

KANSAS SECONDARY SCHOOL
HEALTH SERVICES

by

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CHAPTER I

INTRODUCTION

The Problem

The purpose of this study is to attempt to ascertain to what extent the public secondary schools of Kansas are employing certain recommended practices in their school health programs, and further to find out the relationship between the application of these practices and the percentage of pupil attendance.

Justification of the Study

The health of students should be of paramount importance to educators. Only through the maintenance of optimum health can students be in physical and mental condition to achieve to the maximum of their ability. The importance of student health as an objective of education was enhanced when it was placed on the list of "Objectives of Education" published by the United States Bureau of Education in 1918. Since that time it has become accepted as an area of responsibility of our public schools. This was exemplified in 1932 by the following statement from the report of the White House conference on child health and protection entitled: The Administration of the School Health Program.

The statement follows:

School authorities should be concerned with all measures for conserving and improving the health of school children. This is a primary and essential condition for the success of educational effort.¹

¹White House Conference of Child Health and Protection. "The Administration of the School Health Program." National Education Association, Washington, D. C., 1932. p. 19.

Other important contributions to the students welfare result from adequate school health services. These are in addition to the maintenance and protection of his existing health status and read as follows:

Health services contribute to the realization of educational aims.
Health services minimize hazards of school attendance.
Health services facilitate adaptation of school program to individual capacities and needs.
Health services help children obtain the care they need.
Health services possess inherent values for health education.²

While the provision of health services has been generally accepted as an important phase of education and an area of public school responsibility, little has been done to ascertain whether the responsibility is being adequately met by our educational institutions.

Certainly in view of the importance of adequate health services in the effective functioning of our schools, every effort should be made to provide the best possible services. In order to do this it is necessary to know what is currently being done in providing school health services. If the specific areas of strengths and weaknesses in the program can be learned, effective steps can be taken to strengthen and unify the entire program. It is hoped that this study of the health services of the secondary schools of Kansas will indicate the current practices and may serve as background data for the eventual improvement of health services.

It was considered impractical to attempt to study in detail all of the possible ramifications of school health services. Therefore, the scope of this study was limited in terms of four criteria which

²Charles C. Wilson, M.D. "School Health Services." National Educational Association and American Medical Association, 1201 16th Street, North West, Washington, 6 D.C. 1953, pp. 2-5.

were as follows: (1) the practices most commonly indicated as desirable in current writing were included, (2) those items not directly effecting the student were excluded, (3) items regarding the physical properties of the school plant were excluded, and (4) no items were included which could not be answered factually or which required subjective evaluation. While the scope of the study is limited, it is hoped that the value of the data was enhanced by careful selection of the items studied. The phases of health services studied are those which the concensus of modern authorities consider as essential in a minimum program.

Preview of the Study

The data gathered from this study will be presented in Chapter II. In order that they will be more meaningful to administrators of various size schools, the results will first be presented for schools of various enrollments. The divisions on the basis of enrollment have been arbitrarily established as follows: Group one, enrollment of up to forty-nine students; group two, enrollment of fifty-to ninety-nine students; group three, enrollment of one hundred to one hundred and ninety-nine students; group four, enrollment of two hundred to four hundred and ninety-nine students; and group five, enrollment of five hundred or more students.

In order that the data will be more meaningful to those who are interested in the state school health program as a whole, a composite of the data for all schools will be presented. It should be noted, however, that this composite will not include all of the schools that responded to the questionnaire because the responses returned were not proportionally distributed among the schools of the different population

classifications. The number of schools in each grouping and the percentage responding was as follows: Group one, two hundred and eight schools, 60 per cent response; group two, one hundred and ninety-seven schools, 64 per cent response; group three, one hundred and six schools, 93 per cent response; group four, sixty schools, 93 per cent response; and group five, thirty-six schools, 86 per cent response. Stated more concisely, the schools with less than one hundred pupils make up 66 per cent of the secondary schools in Kansas and are represented by 57.4 per cent of the responses while the schools with one hundred or more pupils representing 33 per cent of the secondary schools in Kansas are represented by 42.6 per cent of the responses. Since a higher percentage of return was received from the larger schools, it was feared that the composite presentation of data on the existing health situation in Kansas secondary schools would be unduly influenced by the larger schools of Kansas. In order to prevent this, enough schools were deleted from each of the five enrollment classification groups to obtain a 60 per cent representation of the total number of schools in each group in the state. This having been done, it is felt that this phase of the study will present a truly representative picture of what is currently being done in the area of secondary school health services in Kansas.

This chapter will be concluded by the presentation of a comparison between the percentage of attendance and the scope of the school health service. This will be done to ascertain whether there is any relationship between health services and student health as indicated by school attendance records.

The third and final chapter will be a summarization and evaluation of the data with any conclusions that may be drawn from it.

Summary of Selected Works on the Subject

Much excellent writing has been done in the area of public school health dealing with suggested policies, practices and procedures, which should be incorporated into a good school health service program. Some of these writings which have exercised great influence on the school health services of this country are summarized as follows: Health for School Children was published in 1923; it was the work of the Committee on Health Education of the National Child Health Council. This work established certain standards for guiding educators in establishing adequate health services in their respective schools.

In 1932, the results of the White House Conference on Education were published in a report entitled, The School Health Program. This contained recommended procedures for many phases of school health services. The following definition was found in the Journal of Health and Physical Education in 1932:

Health Service comprises all those procedures designed to determine the health status of the child, to enlist his cooperation in health protection and maintenance, to inform his parents of the defects that may be present, to prevent disease, and to correct remediable defects.³

Another report published in the same year which was also a result of

³Terminology Committee of Health Education Section of American Physical Education Association. "Definition of Terms in Health Education," The Journal of Health and Physical Education, 12 (December) 1934. p. 17.

the White House Conference on Child Health and Protection was called The Administration of the School Health Program. In this report the following procedures were listed as being part of a health service program: Health examination, follow-up program and correction of remedial health defects, daily health inspection, immunization of school children against infectious and communicable disease, the hygiene of the school environment, first aid and safety provisions, hygiene of instruction, and the health of teacher and other school employees.

In 1942, a report entitled, Solving School Health Problems, was published. It was compiled from the results of a study of school health services in the New York City Schools. The report consisted largely of recommended school health practices which were being used successfully in the schools studied.

The American Medical Association published a report in 1945 called, Suggested School Health Policies. This was the result of the combined work of representatives of fifteen professional organizations from the fields of education, medicine, health, and dentistry. The purpose of the report was:

To provide a clear, comprehensive printed statement of the consensus of well-informed professional opinion concerning specific health policies which directly or indirectly affect the health of children and adults.⁴

In 1941, the American Association of School Administrators published a yearbook entitled, Health in Schools. This publication

⁴ National Committee on School Health Policies, Suggested School Health Policies, American Medical Association, Chicago, 1945. Foreword.

presented a definite explanation of the extent and function of the various aspects of school health services, recommended practices, and indicated the relationship of the program to other community health activities.

The above mentioned and probably many other studies, have been the progressive steps necessary to the eventual evolution of a comprehensive, well-defined program of school health services. An excellent work on the subject which incorporates nearly all of the desirable features of preceding work, School Health Services, was published in 1953. It was a report of the work of a joint committee of the National Education Association and the American Medical Association. This report is detailed in regard to what should be included in an adequate school health program with suggested policies and procedures for carrying on the program.

Two publications are currently effecting some phases of health services in our Kansas schools. One is, Physical Education for High Schools, prepared by the Kansas Health Physical Education and Recreation Association. It is devoted largely to outlining a physical education program for high schools. In regard to health services, it is stated that such services function through health examination, health instruction, and healthful school environment. The health examination should desirably be given every year or if this is impossible at least every school level preferably in the first, fourth, seventh, and tenth grades. In regard to health instruction, it was said that a unit of health instruction should be required. The second

publication on school health in Kansas is, Health Education in Elementary and Secondary Schools prepared by the State Policy Making Committee on Health Education. This was a comprehensive treatment of recommendations for school health in the state. The principles and objectives of health education are outlined and the procedures are recommended for the creation of a healthful school environment. A section of this report dealt directly with school health services and suggested some specific practices in this area. In regard to health examinations it is stated:

If resources and facilities do not permit examination of all children, priority in school examination should be given to children entering school for the first time. Physical examinations should be repeated at as many regular intervals thereafter (annual to three year periods) as local and state resources and facilities for conducting examinations will permit. Examinations are of little value unless there is a follow-up program planned and promoted.⁵

The report then deals with the care and treatment of the deviates found by the physical examination, and of the necessity of keeping adequate health records.

On the subject of first aid, the report emphasizes the importance of a trained first aid person, a plan of action in case of accident or sudden illness, and first aid supplies properly located throughout the school.

The following was the statement of the policy making committee in regard to the health of the teacher:

The problem of selecting teachers who are not only well but who also express energy and vitality in their daily work is difficult.

⁵Health Education in Elementary and Secondary Schools, Kansas State Policy-Making Committee on Health Education, State Department of Education, Topeka, 1945, p. 47.

We must: (1) select well-balanced healthy teachers, (2) keep them that way, and (3) provide substitutes for them on days when they are sick or so far below par that children suffer from being with them. While a nation as rich as the United States should be concerned with the health and well-being of all her citizens; the parent, or the taxpayer has a special interest in the health of the teacher, for only healthy teachers can guide and develop healthy children.⁶

The report continues by explaining that all school employees should be given a thorough medical examination within six months prior to the date that actual work begins. It is also specifically stated that:

All schools and school systems should have a definite sick leave policy.⁷

While none of the sources of information mentioned thus far have dealt specifically with the problem with which this study proposes to deal, they have resulted in the growth and development of a set of specific criteria on what should be included in an adequate school health service program. Therefore, they are basic to this study and have been included for that reason.

Two reports were found which dealt with an evaluation of the school health services of Kansas schools. The most comprehensive was presented in, A Summary Report to the North Central High Schools of Kansas on Criterion 3: School Staff.⁸ Table 16 of this report was pertinent and entitled, "Policies and Practicies Relative to Health and Medical Services in Responding Schools." The questions asked of the

⁶Health Education in Elementary And Secondary Schools, op. cit. p.63.

⁷Ibid., p. 64

⁸H. A. Smith and K. E. Anderson, A Summary Report to the North Central Schools of Kansas on Criterion 3: School Staff. Kansas Studies in Education, 4(April)1954.

schools relative to their health services and the responses received are given in table form. Four of the items covered in the above mentioned article deal with the same material being studied in this questionnaire survey.

The data gathered by these four items presented in Table 16 may be summarized as follows: Twenty-one or 39 per cent of the schools responding have a trained nurse available when school is in session; forty-one or 73.2 per cent have a physician available or one on call when school is in session; forty-eight schools or 82.8 per cent always have someone qualified to administer first aid in the building when school is in session; and eight or 13.6 per cent of the schools responding give physical examinations to all students periodically. The other seven items presented in Table 16 deal with health service administrative problems, but do not parallel those in the current study and will not be discussed in detail in this writing. The above mentioned report was in regard to a study of North Central schools of Kansas. Sixty-four schools cooperated by supplying the data upon which the report was based.

Another Summary Report to the North Central High Schools of Kansas on Criterion 5: School Plant and Equipment⁹ gives us the following information: No special provisions for the physically handicapped was made in 63.7 per cent of the one hundred and two schools participating in the study. When asked if they provide health services, 47.1 per cent

⁹K. E. Anderson, A Summary Report to the North Central Schools of Kansas on Criterion 5: School Plant and Equipment. Kansas Studies in Education, 3 (April) 1953, 24 pp.

said yes, 16.7 per cent said no, and 36.2 per cent replied partly, or about 83 per cent provide health services at least in part. Only 3.39 per cent of the schools in the study indicated that space was provided in their school for a health unit.

Source of Data

A questionnaire was the means employed to collect the data for this study. The background material previously mentioned was studied and those items which were most commonly given as being essential to a good school health program were included as items on the questionnaire. In addition references listed in the bibliography were studied and pertinent items selected from them to be included as a part of the questionnaire. The questionnaire was then studied carefully and those items eliminated which could only be evaluated subjectively. Next, any items related to school plants were eliminated, not because it was felt that they were not important, but it seemed that extenuating circumstances exerted such great influence on the quality of this item that it did not fairly demonstrate the efforts being made by the school to offer an adequate health program. Next, the items were classified and grouped, duplication eliminated, and the questionnaire formed. The questionnaire was then presented to this writer's doctoral committee for study, their suggestions noted, and in most cases the questionnaire improved accordingly. The next step was to present the questionnaire to members of the Kansas State Departments of Health and Education for further suggestions and criticism. The finished product was then given

to a select number of public school administrators to fill out and criticize. The results of this preliminary trial being satisfactory, the questionnaire was then sent to the chief administrator of all public secondary schools in Kansas. A total of six hundred and fifteen copies were sent out and four hundred and thirty-seven were completed and returned for a 71 per cent return. The data from the returned questionnaires were then classified and tabulated and are the basis for this study. A copy of the questionnaire which was used in this study may be found in the appendix.

While the two evaluative reports on Kansas health services are excellent, it is felt that their sample may not have been sufficient to give a truly representative evaluation of the phases of school health services of Kansas on which they reported. Also, since these reports were primarily dealing with other problems of education in Kansas, they did not deal with but a very limited number of the aspects of school health services. It is, therefore, felt that further and more comprehensive study of the secondary school health services in Kansas is indicated before a true evaluation can be made. Evaluation is a necessity in order that progress can be made in the development of adequate school health services throughout the state.

CHAPTER II

PRESENTATION OF DATA

Introduction

In this chapter an attempt will be made to present the data gathered from this questionnaire study in such a manner that it will be accessible and meaningful to educators and others interested in student health regardless of the size of their school or the problem in which they are interested. The following phases of the study will be dealt with in this presentation: (1) the health services of schools of various enrollment classification; (2) the representative picture of the total secondary school health service program in Kansas; (3) the relationship between certain selected phases of the school health program, and the percentage of pupil attendance; and (4) a tabular summarization of the data.

Questionnaire Results Classified According To School Enrollment

The data presented in this section have been classified into groups for schools with enrollments up to forty-nine, fifty to ninety-nine, one hundred to one hundred and ninety-nine, two hundred to four hundred and ninety-nine, five hundred and above. Within each enrollment classification the data will be presented under the following headings:

1. Healthful School Living.

This area deals with the administrative policies in use in the schools which would either directly or indirectly affect the health of the school population. No attempt is made to evaluate the school program. The data are presented to show what policies are most common in Kansas secondary schools.

2. Health Services Provided.

This is perhaps the most important phase of the school health program. The data presented here will show if some specific health services, pertinent to the health of school age children, are or are not available to the secondary school children of Kansas.

3. Health Instruction.

Three pertinent questions were asked in an effort to determine how many schools were offering courses in health or sex education. No attempt was made to evaluate the courses as such.

4. School Health Administrative Policies.

The scope of this topic is so broad and the possible variations so great that it was dealt with only to the extent of attempting to find out

what practices were most commonly used. A few select questions were asked to try and find out what practices were being employed in dealing with a few of the most common health program administrative problems.

In this study whenever the results to a specific question are being presented, they will be preceded by the question as it appeared on the questionnaire.

Schools With Enrollments Of Up To Forty-nine Students

In the state of Kansas there are approximately two hundred and ten schools of this size serving nearly 7000 children. Thus the services offered by these small high schools are of great importance and affect the lives of a large number of children. The results of the questionnaire study of schools of this size is as follows:

Healthful School Living:--

A. The length of the school day was ____ hours and ____ minutes?

One hundred and twenty-five schools responded to this question and the average length of the school day derived from their responses was six hours and 25.8 minutes.

B. The daily schedule consisted of ____ periods of ____ minutes each?

The number of responses to this question was eighty-seven. The mean was 7.15 periods of 50.3 minutes. The number of schools and the number of periods in their daily schedule are shown in Table I.

TABLE I

NUMBER OF PERIODS IN DAILY SCHEDULE OF RESPONDING SCHOOLS
WITH ENROLLMENT OF UP TO FORTY-NINE STUDENTS

Number of Periods	Number of Schools	Percentage of Total Responses
9	5	5.7
8	4	4.6
7	50	57.4
6	24	27.6
5	3	3.4
4	1	1.1

- C. Students have ____ free time daily for extracurricular activities during the school day.

Ninety-five schools reported that students had free time for extracurricular activities during the school day. The average length of free time reported by these ninety-five schools was 50.4 minutes. Ten schools indicated that their students had no free time and twenty did not answer the question.

- D. Teachers have ____ free periods per day.

An average figure for this question would be virtually meaningless so the number of schools and the free periods their teachers had is shown in Table II.

- E. Teachers must have a medical examination:

- (check) () before being employed
 () annually
 () every 2 years
 () every 4 years
 () no requirement

This question received response from one hundred and twenty-two schools. The results of which were as follows:

In four schools or 3.3 per cent, each teacher was required to have an examination before employment.

In one school of 0.8 per cent, each teacher was required to be examined annually.

In one hundred and seventeen or 96 per cent the teachers were not required to take a medical examination.

TABLE II
TEACHER FREE PERIODS IN SCHOOLS WITH
ENROLLMENTS OF UP TO FORTY-NINE

Number of Free Periods	Number of Schools	Percentage of Total Responses
1	93	75
2	13	9.5
3	1	.8
0	17	15.3

F. Students must have a medical examination:

- (check) () before admittance
 () annually
 () every 2 years
 () no requirements

One hundred and twenty-five responses were received to this question with the following results:

In four schools or 3.3 per cent, the students were required to be examined before admittance.

In forty-four or 36.8 per cent of the schools the students were examined annually.

In seventy-six or 61.8 per cent of the schools no medical examination of students was required.

- G. Teachers are allowed _____ days sick leave per year.
 _____ days with pay
 _____ days half pay
 _____ total days accumulative

It was indicated that ninety-five schools their teachers sick leave. The mean number of days allowed yearly by these ninety-five schools was 5.23 days. Eighteen schools failed to answer the question and twelve indicated no provision was made for sick leave. Nineteen schools made provisions for accumulative sick leave. The mean number of days which these nineteen schools allowed each teacher to accumulate was 19.41.

Health Services Provided:--

The questions in this section with one exception needed only a yes or no answer. The number and percentage of yes and no answers will be indicated following the statement of each question.

A. Is an immunization program provided for your students?

Yes - 32 or 26.5 per cent

No - 89 or 73.5 per cent

121 - Total number of responses to question.

B. Do you have a registered nurse at school full time?

No - 122 or 100 per cent

122 - Total number of responses to question.

C. Do you have a registered nurse at school part time?

Yes - 10 or 8.1 per cent

No - 114 or 92 per cent

124 - Total number of responses to question.

D. Is first aid treatment by a qualified person available at school?

Yes - 107 or 86.3 per cent

No - 17 or 13.7 per cent

124 - Total number of responses to question.

E. Are students examined for contagion before readmittance after absences?

(indicate by whom) () doctor

() nurse

() classroom teacher

Yes - 73 or 59 per cent

No - 51 or 40.9 per cent

124 - Total number of responses to question.

By whom the students were examined:

30 or 40.1 per cent were examined by doctor

1 or 3.3 per cent were examined by nurse

42 or 57 per cent were examined by classroom teacher

F. Are all school employees required to take a yearly medical examination?

Yes - 3 or 2.4 per cent

No - 119 or 97.6 per cent

122 - Total number of responses to question.

G. Are all students and employees checked for tuberculosis annually?

Yes - 35 or 29 per cent

No - 87 or 70.8 per cent

122 - Total number of responses to question.

H. Are the services of a physician immediately available to the school?

Yes - 39 or 31.4 per cent

No - 85 or 69.5 per cent

124 - Total number of responses to question.

I. Is there a physician available within five miles of the school?

Yes - 30 or 24.8 per cent

No - 91 or 75.2 per cent

121 - Total number of responses to question.

J. Are hospital facilities available in your immediate community?

Yes - 27 or 22.3 per cent

No - 94 or 77.6 per cent

121 - Total number of responses to question.

K. Is there a hospital within ten miles of your school?

Yes - 55 or 44.4 per cent

No - 69 or 55.5 per cent

124 - Total number of responses to question.

Health Instruction:--

A. Does your school offer a specific course in health or hygiene?

Yes - 89 or 72.9 per cent

No - 33 or 27 per cent

122 - Total number responses to question.

B. Does your school offer a specific course in sex education?

Yes - 2 or 1.6 per cent

No - 112 or 98.4 per cent

124 - Total number of responses to question.

C. Is sex education dealt with in any course in your school?

Yes - 64 or 53.7 per cent

No - 55 or 46.3 per cent

119 - Total number of responses to question.

School Health Administrative Policies:--

A. Is a faculty committee set up to work on school health?

Yes - 12 or 9.7 per cent

No - 112 or 90.2 per cent

124 - Total number of responses to question.

B. Do you have established policies for first aid care of pupils?

Yes - 61 or 49.3 per cent

No - 63 or 50.8 per cent

124 - Total number of responses to question.

C. Does your school carry accident insurance covering all students?

Yes - 43 or 35.1 per cent

No - 77 or 65 per cent

120 - Total number of responses to question.

D. Do you have first aid equipment in all shops and laboratories?

Yes - 77 or 62.6 per cent

No - 46 or 37.3 per cent

123 - Total number of responses to question.

E. Who is responsible for supervision of the school health program?

(check one) () superintendent

() principal

() nurse

() coach

In 39 or 32 per cent of the schools the superintendent was responsible.

In 46 or 38 per cent the principal was responsible.

In 37 or 30 per cent the coach was responsible.

122 - Total number of responses to question.

Schools With Enrollments of Fifty to Ninety-nine Students

There are approximately one hundred and six schools of this size in Kansas serving roughly fourteen thousand high school students. The

result of the questionnaire study of the schools serving these children is as follows:

Healthful School Living:--

- A. The length of the school day is ____ hours and ____ minutes.

One hundred and twenty-six schools responded to this question and the average length of the school day that derived from their responses was 6 hours and 22 minutes.

- B. The daily schedule consists of ____ periods of ____ minutes each.

The number of responses to this question was eighty-seven. The mean was 7 periods of 52 minutes each. The number of schools and the number of periods in their daily schedule is shown in Table III.

- C. Students have free time daily for extracurricular activities during the school day.

Ninety-four schools reported that students had free time for extracurricular activities during the school day. The average length of free time reported by these ninety-four schools was 52.34 minutes. Twenty-six schools did not answer the question and six schools indicated that students had no free time during the school day.

- D. Teachers have ____ free periods per day.

An average figure for this question would be virtually meaningless, so the number of schools and the free periods their teachers had is shown in Table IV.

TABLE III
 NUMBER OF PERIODS IN DAILY SCHEDULE OF SCHOOLS
 WITH ENROLLMENTS OF FIFTY TO NINETY-NINE

Number of Periods	Number of Schools	Percentage of Total Response
10	1	.8
9	3	2.5
8	33	27
7	52	42.6
6	28	23
5	2	1.6
4	2	1.6
3	1	.8

TABLE IV
TEACHER FREE PERIOD IN SCHOOLS WITH ENROLLMENTS
OF FIFTY TO NINETY-NINE STUDENTS

Number of Free Periods	Number of Schools	Percentage of Total Response
1	110	93.4
2	2	1.7
0	6	5

E. Teachers must have a medical examination:

- (check) before being employed
 annually
 every 2 years
 every 4 years
 no requirements

This question received responses from one hundred and seventeen schools. The results of which were as follows:

In one school or .8 per cent, each teacher was required to have an examination before employment.

In two schools or 1.7 per cent, each teacher was required to be examined every two years.

In one hundred and fourteen schools or 97.4 per cent, teachers were not required to take a medical examination.

F. Students must have a medical examination:

- (check) before admittance
 annually
 every 2 years
 no requirements

One hundred and twenty-five responses were received to this question with the following results:

In one school or 0.8 per cent of total response, students were required to be examined before admittance.

In thirty-one schools or 24.8 per cent, students were examined annually.

In two schools or 1.6 per cent, students were examined every two years.

In eighty-one schools or 64 per cent, no medical examination of students was required.

G. Teachers are allowed _____ days sick leave per year.

_____ days with pay

_____ days half pay

_____ total days accumulative

The response to this question indicated that eighty-nine schools allowed their teachers sick leave. The mean number of days allowed yearly by these eighty-nine schools was 5.76 days. Thirty-four schools failed to answer the question and three indicated that they did not allow sick leave. Twenty-two schools made provisions for accumulative sick leave. The mean number of days sick leave which these twenty-two schools allowed each teacher to accumulate was 19.18 days.

Health Services Provided:--

A. Is an immunization program provided for your students?

Yes - 43 or 32.6 per cent

No - 89 or 67.4 per cent

132 - Total number of responses to question.

B. Do you have a registered nurse at school full time?

Yes - 2 or 1.6 per cent

No - 122 or 98.4 per cent

124 - Total number of responses to question.

C. Do you have a registered nurse at school part time?

Yes - 21 or 17.2 per cent

No - 101 or 82.8 per cent

122 - Total number of responses to question.

D. Is first aid treatment by a qualified person available at school?

Yes - 102 or 82.9 per cent

No - 21 or 17.1 per cent

123 - Total number of responses to question.

E. Are students examined for contagion before readmittance after absences?

(indicate by whom) () doctor

() nurse

() classroom teacher

Yes - 76 or 61.3 per cent

No - 48 or 38.7 per cent

124 - Total number of responses to question.

By whom the students were examined.

53 or 69.7 per cent were examined by doctor.

3 or 3.9 per cent were examined by nurse.

20 or 26.3 per cent were examined by classroom teacher.

F. Are all school employees required to take a yearly medical examination?

Yes - 4 or 3.3 per cent

No - 119 or 96.7 per cent

123 - Total number of responses to question.

G. Are all students and employees checked for tuberculosis annually?

Yes - 28 or 23.3 per cent

No - 92 or 76.7 percent

120 - Total number of responses to question.

H. Are the services of a physician immediately available to the school?

Yes - 63 or 52.4 per cent

No - 57 or 47.5 per cent

120 - Total number of responses to question.

I. Is there a physician available within five miles of the school?

Yes - 62 or 49.2 per cent

No - 64 or 50.8 percent

126 - Total number of responses to question.

J. Are hospital facilities available in your immediate community?

Yes - 38 or 31.1 per cent

No - 84 or 68.9 per cent

122 - Total number of responses to question.

Is there a hospital within ten miles of your school?

Yes - 70 or 64.8 per cent

No - 43 or 35.2 per cent

122 - Total number of responses to question.

Health Instruction:--

A. Does your school offer a specific course in health or hygiene?

Yes - 94 or 75.2 per cent

No - 31 or 24.8 per cent

125 - Total number of responses to question.

B. Does your school offer a specific course in sex education?

Yes - 4 or 3.2 per cent

No - 120 or 96.8 per cent

125 - Total number of responses to question.

C. Is sex education dealt with in any course in your school?

Yes - 79 or 64.8 per cent

No - 43 or 36.2 per cent

122 - Total number of responses to question.

School Health Administrative Policies:--

A. Is a faculty committee set up to work on school health?

Yes - 10 or 8 per cent

No - 115 or 92 per cent

125 - Total number of responses to question.

B. Do you have established policies for first aid care of pupils?

Yes - 62 or 50 per cent

No - 62 or 50 per cent

124 - Total number of responses to question.

C. Does your school carry accident insurance covering all pupils?

Yes - 35 or 27.8 per cent

No - 91 or 72.2 per cent

126 - Total number of responses to question.

D. Do you have first aid equipment in all shops and laboratories?

Yes - 83 or 68.6 per cent

No - 38 or 31.4 per cent

121 - Total number of responses to question.

E. Who is responsible for supervision of the school health program?

(check one) () superintendent

() principal

() nurse

() coach

In 35 or 30.4 per cent of the schools the superintendent was responsible.

In 44 or 38.3 per cent the principal was responsible.

In 3 or 2.6 per cent the nurse was responsible.

In 33 or 28.7 per cent the coach was responsible.

115 - Total number of responses

Schools With Enrollments of One Hundred to One Hundred and Ninety-nine Students

There are approximately one hundred and six schools of this size in Kansas serving roughly fifteen thousand high school students. The results of the questionnaire study of the schools serving these children were as follows:

Healthful School Living:→

- A. The length of the school day is ____ hours and ____ minutes.

Ninety-nine schools responded to this question and the average length of the school day derived from their responses was 6 hours and 25.5 minutes.

- B. The daily schedule consists of ____ periods of ____ minutes each.

The number of responses to this question was ninety-nine. The mean was 6.76 periods of 52.28 minutes each. The number of schools and the number of periods in their daily schedule is shown in Table V.

Students have ____ free time daily for extracurricular activities during the school day.

TABLE V

NUMBER OF PERIODS IN DAILY SCHEDULE OF SCHOOLS WITH ENROLLMENTS
OF ONE HUNDRED TO ONE HUNDRED NINETY-NINE STUDENTS

Number of Periods	Number of Schools	Percentage of Total Response
10	2	2
9	1	1
8	18	18.2
7	35	35.3
6	36	36.7
5	7	7

Eighty-six schools reported that students had free time for extracurricular activities during the school day. The average length of free time reported by these eighty-six schools was 47.51 minutes. Twenty schools did not answer the question and nine schools indicated that students had no free time during the school day.

D. Teachers have ____ free periods per day.

An average figure for this question would be virtually meaningless, so the number of schools and the free periods their teachers had is shown in Table VI.

E. Teachers must have a medical examination:

- (check) () before being employed
- () every 2 years
- () every 4 years
- () no requirement

This question received response from ninety-nine schools.

The results of which were as follows:

In one school or 1 per cent, each teacher was required to have an examination before employment.

In five schools or 5 per cent, each teacher was required to be examined every two years.

In ninety-three schools or 93.9 per cent, teachers were not required to take a medical examination.

TABLE VI

TEACHER FREE PERIODS IN SCHOOLS WITH ENROLLMENTS OF
ONE HUNDRED TO ONE HUNDRED AND NINETY-NINE STUDENTS

Number of Free Periods	Number of Schools	Percentage of Total Response
1	83	83.8
2	6	6.1
0		10.1

F. Students must have a medical examination:

- (check) () before admittance
 () annually
 () every 2 years
 () no requirement

Ninety-eight responses were received to this question with the following results:

In two schools or 2 per cent of the total response, students were required to be examined before admittance.

In eleven schools or 11.2 per cent, students are examined annually.

In eighty-five schools or 86.7 per cent, no medical examination of students was required.

- G. Teachers are allowed _____ days sick leave per year.
 _____ days with pay
 _____ days half pay
 _____ total days accumulative

The response to this question indicated that seventy-seven schools allowed their teachers sick leave. The mean number of days allowed yearly by these seventy-seven schools was 6.94 days. Eighteen schools failed to answer the question and four indicated that they did not allow sick leave. Forty-one schools made provision for accumulative sick leave. The mean number of days sick leave which these

forty-one schools allowed each teacher to accumulate was 21.41 days.

Health Services Provided:--

A. Is an immunization program provided for your students?

Yes - 36 or 37.5 per cent

No - $\frac{60}{96}$ or 62.5 per cent

$\frac{96}{96}$ - Total number of responses to question.

B. Do you have a registered nurse at school full time?

Yes - 2 or 2 per cent

No - $\frac{94}{96}$ or 97.9 per cent

$\frac{96}{96}$ - Total number of responses to question.

C. Do you have a registered nurse at school part time?

Yes - 22 or 22.4 per cent

No - $\frac{76}{98}$ or 77.5 per cent

$\frac{98}{98}$ - Total number of responses to question.

E. Are students examined for contagion before readmittance after absences?

(indicate by whom) () doctor

() nurse

() classroom teacher

Yes - 60 or 60.6 per cent

No - $\frac{39}{99}$ or 38.4 per cent

$\frac{99}{99}$ - Total number of responses to question.

By whom the students were examined:

40 or 66.6 per cent were examined by doctor.

4 or 6.6 per cent were examined by nurse.

16 or 26.6 per cent were examined by classroom teacher.

F. Are all school employees required to take a yearly medical examination?

Yes - 6 or 6.2 per cent

No - $\frac{91}{97}$ or 93.8 per cent
 $\frac{91}{97}$ - Total number of responses to question.

G. Are all students and employees checked for tuberculosis annually?

Yes - 23 or 24 per cent

No - $\frac{73}{96}$ or 76 per cent
 $\frac{73}{96}$ - Total number of responses to question.

H. Are the services of a physician immediately available to the school?

Yes - 74 or 74.7 per cent

No - $\frac{25}{99}$ or 25.3 per cent
 $\frac{25}{99}$ - Total number of responses to question.

I. Is there a physician available within five miles of the school?

Yes - 80 or 82.5 per cent

No - $\frac{17}{97}$ or 7.5 per cent
 $\frac{17}{97}$ - Total number of responses to question.

J. Are hospital facilities available in your immediate community?

Yes - 49 or 50.5 per cent

No - $\frac{48}{97}$ or 49.5 per cent
 $\frac{48}{97}$ - Total number of responses to question.

K. Is there a hospital within ten miles of your school?

Yes - 60 or 61.9 per cent

No - $\frac{37}{97}$ or 38.1 per cent
 $\frac{37}{97}$ - Total number of responses to question.

Health Instruction:--

A. Does your school offer a specific course in health or hygiene?

Yes - 78 or 79.5 per cent

No - 20 or 20.4 per cent

$\frac{98}{98}$ - Total number of responses to question.

B. Does your school offer a specific course in sex education?

Yes - 1 or 1 per cent

No - 98 or 99 per cent

$\frac{99}{99}$ - Total number of responses to question.

C. Is sex education dealt with in any course in your school?

Yes - 64 or 67.4 per cent

No - 31 or 32.6 per cent

$\frac{95}{95}$ - Total number of responses to question.

School Health Administrative Policies:--

A. Is a faculty committee set up to work on school health?

Yes - 5 or 5.2 per cent

No - 91 or 94.6 per cent

$\frac{96}{96}$ - Total number of responses to question.

B. Do you have established policies for first aid care of pupils?

Yes - 48 or 49.5 per cent

No - 49 or 50.5 per cent

$\frac{97}{97}$ - Total number of responses to question.

C. Does your school carry accident insurance covering all pupils?

Yes - 15 or 15.6 per cent

No - 81 or 84.4 per cent

$\frac{96}{96}$ - Total number of responses to question.

D. Do you have first aid equipment in all shops and laboratories?

Yes - 79 or 78.8 per cent

No - 20 or 21.2 per cent

$\frac{99}{99}$ - Total number of responses to question.

E. Who is responsible for supervision of the school health program?

(check one) () superintendent

() principal

() nurse

() coach

() _____

In 27 or 28.7 per cent of the schools the superintendent was responsible.

In 39 or 41.5 per cent the principal was responsible.

In 5 or 5.3 per cent the nurse was responsible.

In 23 or 25.5 per cent the coach was responsible.

$\frac{94}{94}$ - Total number of responses to question.

Schools with Enrollments of Two Hundred to Four Hundred and Ninety-nine Students

There are approximately sixty schools of this size in Kansas serving roughly nineteen thousand high school students. The results of the questionnaire study of the schools serving these children were as follows:

Healthful School Living:--

A. The length of the school day is ____ hours and ____ minutes.

Fifty-six schools responded to this question and the average length of the school day derived from their responses was 6 hours and 52.2 minutes.

- B. The daily schedule consists of _____ periods of _____ minutes each.

The number of responses to this question was fifty-four. The mean was 6.25 periods of 56.09 minutes each. The number of schools and the number of periods in their daily schedule is shown in Table VII.

- C. Students have _____ free time daily for extracurricular activities during the school day.

Forty-seven schools reported that students had free time for extracurricular activities during the school day. The average length of free time reported by these forty-seven schools was 46.07 minutes. Three schools did not answer the question and six indicated that students had no free time during the school day.

- D. Teachers have _____ free periods per day.

An average figure for this question would be virtually meaningless so the number of schools and the free periods their teachers had is shown in Table VIII.

- E. Teachers must have a medical examination:

(check) () before being employed

() annually

() every 2 years

() every 4 years

() no requirement

TABLE VII

NUMBER OF PERIODS IN DAILY SCHEDULE OF SCHOOLS WITH ENROLLMENT OF
TWO HUNDRED TO FOUR HUNDRED AND NINETY-NINE STUDENTS

Number of Periods	Number of Schools	Percentage of Total Response
8	4	7.4
7	9	16.6
6	36	66.6
5	5	9.3

TABLE VIII

TEACHER FREE PERIODS IN SCHOOLS WITH ENROLLMENTS OF
TWO HUNDRED TO FOUR HUNDRED AND NINETY-NINE STUDENTS

Number of Free Periods	Number of Schools	Percentage of Total Response
1	43	76.7
2	1	1.7
0	12	21.4

This question received response from fifty-six schools.

The results of which were as follows:

In one school or 1.7 per cent, each teacher was required to be examined annually.

In fifty-five schools or 98.2 per cent, teachers were not required to take a medical examination.

F. Students must have medical examination:

(check) () before admittance

() annually

() every 2 years

() no requirement

Fifty-six responses were received to this question with the following results:

In two schools or 3.6 per cent of the total response, students were required to be examined before admittance.

In three schools or 5.3 per cent, students were examined annually.

In fifty-one schools or 91 per cent, no medical examination of students was required.

G. Teachers are allowed _____ days sick leave per year.

_____ days with pay

_____ days half pay

_____ total days accumulative

The response to this question indicated that fifty-two schools allowed their teachers sick leave. The mean number

of days allowed yearly by these fifty-two schools was 6.42 days. Four schools failed to answer the question. Thirty-three schools made provisions for accumulative sick leave. The mean number of days sick leave which these thirty-three schools allowed each teacher to accumulate was 23.94 days.

Health Services Provided:--

A. Is an immunization program provided for your students?

Yes - 25 or 45.4 per cent

No - 30 or 54.5 per cent

$\frac{55}{55}$ - Total number of responses to question.

B. Do you have a registered nurse at school full time?

Yes - 9 or 16 per cent

No - 47 or 83.9 per cent

$\frac{56}{56}$ - Total number of responses to question.

C. Do you have a registered nurse at school part time?

Yes - 20 or 39.2 per cent

No - 31 or 60.8 per cent

$\frac{51}{51}$ - Total number of responses to question.

D. Is first aid treatment by a qualified person available at school?

Yes - 51 or 92.7 per cent

No - 4 or 7.3 per cent

$\frac{55}{55}$ - Total number of responses to question.

E. Are students examined for contagion before readmittance after absences?

(indicate by whom) () doctor

() nurse

() classroom teacher

Yes - 42 or 75 per cent

No - $\frac{14}{56}$ or 25 per cent

$\frac{56}{56}$ - Total number of responses to question.

By whom the students were examined:

26 or 61.9 per cent were examined by doctor.

13 or 30.9 per cent were examined by nurse.

3 or 7.1 per cent were examined by classroom teacher.

F. Are all school employees required to take a yearly medical examination?

Yes - 25 or 44.6 per cent

No - $\frac{31}{56}$ or 55.4 per cent

$\frac{56}{56}$ - Total number of responses to question.

G. Are all students and employees checked for tuberculosis annually?

Yes - 8 or 14.8 per cent

No - $\frac{46}{54}$ or 85.2 per cent

$\frac{54}{54}$ - Total number of responses to question.

H. Are the services of a physician immediately available to the school?

Yes - 48 or 87.3 per cent

No - $\frac{7}{55}$ or 12.7 per cent

$\frac{55}{55}$ - Total number of responses to question.

I. Is there a physician available within five miles of the school?

Yes - 52 or 96.3 per cent

No - $\frac{2}{54}$ or 3.7 per cent

$\frac{54}{54}$ - Total number of responses to question.

J. Are hospital facilities available in your immediate community?

Yes - 43 or 76.8 per cent

No - 13 or 23.2 per cent

$\frac{56}{56}$ - Total number of responses to question.

K. Is there a hospital within ten miles of your school?

Yes - 41 or 73.8 per cent

No - 11 or 21.2 per cent

$\frac{52}{52}$ - Total number of responses to question.

Health Instruction:--

A. Does your school offer a specific course in health or hygiene?

Yes - 46 or 82.1 per cent

No - 10 or 17.8 per cent

$\frac{56}{56}$ - Total number of responses to question.

B. Does your school offer a specific course in sex education?

Yes - 3 or 5.4 per cent

No - 53 or 94.6 per cent

$\frac{56}{56}$ - Total number of responses to question.

C. Is sex education dealt with in any course in your school?

Yes - 40 or 71.4 per cent

No - 16 or 28.6 per cent

$\frac{56}{56}$ - Total number of responses to question.

School Health Administrative Policies:--

A. Is a faculty committee set up to work on school health?

Yes - 6 or 10.7 per cent

No - 50 or 89.3 per cent

$\frac{56}{56}$ - Total number of responses to question.

B. Do you have established policies for first aid care of pupils?

Yes - 30 or 55.7 per cent

No - $\frac{24}{54}$ or 44.3 per cent
 $\frac{54}{54}$ - Total number of responses to question.

C. Does your school carry accident insurance covering all pupils?

Yes - 10 or 18.5 per cent

No - $\frac{44}{54}$ or 81.5 per cent
 $\frac{54}{54}$ - Total number of responses to question.

D. Do you have first aid equipment in all shops and laboratories?

Yes - 47 or 83.9 per cent

No - $\frac{9}{56}$ or 16.1 per cent
 $\frac{56}{56}$ - Total number of responses to question.

E. Who is responsible for supervision of the school health program?

(check one) () superintendent

() principal

() nurse

() coach

() _____

In 18 or 32.1 per cent of the schools the superintendent was responsible.

In 18 or 32.1 per cent the principal was responsible.

In 9 or 16.1 per cent the nurse was responsible.

In 11 or 19.6 per cent the coach was responsible.
 $\frac{56}{56}$ - Total number of responses to question.

Schools with Enrollments of Five Hundred Students and Up

There are approximately thirty-five schools of this size in Kansas serving roughly thirty-four thousand high school students. The results of the questionnaire study of the schools serving these children were as follows:

Healthful School Living:--

- A. The length of the school day is ____ hours and ____ minutes.

Thirty-one schools responded to this question and the average length of the school day derived from their responses was 6 hours and 25.2 minutes.

- B. The daily schedule consists of ____ periods of ____ minutes each.

The number of responses to this question was thirty-one. The mean was 5.81 periods of 52.12 minutes each. The number of schools and the number of periods in their daily schedule are shown in Table IX.

- C. Students have ____ free time daily for extracurricular activities during the school day.

Thirteen schools reported that students had free time for extracurricular activities during the school day. The average length of free time reported by these thirteen schools was 46.38 minutes. Fourteen schools did not answer the question and four indicated that students had no free time during the school day.

TABLE IX

NUMBER OF PERIODS IN DAILY SCHEDULE OF SCHOOLS WITH
ENROLLMENT OF FIVE HUNDRED OR MORE STUDENTS

Number of Periods	Number of Schools	Percentage of Total Response
8	1	3.2
7	2	6.5
6	18	58.0
5	10	32.2

D. Teachers have ____ free periods per day.

An average figure for this question would be virtually meaningless so the number of schools and the free periods their teachers had are shown in Table X.

E. Teachers must have a medical examination:

- (check) () before being employed
 () annually
 () every 2 years
 () every 4 years
 () no requirement

This question received response from thirty-one schools.

The results of which were as follows:

In five schools or 16.1 per cent, each teacher was required to have an examination before employment.

In one school or 3.2 per cent, each teacher was required to be examined every two years.

In one school or 3.2 per cent, each teacher was required to be examined annually.

In twenty-four schools or 77.44 per cent, teachers were not required to take a medical examination.

F. Students must have a medical examination:

- (check) () before admittance
 () annually
 () every 2 years
 () no requirement

TABLE X
TEACHER FREE PERIODS IN SCHOOLS WITH ENROLLMENTS
OF FIVE HUNDRED OR MORE STUDENTS

Number of Free Periods	Number of Schools	Percentage of Total Response
1	19	61.3
2	1	3.2
0	11	35.4

Thirty-one responses were received to this question with the following results:

In three schools or 9.6 per cent, students were examined annually.

In twenty-eight schools or 90.3 per cent, no medical examination of students was required.

- G. Teachers are allowed ____ days sick leave per year.
 ____ days with pay.
 ____ days half pay.
 ____ total days accumulative.

The response to this question indicated that twenty-six schools allowed their teachers sick leave. The mean number of days allowed yearly by these twenty-six schools was 7.81 days. Five schools failed to answer the question. Twenty-one schools made provision for accumulative sick leave. The mean number of days sick leave which these twenty-one schools allowed each to accumulate was 29.81 days.

Health Services Provided:--

- A. Is an immunization program provided for your students?

Yes - 13 or 43.4 per cent

No - $\frac{17}{30}$ or 56.5 per cent
 30 - Total number of responses to question.

- B. Do you have a registered nurse at school full time?

Yes - 14 or 48.3 per cent

No - $\frac{15}{29}$ or 51.7 per cent
 29 - Total number of responses to question.

C. Do you have a registered nurse at school part time?

Yes - 12 or 89.5 per cent

No - $\frac{2}{14}$ or 10.5 per cent

$\frac{14}{14}$ - Total number of responses to question.

D. Is first aid treatment by a qualified person available at school?

Yes - 11 or 35.5 per cent

No - $\frac{20}{31}$ or 64.5 per cent

$\frac{31}{31}$ - Total responses to question.

E. Are students examined for contagion before readmittance after absences?

(indicate by whom) () doctor

() nurse

() classroom teacher

Yes - 27 or 93.1 per cent

No - $\frac{2}{29}$ or 6.9 per cent

$\frac{29}{29}$ - Total number of responses to question.

By whom the students were examined:

14 or 51.9 per cent were examined by doctor.

12 or 44.4 per cent were examined by nurse.

1 or 3.7 per cent were examined by classroom teacher.

F. Are all school employees required to take a yearly medical examination?

Yes - 1 or 3.4 per cent

No - $\frac{28}{29}$ or 96.6 per cent

$\frac{29}{29}$ - Total number of responses to question.

G. Are all students and employees checked for tuberculosis annually?

Yes - 7 or 21.9 per cent

No - $\frac{25}{32}$ or 78.1 per cent
 $\frac{32}{32}$ - Total number of responses to question.

H. Are the services of a physician immediately available to the school?

Yes - 19 or 61.3 per cent

No - $\frac{12}{31}$ or 38.7 per cent
 $\frac{31}{31}$ - Total number of responses to question.

I. Is there a physician available within five miles of the school?

Yes - 29 or 100 per cent

No - $\frac{0}{29}$
 $\frac{29}{29}$ - Total number of responses to question.

J. Are hospital facilities available in your immediate community?

Yes - 30 or 100 per cent

No - $\frac{0}{30}$
 $\frac{30}{30}$ - Total number of responses to question.

K. Is there a hospital within ten miles of your school?

Yes - 30 or 100 per cent

No - $\frac{0}{30}$
 $\frac{30}{30}$ - Total number of responses to question.

Health Instruction:--

A. Does your school offer a specific course in health or hygiene?

Yes - 25 or 83.3 per cent

No - $\frac{5}{30}$ or 16.7 per cent
 $\frac{30}{30}$ - Total number of responses to question.

B. Does your school offer a specific course in sex education?

Yes - 7 or 23.3 per cent

No - 23 or 76.7 per cent

$\frac{30}{30}$ - Total number of responses to question.

C. Is sex education dealt with in any course in your school?

Yes - 26 or 86.7 per cent

No - 4 or 13.3 per cent

$\frac{30}{30}$ - Total number of responses to question.

School Health Administrative Policies:--

A. Is a faculty committee set up to work on school health?

Yes - 8 or 25.8 per cent

No - 23 or 74.2 per cent

$\frac{31}{31}$ - Total number of responses to question.

B. Do you have established policies for first aid care of pupils?

Yes - 26 or 83.9 per cent

No - 5 or 16.1 per cent

$\frac{31}{31}$ - Total number of responses to question.

C. Does your school carry accident insurance covering all pupils?

Yes - 2 or 6.4 per cent

No - 29 or 93.5 per cent

$\frac{31}{31}$ - Total number of responses to question.

D. Do you have first aid equipment in all shops and laboratories?

Yes - 28 or 90.3 per cent

No - 3 or 9.7 per cent

$\frac{31}{31}$ - Total number of responses to question.

E. Who is responsible for supervision of the school health program?

(check one) () superintendent

() principal

() nurse

() coach

() _____

In 5 or 16.1 per cent of the schools the superintendent was responsible.

In 11 or 35.5 per cent the principal was responsible.

In 13 or 41.9 per cent the nurse was responsible.

In 1 or 3.2 per cent the coach was responsible.

In 1 or 3.2 per cent the city health director was responsible.

31 - Total number of responses to question.

Representative Data On The Total Situation

In order that the data in this section might be more representative of the total secondary school health situation, it was considered necessary to make the percentage of schools in each population group proportional. This was done by reducing the number of schools in each group to 60 per cent of the number of schools of that size in the state. Schools were selected randomly to be deleted from the data. This procedure reduced the total number of schools to three hundred and sixty-five, but it was felt that this process was necessary to prevent the data from being too strongly influenced by the larger schools from which the percentage of return was higher.

The data in this section will be presented in the same manner as that in the preceding section. This will make it possible to compare any population group with the total situation.

There are approximately six hundred and ten high schools in Kansas serving roughly ninety thousand students. The results of the questionnaire study of a representative sample of these schools are as follows:

Healthful School Living:--

- A. The length of the school day is ____ hours and ____ minutes.

Three hundred and sixty-five schools responded to this question and the average length of the school day derived from their responses was 6 hours and 24.6 minutes.

- B. The daily schedule consists of ____ periods of ____ minutes each.

The number of responses to this question was four hundred and thirty-one. The mean was 6.8 periods of 52.12 minutes each. The number of schools and the number of periods in their daily schedule are shown in Table XI.

- C. Students have ____ free time daily for extracurricular activities during the school day.

Two hundred and eighty-three schools reported that students had free time for extracurricular activities during the school day. The average length of free time reported by these two hundred and eighty-three schools was 49.68 minutes. Seventy-two schools did not answer the question and thirty

TABLE XI
NUMBER OF PERIODS IN DAILY SCHEDULE OF
REPRESENTATIVE SAMPLE OF ALL SCHOOLS

Number of Periods	Number of Schools	Percentage of Total Response
10	2	.6
9	7	2.2
8	53	16.2
7	129	39.4
6	106	32.1
5	21	6.5
4	3	.9
3	1	.3

indicated that students had no free time during the school day.

D. Teachers have ____ free periods per day.

An average figure for this question would be virtually meaningless so the number of schools and the free periods their teachers had are shown in Table XII.

E. Teachers must have a medical examination:

- (check) () before being employed
 () annually
 () every 2 years
 () every 4 years
 () no requirement

This question received response from three hundred and fifty-nine schools. The results of which were as follows:
 In six schools or 1.7 per cent, each teacher was required to have an examination before employment.

In seven schools or 1.9 per cent, each teacher was required to be examined every two years.

In two schools or .6 per cent, each teacher was required to be examined every two years.

In three hundred and forty-four schools or 95.8 per cent, teachers were not required to take a medical examination.

F. Students must have a medical examination:

- (check) () before admittance
 () annually
 () every 2 years
 () no requirement

TABLE XII
TEACHER FREE PERIODS IN REPRESENTATIVE
SAMPLE OF ALL SCHOOLS

Number of Free Periods	Number of Schools	Percentage of Total Response
1	293	80.9
2	21	5.8
3	1	.3
0	47	13

Three hundred and forty-nine responses were received to this question with the following results:

In eight schools or 2.3 per cent of the total response, students were required to be examined before admittance.

In eighty-four schools or 24.1 per cent, students were examined annually.

In two schools or .6 per cent, students were examined every two years.

In two hundred and fifty-five schools or 73 per cent, no medical examination of students was required.

- G. Teachers are allowed _____ days sick leave per year.
- _____ days with pay
- _____ days half pay
- _____ total days accumulative

The response to this question indicated that two hundred and eighty-one schools allowed their teachers sick leave. The mean number of days allowed yearly by these two hundred and eighty-one schools was 6.14 days. Seventy-five schools failed to answer the question and seventeen indicated that they did not allow sick leave. One hundred and six schools made provision for accumulative sick leave. The mean number of days sick leave which these one hundred and six schools allowed each teacher to accumulate was 21.13 days.

Health Services Provided:--

- A. Is an immunization program provided for your students?
- Yes - 116 or 32 per cent
- No - $\frac{247}{363}$ or 68 per cent
 $\frac{363}{363}$ - Total number of responses to question.
- B. Do you have a registered nurse at school full time?
- Yes - 20 or 5.6 per cent
- No - $\frac{338}{358}$ or 94.4 per cent
 $\frac{358}{358}$ - Total number of responses to question.
- C. Do you have a registered nurse at school part time?
- Yes - 65 or 18.8 per cent
- No - $\frac{281}{346}$ or 81.2 per cent
 $\frac{346}{346}$ - Total number of responses to question.
- D. If first aid treatment by a qualified person available at school?
- Yes - 313 or 86.9 per cent
- No - $\frac{47}{360}$ or 13.1 per cent
 $\frac{360}{360}$ - Total number of responses to question.
- E. Are students examined for contagion before readmittance after absences?
- (indicate by whom) () doctor
- () nurse
- () classroom teacher
- Yes - 235 or 64.7 per cent
- No - $\frac{128}{363}$ or 35.3 per cent
 $\frac{363}{363}$ - Total number of responses to question.

By whom the students were examined:

135 or 56.7 per cent were examined by doctor.

28 or 11.8 per cent were examined by nurse.

75 or 31.5 per cent were examined by classroom teacher.

F. Are all school employees required to take a yearly medical examination?

Yes - 13 or 3.7 per cent

No - $\frac{342}{355}$ or 96.3 per cent

$\frac{342}{355}$ - Total number of responses to question.

H. Are the services of a physician immediately available to the school?

Yes - 194 or 53.9 per cent

No - $\frac{166}{360}$ or 46.1 per cent

$\frac{166}{360}$ - Total number of responses to question.

I. Is there a physician available within five miles of school?

Yes - 195 or 54.8 per cent

No - $\frac{161}{356}$ or 45.2 per cent

$\frac{161}{356}$ - Total number of responses to question.

J. Are hospital facilities available in your immediate community?

Yes - 145 or 40.8 per cent

No - $\frac{210}{355}$ or 59.2 per cent

$\frac{210}{355}$ - Total number of responses to question.

K. Is there a hospital within ten miles of your school?

Yes - 215 or 60.4 per cent

No - $\frac{141}{356}$ or 39.6 per cent

$\frac{141}{356}$ - Total number of responses to question.

Health Instruction:--

A. Does your school offer a specific course in health or hygiene?

Yes - 277 or 77.2 per cent

No - 82 or 22.8 per cent

359 - Total number of responses to question.

B. Does your school offer a specific course in sex education?

Yes - 12 or 3.3 per cent

No - 349 or 96.7 per cent

361 - Total number of responses to question.

C. Is sex education dealt with in any course in your school?

Yes - 220 or 62.5 per cent

No - 132 or 37.5 per cent

352 - Total number of responses to question.

School Health Administrative Policies:--

A. Is a faculty committee set up to work on school health?

Yes - 30 or 8.3 per cent

No - 330 or 91.7 per cent

360 - Total number of responses to question.

B. Do you have established policies for first aid care of pupils?

Yes - 186 or 51.8 per cent

No - 173 or 48.2 per cent

359 - Total number of responses to question.

C. Does your school carry accident insurance covering all pupils?

Yes - 91 or 25.5 per cent

No - 266 or 74.5 per cent

347 - Total number of responses to question.

D. Do you have first aid equipment in all shops and laboratories?

Yes - 254 or 70.9 per cent

No - 104 or 29.1 per cent

$\frac{358}{}$ - Total number of responses to question.

E. Who is responsible for supervision of the school health program?

(check one) () superintendent

() principal

() nurse

() coach

() _____

In 106 or 30.3 per cent of the schools the superintendent was responsible.

In 131 or 37.4 per cent the principal was responsible.

In 19 or 5.4 per cent the nurse was responsible.

In 93 or 26.6 per cent the coach was responsible.

In 1 or .2 per cent the city health director was responsible.

$\frac{350}{}$ - Total number of responses to question.

The Relationship Between Certain Health Services
And Pupil Attendance

In order to determine whether there was a relationship between health services and pupil attendance, it was necessary to establish a criteria for the evaluation of the services offered. Certain questions from the questionnaire used in this study were selected as being relevant to pupil health, and were scored as an evaluation of the school's health service.

The questions selected to be used in this evaluation were as follows:

1. Students must have a medical examination.*
 - (check) () before admittance
 - () annually
 - () every 2 years
 - () no requirement
2. Is an immunization program provided for your students?
3. Do you have a registered nurse at school full time?***
4. Do you have a registered nurse at school part time?***
5. Is first aid treatment by a qualified person available at school?
6. Are students examined for contagion before readmittance after absences?
7. Are the services of a physician immediately available to the school?
8. Does your school offer a specific course in health or hygiene?
9. Is a faculty committee set up to work on school health?
10. Do you have established policies for first aid care of pupils?
11. Do you have first aid equipment in all shops and laboratories?

For each of the above questions which were answered yes, one point was given. These points were then added together to make a total score for the school. This total score was assumed to be indicative of the

*Question number one was scored if students were required to have a medical examination at any time.

***Only one score was recorded for questions three and four. A score was recorded if the school had a registered nurse on duty either full or part time.

quality of the school's health service program and was compared with the school's percentage of attendance, as will be described later.

Only the schools which gave their percentage of attendance on the questionnaire could be used in this phase of the study. This limited the number of schools used in this section to two hundred and seventy-five. These two hundred and seventy-five schools were arranged in rank order of percentage of attendance and then the distribution was divided into upper, middle, and lower thirds. Twenty schools were then selected randomly from each one-third of the distributions and the health services total scores obtained by the method previously described were compared for the three groups.

The method used for this comparison was the "U" test as described by Donovan Auble.¹ The upper one-third of the distribution was compared with the middle one-third and a U score of 239 was obtained. The middle one-third was compared with the lower one-third and a U score of 234.5 was obtained. The upper one-third was compared with the lower one-third and a U score of 263 was obtained. Reference to Table 7 in the bulletin by Auble shows that the U value of 263 obtained by the comparison of the upper and lower one-thirds of the distribution is significant at the .10 per cent level of probability. The results obtained by comparison of the other groups were not significant. Thus there appears to be some relationship between the percentage of attendance and the extent of the school's health service as measured by

¹Donovan Auble, Extended Tables for the Mannwhitney Statistic. Bulletin of the Institute of Educational Research at Indiana University, Vol. I, Number 2, 1953.

the questions used in this study. The calculations for the upper one-third versus the lower one-third is as follows:

$$\begin{aligned}U &= MN + \frac{M(M+1)}{2} - T \\&= 20 \cdot 20 + 20(20+1) - 347 \\&= 610 - 347 \\&= 263\end{aligned}$$

$$P < .10$$

Tabular Summarization of Data

This summary of data in tables is presented so that the reader may easily make comparisons between the schools of various enrollment classifications on any specific item.

In Table XIII is shown the mean length of the school day. The column on the left contains the school enrollment groups and the column on the right shows the mean length of the school day for each enrollment group. The term composite* at the bottom of the left hand column refers to the representative sample of all schools. The variation in length of the school day is very slight and does not appear to vary in relation to school size.

TABLE XIII
LENGTH OF SCHOOL DAY

Enrollment	Mean Length of School Day
Up to 49	6 hours and 25.8 minutes
50 to 99	6 hours and 22 minutes
100 to 199	6 hours and 25.5 minutes
200 to 499	6 hours and 25.2 minutes
500 and up	6 hours and 25.2 minutes
Composite	6 hours and 24.6 minutes

*Composite: This term will be used throughout the remainder of this chapter and will refer to the representative sample of all schools made up of sixty per cent of the total number of schools in the state in each enrollment classification.

The number and length of periods in the daily schedule of the cooperating schools is shown in Table XIV. It will be noted that the number of periods decreased as the school enrollment increased.

TABLE XIV
NUMBER AND LENGTH OF PERIODS

School Enrollment	Mean Number of Periods	Mean Length of Periods
Up to 49	7.15	50.3
50 to 99	7	52
100 to 199	6.76	52.28
200 to 499	6.25	56.09
500 and up	5.81	52.12
Composite	6.8	52.13

The number of periods in the daily schedule of the schools of various sizes is shown in percentages in Table XV. The six or seven period day is most common in schools of all sizes. The widest range in number of periods was in the schools with enrollments of from fifty to ninety-nine students where the variation was from three to ten periods in the school day.

TABLE XV
PERIODS IN DAILY SCHEDULE

Number of Periods	Percentage According to Enrollment Classification					
	Up to 49	50 to 99	100 to 199	200 to 499	500 and up	Composite
10		.8	2.0			.6
9	5.7	2.5	1	.1		2.2
8	4.6	27	18.2	7.4	3.2	16.2
7	57.4	42.6	35.2	16.6	6.5	39.4
6	27.6	23	36.4	66.6	58	32.1
5	3.4	1.6	7	9.3	32.2	6.5
4	1.1	1.6				.9
3		.8				.3

The mean length of free periods which each student had for extra-curricular activities during the school day is shown in Table XVI. The mean was derived from those schools which made provision for student free time and those schools within an enrollment classification that did not allow students free time during the school day were not considered in this table. It will be noted that the range of the length of periods of free time is less than 4.5 minutes.

TABLE XVI

AMOUNT OF STUDENT FREE TIME FOR EXTRACURRICULAR ACTIVITIES

Enrollment	Minutes of Free Time
Up to 49	50.4
50 to 99	52.34
100 to 199	47.61
200 to 499	46.07
500 and up	46.38
Composite	48.56

The number of schools which made provision for student free time for extracurricular activities during the school day is shown in Table XVII. Included in this table is the number of schools which made no provision for student free time and the number of schools which did not respond to the question.

TABLE XVII

NUMBER OF SCHOOLS WHICH ALLOWED STUDENTS
FREE TIME DURING THE SCHOOL DAY

Enrollment	Number of Schools Which Allowed Student Free Time	Number of Schools Which Did Not Allow Students Free Time	Number of Schools Which Did Not Respond To Question
Up to 49	95	10	20
50 to 99	94	6	26
100 to 199	86	9	20
200 to 499	47	6	3
500 and up	13	4	14
Composite	283	30	72

Table XVIII indicates the percentage of schools of each enrollment classification which allowed teachers to have free time during the school day. This table also shows the number of free periods per day which the teachers were allowed. The tendency in general is for the percentage of schools which made provision for teacher free time to decrease as the size of the schools increase.

TABLE XVIII

PERCENTAGE OF SCHOOLS PROVIDING FREE
TIME FOR TEACHERS

Enrollment	Number of Free Periods			
	1	2	3	0
Up to 49	75	9.5	.8	15.3
50 to 99	93.2	1.7		5
100 to 199	83.8	61		10.1
200 to 499	76.7	1.7		21.4
500 and up	61.3	3.2		35.4
Composite	80.9	5.8	.3	13

The percentage of schools in each enrollment classification which required their teachers to have a medical examination is shown in Table XIX. The frequency of the examination is shown in the left hand column of the table. The percentage of schools requiring teachers to have a medical examination was so consistently low that no pattern in relation to school enrollment is apparent. The larger school group of five hundred or more students was the only group in which an appreciable percentage of schools required a medical examination of teachers.

TABLE XIX

PERCENTAGE OF SCHOOLS REQUIRING
MEDICAL EXAMINATION OF TEACHERS

Frequency of Examination	Enrollment					
	Up to 49	50 to 99	100 to 199	200 to 499	500 and up	Composite
Before Employment	3.3	.8	1	1.7	16.1	1.7
Annually	.8				3.2	1.9
Every two Years		1.7	5		3.2	.6
Every four Years						
No Requirement	96	97.4	93.9	98.2	77.4	95.8

The percentage of schools in each enrollment classification which did or did not require students to have a medical examination and the frequency of the examination is shown in Table XX. The percentage of schools which did not require a medical examination of their students shows a consistent increase as the size of the schools increase.

TABLE XX

PERCENTAGE OF SCHOOLS REQUIRING STUDENTS TO HAVE
A PERIODIC MEDICAL EXAMINATION

Frequency of Examination	Enrollment					
	Up to 49	50 to 99	100 to 199	200 to 499	500 and up	Composite
Before Admittance	3.3	.8	2	3.6		2.3
Annually	36.8	24.8	11.2	5.3	9.6	24.1
Every two Years		1.6				.6
No Requirement	61.8	64	86.7	91	90.3	73

The subject of sick leave for teachers is dealt with in Table XXI. This table shows that the number of days sick leave each teacher was allowed increases progressively as the size of the school increases. It is further shown in this table that in general a proportionately larger number of schools of greater enrollment made provision for sick leave and for sick leave to be accumulated. It is also shown that the number of days sick leave which each teacher was allowed to accumulate increased as the size of the school increased.

TABLE XXI
SICK LEAVE FOR TEACHERS

Number of Schools	Enrollment					
	Up to 49	50-99	100-199	200-499	500 & up	Composite
Allowed Teachers Sick Leave	95	89	77	52	26	281
Mean Number of Days Allowed	5.23	5.76	6.94	6.42	7.81	6.14
Did not Provide Sick Leave	12	3	4			17
Allowed Sick Leave to Accumulate	19	22	41	33	21	106
Mean Number of Days Allowed To Accumulate	19.41	19.18	21.41	23.94	29.81	21.13
Number not Responding to Question	20	34	18	4	5	75

The health services provided by the schools of various enrollment classifications are shown in Table XXII. This table shows that in most cases a higher percentage of the larger schools provided each service. The following statements indicate which services did not follow this trend. The percentage of schools requiring all employees to have a medical examination yearly was highest for schools with enrollments of from one hundred to one hundred ninety-nine students. The percentage of schools requiring annual medical examination of all employees was so low in all cases that no assumptions could be made in regard to this data. The percentage of schools in which all students and employees were checked for tuberculosis annually was inconsistent and no pattern for increased frequency with school size was shown.

TABLE XXII

HEALTH SERVICES PROVIDED

Questions:

1. Is an immunization program provided for your students?
2. Do you have a registered nurse at school full time?
3. Do you have a registered nurse at school part time?
4. Is first aid treatment by a qualified person available at school?
5. Are students examined for contagion before readmittance after absences?
6. Are all school employees required to take a yearly medical examination?
7. Are all students and employees checked for tuberculosis annually?
8. Are the services of a physician immediately available to the school?
9. Is there a physician available within five miles of the school?
10. Are hospital facilities available in your immediate community?
11. Is there a hospital within ten miles of your school?

TABLE XXII (continued)

Question Number	Percentage of Responses According to Enrollment Classification											
	Up to 49		50 to 99		100 to 199		200 to 499		500 and Up		Composite	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
1	26.5	73.5	32.6	67.4	37.5	62.5	45.4	54.5	43.4	56.6	32	68
2		100	1.6	98.4	2	97.2	16	83.9	48.3	51.7	5.6	94.4
3	8.1	92	17.2	82.2	22.4	77.5	39.2	60.8	89.5	10.5	18.8	81.2
4	86.3	13.7	82.9	17.1	84.7	15.3	92.7	7.3	96.6	3.4	86.9	13.1
5	59	40.9	61.3	38.7	60.6	38.4	75	25	93.1	6.9	64.7	35.3
6	2.4	97.6	3.3	96.7	6.2	93.8	1.8	98.2	3.4	96.6	3.7	96.3
7	29	70.8	23.3	76.7	24	76	14.8	85.2	21.9	78.1	24.2	75.8
8	31.4	69.5	52.4	47.5	74.7	25.3	87.3	12.7	61.3	38.7	53.9	46.1
9	24.8	75.2	49.2	50.8	82.5	17.5	96.3	3.7	100		54.8	45.2
10	22.3	77.6	31.1	68.9	50.5	49.5	76.8	23.2	100		40.8	59.2
11	44.4	55.5	64.8	35.2	61.9	38.1	78.8	21.2	100		60.4	39.6

Health and sex instruction are dealt with in Table XXIII. This table shows that the percentage of schools offering a course in health or hygiene progressively increases as the size of the schools increase. The percentage of schools in each classification offering a specific course in sex education is so low, in all cases except the schools of five hundred or more students; that it would be difficult to draw any conclusions from the data. The percentage of schools in which sex education was dealt with in some course in the school, shows progressive increases as the size of the schools increase.

TABLE XXIII

HEALTH INSTRUCTION

Questions:

1. Does your school offer a specific course in health or hygiene?
2. Does your school offer a specific course in sex education?
3. Is sex education dealt with in any course in your school?

Question Number	Percentage of School Responses According to Enrollment Classification											
	Up to 49		50 to 99		100 to 199		200 to 499		500 and up		Composite	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
1	72.9	27	75.2	24.8	79.6	20.4	82.1	17.8	83.3	16.7	77.2	22.8
2	1.6	98.4	3.2	96.8	1.1	98.9	5.4	94.6	23.3	67.7	3.3	96.7
3	53.7	46.3	64.8	36.2	67.4	32.6	71.4	28.6	86.7	13.3	62.5	37.5

Table XXIV indicates what percentage of the schools of various sizes have employed certain practices in the administration of their school health program. The use of a faculty committee was not a common practice in any of the school groups except in the schools of five hundred or more students where nearly twenty-six per cent of the schools had a faculty committee set up to work on school health. The table shows that approximately one-half of the schools below five hundred students had established policies for first aid care of pupils. In the schools of over five hundred students nearly eighty-four per cent have established first aid policies. The policy of carrying accident insurance covering all pupils was most common throughout the smaller schools and the percentage decreases as the schools get larger. The practice of having first aid equipment in all shops and laboratories became progressively more common as the enrollment increased.

TABLE XXIV

SCHOOL HEALTH ADMINISTRATIVE PRACTICES

Questions:

1. Is a faculty committee set up to work on school health?
2. Do you have established policies for first aid care of pupils?
3. Does your school carry accident insurance covering all pupils?
4. Do you have first aid equipment in all shops and laboratories?

Question Number	Percentage of Responses According to School Enrollment Classification											
	Up to 49		50 to 99		100 to 199		200 to 499		500 and up		Composite	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
<u>1</u>	9.7	90.2	8	92	5.2	94.6	10.7	89.3	25.8	74.2	8.3	91.7
2	49.3	50.8	50	50	49.5	50.5	55.6	44.6	83.9	16.1	51.8	48.2
3	35.1	65	27.8	72.2	15.6	84.4	18.5	81.5	6.4	93.5	25.5	74.5
4	62.6	37.3	68.6	31.4	78.8	21.2	83.9	16.1	90.3	9.7	70.9	29.1

Table XXV indicates who was responsible for the supervision of the school health program in the schools of the different enrollment classifications. The percentage of schools in which this responsibility was given to the principal was nearly constant in all enrollment classifications. The superintendent accepted this responsibility in about thirty per cent of the schools of all groups except in the classification of enrollments of five hundred or more in which the superintendent was responsible in only about sixteen per cent of the cases. As the size of the schools increased the school nurse became responsible for the supervision of the health program in a larger percentage of cases. However, the percentage of cases in which the coach was responsible became progressively less as the enrollments became larger.

TABLE XXV

RESPONSIBILITY FOR SUPERVISION OF SCHOOL HEALTH PROGRAM

Responsible for Supervision of School Health Program	Percentage of Responses According to Enrollment					
	Up to 49	50-99	100-199	200-499	500 & up	Composite
Superintendent	32	30.4	28.7	32.1	16.1	30.3
Principal	38	38.3	41.5	32.1	35.5	37.4
Nurse		2.6	5.3	16.1	41.9	5.4
Coach	30	28.77	25.5	19.6	3.2	26.6
City Director					3.2	12*

CHAPTER III

DISCUSSION AND SUMMARY

Summary

The purpose of this study was to evaluate certain phases of the secondary school health services in Kansas, and to ascertain if any relationship existed between specific health services and the percentage of pupil attendance. The data for achieving the purpose of the study were presented in Chapter II. The third chapter is a summarization of some of the material presented in the second chapter. Some important implications to be gained from the data are also presented.

The review of the literature on this topic found only two evaluative studies of the Kansas secondary school health services. The one which paralleled this study in part was, A Summary Report to the North Central High Schools of Kansas on Criterion 3: School Staff.¹ In the Smith and Anderson study, 39 per cent of the schools responding indicated they had a trained nurse available when school was in session. In the current study only 24 per cent of the schools responding indicated that a registered nurse was at school either full or part time. In the Smith and Anderson study, it was found that 73.2 per cent of the responding schools had a physician available or on call when school was in session. In comparison the results from the responses received in the

¹H. A. Smith and K. E. Anderson. A Summary Report to the North Central High Schools of Kansas on Criterion 3: School Staff. Kansas Studies in Education, 4 (April) 1954, No.1, p. 17.

present study indicated that 53.9 per cent had a physician immediately available to the school.

In the Smith and Anderson study, 82.8 per cent of the schools always had someone qualified to administer first aid in the building when school was in session. In the present study the responses indicated that 86.9 per cent had first aid treatment by a qualified person available at school.

In another item which was similar in both studies, the Smith and Anderson report indicated that 13.6 per cent of the responding schools gave physical examinations to all students periodically. In the present study it was found that 27 per cent of the responding schools required their students to have a medical examination either before admittance, annually, or every two years. While the findings of the two studies differ, the difference is not so great that it cannot be accounted for by the following variations in the studies. The Smith and Anderson study was selective in that it dealt with schools which were members of the North Central Association, while the present study included all public secondary schools in Kansas. The Smith and Anderson report was based on the responses of sixty-four schools which cooperated in the study. Results of the present study were based on the responses of four hundred and thirty-seven schools. Also, the Smith and Anderson study was designed primarily for the evaluation of the school staff and the current study was made specifically of school health services. These and probably many other factors are sufficient to account for the differences in final results obtained by the two studies which are not

so different but what they tend to support one another.

The other report dealing with health services provided in Kansas was the Summary Report to the North Central High Schools of Kansas on Criterion 5: School Plant and Equipment.² While this report was not directly related to the present study, one statement was made which should be considered in this report to the effect that 83 per cent of the responding schools indicated that they provided health services at least in part.

No other studies were found which were directly related to the evaluation of Kansas secondary school health services. This lack of research in this area coupled with the importance attached to health services according to other references cited in Chapter I, emphasize the need for this and further studies of the health services provided by our Kansas secondary schools.

While the data presented in Chapter II are in many instances self-explanatory and need no further elaboration, there are some findings of this study which should be given additional emphasis by further discussion.

The importance of free time for both students and teachers has apparently been recognized by the majority of educational authorities in Kansas as exemplified by the following information: Nearly 75 per cent of the schools made provision for the students to have free time during

²K. E. Anderson. Summary Report to the North Central High Schools of Kansas on Criterion 5: School Plant and Equipment. Kansas Studies in Education, 3 (April) 1953, No. 3, p. 20.

the school day for extracurricular activities. Teachers were allowed free periods during the school day by nearly 87 per cent of the responding schools. This is a good indication that the schools of Kansas assume that both students and teachers need some freedom during the school day and that the Kansas secondary schools are, for the most part, making provisions to meet this need.

In 95.8 per cent of the schools cooperating in this study, no provision was made to require teachers to have a medical examination. The sentiment has been expressed by many authorities that teacher health has a direct influence on student health. First, because the teacher who may have a contagious disease may infect a large number of children; secondly, because a teacher in poor health may be emotionally unstable to the extent that her classroom behavior has a detrimental effect on the mental health of her students; and thirdly, because a teacher with poor health will not ordinarily do a good job of teaching.

The question was asked if all school employees were required to take a yearly medical examination. In answer to this question 96.8 per cent answered that they were not required to be examined. It must be apparent that such non-teaching employees as janitors, bus drivers, and anyone else who comes in contact with students and teachers should submit a report of a periodical medical examination. Another question was asked whether all students and employees were checked for tuberculosis annually. The response to this question indicated that this was done in only 24.4 per cent of the schools. This question on a specific disease was included because it is quite possible for a person to have tuberculosis

and not realize it; therefore, most health authorities feel a yearly examination is the only adequate control of this disease. An important phase of the health protection aspect of health services is the prevention of the spread of disease from one child to another. This can be done effectively only if children who have been ill are examined upon their return to school to ascertain if their condition is such that they may infect other children with the disease. The responses received indicated that in 64.7 per cent of the schools, students who had been absent were examined for contagion before readmittance.

The preceding information would seem to indicate that the Kansas secondary schools have not made adequate provision for the prevention and control of disease.

Information gained from the schools cooperating in this study indicated that 73 per cent of the schools did not require students to have medical examinations. Certainly it is important for all students to be examined periodically. Only by this means could diseases be detected and their spread prevented. It would also provide knowledge of the health status of a student that would be of paramount importance in the guidance of that student through his high school career. Certainly no effort could be made to correct remedial defects unless they are found by medical examination. Thus another point of weakness in the health services of Kansas secondary schools is in the area of student medical examination.

Sick leave for teachers is important to teacher health and is considered important to pupil health by most authorities. If the teacher

is allowed sick leave without salary deduction it encourages teachers to remain away from school whenever their health status is such that they cannot do a good job of teaching or when they may have some contagious disease which might infect other teachers or students. The majority of school authorities in Kansas have recognized the importance of sick leave for teachers as indicated by the responses received in this study; since 76 per cent of the schools made provisions for yearly sick leave for teachers. Approximately 28 per cent of the schools cooperating in this study indicated that provisions were made for teachers to accumulate sick leave. While the provision of yearly sick leave to allow for acute illnesses of short duration is of primary importance, it is also important to make some provision for the security of the teacher who after several years of service may contract an illness of long duration.

Emergency care of students should be an accepted responsibility of the school. Provisions should be made for the care of students who may be injured or become ill while at school. The following information from schools cooperating in this study indicated what provisions the secondary schools of Kansas were making in this area. A registered nurse was on duty at school full time in 5.6 per cent of the schools, and part time in 18.8 per cent. This indicates that over 75 per cent of the schools responding did not have a registered nurse at school either full or part time. However, 86.9 per cent of the schools had a person qualified in first aid treatment in their schools. This indicates that most of the schools cooperating in this study were making an effort

to provide for the emergency care of their students. In cases of more serious accidents or illnesses which required the services of a physician or the facilities of a hospital the following information was obtained. The services of a physician were immediately available in 53.9 per cent of the schools, while 45.2 per cent of the schools did not have a physician available within five miles of the school, and nearly 40 per cent did not have a hospital located within ten miles of the school. While the provision of these services and facilities are not within the scope of most school authorities to provide, they do have a relationship to the total picture of the availability of health services and were included for that reason.

The inclusion of a course in health or hygiene in the curriculum is important at the secondary level, not only because of its value as a source of knowledge to students, but because of the opportunity it would afford in making students health conscious. About 77 per cent of the schools in this study indicated a specific course in health or hygiene was offered. Assuming that most of these courses were well taught, it could be said that the majority of secondary schools of Kansas were meeting the needs of students for health instruction.

The situation is somewhat different in regard to sex education. Only 3.3 per cent of the schools responding to this study offered a specific course in sex education, and in only 37.5 per cent of the schools was sex education dealt with in any course in the school. In recent years much has been said about the needs of the youth in the area of sex education. If this need really exists then the secondary

see p. 65!

schools of this state can hardly be considered to have made adequate provision for meeting this need.

The other items which were included in this study dealt with policies and practices and were included to obtain knowledge of what procedures were most common in the Kansas secondary schools. Items of that type cannot be classified as to degree of good or bad procedure and were included in this study to provide background information for understanding the total health situation in the high schools. The data on these items are included in Chapter II and will not be discussed in this chapter.

Recommendations

In the opinion of this writer the secondary schools of Kansas should try to improve the obvious weaknesses in their health services. The greatest single weakness in the health program of the Kansas high schools seemed to be in the small percentage of schools requiring physical examinations of teachers, employees, and students. To strive for certain academic qualifications in teachers as assurance of their ability to teach, and to make no attempt to determine their physical qualification to teach except by untrained observation, seems to be endorsing two incompatibles. In addition to ascertaining if they are physically able to teach, it should be determined that they are free of disease and will not infect other teachers or students. Certainly the examination of teachers would not pose any great administrative

problem. No one who has spent four years and thousands of dollars going to school in order to be qualified to teach would let the time and expense of a medical examination keep them from taking a teaching position. The school district probably should be willing to bear the expense of the medical examination of teachers. If it would keep them from making contract with one physically unfit teacher it would be a good investment of school funds. A good plan in use in some states is that the teacher must pass a comprehensive medical examination before being granted a teaching credential and take a subsequent examination with each application for renewal of the credential.

The examination of students poses many more administrative problems than does the examination of teachers. The problems encountered in a student health examination program are not insolvable as shown by the fact that ninety-four or 27 per cent of the schools included in this study had made provisions for the periodic medical examination of all students. No school health program can be effective unless the students are given a thorough medical examination. It is the only adequate means of learning the health status of the student. Little remedial work can be done by the school unless some means of discovering the existence of remediable defects is employed. Special programs cannot be provided unless the need for such is determined by an evaluation of the health of the student body. Nor can the student's health be protected from the rigor of school activities unless he is given a medical examination. These reasons plus the fact that the examination is an excellent learning opportunity in itself are all factors which

make it seem most desirable that every effort be made to get all students examined periodically. From the point of view of the school administrator the simplest method of handling the medical examination of students is to provide the student with an examination form and let the student be examined by his family doctor. The expense of the examination is to be borne by the student. However, if it can be arranged, the examination of all students, at the school by one examining staff is considered to be the most practical and valuable practice. The important thing is to have all students, teachers, and employees take a thorough medical examination at periodic intervals, preferably every year. Until this is done it is not felt that any school can have an adequate school health program.

While the majority of the schools cooperating in this study made provisions for annual sick leave, only about one out of four made provisions for annual sick leave to accumulate over a period of years. Additional research should be done to determine the frequency and duration of teacher illnesses over a period of years so that school authorities could be asked to make provision for annual and accumulative sick leave on the basis of teacher needs.

Another weakness in the health program of the Kansas secondary schools was in the area of emergency first aid care. While a high percentage of schools had someone at school who was qualified to administer first aid, more of the schools should establish and publicize a plan of action for first aid care in case of emergency. This could be done easily. It is entirely feasible that immediate action without

delay caused by indecision might save a life or prevent more serious injury.

This writer feels that one real weakness shown by this study is the fact that sex education is not dealt with in any course in two out of every three of the schools cooperating in this study. Many authorities could be cited which would agree that sex instruction is needed at the high school level. However, it is not felt that school authorities need to be convinced of this student need, instead they need to be given courage to start such a program in the face of presupposed community censure. This will probably have to come in the form of writings in the state and university publications advocating the inclusion of the subject in the curriculum. see p 65

Conclusion

Since no previous comprehensive evaluation of the secondary school health services of Kansas was found, it is impossible to estimate the progress being made in this area by the high schools of the state. It can be said, however, that there is need for improvement in certain phases of the program before the health services of our Kansas secondary schools can be considered to be adequate to insure the optimum health of our high school students.

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APPENDIX

QUESTIONNAIRE

GENERAL INFORMATION

- A. Name of School _____ . B. Address _____ .
C. Enrollment 1952-53 _____. D. Percentage of attendance 1952-53 ____%

REMARKS: (If you have any statement you would like to make about the health program in your school, please do so in this space.)

HEALTHFUL SCHOOL LIVING

- A. The length of the school day is ____ hours and ____ minutes
B. The daily schedule consists of ____ periods of ____ minutes each.
C. Students have ____ free time daily for extracurricular activities during the school day.
D. Teachers have ____ free periods per day.
E. Teachers must have a medical examination: (check) () before being employed
() annually
() every 2 years
() every 4 years
() no requirement
F. Students must have a medical examination: (check) () before admittance
() annually
() every 2 years
() no requirement
G. Teachers are allowed ____ days sick leave per year
____ days with pay
____ days half pay
____ total days accumulative

HEALTH SERVICES PROVIDED

YES NO

- A. Is an immunization program provided for your students?.....
- B. Do you have a registered nurse at school full time?.....
- C. Do you have a registered nurse at school part time?.....
- D. Is first aid treatment by a qualified person available at school?.....
- E. Are students examined for contagion before readmittance after absences?.....
 (indicate by whom) Doctor
 Nurse
 Classroom Teacher
- F. Are all school employees required to take a yearly medical examination?.....
- G. Are all students and employees checked for tuberculosis annually?.....
- H. Are the services of a physician immediately available to the school?.....
- I. Is there a physician available within five miles of the school?.....
- J. Are hospital facilities available in your immediate community?.....
- K. Is there a hospital within ten miles of your school?.....

HEALTH INSTRUCTION

- A. Does your school offer a specific course in health or hygiene?.....
- B. Does your school offer a specific course in sex education?.....
- C. Is sex education dealt with in any course in your school?.....

SCHOOL HEALTH ADMINISTRATIVE POLICIES

- A. Is a faculty committee set up to work on school health?.....
- B. Do you have established policies for first aid care of pupils?.....
- C. Does your school carry accident insurance covering all students?.....
- D. Do you have first aid equipment in all shops and laboratories?.....
- E. Who is responsible for supervision of the school health program?.....
 (check one) Superintendent
 Principal
 Nurse
 Coach
