The Organization of Health Work in the Small City

By W. R. RUTHERFORD
Superintendent of Schools, Eugene, Oregon
A Plan for School Health Work
in the Small City

By W. R. Rutherford,

One of the most urgent demands now facing Boards of Education and superintendents throughout the country is for thorough and constructive health work in the schools. The past two years have forced upon the general public a new lesson concerning the value of physical fitness. The health of an individual is not a mere personal matter; it is a vital asset of his country and a necessity to his community. The only agency which can reach the problem effectively is the school, and in the small city this responsibility presents a particularly difficult administrative problem. Some of our large city school systems have developed very effective health departments, but the limited means of the average small city make it impossible to provide the services of the medical examiners, surgeons, nurses, dentists, oculists, posture specialists, health lecturers and other highly specialized workers employed by the large city, while the many diverse features of the work done by these specialists make it next to impossible to so combine and simplify the plan as to bring it within the means of the small city without neglecting features necessary for complete and effective work in child hygiene.

Purpose and Scope of this Study.

This study was begun with the purpose of trying to develop a plan for health work which will be within the means of the average small city and will still care for all of the more urgent needs. The materials used include textbooks and periodicals dealing with the general subject of child hygiene and a study of the health plans of a number of our large cities found in periodicals, surveys and in their own printed bulletins, but closer attention has been given to a study of the health work being done in small cities with a population ranging from five to fifteen thousand people. The plans of such cities in 47 states were secured by writing letters to their superintendents, asking for a brief account of the principal features of all the health work done, together with its approximate cost and apparent results, and with suggestions for needed improvements. Knowing the reluctance with which most school men answer a detailed questionnaire and the consequent delay or uncertainty of an answer, this form of inquiry was not used, and for this reason the material does not lend itself readily to tabulation, but this defect
is largely counterbalanced by the frank estimates and illuminating com-
ments which might not have been elicited by a formal questionnaire.

The first impression upon examining the reports from the small city
is that in most of them this work is of very recent growth and is still far
from adequate, usually failing to care for many of the essentials of a
complete health program. We also receive the impression that attempts
to provide for all the diverse branches of this work have often led to the
employment of a great deal of part time service, part time nurses, part
time physicians, physical directors, etc. whose attention is very apt to
be divided and whose combined services do not seem to constitute a com-
plete and well organized health department.

Many hopeful things are found, however, in the letters from even
the smallest cities studied. Practically all recognize the importance of
the problem and have made some beginning for its solution. Few are
content with present accomplishments and many speak of definite plans
for extensions and improvements. Some of the letters tell of voluntary
services to the schools by local dentists and physicians, and few tell
of serious opposition on the part of parents. This growing consciousness
of the school's responsibility and the cooperative attitude of parents
and physicians indicated by these reports are gains which offer much
compensation for the lack of present actual attainments, while the bet-
ter opportunity of the small city to keep the human element in its
machinery and the personal relation in its services is a strong asset in
advancing this particular work.

Coordination of the Health Work.

Even the elaborate and expensive plans of the large cities do not
always seem to assume that medical inspection, physical education, play-
ground work, health teaching, etc. are closely related parts of the de-
partment of child hygiene with one single purpose which can best be
served only by the closest cooperation and coordination of all these
agencies for the promotion of health. In the small cities studied there
is still less coordination between the different branches of the health
work. Many of them provide for part time school physicians, part time
health officers, part time nurses, part time physical training directors,
etc. whose work seems in most cases to have no sure means of correla-
tion and of centralization upon the one object of all of them. Even
where adequate provision has been made for part or all of the essential
features of health work, there seems to be an inclination for each depart-
ment to work independently of the others with little or no attempt to
mold all of them into closely coordinated agencies for the same purpose,
or to accomplish this by having some one person in direct charge of all

(3)
The remedy for this defect, it seems to me, is to have some one person who will act as a coordinating element in all health work, who will direct and keep in touch with every phase of the school which has to do with the child's physical condition, who will be closely in touch with all teachers and serve as a source of inspiration and promotion along all lines which affect the children's health.

The Health Director.

The plan outlined here centers very closely about this person in charge of all branches of the health work, whom we shall term the Health Director, not necessarily a woman, but more likely to be, in the smaller city. The success of this plan will depend in a great measure upon her ability to grasp the full significance of every part of the health work, to see that every branch of it is directed toward the common end of all and to make sure that instead of independent, inconsecutive efforts through several different agencies, this whole work shall form a fairly complete and closely correlated plan for the accomplishment of definite results in the cultivation of health and the prevention of defectiveness.

Of all the various persons usually employed in the different branches of health work, the well trained graduate of one of the broad physical education courses now being conducted in some of the colleges seems to be the best material available to the small city of rather limited means. A strong physician with special training or experience might be more thoroughly prepared to direct the work, but the full time service of such a man can seldom be afforded by the small city and part time service is not adequate for the responsibility and work required. The trained nurse, while excellent for the pathological side of the work, will seldom be equipped to direct all of the health service, including the physical training and teaching of hygiene.

The broadly trained graduate of physical education should have an excellent viewpoint upon the whole problem. Her training should give her a good idea of the true aim as well as of the materials in the health or hygiene lessons to be taught, and her objectives should be largely free from the academic viewpoint of the work done by so many of the classroom teachers. In detecting children who should be thoroughly examined for such remediable defects as adenoids, diseased tonsils, eye defects, spinal curvature, etc. she will have the general information necessary, but her ability to readily detect these conditions must come from practice, which is also necessary for the nurse or general practitioner, who, for the first time, examines school children, while her work in contagious cases should not involve complete nor positive diagnoses, but simply the detection of pupils who should be sent home or thoroughly examined.
by a regular physician. In the direction of physical training, she should have a much broader aim than mere "physical culture," making this work an integral part of the general health plan, designed to supplement the general teaching of health and health habits, to correct general and individual deficiencies and to build up the general physical vigor of the children.

The duties of the Health Director will at best be varied, but her direct responsibility for the various phases of the health work will, of course, depend upon the size of the school system and the amount of special help provided for her department. She should always have available the paid or voluntary assistance of a good physician for help in diagnosis. I believe that with this help the competent director in a school system of only a few hundred pupils can accomplish alone much more than several part time workers secured at the same expense.

In larger towns which can afford a physical director, a nurse, a school physician or other specialized help, the Health Director should still have general charge of all the special work, should maintain a close touch with every part of the health program and should directly supervise the teaching of hygiene by the regular classroom teacher. She should spend much of her time in direct contact with teachers and pupils, and her program should be partly fixed and regular in order that teachers and principals may depend upon a definite time for consulting her, but much of her time should be left free for direction of the work where needed and for attention to the many individual cases which will arise.

The Regular Teacher.

Few of the health programs in either the large or small city seems to provide very thoroughly or definitely for the participation of the regular classroom teacher. This seems a serious defect, for without her interest, her vigilance and her intelligence in matters concerning the health of her pupils, no plan can operate closely enough to children to be effective. A thorough plan should include definite means of increasing the teacher's knowledge of the problem, securing her intelligent cooperation and placing definite responsibilities upon her. Part of this may be accomplished through clear and complete directions for her part in the health work and through bulletins or meetings, but her greatest source of help will be her frequent contact and consultation with someone who is enthusiastic, well informed and thoroughly conscious of the supreme importance of the school's responsibility in this matter. This is one of the most important phases of the Health Director's work and she should miss no opportunity to arouse the teacher's interest, to encourage her constant attention to her pupils' physical condition, to consult with her as to
individual pupils, to inform her of the results of any diagnoses made upon them and to make her, if possible, an intelligent and enthusiastic factor in the health program. Unwillingness or inability of the teacher to meet this part of her responsibility should be considered a very serious discount upon her value in the teaching corps, but the conscientious teacher is almost invariably interested in the physical welfare of her pupils if brought to understand its extreme importance.

Communicable Diseases.

One of the most serious problems with which the school must contend is the control of communicable disease. Terman states that “the mortality in the United States from measles, scarlet fever, whooping cough and diphtheria amounts every year to twice the loss of life on the field of Gettysburg.” The permanent physical defects, loss of school time and, retardation due to these and other epidemics are additional indemnities which the school itself must face.

The absolute necessity of some control of epidemics causes this to be the first form of health work begun in most schools, and while it is only a small part of the complete health program, it is an entering wedge which often leads to more comprehensive work. Nearly all of the small cities studied have some provision for preventing contagion, although in many of them it seems far from adequate. In others, this seems to be the one objective sought, the prevention of diseases consuming all the time and money spent for health work to the neglect of other more constructive phases of work in child hygiene.

Even a small city is seldom free from scattering cases of contagious diseases, and the utmost vigilance is necessary to prevent their spread. The close contact necessary in school of children from every type of home, the careless attitude toward these “trivial childish ailments” and the selfishness of individuals, ready to freely expose others rather than suffer any temporary inconvenience make it difficult to keep the schools free from contagious disease, while the extreme contagiousness of most of them, the uncertainty of diagnoses in their early stages and the varying opinion of medical authorities are elements of danger and uncertainty which add greatly to the difficulty of preventing epidemics.

One of the most serious handicaps in the average small city is in the inadequate service rendered by health officers who have the only authority to enforce precautions against spreading contagion. Such officers are usually poorly paid, give little time to the work and are not often available for much help in connection with the schools. Even if the school district employs a nurse or school physician and guards closely the spread of disease inside the schools, epidemics will occur unless close cooperation

(6)
A PLAN FOR SCHOOL HEALTH WORK IN THE SMALL CITY

and prompt action can be secured from the officer having authority to enforce a quarantine or control other agencies for the spread of disease.

From the foregoing it will be seen that the two essential features in the prevention of school epidemics are, first, adequate means for promptly detecting and excluding pupils dangerous to the schools, and second, close cooperation with the officers having authority to enforce restrictions which will prevent exposure of the children outside the school. It would seem that the ideal plan would be for the part time medical service usually employed by the small city school district and the duties of the city health officer to be performed by the same physician. If the school and municipal authorities can agree upon a suitable person for this work, enough can be paid to secure more adequate service; the combined duties would give the officer a much closer touch with general health conditions; the school would be better guarded against the entrance of pupils unfit to enter, and those cases detected in the school could be more promptly quarantined than they usually are. One of the special problems is the family which does not call a doctor, the case thus escaping report to the city health officer and quarantine omitted or established too late to prevent trouble. Many of these cases come to the attention of the schools and with a joint health officer with authority to investigate them they could be promptly diagnosed and quarantined.

Under the plan here outlined, much of the responsibility for the detection of contagious troubles would rest with the Health Director and the classroom teachers under her direction. No attempt at diagnoses should be made but suspicious cases should be promptly excluded and referred to the school physician. Temperature is perhaps the most reliable indication of incipient contagious disease and there should be in every school building a good thermometer and at least one teacher who can use it. Pupils having a temperature of one degree or more above normal should be promptly sent home. Heavy colds are a serious menace to the classroom, not only because of their contagious nature but because so many of the contagious diseases can hardly be distinguished from a cold in their beginning stages. Teachers afflicted with heavy colds should also be excluded, and a substitute supplied for at least two or three days at the expense of the district. The conscientious teacher thus excluded will usually return in a day or two in good condition, while otherwise she may work for weeks with a cold which is a menace to her pupils and with her efficiency much impaired.

One of the greatest assets in maintaining health conditions is the intelligent cooperation of parents, and a printed letter containing some information as to the serious nature of childhood diseases, explaining the school plan for their control and requesting cooperation, not only in connection with their own families but by furnishing information which
A PLAN.' FOR SCHOOL HEALTH WORK IN THE SMALL CITY

will help to discover and control contagious cases, will help in gaining their sympathy and assistance.

Inspection of

After the control of contagious diseases, the work next developed in most cities is the correction of non-contagious physical defects such as adenoids, diseased tonsils, defective sight, hearing, etc. A majority of the small cities 'heard from have begun this work and some of them have plans which should succeed in eliminating a large percentage of such cases. In most a them, however, the examinations for such defects are too 'infrequent and there is no adequate machinery for following them up and insuring their correction.

Every pupil should really be inspected at the beginning of each school day by the regular teacher. Whether this is the regular few minutes of formal inspection in which each pupil comes to the teacher for quick examination or whether the teacher simply passes about the classroom as pupils work, noting closely the appearance of each, there should be, at some time very close to the opening of the school day, a few minutes in which the attention of every teacher is given entirely to this indispensable part of her day's work. Colds, skin defects, evidences of temperature and other conditions suggesting contagiousness should be immediately investigated and referred to the principal when it seems advisable. In every building the principal or some teacher should be able to take temperatures with reasonable accuracy, and pupils having more than one degree above a normal temperature or showing evidence of infectious trouble should be isolated or excused until examined by the Health Director, nurse or school physician.

At least once a week each classroom should be carefully looked over by the Health Director or school nurse, who should look for contagious trouble and remediable defects, observe the general physical condition of all children and give particular attention to those referred to her by the regular teacher.

As often during the term as the time given to the work by the school physician will permit, he should visit each school and inspect the pupils. His visits should approximate a regular schedule just as closely as his other practice will permit, and as far as possible the Health Director should accompany him upon these visits, in order that she may call to his attention cases needing diagnosis and get at first hand the additional information brought out by his examination, see that it is included in the child's health record and follow it with parents and teachers to secure the correction of the trouble, if possible. By securing the consent of parents, the Health Director can take many cases to the school physician's
A PLAN FOR SCHOOL HEALTH WORK IN THE SMALL CITY

office in order to save his time or to have better facilities for examination, but in general she should be present for the diagnoses in order that she may constantly increase her ability to recognize prevalent causes of trouble and that she may better understand and follow up the cases needing attention.

Once each year every pupil should have a thorough medical examination covering the points suggested by Terman or some other good authority on school inspection. The results of this examination should be fully entered on the child's permanent health record and the parent should be informed of anything needing attention. Part of this examination such as testing sight and bearing may be done by the Health Director or the nurse, and only the suspected cases referred to a physician, but the test of heart, lungs, nose, throat, etc. should be made at least once during the year by a competent physician. If possible, a thorough dental inspection should be made, but if this is not possible at least those having badly decayed teeth should be noted and parent's attention called to the need of treatment.

Health Records and Elimination of Physical Defects.

One of the essential parts of an adequate health plan is a complete and permanent health record of every child. These should include the results of physical measurements and of a thorough medical examination, with additional information concerning the health history of the pupil. A good many of the small cities studied have begun such records, some of them very complete. Some of the examinations have been made by the school physician and in some cases by public-spirited physicians who can often be induced to help in this matter. In a very few of the schools, adequate plans have been made for effective use of this record, by keeping it up to date, following up the defects recorded, by reporting them to parents and securing their correction, but in far too many of them the record itself is the chief attainment and it does not function largely in eliminating the unsatisfactory conditions discovered and recorded.

The physical measurements may be made by the Health Director or physical training teacher and should include at least the height, weight and lung capacity, with any additional measurements or strength tests that will be of actual value. They should be recorded at least once each year, but may be taken oftener and made of much value by keeping children interested in their development and using this as a motive for health habits and physical exercise. Boys are particularly interested in their growth and increase in lung capacity and this will often make a more effective appeal to them than any amount of moralizing or general talk upon the value of health. Such plans as the Athletic Badge...
A PLAN FOR SCHOOL HEALTH WORE IN THE SMALL CITY

test can also be made very effective in promoting interest in physical development.

The permanent record of the medical examinations mentioned under inspection should be complete and definite. Many good blanks for the purpose have been received from different cities, but in most cases they make no provision for recording the remedial results accomplished by the school or by the family physician. Whenever these records are permitted to become a mass of dead material filed away from one examination to another, their value is extremely small, but if they can be made a live record showing at all times the present status of the pupil's physical condition and used as a guide for all who are concerned with his health, they may be made almost invaluable. Any remediable defect which has not received attention is one of the important working objectives of the Health department. The first thorough medical examination in any city will reveal a mass of defects that present a formidable looking problem, but the first notice to many parents will bring prompt attention, and a tactful but insistent follow-up program for the others will reduce the number to where each may be given a good deal of attention.

An excellent form for the first notice to parents, used by several of the cities studied, is a card which makes the very conservative statement that an examination of the pupil "seems to indicate" certain defects and advising them to take the child to their family physician for thorough examination. On the reverse side of this card is a blank to be filled out by the family physician, giving the result of his examination and the remedial treatment given. This card is returned to the school, and the additional findings, treatment or operation recorded on it should be entered upon the pupil's permanent health record.

The first notification will be sufficient for a large percentage of parents, who will take the necessary measures for the correction of defects and greatly reduce the number of cases needing attention. Parents not responding to the first notice in a reasonable length of time should receive a second notice, reminding them of the importance of early attention to the defect, or they should be called upon by the nurse or Health Director. Every effort should be made to secure the treatment of every case needing attention and some arrangement should be made to help those parents unable to provide treatment for their children. A number of the letters received tell of such services being given by public-spirited physicians, and in most cities some doctors can be found who will give free treatment to a number of cases besides those which may be cared for by the school physician.

Badly needed corrections in such matters as posture, breathing and use of eyes or voice, which need watching at home as well as in school, should also be brought to the attention of parents and their cooperation
A PLAN FOR SCHOOL HEALTH WORK IN THE SMALL CITY

asked. Most parents will respond if the request is tactfully made, and in cases where they do not, nothing will be lost by the attempt.

Physical Training.

Any complete health program must make provision for regular and systematic exercise and development through some form of physical training. Many of the small cities studied are providing some systematic physical training for their elementary pupils, and in many of them, required or elective courses are prescribed for high school girls. A very few are even attempting to replace interscholastic athletics by physical training for all their high school boys, a subject which is as Mark Twain said of the weather: "Something which many people discuss, but few attempt to do anything about it." The most serious defect in all this work seems to be that in most places it does not seem to be considered as an integral part of the general health plan. It is too much concerned with objects of its own and no attempt is made to correlate it closely with the other agencies in child hygiene.

The best courses in physical training do not seem to make extreme use of formal calesthenics, nor do they substitute games and plays for all formal exercises. The formal exercises used, however, have a definite object, such as good posture, proper breathing, the correction of common defects, or overcoming school room conditions. They are not made an object in themselves, are not developed for exhibition purposes, and no pretense is made that they can provide the genuinely wholesome exercise, the relaxation, initiative and socializing influences found in real play, which must always form the larger part of any good course in physical training.

The play ground should be made to serve its true purpose, and even in the six and eight room buildings often found in the small city, it is usually possible to have one or more teachers capable of taking the lead in directing the play ground activities, with help in organization from the Health Director or physical training teacher. The increased attention given to play ground supervision in Normal schools and colleges make it possible to secure teachers capable of directing this work, and teachers already in service can often be encouraged by a small increase in salary to take summer courses which will equip them for this purpose.

A number of books, as well as some of the best manuals printed by state and city departments, give excellent courses in physical training complete with directions, exercises, games and folk dances, and a few of these are named in the appended bibliography. Whatever the course used, it should never be dominated by temporary or extraneous purposes, but should be a thoroughly coordinated part of the general health plan, closely correlated with every other part of it and having as its prime objective the building of health and the prevention of defectiveness.
Mental Tests.

One of the serious problems which will be met in every school system is the extremely backward child, whose difficulty is not due to physical defect, but to a natural lack of mental endowment. The only sure way to distinguish these pupils is by a scientific intelligence test, and yet not one of the small cities studied mentions any provision for applying such a test in cases where the retardation cannot be traced to physical defects. The comparative simplicity of these tests, the availability of material for applying them, and the very definite and untechnical instructions given in such a work as that of Terinan, should make it possible to have in every school system someone capable of making a fairly accurate intelligence test. The Health Director, if trained to apply these tests, would find them shedding light on many of her most puzzling cases, and she could often contribute information which would enable teachers to so adapt the work of many pupils as to prevent the school room tragedies which so often befall the misfit, even in a good school.

Health Lessons.

While the teaching of hygiene is the one part of the health program almost universally attempted and required by law in almost every state, it seems to be the part most poorly done. For the normal child, this should be the most valuable part of the whole health plan, and yet in actual practice it is usually the most sterile, for there seems to be a consensus of opinion that hygiene is the most neglected and most poorly taught subject in the whole curriculum. The most serious defect in this work is that knowledge and not actual achievement is usually made its basis, and while most schools have quit memorizing the names of bones and are emphasizing hygiene, it is still largely taken for granted that a mere knowledge of the, rules of health, with their underlying reasons, is sufficient to insure the formation and practice of healthful habits.

True health habits are not based upon knowing but upon doing, and no amount of knowledge is apt to seriously affect the actual practice of a class of children unless careful provision is made to encourage, stimulate and check up on their performance day after day until their habits are fairly well fixed. Pupils' grades in hygiene are almost universally based upon the mere acquisition of facts about health. The boy who has never made the acquaintance of a tooth brush is given a perfect grade for being able to memorize the facts presented upon this subject, while another whose care of his teeth is perfect gets no grade if unable to perform this valuable intellectual feat. Grades in this subject should be based largely upon actual achievements in the formation of health habits. Home cards may be furnished and sent to the mother with a note inviting her to help in grading the child, if she cares to do so, by checking him upon certain things which go to make up the grade.
In the best courses of study, simple habits of cleanliness and care of the body largely constitute the work of the first four grades with much greater emphasis upon the how than upon the why, and with only such reasons as will appeal to the child of this age. No serious embarrassment need be caused the child in these grades, and the resourceful teacher can bring to her aid many of the devices so effective with younger pupils, the little flag to be worn by those who have remembered to do the several things required, early dismissal for a certain number of days when all pupils remembered to do these things, and scores of other incentives known to the good primary and intermediate teacher.

In fifth and sixth grades, more subject matter is used in the best courses, but the emphasis is still placed upon health habits. A number of excellent text books are available for these grades, but in the best of supplementary health readers which furnish good material for stimulating interest in the subject and provide material for discussion without tempting the teacher to do the kind of work which is likely to result from close following of a textbook in this subject. Besides personal hygiene, emergencies, simple lessons in first aid, the avoidance of harmful habits and an elementary view of public health measures and the avoidance of communicable disease should be included in the work of these grades.

A surprisingly large number of the state and city courses reviewed, give no attention to health lessons in the seventh and eighth grades, and while the age of pupils, as well as the crowded curriculum for these grades present some special difficulties, they certainly are not a sufficient excuse for the total neglect of this most important subject at this time when the formation of habits is so important and the pupil is so much more able to grasp the essential facts concerning personal and public health. The stupidity and selfishness so evident in every serious epidemic and the indifference or opposition often found to progressive health measures would doubtless be much less in evidence if such matters were not so commonly ignored during the years when it is most feasible to handle them effectively in the common school. In the very best courses studied, health lessons form an important part of the curriculum in seventh and eighth grades. Personal hygiene is still a large factor, but the view point is broadened and community hygiene becomes an important part of the work. The aims include the formation of habits most essential for the physical welfare of adolescent boys and girls as well as the facts and view point which will make for an intelligent and progressive attitude toward matters concerning public health. A number of excellent courses of study and good textbooks in personal and community hygiene are available for this work, and there is almost unlimited material upon special health programs written within the grasp of seventh and eighth year pupils. The best work for older pupils can, no doubt,
be done where the organization will permit of segregated classes, but even with mixed classes and a few special talks to segregated groups, much may be accomplished.

In teaching health lessons, the school must either content itself with a program much less comprehensive, with results less uniform and a control much less complete than that attained in other phases of its work, or it must bring to this subject an enthusiasm, an influence and a thoroughness which rise far above that of ordinary teaching. So small a portion of the pupils' time is under our control and so many of the agencies that mean most to health and health habits are in the home, beyond our direct reach, that we cannot expect to secure results with the same effort and by the same means as in those subjects confined entirely to our teaching and controlled entirely by the school.

It takes skill for a teacher to make her presence and her voice direct and stimulate a class in Arithmetic or Geography, to make conditions such that community of interest, competition and other social agencies may have full force, to stimulate or repress at just the right time and to attain the definite results at which she aims. It is quite another matter, however, to secure results with a tooth brush hours away from the sound of her voice and far removed from the inspiration of her classroom, in a home, perhaps, where the atmosphere and conveniences are anything but favorable, with years of habit and the carelessness of 'childhood to resist her teaching. To secure results under these inauspicious circumstances will take not only skill but rare resourcefulness and tact and influence. With all its difficulties, the task is possible, and I believe the true teacher will attempt it all the more eagerly, not only because of its tremendous importance to the child, but because of its very difficulty. But she must expect to use other methods than those employed to secure results in other classroom subjects.

One of the very first requisites if we shall do effective work in this subject is to eliminate those excuses so often used for failing to do real health work and contenting ourselves with purposeless and unproductive teaching which does not present special difficulties. To be sure, we find the subject more personal, more difficult of approach than other subjects that we teach. To be sure, many of our children come from careful homes which might consider impertinent the lessons most necessary to other children of your class. It is true that we cannot always secure the best results where the home atmosphere is most unfavorable, nor can we be sure that habits, even well begun, will be continued; but these and the many other objections are not valid reasons for failing to attempt a service to the child which may mean more to him than all else that we may do. They are only the natural difficulties of this particular subject, to be met as other difficulties are; with skill, resourcefulness and tact.
A PLAN FOR SCHOOL HEALTH WORK IN THE SMALL CITY

General Status of Health Work in Small Cities

In part of the letters received the statements of the health work being done was too indefinite to be summarized, but the following figures from seventy-four cities, located in forty-seven different states and ranging from seven thousand to fifteen thousand in population, will give a good, general idea of the present status of health work in cities of this size throughout the country.

1. Cities included .......................................................... 74
2. States represented (all except Florida) .......................... 47
3. Cities having regular, systematic inspection of pupils .... 43
4. Cities providing thorough physical examination of all pupils .. 34
5. Cities having system of permanent health records .......... 27
6. Cities having systematic follow-up plans for the elimination of remediable defects .................................. 20
7. Cities having part or full time school nurse ..................... 41
8. Cities having part or full time school physician .............. 26
   (Part time in practically all cases.)
9. Cities having physical training under trained directors ...... 37
10. Cities having systematic dental inspection ...................... 13
11. Cities having free dental clinic ................................... 9
12. Cities having special supervision of hygiene teaching .... 3

BIBLIOGRAPHY

1. Cubberley, Elwood P. "Public School Administration." Houghton Mifflin Co., 1916. (Has a short but excellent chapter on "The Department of Health Supervision." A good point of departure for study of the subject.)
2. Hoag & Terman. "Health Work in the Schools." Houghton Mifflin Co., 1914. (Perhaps the most comprehensive and untechnical statement of the problems involved in health supervision and hygiene teaching.)
3. Ayres, Williams & Wood. "Healthful Schools." Houghton Mifflin Co., 1918. (A good text for the school administrator, dealing with buildings and equipment as well as with medical inspection, physical training, etc. Particularly useful for the large number of accepted standards given.)
4. Allen, William H. "Civics and Health." Ginn & Co., 1909. (One of the most interesting texts for teachers.)
A PLAN FOR SCHOOL HEALTH WORK IN THE SMALL CITY

(A good, general text, covering the whole subject of child hygiene. A particularly good book for the teacher.)

(6) Terman, Lewis M. "The Hygiene of the School Child." Houghton
Perhaps the best treatment of the subject in a form that teachers can use.

MEDICAL INSPECTION.

The most complete work I have found on the subject from an administrative view point, with specific directions, administrative blanks and a good chapter upon the legal aspects of the subject.

PHYSICAL TRAINING.

A very complete and acceptable course of study for elementary physical training.

(3) State and City Courses of Study.
Some of the best manuals for physical training examined are those printed by the state of Michigan and New York, and by the cities of New York, Detroit, Indianapolis and Denver.

GAMES AND FOLK DANCES.

An excellent collection of exercises suitable for school use.

(2) Des Moines Public Schools. "Polk Dances and Games."


TEACHING OF HYGIENE.

Far the best book found upon the subject with an excellent statement of the aims of hygiene teaching and many definite and practical suggestions for accomplishing them.

Has two excellent chapters upon the teaching of hygiene.

(3) Baltimore County Course of Study. Williams & Wilkins Co., 1915.
A practical course of study closely correlated with other health activities.

---

(16)