

HEALTH EDUCATION IN SCHOOLS OF COLLEGIATE
RANK

V.

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Health Education in Schools of Collegiate Rank

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Preface

The fact that people of the United States are becoming more vitally interested in matters concerning health both personal and public is evidenced by the great number of articles on that subject appearing in the newspapers and journals throughout the land. It is very necessary that this interest be directed along the right paths and there is no better medium through which this can be accomplished than through the public schools.

That the teaching profession recognize this fact is proven by the placing of health with its broadest interpretation as the first of the seven objectives of education. The subject of this thesis is the preparation of teachers toward the attainment of this goal.

Eleanore Gill

Health Education in Schools of Collegiate Rank

Introduction

When the American Student Health Association met in December, 1930, part of their resolutions read as follows:

"Whereas: It is generally believed that a fundamental objective of higher education is to develop the ability of the individual to live a more useful, effective, and happy life, and

Whereas: Health (emotional and physical) is recognized as one of the greatest factors in the realization of this objective, therefore be it

Resolved: That it is a major responsibility of every college and university to develop and protect the health of the student and to educate him in scientific health conservation."

This ideal for health teaching has a wide implication for it must be applied in the case of each individual student with due allowance for his health needs. In all education there is an increasing emphasis on teaching the individual instead of the subject.

Although the students who enter our schools of higher education are from the upper strata of intellectual ability, we must consider the diversity of their backgrounds in health education.

To begin with native ability and endowment, we find great variation. This diversification continues in home training proportionately as the number of homes from which our students come. Parents may or may not have a store of knowledge on hygiene both physical and mental and they may or may not be able to apply this knowledge effectively. For this reason children start school with a wide range of good and bad habits, true and false information, and many abilities - some developed and many of which remain potentialities.

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In schools, because of the variation in abilities and training of teachers, the range in effectiveness of health education continues. In some schools there is no mention of health in a constructive manner, in others a poor attempt is made to give students some health education and in still others we have a good health education course well taught.

In the community we have as much difference in health administration. There may be a county health unit managed by people trained in health or there may be worse than no health organization. This probably varies in proportion with the interest and economic resources of the residents of the county or city. Our students come from every kind of community.

The diversity of experience becomes apparent even in religion as there are those whose devotion to the principles of faith healing reaches beyond the limit of good judgment. There are others whose religion interferes seriously with a rational attitude toward and practice of mental hygiene.

Considering all these variations, it can be readily observed that health education has much territory to cover. Obviously individual differences must be taken into account. In addition to the knowledge, attitude, and practice of health education which should be learned for the good of the individual student, we must keep in mind the influence that will be exerted by this group upon their own families, upon the pupils of those who are entering the field of education, and upon their future communities, who will look to them for accurate information because of their greater opportunities in the educational field.

This greater challenge to higher education is barely being touched by our educators, who are becoming more and more aware of the potentialities in greater happiness for humanity which would undoubtedly be released by the practice of even our present knowledge of health principles. The importance of health education is manifest:

Of what use is the greatest amount of knowledge of skills after all our learning if lack of health prevents their use or the opportunity of passing them on to others?

One educator² suggests that some day the colleges and universities may refuse degrees to those who don't take logical precautions for the maintenance of health. It would seem that the importance of health should prevent the use of coercion for its promotion as this would defeat its own end. We must give the students not only tools with which to work but also the eagerness to use them which assures us that they will become integrated into each personality. In fact, the knowledge and practice of health principles must become essentially fashionable.

History of Health Education in Colleges and Universities

The first part of the health education program of schools of higher learning started in 1817 and 1818 in the form of physical training at West Point and other military schools. In 1825 there was some revival of physical education. In 1860, Harvard, Yale and Amherst built gymnasias, the use of which was optional at Cambridge and New Haven.³

At Amherst, Reverend W. A. Sterns, who became president in 1854, introduced a regular regime of class calisthenics. In 1874 a class was taken to Japan by Dr. George A. Leland for demonstration of physical education methods then in use at Amherst. In 1879 he introduced to all schools in Japan "the Amherst way" for the Japanese government.

By 1880 colleges in general had made some provision for physical education. The aim of this course was health as it was conceived at that time by educators. The objective, it seems, was coordination of the mind. Although obviously the objective is far afield of that of present day health education, we must recognize it as a step forward. Whereas previously there had been some recognition of the need of physical education, it had been in scattered areas and desultorily taught.

Because it was the first branch of health to be introduced into

education, we must recognize its importance in a historical way. As methods of teaching physical education were improved, however, we find there was specialization. One group placed great emphasis on methods and techniques so that the objective was entirely lost in the doing: what should have been a means to an end became itself the end.

Another off-shoot of physical education has grown to gigantic proportions, has developed into a progeny so different from its parent that the relationship is difficult to recognize. It is our present much commercialized system of intercollegiate sports. They are contests of prowess which have achieved much undeserved importance in the eyes of alumnae, many contemporary college students, and those who plan to enter a college or a university.

In the eyes of many prospective students the choice of a school depends solely upon the standing of that school in athletic circles. The competition among many of our schools of higher learning in their efforts to attract outstanding high school athletes is quite a well-known fact. Alumni seem to feel that the football their college plays indicates its progress since their completion of the course.

In the present system of athletics there seems to be little reason for their inclusion with physical education. It is not considered advisable to over-develop the physique when in most cases the individual will probably lead a sedentary life, nor does the inter-collegiate athletic system prepare one for future living. In fact it has happened in more than a few cases that definite irreparable damage has been done to the health of those boys who were on the intercollegiate athletic teams.

Considering this Dr. Sundwall⁴ aptly suggests that inter-collegiate athletics be placed in the advertising or entertainment portion of the school program, thus to eliminate the misconception as to its relation to the health education curriculum.

The physical education of today has its place in a health education program. It will be further discussed as a part of the health education curriculum.

Need of Especially Trained Leaders

Since the World War there has been an increased interest in health education. The reason for this was the statistics obtained by the government when examining the army men. With all our smugness about our "land of opportunity", we experienced a rude awakening upon finding that many potential opportunities did not develop because our school children were not receiving adequate health education or health service. There were appalling numbers of men who were not accepted for army service because of defects which could have been remedied in childhood.

As a result of the conditions revealed intensive campaigns were put on by many organizations throughout the United States to safeguard the health of children. Among them were The American Child Health Association, The National Tuberculosis Association and The Parent-Teachers' Association.

The National Tuberculosis Association put on an extensive program through the schools entitled "The Health Crusade", which had far-reaching effects in spite of its lack of trained workers. From this the Association has progressed to its present extensive program of health education.

The American Child Health Association united their efforts with those of the Commonwealth Fund and put on five large demonstrations in various parts of the United States to show what could be done along the line of saving the health of children. Their program started in the home and reached through all the grades of school. Whereas they employed especially trained workers to carry out the program during the five years of the demonstration, it was found necessary to train the teachers of the public schools in health work in order to insure the continuation of the work after the specialized workers had gone. This practical training should be given every teacher in her educational experience in order to prepare him to do an effective share in health education.

Another activity of the American Child Health Association which has proven to be of immense value was the making of surveys and studies which showed the great need of health education in our schools and leaders to promote it.

The White House Conference on Child Health and Protection in 1931 gathered together many of the finest social and educational forces with a common goal: better conditions for children. This culminated in "The Children's Charter"⁵ which follows:

The Children's Charter

President Hoover's White House Conference on Child Health and protection, recognizing the rights of the child as the first rights of citizenship, pledges itself to these aims for the children of America

I For every child spiritual and moral training to help him to stand firm under the pressure of life

⁵ Quoted from "The Children's Charter"

II For every child understanding and the guarding of his personality as his most precious right

III For every child a home and that love and security which a home provides; and for that child who must receive foster care, the nearest substitute for his own home

IV For every child full preparation for his birth, his mother receiving prenatal, natal, and postnatal care; and the establishment of such protective measures as will make childbearing safer

V For every child health protection from birth through adolescence, including: periodical health examinations and, where needed, care of specialists and hospital treatment; regular dental examinations and care of the teeth; protective and preventive measures against communicable diseases; the insuring of pure food, pure milk, and pure water

VI For every child from birth through adolescence, promotion of health, including health instruction and a health program, wholesome physical and mental recreation, with teachers and leaders adequately trained

VII For every child a dwelling place safe, sanitary, and wholesome, with reasonable provisions for privacy, free from conditions which tend to thwart his development; and a home environment harmonious and enriching

VIII For every child a school which is safe from hazards, sanitary, properly equipped, lighted, and ventilated. For younger children nursery schools and kindergartens to supplement home care

IX For every child a community which recognizes and plans for his needs, protects him against physical dangers, moral hazards, and disease; provides him with safe and wholesome places for play and recreation; and makes provision for his cultural and social needs

X For every child an education which, through the discovery and development of his individual abilities, prepares him for life; and through training and vocational guidance prepares him for a living which will yield him the maximum of satisfaction

XI For every child such teaching and training as will prepare him for successful parenthood, homemaking, and the rights of citizenship; and, for parents, supplementary

training to fit them to deal wisely with the problems of parenthood

XII For every child education for safety and protection against accidents to which modern conditions subject him--those to which he is directly exposed and those which, through loss or maiming of his parents, affect him indirectly

XIII For every child who is blind, deaf, crippled, or otherwise physically handicapped, and for the child who is mentally handicapped, such measures as will early discover and diagnose his handicap, provide care and treatment, and so train him that he may become an asset to society rather than a liability. Expenses of these services should be borne publicly where they cannot be privately met

XIV For every child who is in conflict with society the right to be dealt with intelligently as society's charge, not society's outcast; with the home, the school, the church, the court and the institution when needed, shaped to return him whenever possible to the normal stream of life

XV For every child the right to grow up in a family with an adequate standard of living and the security of a stable income as the surest safeguard against social handicaps

XVI For every child protection against labor that stunts growth, either physical or mental, that limits education, that deprives children of the right of comradeship, of play, and of joy

XVII For every rural child as satisfactory schooling and health services as for the city child, and an extension to rural families of social, recreational, and cultural facilities

XVIII To supplement the home and the school in the training of youth, and to return to them those interests of which modern life tends to cheat children, every stimulation and encouragement should be given to the extension and development of the voluntary youth organizations

XIX To make everywhere available these minimum protections of the health and welfare of children, there should be a district, county, or community organization for health, education, and welfare, with full-time officials, coordin-

ating with a state-wide program which will be responsive to a nation-wide service of general information, statistics, and scientific research. This should include:

- (a) Trained, full-time public health officials, with public health nurses, sanitary inspection, and laboratory workers
- (b) Available hospital beds
- (c) Full-time public welfare service for the relief, aid, and guidance of children in special need due to poverty, misfortune, or behavior difficulties, and for the protection of children from abuse, neglect, exploitation, or moral hazard

For every child these rights, regardless of race, or color, or situation, wherever he may live under the protection of the American flag

These may be ideals which will be accomplished only after years of education, but they show plainly that all who deal with children need excellent training.

The Parent-Teachers' Association started with examination and scoring of infants and preschool children. The adult education that is being carried on by this group has probably been at least partly instrumental in the lengthening of the time the average child spends in school. This longer period of education makes possible a more complete health education. Speaking of the extensive education carried on by the Parent-Teachers Association, Mr. Joy E. Morgan

states, "As you watch it over a period of years you see coming into it this fine new crop of college graduates which we are now turning out in such numbers, and I believe we have there, those of us who are interested in education, a force more powerful than anything that has heretofore existed in America, a force that is growing in terms of hundreds of thousands each year in numbers, and that is growing even more each year in its working power and sense of specific things that can be done." ⁶ If this is not as true as it should be, we must make it so.

Especially trained people are badly needed to carry on the recently started adult education program. As leisure time increases, people will be able to continue their education after they have ceased to attend school. They not only will be able to but will need to in order to learn to spend their leisure time effectively.

Each of these and many other organizations have contributed to the gradual development of health consciousness, incidental to which occurred the arousal of popular interest in the book entitled "The Mind that Found Itself" by Clifford Beers and awakening of people to the need of the teaching and practice of mental hygiene.

In connection with mental hygiene, there is also the important function of prevention of delinquency and crime. With all educators trained in the principles of mental hygiene so that they are able to practice them as well as teach them, the amount of delinquency and crime should be materially reduced.

History and Discussion of Health Education

As with every other intense interest that has developed in history, each phase of health education in turn became a fad and was over-emphasized for a while, but each is now taking its logical place in the general field with the proper amount of emphasis.

Our present-day interpretation of health is positive: freedom from disease is not sufficient. In addition we must have physical efficiency, endurance and good adjustments mentally and socially so that we may "live most and serve best."⁷

The importance of health education is emphasized by the American Physical Education Association in speaking of it as "the sum of all experiences which favorably influence habits, attitudes, and knowledge relating to individual, community, and racial health."⁸

Health has been placed first in all recent lists of educational objectives, but teachers themselves must have improved attitudes as well as health information founded on scientific knowledge.

Educators throughout the United States are becoming more insistent in their demands for better health education work and boldly stating their opinions as to its importance. The length of the paper per-

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mits' mention of only a few.

Paul Roton declares that graduating teachers have a surprising number of health misconceptions. Although these decrease with further education, our educational system is proven to be sadly lacking when it allows teachers to begin their careers so poorly equipped in this respect.⁹

Dr. Mary E. Spencer of Teachers' College Columbia University insists that the school health program should include "everything that the school does to preserve and to promote the students' health and to educate them in health information, attitudes and behavior."¹⁰

Miss Wootten who needs no introduction to those interested in health says "The general aim of education has been variously defined; by the Epicurean who believed it would bring happiness; by the moralist who thought it would bring goodness; by the book lover who fought for 'knowledge for knowledge sake'; by the utilitarian who saw its economic value; by the social worker who sensed its need in order to give greater understanding in social service; by the true educator who worked through it for the growth, development, unfolding, and adjustment of the individual child to his environment."¹¹

She lists ten objectives which contribute to the final goal of "a well-rounded personality, whose actions are based on clear, scientific thinking concerning his own health problems and those of other members of society" the following:

- " 1. To learn that health education can and should be an effective force in the daily lives of children, youths, and adults.
2. To learn that a successful health education program is based on the intelligent cooperation of school administrators, teachers, parents, children, doctors, nurses, public health officers, and other civic leaders.
3. To set up personal and professional standards for the teacher of health.
4. To learn basic principles and practices in different phases of health with due thought to the solution of difficult problems that are apt to arise so that the instructor may

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- become a safe and sane health leader for the children and the community.
5. To formulate a viewpoint of health education in its relationship to general education.
 6. To apply the laws of learning and the best modern methods to the health education program.
 7. To learn how to help the children to raise their standards of living, to adjust themselves happily in the changing world, and to awaken them to their responsibility for solving the problems of the changing world.
 8. To learn how to evaluate different types of materials and procedures that might be used in health education.
 9. To learn how to develop practical health units and later how to develop a course of study in health for a specific situation.
 10. To learn how to evaluate a health education program in terms of worthy results achieved and in terms of its potential growth in service to the individuals and the community for which it was developed.

An Ideal Health Education Program

Because of the sparsity of adequate health education programs in our schools of collegiate rank, and rather than to exemplify an entire program as it is being carried out, the author prefers to build one using materials from many sources. Instead of stating in each sentence that we are in a hypothetical situation, it is deemed more appropriate to allow the reader to continue the supposition as he reads.

Such a plan as the following should be financed from two sources: the health instruction and physical education should be from the general college funds as other teaching salaries are; and the health service funds should come from student health fees payable at the beginning of every term.

Upon arrival at an institution of higher education the new student has already had his credentials sent from his high school, also a certificate of health from the local physician which states whether or not the student has had any vaccines or serums, for what diseases, and when given.

The first week(which, in the case of freshmen, is before registration) is spent in orientation to the new situation. The

student is given a list of college rulings and the various organizations on the campus are named, giving him the personnel and purpose of each. He is made familiar with the campus and some of the colloquial terminology used in connection with specific buildings and parts of the campus. Some of the older students are on the campus to assist the freshmen. Above all during this week a sincere and genuine effort is made to give the student the assurance that the faculty and other school officials wish to help them in every possible way.

During this week each student is given a complete physical examination including anthropometric, posture, and physical capacity tests as well as tuberculin tests. In addition each must have an intelligence test and an achievement or college aptitude test.

The examination is reviewed by a doctor with the student, giving the necessary advice and information. At the same time the student is given an opportunity to ask any questions he wishes about his health condition. Reasons for these examinations are:

1. They are given early so that they can be used as a guide in the supervision of the student's activities both curricular and extra-curricular.
2. The student is early introduced to the wisdom of a complete physical examination at regular intervals during his entire life.
3. He is given an actual example of a complete examination so that he will know how many procedures are involved in a complete physical examination.

4. The student knows what defects are present and exactly what should be done to correct those that are remediable. It should be obvious to him that their discovery is useless unless they are remedied.
5. The student who is over-anxious about his physical well-being is assured of his bodily soundness.
6. Communicable diseases are detected if present and isolated immediately.
7. Special instruction in physical education may be necessary in order to correct posture defects which are found during examination. If defective posture appears to be the result of mental attitude, an effort is made to remedy the root of the trouble.

The examination is not considered complete until all remediable defects have been corrected, and such cases are rechecked frequently until complete. Each fall upon entering school each student entering school in every group is given a physical examination and each spring a thorough check-up shows the improvement in health during the school year. As further protection to the students, complete examinations are given the faculty, staff members, and employees(including, of course, food handlers).

If when the tuberculin tests are read, the student has a positive, he is given a chest X-ray. If the X-ray shows that the student has had only childhood type of tuberculosis, he is informed that such is the case and advised that he should be particularly careful to live

a healthful life so that he will not develop adult type tuberculosis. If, on the other hand, he is found to have an arrested case, he is watched very carefully and rechecked frequently. He is warned that should his case become active again, he would be asked to leave the school for the good of both himself and his fellow-students. Supposing we might locate an incipient case we should surely advise the student to leave school and continue treatment under the care of a physician until it is arrested. There is no question as to any active case beyond the incipient stage that might be found -- he, of course, must leave school not to return until his case is arrested.

In addition the health service of the school reserves the right to re-examine any case whenever it is deemed advisable. Also, being emphasized by the recently-inaugurated case-finding program of the tuberculosis association, the health officials of the student's home town should be notified as to the positive tuberculin test so that the source of infection can be located and, if the adult type has developed the contacts of the student case may be located also.

That this intensive campaign is imperative is proven by the fact that tuberculosis is listed as the cause of more deaths in the teen age group than any other cause. 12

As soon as the examinations are finished the immunizations should be completed. Those who have not had a smallpox vaccination in the preceding six years should be vaccinated as soon as possible. Typhoid inoculations should be done on all who have not had the disease or been inoculated in the preceding two years.

To all who are positive to the Schick test, toxoid or toxin anti-toxin should be given. It would be well to give Dick tests to all students so that prophylaxis can be speedily administered to those who are susceptible in case of an impending epidemic.

As part of the health service a clinic is maintained for diagnosis and treatment of ambulatory patients. The students are encouraged to use the clinic whenever necessary and to come early in the onset of disease. Because the student fee covers clinic service, finances are not an obstacle to carrying out the above plan. Each visit to the school clinic is a lesson to the student in proper medical procedures and an excellent opportunity to give instruction in preventive medicine. The college assumes responsibility for all accidents that occur on the campus while school is in session.

If hospitalization is needed, it is arranged at the school infirmary up to a specified number of days unless surgical treatment is necessary. If it is necessary, and circumstances warrant it, special arrangements are made so that no student will have to discontinue his education because of the expense of illness. The infirmary is manned by graduate nurses, cook, janitor, etc. as required.

The school with a large enrollment may have a separate department of psychiatry in the clinic with two or three psychiatrists and one or two psychiatric social workers, or one psychiatrist may be in the clinic only part time in a small school. No school of collegiate rank should be so situated that the services of a psychiatrist are inaccessible.

Groves and Blanchard in their chapter on Mental Hygiene for

College Students suggest a plan which should be satisfactory. It is to have the psychiatrist present at the physical examinations, have him introduced to the students and "chat" with them a few minutes. They suggest that after the examinations are over, the psychiatrist would have a list of the students who may need help during their adjustment to the new environment and possibly even farther along in their college careers. He will follow them in their work and aid them as the need arises.¹³ Aside from this advantage, there is the fact that the student knows not only that there is a person in that position on the campus but also that he is the sort of person in whom he can have confidence.

Cases are referred by the doctor in the clinic, the teachers who are especially observing, or other staff members during the early part of the program; but later the students themselves often report to the psychiatric clinic realizing that they need help in adjustment and that the help is available in that department.

The problems that are found can be classified in the following manner:

- "1. Poor preparation and low intelligence.
2. Emotional adjustments
3. Sex difficulties
4. Actual neuroses and psychoses
5. Disciplinary problems of one type or another"¹⁴

Those with low intelligence are advised to change to a different line of work. Those who are poorly prepared are counseled to discontinue college until they can build a better foundation.

The emotional adjustments are of various sorts. The student who has been popular and won many honors in his home town sometimes finds

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the adjustment to the "small frog in a big pool" situation almost outside the realm of possibility. The student who is away from home for the first time after being petted his entire life has a difficult adjustment to make as has also the one who is desperately in love only to be ridiculed by his elders.

The sex difficulties often, when analyzed, turn out to be personality defects. Other difficulties are the lack of information as to sexual normality, homosexual or clandestine love affairs which are profound sources of worry and anxiety. Winifred Richmond states, however, that these cases do not present such stubborn problems as do those of psychoses. 15

Students with psychoses should not be in college. Neuroses occur now and then on a college campus, also hysterias, obsessional neuroses, and anxiety states.

The most difficult problems are those of discipline. Though many may be fairly simple to dispose of, there is a certain percent who are not amenable to treatment.

In the mental hygiene program as with all health programs, our major emphasis is on prevention rather than cure. Drs. Riggs and Terhune encourage those who are particularly interested in the health of college students by stating that they believe a group of college students probably has less mental abnormality than a similar age group in the community would be found to have. 16

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The formal teaching of principles of recreation and play will not bestow upon the student the learning and applying of life-long habits of utilizing interesting play and satisfying recreation.

That "all work and no play makes Jack a dull boy", has been known a long time. Whoever the person was who started this every-day saying must have had a deep understanding of human nature. Although this homely axiom is often used as a crutch for rationalizing one's behavior in a humorous vein, the intrinsic truth of it is not given due consideration. Every individual should definitely plan for recreation and carry out these plans.

Our schools could accomplish much for future citizens in the way of mental hygiene as well as physical well-being by furthering their recreational programs. In fact, they are developing along this line quite rapidly at present. It is true that the boys' and girls' clubs have done much toward this end, but it can well be supplemented by the schools.

In most schools of collegiate rank, there is a rather extensive program of intramural sports which is definitely recreational. There are also certain courses and attainments in physical education required of each student.

Every student who expects to teach physical education should take a course in the theory of physical education of approximately thirty-six class hours. Included in this course are: elements which are suited to the needs of elementary school pupils; learning that is expected from these activities; philosophy and techniques involved; and efficient ways of teaching and organizing games, teams, tournaments, field-days, and play days.

Every student has practice courses in physical education which includes: activities, teaching of activities, and observation of others who are teaching. An essential point is that these courses vary for those who are planning to do rural teaching from those planning for instruction in urban communities.

Some of the practice courses include for women: hockey, soccer, field ball, basketball, baseball, volley ball, simple games, dancing, stunts, and badge tests. For men the following are included: seasonal games and games for playground, badge tests, stunts, track and field events, rhythms, combatives, and general correctives. The students are given practice in the various forms of leadership in physical education. Elective courses allow a more advanced development of the recreation in which the student is interested. Club work offers tumbling, tap dancing, camping, and hiking.

The special days of the year lend variety to the lives of the students: each with its own significance offers its unique recreational possibilities.

The close coordination between the student health service and the department of physical education is emphasized and increased by the use of corrective exercise for reconstruction and rehabilitation. For this part of the physical education program, individual instruction is given.

Although health education in its broadest implication includes every phase of health learning, there must of necessity be some instruction in the principles and practice of health. As with any other subject matter, so it is with health: the content of the courses should

meet the needs of the students. The coordination of the various parts of the college curriculum which have a bearing on scientific health knowledge is essential.

It would be excellent if all students in every phase of education could have as a minimum elementary courses in general science and zoology, a basic course in foods and nutrition, and at least an elementary course in anatomy and physiology as a background for general health education. These courses should stress the background material for health education.

The newer education advocates participation as essential in the learning process. With this most important of all the branches of education, participation is needful as a basis for use in the exercise of future health activities. One of the principles of education is that learning will not take place if the learner is not interested. By coordinating subjects related to health, a more natural setting is evolved and better learning results.

Especially should this be done in education of teachers. It is a very rare individual who can learn exclusively theory and from it teach habits, attitudes, and skills, even in health education. The practice of healthful procedures is by no means a natural process: it must be learned by all who utilize it. We cannot hope for our present young people that their knowledge will be applied to such an extent as we dare to hope for the next generation. This is inevitable because they have not had the background on which to build. If, however, we give them as much as we can, we may be able to attain our hopes for

their children and pupils.

Before starting the course in "Problems in Health Education" or whatever the fundamental course may be called, a survey should be made of the needs and interests of the pupils; and the course, which should be flexible, should be modified accordingly. This course includes well-demonstrated and accepted facts. Each aspect of health should be given due consideration.

In the study of physical well-being, greatest emphasis should be placed on prevention of disease and community health. The students should learn the importance of the health of each member of the group to the welfare of the entire group or community. They should know physiology.

There should be at least some knowledge of bacteriology and pathology and also some information about physical diagnosis and therapy.

In speaking of the importance of nutrition in health education, Dr. Bogart states that there are two main aspects of nutrition: "the food intake and what the body does with it."¹⁷ One is equally as important as the other. No matter how balanced or perfect the food eaten may be, if it is not properly metabolized by the body it is of little use.

Miss Dora S. Lewis, Supervisor of Home Economics, Washington Department of Education, stressed in her speech at the Northwest Conference on High School and College Hygiene, the three factors of malnutrition:

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- "1. Those to do with food supply
2. Those that are part of hygiene
3. Those that are result of physical defects and chronic diseases." 18

College students must realize the importance of nutrition. If well taught in this respect, our young people should achieve better health. They should be able to recognize a fad in diet and evaluate it before accepting or rejecting it. There should be less of the recently prevalent dieting to reduce and the saving of money from food allowance to spend it on much-desired clothes or recreation. Miss Lewis also makes the following pertinent statement: "Perhaps the most neglected factor in education for better nutrition is that of parents."

Elementary information about the nature of disease both communicable and non-communicable should be included.

Social hygiene should be given a place in an elementary health education course. Speaking at the aforementioned conference Dr. W. Ray Jones, Chairman of the Social Hygiene Committee of the Washington State Medical Association, defines social hygiene as "that subtle something which aims to perpetuate the home as the basic unit of civilization, to build a better nation by producing better individuals. Social hygiene fosters everything tending to perpetuate the home and is antagonistic to everything tending to interfere with its proper functioning."

In the preparation of teachers there must be study of the physical development of the child and psychology of child care and training. Each teacher must know from experience as well as from basic facts what constitutes healthful school environment and be anxious to use this information to the best advantage. In this consideration the

the teacher must not forget that he is part of the school environment.

This leads us to mental hygiene, which is so essential to adequate living. In their discussion on Mental Hygiene, Groves and Blanchard emphasize the necessity of the instructor's remembering that "education begins where the student is". 19

As true as is the implication of the parable in which there is a comparison of two houses built on foundations of stone and sand respectively, so true is it that nobody can start the superstructure of advanced education without a complete and firm foundation of rudimentary education upon which to build. So it is that we must start where the student is and build up from there.

To counteract the newness of the entire situation to the freshmen students, a course should be given in orientation. This should be required of every student but should be made so vital, helpful, and interesting that enrollment in it would not need to be a command. It should include, besides principles of mental hygiene, solution of specific problems in which the students are interested. Among other outcomes, students who complete it could be able to face facts, place relative importance upon problems of life; solve problems objectively, and understand his own emotional reactions. More advanced courses in psychology and mental hygiene will give him more complete knowledge.

Upon completion of the college health education courses of which

A number are elective, every student should know how to evaluate health education materials, where to get health education information and whom to choose for advisors in health. He should also have a vital interest in matters of public health.

In concluding, the following quotation from Kilpatrick seems appropriate:

"Any one who is learning to be a teacher, then, must have full opportunity to become more intelligently self-directing in the field of education; must personally think through under guidance the many varied problems of the field; must understand the what and the why -- must learn how better and more intelligently to choose means; must learn how to criticize one's own aims and means as new developments shall show new bases for judging."

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