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To the Graduate Council:

I am submitting herewith a thesis written by Glenn Stephen Pitts entitled "An Evaluation of the Physical Education Programs in Knoxville City High Schools." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Education.

Reagan Abernathy, Major Professor

We have read this thesis and recommend its acceptance:

Samuel Kimble, Michael Nunnery

Accepted for the Council:

Carolyn R. Hodges

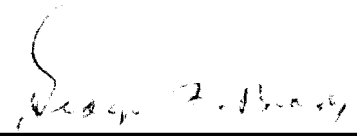
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May 25, 1966


To the Graduate Council:

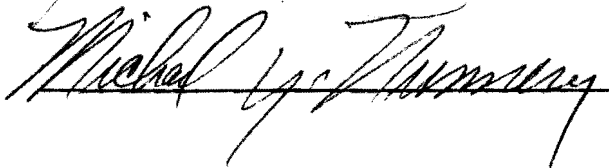
I am submitting herewith a thesis written by Glenn Stephen Pitts entitled "An Evaluation of the Physical Education Programs in Knoxville City High Schools." I recommend that it be accepted for nine quarter hours of credit in partial fulfillment of the requirements for the degree of Master of Science, with a major in Physical Education.



Major Professor

We have read this thesis and
recommend its acceptance:





Accepted for the Council:



Dean of the Graduate School

AN EVALUATION OF THE PHYSICAL EDUCATION PROGRAMS
IN KNOXVILLE CITY HIGH SCHOOLS

A Thesis
Presented to
The Graduate Council of
The University of Tennessee

In Partial Fulfillment
of the Requirements for the Degree
Master of Science

by
Glenn Stephen Pitts
June 1966

DEDICATION

To Samuel W. Jones, Supervisor of Physical Education
in the Knoxville City School System.

In memory of the love, labor, and devotion of this
servant of the educational process in the system in which
he spent so many fruitful years, this thesis is dedicated.

I believe he truly laid up treasure in Heaven. As
the wise man Solomon said:

"A good name is rather to be chosen than great
riches, and loving favor rather than silver or
gold."

-Proverbs 22:1

Glenn Stephen Pitts

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CHAPTER I

INTRODUCTION

In a world that is under constant change, man must adjust and identify his place in society. Physical education has its roots deep in the educational process. It has progressed and had some set-backs, but it has continually grown and adjusted to innovations.

During various armed conflicts, the physical stamina of man was put to a test. During World War II and the Korean war, American men were not physically ready. Many of the men displayed poor performance in basic motor skills such as jumping, throwing, falling, and lifting. They did not have a significant degree of skill in any sport which would initiate a desire for participation.¹

To have improvement there must be change and change is brought about by various means. Mass criticism of the present status or worth of a program causes re-evaluation from within.

¹Edward F. Voltmer and Arthur A. Esslinger, The Organization and Administration of Physical Education (New York: Appleton-Century Crofts, Inc., 1949), pp. 69-70.

It is a general concept in curriculum improvement that:

A good method of maintaining the highest standards in physical education is through continuous study to meet the needs of physical education programs on all levels, beginning with the elementary school and continuing through college.²

Studies such as those conducted during the time of armed conflict and those by Kraus and Hirschland which indicated that American youth are not as physically fit as they should be served a very useful purpose in focusing attention on fitness problems.³

Studies show that the program has improved, regardless of whether facilities and equipment remained the same or had been updated. The worth of a program is determined by the degree to which it meets its objectives.

A survey and comparison of youth fitness from 1958-1965 was compiled by Hunsicker and Reiff of the University

²Taft Roark, "An Evaluation of the Physical Education Programs in Knox County High Schools," (unpublished Master's thesis, The University of Tennessee, Knoxville, 1963), p. 2.

³Edwin A. Fleishman, The Structure and Measurement of Physical Fitness (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1964), pp. 2-3.

of Michigan. This evaluation concluded that the physical fitness level of public school children in 1965 was above that of 1958.⁴

At the White House Conference on Education held July 20-21, 1965, an unprecedented evaluation of education began. John W. Gardner, Secretary of the United States Department of Health, Education, and Welfare, stated that:

The toughest question facing us now, in my judgment, is whether we have the courage and flexibility and imagination to innovate as the times require. Let us not deceive ourselves. The old ways of doing things are not good enough.⁵

Physical educators must develop community opinion towards an understanding of the vast potential of physical education. Of no less consideration is the facilities to be used which may alter the quality and type program within a school or a system.

I. STATEMENT OF THE PROBLEM

This study was concerned with the evaluation of physical education in the Knoxville City High Schools with

⁴Paul A. Hunsicker and Guy G. Reiff, "A Survey and Comparison of Youth Fitness 1958-1965," Journal of Health, Physical Education, and Recreation, 37:23-25, January, 1966.

⁵"Report from Washington, Special Legislative Feature," Journal of Health, Physical Education, and Recreation, 37:18-23, September, 1965.

emphasis centered upon organization and administration of class program; program of activities; personnel; medical examinations and first aid services; outdoor facilities; gymnasium area, equipment offices and staff area; locker and shower area; and supplies and equipment.

The grade system of Knoxville City Schools varied in three of the ten high schools. Two schools were composed of grades seven through twelve. One school was composed of grades ten through twelve. All ten schools were evaluated in this study.

II. PURPOSE OF THE STUDY

The purpose of this study was to evaluate the present physical education program in the schools in an attempt to determine what actually existed and what improvement, if any, could be recommended.

In 1965 the Congress of the United States passed a bill known as Public Law 89-10, or the Elementary-Secondary Education Act. Large sums of money were provided for program improvement in the local school districts. Tennessee was allotted thirty-two million dollars. Certain regulations and requirements proceeded distribution of the funds, and to receive money the local school district had to substantiate that a number of children were considered "educationally

deprived." Children classified as being from educationally deprived situations would be those who come from homes with a family income of less than two thousand dollars annually. The complete qualifications were established in Title I of the Public Law 89-10. Another requirement was that base-line data be furnished by which programs could be evaluated and need for improvement be determined. This study could be used to provide base-line data for determining program needs.

III. NEED FOR THE STUDY

This study was needed to point out what deficiencies in the total program existed, and serving as base-line data, the results could be used in determining what deficiencies, if any, existed between schools with a heavy concentration of "educationally deprived" children and the other high schools in this system.

IV. ORGANIZATION OF THE STUDY

Ten high schools, grades nine through twelve, were evaluated by the writer. Scholastic data and acreage of playground area are illustrated on Table I. The evaluation was based on a score card developed by the researcher. The score card was developed from evaluative criteria

TABLE I
SCHOLASTIC DATA AND ACREAGE OF PLAYGROUND AREA OF
KNOXVILLE CITY HIGH SCHOOLS 1965-1966

School	Grade Level	Number of Teachers	Enrollment*	Acreage**
Austin	10-12	33	569	6
Bearden	9-12	44	1,028	10
Central	9-12	66	1,612	8
East	9-12	27	604	20
Fulton	9-12	66	1,465	6
Holston	9-12	50	1,115	12
Rule	7-12	58	1,571	6
South	7-12	48	1,191	20
West	9-12	33	749	40
Young	9-12	60	1,413	6

*Enrollment as of October 1965.

**Approximate acreage that could be used for play purposes.

established by the Southern Association of Colleges and Schools, Teacher Evaluation Concepts by the New York State Department of Education, the National Study of Secondary School Evaluation, the La Porte Score Card, the Indiana Score Card, and suggestions from Fred Bedelle, Director of Research, Knoxville City Schools.

The Knoxville City Schools had a total enrollment of 39,625 students as of October, 1965. There were seventeen junior and senior high schools with an enrollment of 15,054. The ten high schools used in this study had an enrollment of 11,362 which represented 28.6 per cent of the total enrollment. They also represented 75.4 per cent of the enrollment of the junior and senior high schools.

Prior to the evaluation of the various high schools a score card was formulated for use in this study as discussed in Chapter III.

CHAPTER II

REVIEW OF LITERATURE

A basic principle used in evaluating a school program was the formulation of sound objectives as a foundation for an understanding of previous evaluative measurements used. It was therefore necessary to present results of comparable studies considered pertinent to this evaluation.

The researcher endeavored to select and follow a procedure as outlined under the following categorical headings: (1) curriculum development; (2) evaluation of Knoxville City high schools; (3) evaluation of Knox County high schools; (4) evaluation of Tennessee high schools; and (5) similar evaluations in other states.

I. CURRICULUM DEVELOPMENT

In planning the school curriculum it is an obligation of the planners to develop and implement curricula which contribute substantially to the general education of youth. The objectives of physical education were constructed in the light of this knowledge.¹

¹Arthur G. Miller and Dorothy Massey, A Dynamic Concept of Physical Education for Secondary Schools (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1963), pp. 2-4.

Although there might be some variance in wording, most physical educators would agree that the following would be considered general objectives: (1) physical or organic power; (2) neuromuscular development; (3) personal-social development; (4) emotional-intellectual development; and (5) safety and recreational skills.²

Physical education has two unique aspects, one of which is the development of a high state of physical fitness enabling one to accomplish physical tasks more effectively. The other is development of the ability to perform those tasks such as game and sports skills, grace, rhythm, and improved reaction time through greater neuromuscular skill.³

There are two ways by which a program of physical education could be evaluated. One way is to evaluate pupil progress in an attempt to determine the accomplishment of specific objectives. Another way is to examine those parts of a program that collectively should produce a successful program.

²Charles C. Cowell and Hilda M. Schwehn, Modern Principles and Methods in Secondary School Physical Education (Boston: Allyn and Bacon, Inc., 1964), pp. 3-17.

³Robert N. Irving, "Why All the Fuss About Fitness?," Educational Leadership, 20:376-377, March, 1963.

Irwin stated:

It is obvious to those familiar with the conduct of modern programs of physical education in the public schools that the success of a program is highly dependent on the organization, administration, equipment, and available facilities.⁴

II. EVALUATION OF KNOXVILLE CITY HIGH SCHOOLS

Sam W. Jones, for fourteen years the Supervisor of Physical Education of the Knoxville City Schools, stated:

The physical education programs of the high schools have not been evaluated since I have been supervisor. The programs of the four county schools that were added may have been evaluated before annexation. All of the schools have been evaluated and are accredited by the Southern Association of Secondary School and Colleges; however there has not been a recent evaluation.⁵

The four schools added to the city system were evaluated as a part of the county system. Comments concerning their evaluation are included in the section Evaluation of Knox County Schools.

III. EVALUATION OF KNOX COUNTY SCHOOLS

Evaluation of five Knox County high schools by the Southern Association was completed in 1962. Of those five

⁴Leslie W. Irwin, The Curriculum in Health and Physical Education (Dubuque, Iowa: William C. Brown Company, 1960), p. 18.

⁵Statement by Sam W. Jones, personal interview, December 6, 1965.

schools one was added to the city system and was evaluated by the researcher in this study. A condensation of the reports made by the Southern Association Committee as reviewed by Gee were:

1. All the physical education staff was adequately trained.
2. Equipment was available for a wide range of activities in most schools.
3. The adaptive programs were inadequate.
4. Dressing facilities were inadequate in the schools.
5. Custodial service was poor in one school.
6. Outdoor facilities were inadequate for some schools.
7. Satisfactory records were kept.
8. Proper methods were used for evaluating each student.
9. Some of the schools' programs lacked individual and dual sports.
10. Medical examinations were required.
11. A new gymnasium was recommended for one school.⁶

Roark evaluated the physical education programs in Knox County high schools in 1963. A short time after the completion of his study, Bearden, Central, Holston, and Young high schools were annexed into the city system. Six other county schools evaluated in the study were not affected by the annexation. Roark, using the La Porte Score Card as evaluative criteria, made the following conclusions: (1) there were insufficient supplies and equipment; (2) the

⁶Bobby Wayne Gee, "An Evaluation of the Junior High Physical Education Programs and Facilities in the Knoxville City School System" (unpublished Master's thesis, The University of Tennessee, Knoxville, 1965), p. 9.

outdoor areas were very inadequate; (3) only one school had any semblance of a swimming program; (4) lockers and showers scarcely met the standards; (5) inter-school athletics was well administered and supervised; (6) proper heating, lighting, and ventilating were adequate in the gymnasiums; (7) programs of intramural games and sports should be developed; (8) the program of activities should be expanded; (9) recreational type facilities should be expanded; (10) requirements for medical examination should be enforced; and (11) organization and administration of school programs rated very high in every case.⁷

The scores ranged from 81 to 147. Roark compared Knox County schools with 101 Tennessee schools surveyed by De Witt. Three Knox County schools approached the highest score of De Witt's study. The remaining schools were about average with other schools in the state.⁸

IV. EVALUATION OF SCHOOLS IN TENNESSEE

De Witt conducted a study of boys' physical education programs in 101 Tennessee public high schools. The primary

⁷Taft Roark, "An Evaluation of the Physical Education Programs in the Knox County High Schools" (unpublished Master's thesis, The University of Tennessee, Knoxville, 1963), pp. 57-59.

⁸Ibid., pp. 33-54.

emphasis was centered upon the quality of programs as related to large and small schools. It was noted that as a rule the larger schools scored higher on the La Porte Score Card. Out of a possible score of three hundred the schools averaged 57.6. The scores ranged from 18 to 168. This was considered a very low score. Tennessee schools scored 19.2 per cent of the total possible points. It was noted that schools with Southern Association accreditation had better scores.⁹

V. EVALUATION OF OTHER STATES

A study conducted by White in selected Iowa public schools revealed a deficiency in the areas of aquatics and modified-corrective programs. The scores ranged from 64 to 209. He found that generally the larger schools had higher scores and recommended consolidation in order to provide a better program. The La Porte Score Card Number II was used as evaluative criteria.¹⁰

⁹R. T. De Witt, "Health and Physical Education Programs for Tennessee High School Boys," Research Quarterly, 24:261-269, October, 1953.

¹⁰Norman E. White, "A Critical Survey of the Boys' Physical Education Program in Selected Iowa Secondary Schools, by Means of the La Porte Score Card" (unpublished Doctor's dissertation, Indiana University, Bloomington, 1952), pp. 96-101.

Dodson in a similar study of selected high schools in North Carolina concluded that the physical education programs were limited in scope. As measured by the La Porte Score Card, the areas ranking lowest were aquatics and correctives. It was also noted that those areas that scored high were, for the most part, those required by state regulations. He also found a positive relationship between school size and total score.¹¹

Calhoun in his study selected the top twenty, the middle twenty, and the bottom twenty schools as rated by the La Porte Score Card. The programs were compared in relation to their achievement of objectives. He stated if more schools were surveyed, a definite relationship between high score card reading and high pupil performance could be established; however, because of the limitations the evidence was not conclusive.¹²

In a study by Rice it was determined that with a high score on the La Porte Score Card one could expect

¹¹Nathan T. Dodson, "An Evaluation of the Health and Physical Education Program for Boys in Selected North Carolina High Schools" (unpublished Doctor's dissertation, Indiana University, Bloomington, 1955), pp. 139-143.

¹²Robert Allan Calhoun, "A Comparison of Achievement of Program Objectives of Selected Rated High School Physical Education Programs in Indiana" (unpublished Doctor's dissertation, Indiana University, Bloomington, 1956), pp. 145-147.

greater achievement of objectives. Pupil progress paralleled improvement of the total scores on the score card.¹³

Generally, certain characteristics were evident in the various studies. Some of the most significant characteristics were: (1) outdoor areas were limited; (2) intramural programs were limited; (3) program of activities were narrow in scope; (4) large schools generally rated higher on the score card; (5) schools with higher score card ratings had better programs; (6) aquatics and modified or corrective (adaptive) programs were extremely inadequate in the majority of the cases; and (7) accredited schools had higher scores than non-accredited schools.

¹³James J. Rice, "Status in Health and Physical Education Score Card #2 Standards Compared with Selected Outcomes in Physical Education" (unpublished Doctor's dissertation, Indiana University, Bloomington, 1957), p. 57-61.

CHAPTER III

PROCEDURE

I. DEVELOPMENT OF THE SCORE CARD

It is the obligation of the school to provide a program by which the needs of the students are met and the values of the community reflected. Evaluation of a program can serve at least two useful purposes. First, it can provide for an increase of knowledge and second, it can initiate a desire for improvement.

Various evaluative measurements have been established. These generally fall into two categories. Some authorities in the field believe a program should be evaluated by the activities offered and how they are taught. Others believe a program should be evaluated in terms of more general characteristics.

The La Porte Score Card has probably been used more than any other check list. It was used in part by the researcher in this study, in combination with other evaluative devices. Included were: (1) teacher evaluation concepts developed by the New York State Department of Education; (2) National Study of Secondary School Evaluation; (3)

Indiana Score Card; and (4) suggestions from Fred Bedelle, Director of Research, Knoxville City Schools.

The La Porte Score Card was based on twenty-three years of intensive study by the Committee on Curriculum Research of the College Physical Education Association. Its purpose was centered upon the measuring of characteristics of the physical education program and the general health, safety, and recreation provisions of an entire school.¹

Dwight Beecher, research associate for the New York State Department of Education was commissioned to develop a teacher evaluation check list. Through extensive research and study he developed some guiding concepts which could be used by teachers and administrators in the difficult task of teacher evaluation. It was understandable that teachers and administrators would be apprehensive about evaluation of their effectiveness. Special attention was given to pupil-teacher relationships as a basic factor in teacher effectiveness.²

¹William Ralph La Porte, The Physical Education Curriculum (Los Angeles: College Book Store, 1955), p. 65.

²Dwight E. Beecher, The Evaluation of Teaching: Backgrounds and Concepts (Syracuse: Syracuse University Press, 1949), pp. 5-8.

A very effective evaluative tool which can be used for self-evaluation or accreditation is the National Study of Secondary School Evaluation. The evaluative criterion was designed by a general committee of leading educators and was formerly known as the Cooperative Study of Secondary School Standards. It was revised in 1960 and the title changed to National Study of Secondary School Evaluation. A check list was devised for each subject area which would provide a minimum of writing and a maximum of thinking. The section for evaluation of physical education contains: (1) organization; (2) nature of offering; (3) physical facilities; (4) instructional staff; (5) instructional activities; (6) instructional materials and equipment; and (7) methods of evaluation.³

The Indiana Physical Education Score Card is considered to pertain only to physical education. It was developed by the Indiana State Department of Public Instruction, Purdue University, Indiana University, Ball State Teachers College, and Indiana State Teachers College. This score card is divided into four areas: (1) administration;

³National Study of Secondary School Evaluation, Evaluative Criteria (Washington, D. C.: National Study of Secondary Schools, 1960), pp. 185-192.

(2) program of activities; (3) class management and instruction; and (4) facilities and equipment.⁴

A necessary part in securing monies under the Elementary-Secondary Education Act is the securing of base-line data showing that a discrepancy exists between programs and/or facilities of regular schools and those included in poverty areas. Bedelle, Director of Research, Knoxville City Schools, who is in charge of this program, suggested those parts of the score card that would be pertinent as base-line data.⁵

Parts of the previously listed criteria were used in the development of the score card. The researcher was concerned with the evaluation of physical education; however, a few general measurements of health, safety, and recreation were considered necessary. It was apparent that many of the areas evaluated were similar in all of the evaluative devices.

The La Porte Score Card with certain areas omitted was used as a basis for the score card devised for this

⁴Bobby Wayne Gee, "An Evaluation of the Junior High Physical Education Programs and Facilities in the Knoxville City School System" (unpublished Master's thesis, The University of Tennessee, Knoxville, 1965), p. 33.

⁵Fred Bedelle, personal interview, February, 1966.

study. Intramural and interschool athletics were combined under program of activities. Studies in Tennessee and Knoxville have shown there is virtually no aquatics program and few programs of modified-individual (corrective) activities. The researcher recognized the need for these programs but considered up-grading of the other areas more essential. Even though the area categories may be the same in this study as in La Porte, the questions within the area may be slightly different.

The following is a comparison of the La Porte criteria and the criteria used in this study:

La Porte Score Card	Pitts* Score Card
I Program of activities	I Organization and administration of class program
II Outdoor areas	II Program of activities
III Indoor areas	III Staff personnel
IV Locker and shower areas	IV Medical examination and first aid services
V Swimming pool	V Outdoor facilities
VI Supplies and equipment	VI Gymnasium area, equipment offices, and staff area

*Refers to researcher

La Porte Score Card		Pitts Score Card	
VII	Medical examination and health services	VII	Locker and shower areas
VIII	Modified-Individual (corrective) activities	VIII	Supplies and equipment
IX	Organization and administration		
X	Administration of intramural and inter- school athletics ⁶		

There were eight areas to be evaluated with ten questions in each area in the Pitts' Score Card. Each question was given a point value from zero to six. A cumulative total point value of 480 could be scored.

In reviewing the various types of score cards, check lists, and evaluative criteria, it was decided that portions of the four more outstanding ones should be used. This decision was made after consideration of the objectives of this study.

This study was primarily concerned with evaluation in terms of general characteristics which, if present, should make for a better program.

II. METHODS OF OBTAINING DATA

Each school was evaluated by obtaining data by both the interview and observation methods. All of the ten

⁶La Porte, op. cit., p. 72.

schools were visited and rated by the researcher, using preplanned rating sheets to facilitate speed and accuracy in collecting the data.

Upon entering a school, permission was secured from the principal to conduct the evaluation. It was explained to the principal and physical education teacher that this was not an evaluation of the teacher's efficiency, but an evaluation to secure base-line data for the Elementary-Secondary Education Act.

Observation Method

The data for the following categories were collected by observation: (1) staff personnel; (2) outdoor facilities; (3) gymnasium; (4) supplies and equipment; (5) lockers and showers; (6) academic grading; (7) student reaction and behavior; and (8) program of activities. The researcher endeavored at all times not to disrupt or distract from the program of instruction.

Interview Method

Interviews were conducted with those persons designated as being in charge of the physical education program. Some schools had a staff of one or more members working in

the physical education area. In some instances these persons were also interviewed.

References to these interviews appear throughout the study. Chapter IV includes a discussion of the evaluations.

CHAPTER IV

ANALYSIS OF DATA

This chapter will be concerned with an analysis of the data obtained by the researcher using the score card shown on pages 66-78.

The objective of this study was to survey the Knoxville City high schools in an attempt to evaluate the existing physical education program and facilities. The eight categories selected for evaluation were: (1) organization and administration; (2) program of activities; (3) staff personnel; (4) medical examinations and first aid services; (5) outdoor facilities; (6) gymnasium area, equipment offices, and staff area; (7) locker and shower; and (8) supplies and equipment. Each category had ten items with a total point value of sixty. Each item had a graduated point value; the scale included a maximum score of six.

I. SCHOOL RATING

The high schools participating in this study were Austin, Bearden, Central, East, Fulton, Holston, Rule, South, Young, and West. Each school was discussed in relation to its rating on items in the score card.

School A

Table II contains the evaluation rating for each item of the score card for School A. The evaluation revealed that of the 480 possible maximum points, 239 points or 50 per cent was scored. Table III shows the schools in rank order with the school acquiring the highest per cent value at the top. Each category, for each individual or subject school, was ranked first through eighth place. As seen in Table III, School A ranked sixth with the category of supplies and equipment receiving the highest rating. Medical examinations and first aid services as well as lockers and showers ranked second.

This school's program of physical education had classes of normal size as a result of students in vocational classes not participating in the physical education activities. All classes had a mixture of grade levels. The researcher observed that some boys, usually the younger ones, were excluded from an activity. The program was very limited for reasons other than facilities. Very few individual or dual sports were included in the program.

A physical examination was required at each grade level, but the requirement was not enforced. Medical questionnaires were issued to be taken home and completed by

TABLE II
RATING SHEET FOR HIGH SCHOOL A

Item	Category								
	Organization and Administration	Program of Activities	Staff Personnel	Medical Examinations And First Aid Services	Outdoor Facilities	Gymnasium Area, Equipment Offices, and Staff Area	Locker and Shower	Supplies and Equipment	
1.	6	0	0	6	0	4	6	2	
2.	4	2	6	0	2	0	6	4	
3.	0	4	6	4	0	4	0	2	
4.	2	4	6	0	4	0	4	6	
5.	6	2	0	2	2	6	4	6	
6.	0	0	2	2	4	6	0	6	
7.	0	6	0	4	0	6	6	6	
8.	4	2	2	4	4	2	4	0	
9.	6	0	0	4	6	1	0	2	
10.	2	2	6	6	4	0	2	6	
Total	30	22	28	32	26	29	32	40	
Total for all categories 239 (Maximum points Possible 480)									
Per Cent 50**									

*Item refers to the items of the score card (pp. 66-78).

** Rounded off to the nearest whole number.

TABLE III
RANK ORDER BY SCHOOLS WITH RANK ORDER
OF CATEGORIES FOR EACH SCHOOL

School	Points Scored	Per Cent Scored	Rank							
			1st	2nd	3rd	4th	5th	6th	7th	8th
D	331	69	3*	8	1	2	5,7**	--	4,6	--
E	293	61	2	3	1	5	7	8	6	4
H	293	61	3	5	1,4	--	2	6	8	7
J	282	59	3,1	--	5	8	6	4	2,7	--
C	249	52	3	1	2	8	4	5,6	--	7
A	239	50	8	7,4	--	1	6	3	5	2
B	238	49	3	2	1	8	4	7	5,6	--
F	237	49	3	1	2,4	--	8	5	7	6
G	223	46	3	1	2	4	8	7	6	5
I	215	45	3	1	2	8	4,7	--	6	5

Maximum possible points = 480

*Refers to category number.

**Combined numbers indicate identical rating.

the family physician; however, only about 10 per cent of the students received examinations and returned the necessary medical form. Better health services could have been provided if faculty members were properly utilized.

The outdoor facilities were limited to a combined track and football field. The field was not marked for any other sport. Hard surface courts and play areas were not available.

Acceptable standards of health and hygiene were not practiced. Showers were required, but the requirement was not enforced. Smoking was permitted in the locker room. Ample first aid books for classroom use were not available.

The indoor area and equipment were somewhat better than in most schools, but still far below acceptable standards. With proper planning these facilities could have been used more extensively. The locker and shower area received poor janitorial attention. Staff facilities were extremely limited. The teacher served as an equipment clerk. Basket attendants for issuing gymnasium clothing and towels were not needed because facilities that were available were not being used.

The girls' program was far superior but was severely curtailed because of limited facilities. There was little or no storage space for equipment.

There was an inadequate supply of balls; however, a minimum supply of individual and dual sports equipment was available. Poor design of facilities limited their use.

School B

Table IV contains the evaluation rating for each item of the score card for School B. This school ranked seventh, with 238 points or 49 per cent of the maximum possible points. Staff personnel and program of activities were rated highest as seen in Table III, page 27.

The program at this school was well organized and there was evidence of planning for the class activities. Very little time was wasted. The academic grade was distributed over various factors but participation was of major importance. A good intramural program was in effect; interscholastic activities included football, basketball, tennis, golf, and swimming. Individual and dual sports were not offered as a part of the physical education program. Staff members were qualified in the area of physical education and were conducting a good program regardless of an extreme shortage of facilities.

The boys took showers and were provided towels for a nominal fee. Girls were not required to take showers. The reason given was that the showers were of the "gang type".

TABLE IV
RATING SHEET FOR HIGH SCHOOL B

Item*	Category							
	Organization and Program of Administration	Staff Activities	Medical Personnel And First Aid Services	Examinations	Outdoor Facilities	Gymnasium Area, Offices, and Staff Area	Equipment Locker and Shower	Supplies and Equipment
1.	2	4	6	4	0	0	0	4
2.	2	6	6	2	4	0	0	0
3.	4	2	2	4	2	0	0	4
4.	4	6	2	4	2	0	4	4
5.	6	2	4	2	2	2	2	6
6.	0	6	6	0	0	2	2	2
7.	4	2	6	4	0	4	2	6
8.	6	4	4	0	2	2	2	2
9.	6	6	6	4	2	2	4	2
10.	6	4	6	6	0	2	0	4
Total	40	42	48	30	14	14	16	34
Total for all categories 238 (Maximum points possible 480).								
Per Cent 49**.								

*Item refers to items of score card (pp. 66-78).

**Rounded off to the nearest whole number.

They were provided towels with which to dry perspiration. The boys' showers, drying area, toilet facilities, and locker space were extremely inadequate with evidence of poor janitorial care. Only one janitor was responsible for service for physical education facilities.

Medical examinations were required but not enforced. This was an administrative difficulty rather than a physical education staff problem. Students were excused from class activity by a physician's permission. First aid supplies and availability were minimal.

The outdoor facilities were inadequate. Entrance and exits were improperly located. No hardtop area or marked fields other than for softball were available. The facilities, both indoor and outdoor, were not designed for such large numbers of students. Staff facilities consisted of one small room that could be used only as office space. Storage space was desperately needed. A safety hazard was created by having equipment stored in the corner of the gymnasium.

Equipment was limited; however, there was a good supply of balls or items for team games. Tumbling was the only type of gymnastics that could be offered due to lack of apparatus.

School C

Table V contains the evaluation rating for each item of the score card for School C. This school ranked fifth, with 249 points or 52 per cent of the maximum possible points. Its highest categories were staff personnel and organization and administration as seen in Table III, page 27.

The program was well organized and competently operated. Class requirements were clearly laid out so that each student understood the basis for grading. Classes had large numbers of students which were detrimental to effective instruction.

The staff had excellent personal qualities, were active in professional organizations, and were well qualified in their field. There was evidence of good student-teacher relations.

Outdoor facilities were very poor. No hard surface area was available; the football field was used for boys' and girls' softball. Entrance and exits were improperly designed for safety and convenience. Rest-rooms and drinking fountains were not accessible. The facilities were not designed for community use.

The gymnasium was in poor condition and was not designed for such large numbers of students. Activity and

TABLE V
RATING SHEET FOR HIGH SCHOOL C

Item*	Category							
	Organization and Administration	Program of Activities	Staff Personnel	Medical Examinations And First Aid Services	Outdoor Facilities	Gymnasium Area, Offices, and Staff Area	Equipment Locker and Shower	Supplies and Equipment
1.	2	4	6	6	0	4	2	0
2.	2	2	6	2	2	0	0	0
3.	6	2	6	4	2	0	2	4
4.	4	6	2	2	4	0	4	6
5.	4	2	4	0	2	0	0	6
6.	0	6	6	2	6	6	4	4
7.	2	3	6	6	0	6	2	6
8.	6	2	4	0	0	0	2	2
9.	6	6	4	6	2	2	0	2
10.	6	4	6	4	2	2	2	4
Total	38	37	50	32	20	20	18	34
Total for all categories 249 (Maximum points possible 480)								
Per Cent 52**								

*Item refers to items of the score card (pp. 66-78).

**Rounded off to the nearest whole number.

storage space were extremely limited. Part of the staff office had been converted into a basket room; the cost of the remodelling was paid from athletic funds and a private organization. The office was designed to be used only for administrative purposes. Its location did not permit proper supervision. There were not enough shower heads or an adequate size drying area for students during a peak load class.

School D

Table VI contains the evaluation rating for each item of the score card for School D. As Seen in Table III, page 27, this school received the highest rating, with 331 points or 69 per cent of the 480 maximum possible points. The categories of staff personnel and supplies and equipment received the highest ratings.

Classes were not overloaded and were under the direction of a competent staff. Classes were conducted in an enthusiastic manner with a minimum of wasted time. Daily instructional activities were adequately planned. A variety of team games were offered which were preceded by a vigorous exercise program. Gymnastics and individual and dual sports were limited due to lack of equipment. Rhythms were offered only in the girls' program. Having one of the better girls'

TABLE VI
RATING SHEET FOR HIGH SCHOOL D

Item*	Category							
	Organization and Administration	Program of Activities	Staff Personnel	Medical Examinations And First Aid Services	Outdoor Facilities	Gymnasium Area, Offices, and Staff Area	Equipment Locker and Shower	Supplies and Equipment
1.	2	4	6	4	4	4	4	6
2.	6	6	6	2	6	4	6	4
3.	6	4	2	4	4	2	4	6
4.	4	6	4	2	2	4	4	2
5.	0	2	6	4	2	6	2	6
6.	4	6	4	0	6	4	2	4
7.	4	3	4	6	2	6	4	6
8.	6	2	6	4	6	2	4	2
9.	6	4	4	4	4	2	6	4
10.	6	4	6	6	4	2	4	6
Total	44	41	48	36	40	36	40	46
Total for all categories 331 (Maximum points possible 480)								
Per Cent 69**								

*Item refers to items of the score card (pp. 66-78).

**Rounded off to the nearest whole number.

programs, a variety of activities was included in the curriculum.

A level, well-grassed play area consisting of about fifteen acres was available. The fields used for games were not located for convenient access to rest-room facilities. A hard surface court or a play area, except for a basketball court, was not available. Courts that were once available had been converted into a parking area. The outside area was constantly used by children in the community but was not properly designed for maximum use.

The gymnasium received the highest rating of all the schools. The inside facilities were adequate to handle all classes during bad weather. Spectator seating was of the type that would not limit floor space for class activity. Indoor facilities were available only for recreational purposes to community organizations on a fee basis. As in all schools, the only gymnastic equipment was mats for tumbling.

Locker and shower area provided adequate space for dressing and storing of street clothing. A larger area for drying was needed. Floors were cleaned daily and a general appearance of neatness was evident. Lockers did not have individual locks which presented a problem in the storing of valuables.

This school had a better than average supply of equipment for individual and dual sports; additionally, a good supply of balls, properly cared for, and in good condition was available. Because some students could not afford a standard uniform, the students were not attired alike. Uniforms were required to be kept clean and neat. Considering all areas, this was one of the finest schools the researcher visited. Even though this school did receive the highest rating, it must be pointed out that only a value of 69 per cent was accumulated.

School E

Table VII contains the evaluation rating for each item of the score card for School E. This school, along with School H, was ranked second with 293 points or 61 per cent of the 480 maximum possible points as seen in Table III, page 27. The category receiving the highest rating was program of activities.

Contributing to the success of the program was cooperation, friendly attitude, enthusiasm, and high professional caliber of the staff members. Good student-teacher rapport was apparent. Very little class time was used for administrative purposes. A variety of team games and individual and dual sports was offered. Rhythmic

TABLE VII
RATING SHEET FOR HIGH SCHOOL E

Item*	Category							
	Organization and Administration	Program of Activities	Staff Personnel	Medical Examinations And First Aid Services	Outdoor Facilities	Gymnasium Area, Offices, and Staff Area	Equipment Locker and Shower	Supplies and Equipment
1.	2	6	6	6	6	4	2	4
2.	2	6	6	2	0	2	6	2
3.	6	2	6	0	0	6	4	4
4.	4	6	2	0	4	2	4	2
5.	4	6	6	0	4	0	2	2
6.	0	6	4	0	6	6	4	2
7.	6	3	4	6	4	4	2	6
8.	6	4	2	0	2	2	2	2
9.	6	6	4	6	6	0	2	2
10.	6	6	6	6	6	2	4	4
Total	42	51	46	26	38	28	32	30
Total for all categories 293 (Maximum points possible 480)								
Per Cent 61**								

*Item refers to items of the score card (pp. 66-78).

**Rounded off to the nearest whole number.

activities were offered only in the girls' program. A vigorous exercise program was conducted as a six week unit; additionally, each class activity was preceded by warm-up drills. Gymnastics was not offered due to lack of equipment. Mats for tumbling were needed.

The outdoor area was limited to a football field, track, and a hard surface play area. A larger outdoor area was needed. The available area was convenient but was not designed for community use.

Space in the gymnasium for large classes as were being conducted was limited. Lines on the floor were properly drawn and the windows and lights were covered with protective devices. Staff facilities were small and were conveniently located for locker room supervision. An equipment office was provided, but more space was needed. Spectator seating limited needed floor space.

Provisions for storing gymnasium clothing was provided, with students serving as attendants. Better conditions for drying gymnasium clothing were needed. Towels were made available on a small fee basis. More showers as well as drying space was needed.

The number of students having received medical examinations was insufficient. A health record adequate for

physical education purposes was not available. A student was excused from an activity period only with a doctor's permission. Upon returning to school after an illness, a student was assigned to regular class activity or had to sit-out inasmuch as there was no program of adaptive physical education.

School F

Table VIII contains the evaluation rating for each item of the score card for School F. This school ranked eighth, with 237 points or 49 percent of the 480 maximum possible points as seen in Table III, page 27. The category receiving the highest rating for this school was staff personnel.

The staff had good personal qualities such as voice control, friendliness, and understanding. The primary physical education teacher was working on his Master's degree. A student teacher was conducting the class program under supervision of the staff. The dress of the staff was appropriate and neat. The teacher stressed performance fundamentals combined with social and ethical standards.

Coeducation instructional opportunities did not exist. Rhythms were taught only in the girls' program. The number of students in the classes was above forty and in

TABLE VIII
RATING SHEET FOR HIGH SCHOOL F

Item*	Category							
	Organization and Administration	Program of Activities	Staff Personnel	Medical Examinations And First Aid Services	Outdoor Facilities	Gymnasium Area, Offices, and Staff Area	Equipment Locker and Shower	Supplies and Equipment
1.	0	4	4	2	0	2	2	4
2.	2	2	6	0	2	0	4	0
3.	6	2	4	4	2	0	0	4
4.	4	6	4	3	6	2	4	2
5.	4	0	6	4	4	2	2	6
6.	0	4	4	0	2	4	2	4
7.	4	3	4	6	0	6	4	4
8.	6	0	4	0	2	0	4	2
9.	6	6	4	6	2	0	0	4
10.	4	4	4	6	4	2	1	0
Total	36	31	44	31	24	18	23	30
Total for all categories 237 (Maximum points possible 480)								
Per Cent 49**								

*Item refers to items of the score card (pp. 66-78).

**Rounded off to the nearest whole number.

some instances above sixty. The community was not informed of physical education activities through special demonstrations. An adequate system of grading was maintained. The physical education and interscholastic program were under the direction of a competent teacher, who was well trained and had had a number of years experience in these areas. This school had a limited adaptive or restrictive program.

The gymnasium area was extremely inadequate. Floor space was limited. The staff office was used for storage space and the office was not properly located for good supervision. No private dressing area for staff members was available. Lights and windows were covered with protective devices. Spectator seating was of the type that would not limit usable floor space. No gymnastic or tumbling equipment was available.

The outdoor area was not large enough and in no way was it designed for community use. The area that was available was conveniently located for activity classes. There was no hard surface play area of any type. Part of the outside area was enclosed.

Locker and shower area was inadequate. Provisions for hanging street clothing were provided, but there was no provision for storing gymnasium clothing. Toilet facilities

were extremely limited. Valuables had to be kept by the teacher due to inadequate lock protection.

Balls were available and were kept in good condition. No individual or dual sports equipment for general class use was available. Students were not uniformed alike and all gymnasium clothing was laundered at least once a week.

School G

Table IX contains the evaluation rating for each item of the score card of School G. This school ranked ninth, with 223 points or 46 per cent of the 480 maximum possible points as seen in Table III, page 27. The category receiving the highest rating was staff personnel.

Personal qualities of the staff were very good. Initiative was shown through various projects that had been undertaken. Dress of the teachers and students was appropriate and neat. Teachers stressed performance fundamentals and social and ethical standards. Classes were extremely large and various grade levels were mixed in a single period.

The activities were conducted on a unit basis. Careful planning of activities was evident. A good program of intramurals existed, but the boys' and girls' basic programs

TABLE IX
RATING SHEET FOR HIGH SCHOOL G

Item*	Category							
	Organization and Administration	Program of Activities	Staff Personnel	Medical Examinations And First Aid Services	Outdoor Facilities	Gymnasium Area, Equipment Offices, and Staff Area	Locker and Shower	Supplies and Equipment
1.	2	4	6	6	0	2	2	2
2.	2	4	6	2	0	0	2	0
3.	6	4	2	4	0	2	2	4
4.	4	6	2	2	0	2	4	2
5.	4	0	6	4	0	0	4	6
6.	0	4	4	0	6	4	2	4
7.	4	0	4	2	0	3	0	4
8.	6	2	4	0	0	2	0	2
9.	6	6	6	6	0	0	6	0
10.	6	4	6	6	2	0	0	2
Total	40	34	46	32	8	15	22	26
Total for all categories 223 (Maximum points possible 480)								
Per Cent 46**								

*Item refers to items of the score card (pp. 66-78).

**Rounded off to the nearest whole number.

were separate. Rhythmic activities were offered only in the girls' program. Gymnastics and individual and dual sports were nonexistent due to a lack of equipment and space. A conditioning program was required. Team games were dominant in the program. Medical examinations were not frequent enough to be of real value.

The only outdoor facilities consisted of a football field and a track. The entrance and exits to the field presented a safety hazard. Use of the field for physical education purposes was extremely limited.

The indoor area was also inadequate. Staff offices were not properly designed or equipped. There was virtually no women's staff office space. Some classes had as many as ninety students with only one-half a gymnasium floor. Valuable floor space was used for permanent spectator seating. Equipment storage space was very limited and some of it was used as a concession stand.

The locker and shower areas were far from adequate. A converted boys' basketball dressing room was used by the girls as a locker and shower room. The boys' showers were not adequate for such large classes. There were not enough toilets nor were they conveniently located. Students had less than one-fourth locker space each for storing street

and gymnasium clothing. They did have an adequate lock system. Improvements that had been made came from athletic funds.

A minimum supply of balls was available and they were kept in good condition. Equipment used for rhythmic activities had been purchased by the teacher from personal funds.

School H

Table X contains the evaluation rating for each item of the score card for School H. This school, along with School E, was ranked second with 293 points or 61 per cent of the 480 maximum possible points as seen in Table III, page 27. The categories receiving the highest ratings were staff personnel and outdoor facilities.

The physical education teachers at this school were well qualified. The boys' teacher held a Master's degree, was very active in professional organizations, and had more than fifteen years of teaching and coaching experience. Personal qualities of voice control, friendliness, and understanding were very good. The staff's appearance was clean and neat; however, the boys' teacher chewed tobacco and smoked in the presence of students. A good relationship

TABLE X
RATING SHEET FOR HIGH SCHOOL H

Item*	Category							
	Organization and Administration	Program of Activities	Staff Personnel	Medical Examinations And First Aid Services	Outdoor Facilities	Gymnasium Area, Equipment Offices, and Staff Area	Locker and Shower	Supplies and Equipment
1.	2	4	4	6	6	2	0	4
2.	2	6	6	2	4	0	6	2
3.	6	4	6	4	6	2	0	4
4.	2	6	6	6	6	4	4	2
5.	4	0	4	6	4	4	2	0
6.	4	6	2	0	6	4	2	4
7.	4	3	6	6	2	6	4	6
8.	6	4	4	2	0	2	0	0
9.	6	4	4	4	6	2	0	0
10.	6	4	6	6	6	2	2	4
Total	42	41	48	42	46	28	20	26
Total for all categories 293 (Maximum points possible 480)								
Per Cent 61**								

*Item refers to items of the score card (pp. 66-78).

**Rounded off to the nearest whole number.

seemed to exist between the teachers and the students. The girls' teacher possessed exceptional initiative.

The outdoor facilities were large and were designed for community use. Sufficient play fields were available. Access to the outdoor area was conveniently located with entrance and exits free from safety hazards. The various activity fields were level and well-grassed. Most of the maintenance work was done by the instructor and students. A hard surface play area was available without proper marking.

The gymnasium was of the same design as the other schools. The staff offices were designed only for administrative purposes. Only one major area could be supervised from the office. Spectator seating was of the type which allowed maximum floor space for class activities. Two teaching stations were utilized which reduced the crowded conditions of large classes. Equipment storage space was extremely limited. Other than mats for tumbling, no gymnastic equipment was available.

Lockers and showers were inadequate. One full locker for hanging street clothing was provided with no provision for storing gymnasium clothing. Drying and dressing space was extremely limited. Valuables were kept in the instructor's

office, causing a steady stream of students in and out at the beginning and end of a class period. Equipment clerks were needed.

Both the boys' and girls' program was carefully planned and well organized. Classes were large with mixed grade levels. Activities in the boys' program consisted of fitness activities and a variety of team games. The girls had limited individual and dual sports, rhythmic activities, and team games.

A good health record containing current data was available. Students returning after an illness were assigned to a restricted program. Adequate first aid supplies were available.

School I

Table XI contains the evaluation rating for each item of the score card for School I. Table III, page 27, shows School I ranked tenth, with 215 points or 45 per cent of the 480 maximum possible points. The highest categories were staff personnel and organization and administration.

The staff conducted the best program possible under the worst physical conditions in the school system. Classes had as many as seventy students. Shower facilities were inadequate for the large number of students. Street clothing

TABLE XI
RATING SHEET FOR HIGH SCHOOL I

Item*	Category							
	Organization and Program of Administration	Activities	Staff Personnel	Medical Examinations And First Aid Services	Outdoor Facilities	Gymnasium Area, Equipment Offices, and Staff Area	Locker and Shower	Supplies and Equipment
1.	4	4	6	0	0	2	0	4
2.	0	0	6	2	0	0	4	0
3.	6	2	6	0	0	0	0	2
4.	2	2	6	0	0	0	4	2
5.	0	2	4	2	0	0	2	6
6.	4	6	6	0	6	6	4	6
7.	6	6	6	2	0	3	0	4
8.	6	4	6	0	2	2	2	2
9.	6	6	4	4	0	0	0	0
10.	6	4	6	6	0	0	0	4
Total	40	36	56	16	8	13	16	30
Total for all categories 215 (Maximum points possible 480)								
Per Cent 45**								

*Item refers to items of the score card (pp. 66-78).

**Rounded off to the nearest whole number.

was hung on hooks attached to baseboards around the walls and there was no provision for storing gymnasium clothing. Floor space was extremely limited. Janitorial service was poor. Two toilets had to accommodate the students of the physical education and industrial arts classes. The outdoor facilities consisted of a football field and track. In order to get to the outdoor facilities, students had to cross a major four-lane highway.

Teachers and students dressed appropriately and neatly. Those students who could not afford the standard gymnasium attire were provided uniforms through athletic funds. A good supply of balls was available, but no individual or dual sport's equipment was available. No gymnastic or tumbling equipment was available.

The staff had adequate educational preparation. They were friendly, enthusiastic, and had established excellent rapport with the students. The staff members were very active in professional organizations. Classes were conducted in an orderly fashion with little or no time wasted.

The program of activities was comparable to the other schools. Medical examinations and first aid services were far below average. The staff was disturbed over the lack of adequate medical examinations.

School J

Table XII contains the evaluation rating for each item of the score card for School J. Table III, page 27, shows School J ranked fourth, with 282 points or 59 per cent of the 480 maximum possible points. The highest category was staff personnel.

The staff was highly qualified. Such personal qualities as voice control, friendliness, and understanding were quite evident. There were no rhythmic activities. Gymnastics were not offered due to a lack of equipment. The major emphasis was on team games with very limited individual and dual sports. Conditioning activities were not required daily.

Each class had over forty students, and no one was allowed to substitute work for class activities. Each class consisted of students of one grade level. Pupils' scores were recorded and a good system of grading was used. Activities were conducted on a unit basis.

Ample outdoor area was available. Play fields were relatively near the building with convenient entrances and exits; rest-rooms and drinking facilities were easily accessible. A hard surface play area was available. Field areas were level and well-grassed.

TABLE XII
RATING SHEET FOR HIGH SCHOOL J

Item*	Category							
	Organization and Administration	Program of Activities	Staff Personnel	Medical Examinations And First Aid Services	Outdoor Facilities	Gymnasium Area, Equipment Offices, and Staff Area	Locker and Shower	Supplies and Equipment
1.	2	2	6	4	4	6	0	4
2.	2	2	6	2	6	6	6	4
3.	6	0	6	4	2	0	0	4
4.	6	6	6	6	6	4	4	2
5.	6	2	6	0	4	2	2	4
6.	2	2	0	0	4	2	4	2
7.	6	0	2	4	2	6	2	6
8.	6	6	4	0	2	4	0	2
9.	6	2	6	2	4	2	4	4
10.	4	4	4	6	6	2	4	4
Total	46	26	46	28	40	34	26	36
Total for all categories 282 (Maximum points possible 480)								
Per Cent 59**								

*Item refers to items of the score card (pp. 66-78).

**Rounded off to the nearest whole number.

This school had the only staff offices with a private rest-room and dressing facilities; however, the staff offices were not conveniently located for proper supervision. Conditions were crowded although the indoor facilities were adequate to handle all classes during bad weather. Lights and windows did not have proper protective devices.

More shower heads were needed for the large classes. Floor space for dressing was extremely limited. Each student had a full locker for hanging street clothes, but no provisions were made for storing gymnasium clothing. The locker room was relatively clean and the floors were cleaned daily. Valuables were kept in special boxes in the instructor's office. Student's gymnasium clothing was not uniform.

A good supply of balls was available with an above average supply of individual and dual sports equipment. Equipment was kept in good condition. The issuing of towels and equipment was done by the instructor or student assistants.

II. SUMMARY RATING

The score card could be divided into two major divisions: (1) program; and (2) facilities. The program

was evaluated according to four categories: (1) organization and administration; (2) program of activities; (3) staff personnel; and (4) medical examination and first aid services. The facilities were also classified according to four categories: (1) outdoor facilities; (2) gymnasium area, equipment offices, and staff area; (3) locker and shower; and (4) supplies and equipment. The categories placed in rank order by percentages as seen in Table XIII are:

<u>Category</u>	<u>Per Cent</u>
Staff Personnel	77
Organization and Administration	61
Program of Activities	60
Supplies and Equipment	55
Medical Examination and First Aid Services	51
Outdoor Facilities	44
Locker and Shower	41
Gymnasium Area, Equipment Offices, and Staff Area	39

These percentages show that the facilities scored far below the program. The researcher considers only the category of Staff Personnel as scoring an acceptable percentage.

TABLE XIII
SUMMARY RATING SHEET**

Categories	School										Average
	A	B	C	D	E	F	G	H	I	J	
1. Organization and Administration	50	67	64	73	70	60	67	70	67	77	61
2. Program of Activities	37	70	61	68	85	52	57	68	60	43	60
3. Staff Personnel	47	80	83	80	77	73	77	80	93	77	77
4. Medical Examinations and First Aid Supplies	53	50	53	60	43	51	53	70	27	47	51
5. Outdoor Facilities	43	23	33	67	63	40	13	77	13	67	44
6. Gymnasium Area, Equipment Offices and Staff Area	45	23	33	60	47	30	25	47	22	57	39
7. Locker and Shower	53	27	30	67	53	38	37	33	27	43	41
8. Supplies and Equipment	67	57	57	77	50	50	43	43	50	60	55
Average for all Categories	50	49	52	69	61	49	46	61	45	59	

*Tabulated in percentage.

Certain conditions or activities were common among the schools. These include:

1. Most of the schools supplemented their program with some form of individual or dual sports activity such as golf, swimming, tennis, or bowling. These programs were conducted either by outside organizations or on an interscholastic basis and were not presented as a part of the regular physical education program.

2. Most of the gymnasiums were of similar design.

3. Programs were conducted on a unit basis which coincided with the grade period.

4. The various staffs were active in certain professional organizations as required by the school system. Few joined associations other than those required.

5. The school's nurse service was provided on a rotating basis. Each nurse had a certain number of schools she must service.

6. It was a requirement of the school system that each student have a medical examination at least once at the beginning of each school level but this rule was not enforced.

7. In most schools, hard top courts once used for physical education activities had been converted into parking areas.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

I. CONCLUSIONS

From the evaluative criteria used, the following conclusions were made with regard to the subject schools:

1. Coeducational activity was mildly encouraged.
2. Classes were not limited in size and were in most instances quite large.
3. Students were not assigned to classes by grade level nor were they grouped in an adaptive program on the basis of a medical examination.
4. Physical education teachers were given reasonable time for class planning.
5. Most physical education programs were administered in a very efficient manner.
6. Intramural activities were limited.
7. The program for boys consisted primarily of team games with one unit in tumbling.
8. Teachers were adequately trained and they were teaching in their major field.
9. Health records with pertinent information for physical education purposes were not available.

10. Outdoor play areas were very inadequate.
11. Indoor facilities were inadequate in most schools.
12. Equipment storage space and staff facilities were extremely inadequate.
13. Lockers and showers were below minimum standards.
14. Supplies and equipment generally consisted of various types of balls and softball bats.
All schools had volleyball nets, but storage was usually improvised and inadequate.
15. Care and maintenance of the equipment was very commendable in most cases.
16. Some schools did not take full advantage of the facilities available.

II. RECOMMENDATIONS

Based on the evaluative criteria used in this study, the following recommendations are made:

1. In cooperation with the girls' teacher, a program of rhythmic activities should be developed for boys.
2. There should be greater effort made to keep the community informed of physical education aims

and objectives through the use of special demonstrations and other means.

3. The intramurals program should be expanded.
4. Yearly medical examinations should be required and enforced. The results of these examinations should be filed in a manner which would be of benefit to the physical education teacher.
5. Nurse services should be expanded by reducing the number of schools for which a nurse is responsible.
6. A program should be initiated for the expansion and improvement of outdoor play areas.
7. The locker and shower areas should be renovated to meet requirements for the number of students enrolled as well as to facilitate supervision.
8. Some type of alternate gymnasium or playroom for girls' physical education should be added to each school.
9. With the expansion of facilities, a more varied program of activities should be initiated.
Some schools need immediate expansion.
10. Janitorial services should be greatly increased.
11. A better adaptive program should be developed.

12. Considerations for future construction of
gymnasiums should include such factors as:
 - a. large numbers of students in classes.
 - b. increased emphasis on individual and dual
sports.
 - c. increased emphasis on gymnastics.
 - d. larger outdoor play areas.
 - e. adequate audio-visual teaching devices.
 - f. facilities for aquatics.
 - g. improved health services.
 - h. better staff facilities.

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APPENDIX

SCORE CARD FOR THE EVALUATION OF THE PHYSICAL
EDUCATION PROGRAM IN KNOXVILLE CITY SCHOOLS

1. ORGANIZATION AND ADMINISTRATION OF
CLASS PROGRAM
(Total possible points - 60)

1. Frequent opportunity is provided for coeducational activity, either in class instruction or in recreational participation. (Mild encouragement=2; coeducational intramural sports=4; coeducational elective class instruction=6)

Score _____
2. Instructional classes for normal students are limited in size for effective instruction. (Over 40 students=2; 31-39 students=4; 30 or less students=6)

Score _____
3. Students are not permitted to substitute any work or activity in place of the regular class. (Score=6)

Score _____
4. Consideration is given to grade level and assignment to class is made accordingly. (All grades mixed=2; two grades mixed=4; each grade level separate=6)

Score _____
5. Teacher work load balanced so as to allow time for class preparation especially in cases where intramural and extra duties are required. (One free period per day=4; two free periods =6)

Score _____
6. The community is informed by means of special physical education demonstrations or during P.T.A. meetings. (Once a year=4; twice a year=6)

Score _____

7. Final grade in activity class is distributed over (1) performance skills, (2) knowledge of rules and strategy, (3) social attitudes. (Fair test=2; good test=4; excellent test=6)

Score _____

8. Some written means of pupil progress is recorded for grading purposes. (Score=6)

Score _____

9. The physical education program, including interscholastic and intramural activities, is under the direction of a professionally trained specialist in physical education. (One area, physical education=4; qualified in all areas=6)

Score _____

10. Program calls for systematic class instruction in activity fundamentals on the "block" or "unit" basis (continuous daily instruction in an activity for from three to six weeks). (Definite, but unsystematic instruction=2; systematic instruction in other than block program=4; systematic block instruction=6)

Score _____

2. PROGRAM OF ACTIVITIES

(Total possible points - 60)

1. There is evidence of careful planning of instructional activities. (Fair planning=2; average or a little above=4; thorough planning=6)

Score _____

2. Participation in intramural sports in addition to class instruction is available for all students. (Girls only=2; partial boys and girls=4; boys and girls=6)

Score _____

3. Yearly program (course of study, including special objectives) for each grade level is on file in the principal's office and activity schedules are posted on gymnasium office bulletin boards. (Fair program=2; good=4; excellent=6)
- Score _____
4. A variety of team games are offered. (Less than three=2; three=4; four or more=6)
- Score _____
5. Individual and dual sports are offered. (Less than two=2; three=4; four or more=6)
- Score _____
6. Conditioning activities are required. (Required but determined by class activity=2; ten minutes vigorous with rest intervals=4; five to ten minutes vigorous with no rest intervals=6)
- Score _____
7. Rhythmic activities offered. (Girls only=3; boys and girls=6)
- Score _____
8. Combative, gymnastics, and tumbling activities are offered. (One activity=2; two=4; all three=6)
- Score _____
9. Teaching through demonstration is used effectively. (Score=6)
- Score _____
10. Games of recreational nature are taught that could be used outside of school. (Score=6)
- Score _____

3. STAFF PERSONNEL
(Total Possible Points - 60)

1. Personal qualities, (1) voice control, (2) enthusiastic, (3) friendly and understanding, (4) shows initiative. (Fair=2; good=4; excellent=6)

Score _____

2. Staff teaching in major field. (Score=6)

Score _____

3. Active in professional organizations. (Fairly active=2; active=4; very active=6)

Score _____

4. Adequate educational preparation. (Bachelors degree=2; Bachelors degree working on Masters=4; Masters or above=6)

Score _____

5. Teacher has objectives and is trying to accomplish these objectives. (Score=6)

Score _____

6. Dress of both teacher and pupil is appropriate and neat. (Pupil=2; teacher=4; pupil and teacher=6)

Score _____

7. Conducts class in an orderly fashion with little or no time wasted. (Some time wasted=2; little or no time wasted=6)

Score _____

8. Maintains active interest in in-service education or clinics. (Score=6)

Score _____

9. Teacher stresses co-ordinated teaching; combining with performance fundamentals, social and ethical standards, health and safety factors, and a general attitude of happiness in the job. (Fair=2; good=4; excellent=6)

Score _____

10. Teacher maintains good working relations with staff and other faculty members. (Fair=2; good=4; excellent=6)

Score _____

4. MEDICAL EXAMINATIONS AND FIRST AID SERVICES
(Total Possible Points - 60)

1. First Aid supplies are available at all times. (Fair supplies=2; good=4; excellent=6)

Score _____

2. Trained school nurse service is provided for both school and home visitation purposes, by either part-time or full-time nurses according to size of school. (Rotating nurse=2; good service=4; excellent service=6)

Score _____

3. A comprehensive examination by a physician (assisted by physical education instructors) is required of every student at least once in each school level; and includes at least a careful check for orthopedic defects, vision, hearing, nose, mouth, throat, teeth, heart, lungs, nutrition, skin, nervous condition, and possible hernia. (Once in school level=4; two or more times=6)

Score _____

4. No student is permitted to participate in strenuous class or athletic activity without a satisfactory medical examination. (If cannot participate must have excuse=2-6)

Score _____

5. A permanent, continuous, progressive health record is maintained and passed on for each child and is used as a basis for advice and follow-up health service, and instructor feels a good health record is available. (Fair=2; good=4; excellent=6)

Score _____

6. On basis of medical examination children are classified into three divisions, or equivalent; A, average normal for unlimited participation; B, subnormal, with temporary or permanent limitations to restricted activity; C, offered individual or corrective treatment, supplementing normal program. (Fair=2; good=4; excellent=6)

Score _____

7. Assignment to rest, restricted, or individual activity, or excused from required normal physical education activity (for other than temporary illness) is approved by the school physician, in consultation with the physical education department head. (Score=6)

Score _____

8. Students returning after influenza or other serious illness are inspected by the school physician or nurse and assigned to a modified program until their condition justifies resumption of normal activity; students sent home in case of illness or accident are accompanied by an adult. (Standards approximately met=2-4; fully met=6)

Score _____

9. A health examination is made by the school physician all teacher applicants, and a careful inspection upon returning after illness of two weeks or more. (Standards approximately met=2-4; standards fully met=6)

Score _____

10. Nonmedical teachers or school officers are never permitted to diagnose or treat health disorders; but a close co-operation is maintained between physical education teachers and the school physician. (Score=6)

Score _____

5. OUTDOOR FACILITIES
(Total Possible Points - 60)

1. The facilities are designed and open for community use, (A) lighted, (B) benches, (C) convenient parking area. (Score=6)

Score _____

2. Total available unobstructed field and court space for school and community use varies from four to fifteen or more acres, according to size of school. (Minimum of four acres and one additional acre for each unit of five hundred students=2; minimum of six acres, and one additional acre for each additional unit of four hundred students=4; minimum of eight acres, and one additional acre for each additional unit of three hundred students=6)

Score _____

3. Sufficient playing fields are marked off and equipped (for multiple use in field hockey, field ball, soccer, softball, speedball, touch football, et cetera) to accomodate both boys and girls at peak load outside classes. (Fair facilities=2; good=4; excellent=6)

Score _____

4. Outdoor facilities are readily accessible. (Over 100 yards from gymnasium=2; 50-100 yards from gymnasium=4; less than 50 yards=6)

Score _____

5. The outdoor area is enclosed, free from obstructions, and safety hazards. (Fair=2; good=4; excellent=6)

Score _____

6. Jumping pits and field apparatus are protected by sawdust, sand or dirt kept soft. (Dirt kept soft=2; sand=4; sawdust=6)

Score _____

7. Hard surface playing area is available and clearly marked off for various games. (Available=2; available and in good condition=4; available, in good condition, and clearly marked off=6)

Score _____

8. Maintenance work on fields and courts is done by workmen other than instructors or students. (Partly by others=2; mostly by others=4; entirely by others=6)

Score _____

9. Field areas are well-grassed and relatively dustless, level, and firm. (Fair=2; good=4; excellent=6)

Score _____

10. Entrance and exits to outside area convenient and in good condition (free from safety hazards). (Score=6)

Score _____

6. GYMNASIUM AREA, EQUIPMENT OFFICES, AND STAFF AREA
(Total Possible Points - 60)

1. Gymnasium floors are of hardwood; lines are properly painted; walls are smooth and clear; painting is a light neutral color; radiators and drinking fountains are recessed; ceiling height is between eighteen and twenty-two feet. (Standards approximately met=2; entirely met=6)

Score _____

2. Rest rooms each for men and women staff members are provided with appropriate dressing rooms and showers. (Satisfactory facilities for women or men only=4; satisfactory for both=6)

Score _____

3. An equipment office is provided in both boys' and girls' locker rooms, properly arranged for issuing towels, suits, and supplies for both indoor and outdoor use. (Satisfactory office for one only (boys or girls)=2-4; satisfactory for both=6)

Score _____

4. Properly equipped instructors office (separate for men and women), with suitable facilities for medical examinations, are available in good location for adequate supervision of student activities. (Well-equipped offices but poorly located for supervision=2; well-equipped with good supervision of one major activity area=4; well-equipped with supervision of two or more major activity areas=6)

Score _____

5. The combined inside facilities (including classrooms, gymnasiums, and special rooms) are adequate to handle all classes (boys and girls), inside, during bad weather. (Approximately=2-4; entirely=6)

Score _____

6. Lights and windows are covered with protective devices. (Score=6)

Score _____

7. Provision is made for spectator seating but of a nature that would not limit usable floor space during regular classes. (Score=6)

Score _____

8. The facilities are opened for use by the public. (To organizations on a fee basis=2; open for free play=6)

Score _____

9. The gymnasium is equipped with ropes, rings, bars, mats, horses, ladders, trampoline, bulletin boards, and chalk boards. (At least three items=2; five items=4; seven or more=6)
10. A swimming pool is available and used as a part of the program. (Pool available from outside source used only for a swimming team=2; pool available through outside sources=4; pool available on school grounds=6)

Score _____

7. LOCKER AND SHOWER AREAS
(Total Possible Points - 60)

1. Locker rooms provide floor space (including lockers) adequate to care for peak load of use (peak load equals largest number of students dressing in any one class period). (Nine square feet or less per student=2; ten or eleven square feet per student=4; thirteen or more square feet=6)

Score _____

2. Adequate locker space for hanging street clothing is available. (One-half locker per student=4; full locker per student=6)

Score _____

3. Gymnasium clothing properly stored as to allow proper drying and adequate facilities for easy distribution. (Properly stored=2; easy distribution=4; proper storage and easy distribution=6)

Score _____

4. Towels are made available. (Furnished by student=2; by school with fee=4; by school without fee=6)

Score _____

5. Adequate lock protection is provided for lockers or baskets. (Valuables kept by teacher in special boxes=2; key or combination locks=4; high-grade combination padlocks=6)
- Score _____
6. Continuous supervision by either equipment clerks or instructors is provided for locker areas while in use by students. (Fair supervision=2; good=4; excellent=6)
- Score _____
7. Boys' shower rooms are of the "gang" type, with adequate drying room capacity, and sufficient shower heads to take care of peak load adequately; girls' area offer choice of "gang" type or closed booth type. (Standards approximately met=4; fully met=6)
- Score _____
8. Hot water is thermostatically controlled to prevent scalding; shower heads are neck height; soap is provided in all shower areas. (Standards approximately met=4; fully met=6)
- Score _____
9. Floors are washed daily with antiseptic solution; and antiseptic footbaths are provided for optional use. (Standards approximately met=4; fully met=6)
- Score _____
10. Adequate toilet facilities are available in separate areas immediately adjoining locker and shower rooms (accessible directly to playground); and contain adequate bowls, urinals, washbasins, hot and cold water, soap, drinking fountains, mirrors, wastebaskets, and paper towels or drying machine. (Fair facilities=2; good=4; excellent=6)
- Score _____

8. SUPPLIES AND EQUIPMENT
(Total Possible Points - 60)

1. Adequate supply of balls (in good condition) and similar equipment is available for class instruction in all team activities offered. (Fair=2; good=4; excellent=6)

Score _____

2. Class sets of supplies for individual or dual sports are provided for class instruction in all activities offered (archery, badminton, handball, golf, horseshoes, table tennis, squash, tennis, et cetera). (Individual supplies for each member of average size class=4; for each member of peak load class=6)

Score _____

3. All class supplies are kept repaired in good condition (balls clean and well inflated, bats taped) both for efficiency and safety. (Fair condition=2; good=4; excellent=6)

Score _____

4. All students wear appropriate uniforms in activity classes. (Mixture, furnished by themselves=2; uniforms alike=6)

Score _____

5. Uniforms laundered weekly=6

Score _____

6. Reference materials provide information concerning a variety of games, sports and recreational activities, health, nutrition, family living. (Fair supply=2; good=4; excellent=6)

Score _____

7. Extra equipment such as tape measures, timers, air pump, high jump bar and lining apparatus available and in working condition. (Score 2-6)

Score _____

8. Adequate equipment clerks (other than instructors) are provided at all activity hours to handle equipment and supplies (including towel dispensing). (Volunteer student help (not for physical education credit)=2; paid student help=4; full-time equipment clerk=6)

Score _____

9. Charts, diagrams, and similar visual materials are available. (Fair supply=2; good=4; excellent=6)

Score _____

10. Phonograph, records and other necessary musical equipment furnished for dance classes are available. (Fair equipment and service=2; good=4; excellent=6)

Score _____