.26	59.88	63.56
1929-1931§	59.50	59.31	62.83
1919-1920¶		55.33	57.52
1910†	51.49	50.23	53.62
1901†	49.24	48.23	51.08

* Total United States. † United States, excluding Texas. ‡ Original Death Registration States.

§ United States, excluding Texas and South Dakota.

¶ Aggregate of 27 States; not computed for total persons.

pectation of life at birth having risen from 48.23 years to 50.23 years. On the other hand, the gain in longevity from 1910 to 1919-1920 for white males came to 5.10 years, while in the period from 1919-1920 to 1929-1931 the advance was 3.98 years. Since the triennium 1929-1931 until 1937 white males improved their average length of life by only 1.44 years. The data relating to white females present a picture very much like that for white males.

When compared with most of the countries for which data are available, the United States now ranks very high in expectation of life at birth. Thus, in recent comparable periods, the expectation of life at birth in the United States was greater than that in Belgium by about three years, Czechoslovakia by almost eight years, England and Wales by a little over one-half year, Irish Free State by 3¼ years, Finland by six years, France by 4 2/3 years, Germany by somewhat over one year, Italy by almost 6½ years, Poland by 12 1/3 years, and Scotland by four years. Switzerland, in the period from 1929 to 1932, and the Union of South Africa, in 1936, had expectations of life at birth not far different from that of white persons in the United States in the same periods. On the other hand, the Scandinavian countries, Australia, and New Zealand still rank above the United States in average length of life. The differences in favour of these countries in recent comparable periods are: Sweden, two years; Denmark, one-half year; Norway, 2 2/3 years; Netherlands, 3 1/3 years; Australia, 2¾ years; and New Zealand, 4¾ years. Although these countries make better showings than the United States as a whole, several of our States compare favourably with them. These States, which form a solid block in the Midwest, include the Dakotas, Iowa, Kansas, and Nebraska.

Although the expectation of life at birth in the United States is continuing in its upward trend, the pace has slackened in more-recent years. This situation may be quite normal, for it could hardly be expected that the rapid advance experienced in the years from 1910 to 1930 could continue indefinitely into the future. There is, however, no good reason why the improvement in our longevity should not be fast enough to enable us to catch up, in a relatively short time, with those countries whose expectations of life at birth are now greater than ours. Certainly we have available knowledge, skill, and wealth which should help us into first place among the countries of the world in regard to longevity.

Good Style in Hurdling



A good hurdler *strides* easily over a hurdle.

He does not jump.

Opposite arm and leg cross the hurdle simultaneously to prevent body twisting, to maintain balance, and to prevent breaking stride.



The hurdler comes down to the ground as quickly as possible, no soaring or coasting. Get the foot to the ground as quickly as possible to save time.



Book Reviews

The Scientific Basis of Physical Education. By F. W. W. Griffin, M.A., M.D., B.Ch., Oxford University Press, London, Humphrey Milford, 1937, page 199. Price Rs. 5.

Dr. Griffin is one of those outstanding men of the medical profession in England who has devoted considerable time and energy in the study of the scientific basis of physical education. He has contributed valuable articles and reports of research studies on physical education, which have appeared from time to time in the *Journal of Physical Education and School Hygiene*, Glasgow, London.

The period 1932-37 has seen a great ferment in the field of physical education in England. Attempts have been made to study physical education from many angles and as many different conceptions of what constitutes physical education and the best methods of its promotion have been sought for.

Dr. Griffin in this book has set out a comprehensive and up-to-date summary of the medical and scientific knowledge at present available.

"Physical exercises, states Griffin, involves many activities, each of which is brought about by complex mechanisms—anatomical, physiological, and psychological. Neglect of these mechanisms has in the past vitiated many apparently promising lines of physical training; it has injured some persons physically by over development or straining; it has failed in its purpose of enhancing the vitality of some by inattention to underdevelopment; and so it has deprived the community of the benefits which would otherwise have accrued from wisely planned and correctly executed physical education. It is therefore essential for all medical practitioners, as well as for others interested in this branch of education, to be as fully informed as possible in these respects so that they may be able to give sound advice and to direct such training with the maximum efficiency for the population as a whole as well as for individual cases."

Dr. Griffin has discussed fully various physiological factors relating to exercise, like muscle mechanics and effects, nerve factors in muscular action, physical exercise and respiration, circulatory changes in exercise, the heart in muscular activities, and benefits of exercise. He has devoted two chapters on the psychological aspects of primary education. The consideration of the subject from the psychological aspect presents a new field of thought. There is an attempt made to designate physical types in the same race as a basis for determining the most suitable form of physical education.

This book should stimulate thinking among doctors and leaders in the field of physical education in India. It is a well known fact—though no accurate figures are available for all provinces—that there is a very high percentage of children in our schools and adults in our Colleges who are handicapped by preventable and remediable defects. Physical Education

in order to reach all such cases has necessarily to be a co-operative effort on the part of the doctor, the physical director, the school, the home, and the public hospitals, and special clinics.

Dr. Griffin has made it clear that progress in physical education will only be made if the scientific basis is given full recognition. States Griffin, "The medical advisor, hitherto ignored by most physical training centres, must be admitted to a very full participation in the planning as well as the practising of sports, games and exercises. He will have to be a researcher as well as a general practitioner. Physical, physiological and psychological standards are now available for testing the value of the various cults and systems of training, and they must be used both for this purpose and for individual pupils. Trial must replace guessing as to probable values, and there is a great future for statistical work also, so long as the criteria of scientific statistical work are fully observed. Blind leaders of the blind must be deposed from their power to lead the nation astray any longer. The light of knowledge must be made available to all, so that all may be enabled to learn how to express to the uttermost in each case their latent capabilities for enjoying life, for increasing strength and for adjusting rightly to the world".

The book also throws light on possible avenues of research that could be carried on by research minded doctors and physical directors in India. The long list of bibliography at the end of the book is exhaustive and suggestive to those interested.

C. C. ABRAHAM.

Health Through Knowledge and Habits—By Brown, Russell and Carino
Ginn and Company, New York and London—1933. Price \$2.00.

This book was written for the use of the boys and girls in the PHILIPPINES by Dr. William H. Brown, Director, Bureau of Science, Manila; Dr. Paul F. Russell, Field Director, International Health Division, The Rockefeller Foundation, Manila (now stationed at the Research Institute, Guindy, Madras); and Clara Palafox Carino, supervisor of Home Economics, Bureau of Education, Manila. The authors have taken great pains to combine accepted facts concerning health in the Philippines and actual experiences of Filipino children. There have been made the background for explaining health habits and developing right health attitudes.

The book is not a mere treatise on health. It deals with the human body, its environment, the family and the School, community and government in relation to health habits. It develops in the pupils an intelligent understanding of the many facts—physiological and biological—upon which each health habit is based and through activities it guides the pupil to apply his health knowledge and habits to the situations in which he finds himself.

Robust vigorous health through good health habits and right attitudes all problems of health including food, exercise, rest, play, recreation, preven-

tion of infection, protection against minor injuries, is the keynote of this book. The teaching of health is through suggesting positive health habits, practices and attitudes.

The book is divided into six units covering Our Environment, Ourselves Our Food, Keeping Healthy, Family Health, and Community Health, all profusely illustrated with anatomical, physiological, and other suitable charts. This is an excellent book to be used as a pattern and a basis for similar reproductions to suit our conditions in India. Every school library must own a copy, and every high school boy should study it.

C. C. ABRAHAM.

A Modern Philosophy of Physical Education—By Agnes R. Wayman, M.A.
W. B. Saunders Company, Philadelphia and London—1938. Price \$2.25.

Agnes R. Wayman is the Associate Professor of Physical Education and Head of the Department of Physical Education, Barnard College, Columbia University, a Member of the American Academy of Physical Education and a well-known writer. The book deals with problems in physical education and to a certain extent those of health education on the College level for girls. However, the philosophy, principles, standards, and policies as set forth in the book can be applied when intelligently interpreted, to any age level and either or both sexes. Wherever young people are participating in physical activities these principles and practices should be of great help.

The book does not supply a program of activities for a college or school. The aim of the author is to suggest that a point of view and a philosophy is necessary to advocate principles which will make it easier for the teacher to apply and use intelligently the material already available, in the changing social and educational philosophy. The book is the outcome of eighteen years of work at Barnard College and during this period the College has been so to speak a laboratory with a lot of freedom to experiment and develop programmes unhampered.

The author in pointing out the rapid changes taking place all over the world, says "During the past few years in a world which at times has seemed to be crumbling about our ears, as we have seen all of our old theories—religious, moral, political, industrial, economic, and educational failing, many of us have been asking, "Has education meant so little? Has it ceased to function? Has it not contributed anything to intelligent thinking, to constructive co-operative activity, to moral conduct? Have we forgotten or simply ceased to believe that men and women are the goal of education; that fine living and not facts are its aim? In our worry over earning a living have we not been in danger of forgetting the art of living?"

In solving our economic problems have we not been in danger of losing our cultural and our spiritual background?"

The writer believes that a well organised and properly directed programme of health and physical education in schools and colleges has a great contribution to make to develop that strong, virile, well integrated personality that will face life situations with courage, confidence, and optimism. The book is written in such lucid style and is read easily, with the author leaving a deep impression in the mind of the reader. It is worthy of a place in any library.

C. C. ABRAHAM.

Old Boys News and Notes

BY

A. K. SINGH, B.A.,

M. K. Patel (1938-39)—is working in the Modern School, Bombay. There are about 600 students in the school but the space for play is limited so he has to conduct only small area games, besides Lezim and dumbbells.

K. Sivarajah (1937-38)—has been appointed in C. B. M. High School, Vizagapatam. The Principal is very much interested in Physical Education, but the school does not have satisfactory facilities. We wish him luck.

S. D. Gupta (1937-38)—is attending a course in the College of Hygiene and Physical Education, Glasgow. We hope he will escape the German Bombers and will be able to finish the course safely.

Chuni Lal Mehra (1938-39)—is working as an assistant Teacher in S. D. High School, Haripur, N.W.F.P. He is trying his best to help in the Physical Education programme as well, and we are sure he will be an asset to the school.

B. L. Gupta (1938-39)—is working in Government Emerson College, Multan. He has done some useful work so far, we wish him the best of luck.

R. S. Govindarajan (1937-38)—has just been stricken by the demise of his wife. He and his children have our deepest sympathy.

P. I. Joseph (1937-38)—paid us a short visit during the Christmas Holidays. With him was his bride. We were glad to welcome both of them.

