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To the Graduate Council:

I am submitting herewith a thesis submitted by John Ralph Puckett entitled "An Evaluation of Certain Areas of Physical Education Service Programs of Selected White and Negro Colleges in Tennessee." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Educational Administration and Supervision.

Galen N. Dewey
Major Professor

We have read this thesis and
recommend its acceptance:

John W. Gilliland
George F. Brady
John B. Lloyd
Earl M. Ramey

Accepted for the Council:

Alvin H. Henthorn
Dean of the Graduate School

33

AN EVALUATION OF CERTAIN AREAS OF PHYSICAL
EDUCATION SERVICE PROGRAMS OF SELECTED
WHITE AND NEGRO COLLEGES IN TENNESSEE

A THESIS

Submitted to
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John Ralph Puckett
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The writer wishes to dedicate this study to his wife, Merle, and son, "Rocky."

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CHAPTER I

INTRODUCTION

During World War II inadequacies in physical education programs in the United States were clearly revealed. A study of the physical fitness of men in the Army Air Force disclosed that almost one-half of inductees were in poor or very poor condition. The Army and Navy testing programs also revealed that a large percentage of inductees was in poor physical condition. These test results did not include the numerous persons who were rejected from military service for various reasons.

Most of the men displayed poor performance in basic motor skills such as jumping, throwing, falling and lifting. It was also discovered that nearly one-half of the men did not possess a sufficient degree of skill in any sport to desire participation in that activity.¹

These tests indicated that physical education programs in this country had not fulfilled such objectives as physical development or physical fitness and the development of recreational skills such as golf, tennis, swimming and badminton.

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

Although much was done following World War II to improve this situation, physical education practice still continued to lag far behind current knowledge and philosophy.²

Recently it has been pointed out that Americans are becoming physically soft because of a high degree of mechanization in industry and everyday life with a resulting lack of adequate physical exertion to maintain body fitness. It has also been emphasized that if too many persons become soft and weak, then the nation itself may eventually acquire these same characteristics.³

It is the responsibility of physical educators to do their utmost to prevent the degeneration of physical fitness in American youth and adults. Improved programs of physical education should aid in increasing the strength and health of individuals and ultimately the strength of the nation.

One method of improving physical education is through continuous evaluations of present physical education programs on all levels, elementary through college, in order to discover and as nearly as possible to eliminate deficiencies. Along with evaluations of individual programs, a comparison

²Loc. cit.

³Lawrence E. Morehouse, "American Living - A Threat to Fitness," Journal of Health, Physical Education and Recreation, 20 ff., September 1956.

with other programs may prove helpful in discovering deficiencies which need to be corrected.

Statement of the Problem

The problem in this study was to compare the physical education service programs of selected white institutions of higher education with those of somewhat comparable Negro institutions, with emphasis on available facilities, equipment, staff personnel, organization and program of activities.

Sub-Problems

In order to solve the major problem of this study, the following sub-problems were undertaken:

1. To select five accredited four-year white institutions of higher education in Tennessee to be compared with five somewhat comparable Negro institutions in the state.

2. To develop evaluative criteria to be utilized for purposes of evaluation of physical education service programs of each of the ten selected institutions.

3. To submit the evaluative criteria for validation by a panel of physical education specialists.

4. To describe the physical education service programs of each of the selected institutions, with emphasis upon the following areas: facilities, equipment, staff

personnel, organization of the program and curriculum.

5. To draw conclusions and offer suggestions for program improvement, based upon individual evaluations and a comparison of the physical education service programs of the selected white institutions with those of the selected Negro institutions.

Need for the Study

Two of the chief reasons for limited physical education programs have been found to be inadequate facilities and a lack of application of educationally sound methods of curriculum construction.⁴ Other limiting factors in the development of physical education service programs are lack of adequate equipment and inadequate preparation of staff members.

In instances where facilities and equipment are inadequate, the program of activities is necessarily limited, with the result that the needs of many students are not fulfilled. As an example, if no swimming pool, tennis courts, or bowling alleys are provided, then the activities for which these facilities would be used are eliminated or become limited to a considerable extent. Other limitations are placed upon active participation by class members if adequate equipment is not supplied for their use.

⁴Ibid., pp. 70-71.

Inadequately prepared staff members is another factor detrimental to physical education programs. It is quite unlikely that poorly trained staff members are capable of planning a program of activities suitable to the age groups participating in them. Also, activities in which staff members are not properly trained are usually eliminated or proper instruction in those activities is not given. In either instance students do not receive maximum benefit from the physical education programs.

Financial support is usually a necessary factor in improving the previously mentioned inadequacies. In most of the states of the South, there are inequalities in educational provisions for Negroes. The per capita expenditure for Negro education is lower than the per capita expenditure for white education.⁵ Differences in expenditures usually indicate differences in available facilities and equipment. Inadequate facilities and equipment for some place a limiting effect upon the type and number of activities to be offered in their physical education programs.

The purpose of this study was to evaluate the physical education service programs of the selected institutions and to compare the programs of the selected white institutions with those of the selected Negro institutions. The

⁵Harry D. Ashmore, The Negro and the Schools (Chapel Hill: The University of North Carolina Press, 1954), p. 153.

evaluations were then used as a basis for recommendations concerning improvement of the programs.

A related purpose of the study was the development and application of a suitable instrument for the evaluation of the physical education service programs of the selected institutions.

Additional significance attaches to the study due to recent legislation and court decisions concerning the desegregation issue. These developments have made necessary additional information relating to all levels and areas of white education and Negro education in order for intelligent decisions to be made concerning future educational planning.

Delimitations of the Study

The study was limited to: (1) five accredited four-year white institutions of higher education and five somewhat comparable Negro institutions in Tennessee; (2) five areas of the physical education service program: facilities, equipment, staff personnel, organization and program of activities; (3) data gathered from interviews with department heads and staff members of the physical education departments and a study of publications of the selected institutions (publications included catalogues and mimeographed materials such as objectives and physical fitness tests); and (4) use of

evaluative criteria developed by modification and combination of previously validated instruments.

Definition of Terms

The following definitions apply in this study:

1. Curriculum--A systematic sequence of courses required for graduation or certification in a major field of study, for example, social studies or physical education.⁶

2. Physical education--The organized program of instruction and participation in sports and other big-muscle activities designed to promote physical development, skills and desirable habits and attitudes.⁷

3. Service program--The facilities, equipment, staff personnel, organization and curriculum of the required program of physical education in institutions of higher education.

4. College--An institution of higher education that maintains a four-year curriculum leading to a degree.⁸

5. Department head--A staff member who performs the usual duties of teaching in a department and also administers

⁶Carter V. Good, Dictionary of Education (New York: McGraw-Hill Book Company, Inc., 1945), p. 113.

⁷Ibid., p. 298.

⁸Ibid., p. 83.

the affairs of the department.⁹

6. Instructional staff--All staff members who are occupied directly with teaching or with the supervision of teaching.¹⁰

Hypotheses to be Tested

The following hypotheses were established to be tested in the study:

1. The established evaluative criteria (The Tennessee Scorecard) will reveal deficiencies in the physical education service programs of the selected institutions.

2. In general, the evaluative criteria will be met more adequately in the white institutions than in the Negro institutions.

3. The evaluative criteria will generally be met more adequately in the relatively large institutions than in the small institutions.

Procedures

The following procedures were utilized in the completion of the study:

1. A study was made of previous surveys and

⁹Ibid., p. 126.

¹⁰Ibid., p. 385.

evaluations of physical education service programs of various colleges and universities. Other related literature was also reviewed.

2. Five Negro institutions and five somewhat comparable white institutions were selected from accredited four-year Tennessee colleges and universities. Negro institutions were selected first because of their limited number in the state. White institutions were subsequently paired with the selected Negro institutions on the basis of enrollments and general types of institutions, for example, four-year liberal arts colleges. Pairings were utilized for purposes of selection only and not for comparison of paired institutions. The institutions were also selected so as to represent each of the three grand divisions of the state, East, Middle, and West Tennessee.

The heads of the physical education departments of the selected institutions were then written and it was requested that their departments participate in the study.

3. Criteria were established for purposes of evaluation of the physical education service programs of each of these institutions.

In the development of the necessary instrument of evaluation, three previously validated criteria were slightly modified and combined. The established instrument was devised so as to evaluate the five areas emphasized in the

study: facilities, equipment, staff personnel, organization and program of activities.

4. Ten outstanding persons in the field of physical education were written and were asked to list in their judgment the value in per cent of each of the areas of the established criteria. Based upon this information, the sections were weighted and a total possible score was established.

5. The individual items of the instrument were next submitted to the physical education staff of the University of Tennessee for validation. Suggestions were made by the staff members as to methods of improving the evaluative criteria and upon the basis of these recommendations the criteria were revised and established in final form.

6. Published information concerning the physical education service programs of the selected institutions was reviewed. Catalogues were utilized to obtain general information concerning the institutions and in some instances to obtain information related to the physical education service program. This included, for example, a description of health services available, educational preparation and rank of staff members, and a listing of available activities in the service program. This information was later reviewed for accuracy by physical education staff members of the institutions.

In many instances reviews were made of mimeographed publications such as objectives, physical fitness tests,

medical examination forms and lists of programs of available activities.

7. The primary method for obtaining data was interviews conducted with the heads or chairmen of both the men's and the women's physical education departments and in some instances with other members of the physical education staff. At least two persons in the departments were interviewed at all institutions with the exception of two, in which interviews were conducted exclusively with department heads. The average number of persons interviewed was two, usually the head of the men's department (who was also in most instances the head of the entire department) and the head of the women's department.

The interviews were used as a means of securing data concerning staff personnel, organization of the program, program of activities, medical examinations and health services and general information relating to facilities and equipment. The evaluative criteria were followed strictly in all interviews.

8. Physical education facilities and equipment were observed and examined to determine their availability and general condition.

Outdoor areas were observed to determine total acreage, accessibility to students, type and general condition of surface, drainage and safety features.

Indoor facilities were noted with respect to number, size and condition of gymnasium areas; locker, shower and toilet areas; swimming pools, bowling alleys or other special areas; instructors' offices and equipment offices.

Equipment for team sports, adult recreative sports and rhythmic activities were also observed to determine availability and general condition. Also noted were towel services, if provided, and first aid equipment.

Institutions Participating in the Study

The institutions selected were Southwestern at Memphis, East Tennessee State College, Lincoln Memorial University, the University of Chattanooga, Belmont College, Fisk University, Knoxville College, Lane College, Tennessee Agricultural and Industrial State University and Le Moyne College.

The following information concerning these institutions was taken from the Education Directory 1958-1959:¹¹

Southwestern at Memphis

This institution, which is located at Memphis in the southwestern tip of the state, is accredited by the Southern Association of Colleges and Secondary Schools. Southwestern

¹¹U. S. Department of Health, Education and Welfare, Office of Education, Education Directory 1958-1959, Part 3 (Washington: Government Printing Office, 1959), pp. 148-151.

is a liberal arts and general education college and offers only the bachelor's degree. It is coeducational and the semester basis is used. The institution is controlled by the Presbyterian Church and has an enrollment of 612.

For purposes of selection in this study, Southwestern at Memphis was paired with Le Moyne College.

Le Moyne College

Le Moyne College is also located at Memphis. The college is coeducational, operates on the semester basis and confers only the bachelor's degree. Le Moyne is a liberal arts and general education college, with emphasis also upon teacher preparation. It is controlled by the American Missionary Association. The college is accredited by the Southern Association of Colleges and Secondary Schools and has an enrollment of 445.

East Tennessee State College

East Tennessee State College is a state-controlled institution with an enrollment of 3,623. It is located at Johnson City in the northeastern section of the state. It is a liberal arts and general education college which offers both a bachelor's degree and a second professional degree in some areas. This coeducational institution operates on a quarter basis and is accredited by the Southern Association of Colleges and Secondary Schools.

The college was paired with Tennessee Agricultural and Industrial State University in this study.

Tennessee Agricultural and Industrial State University

This state-controlled institution is located at Nashville in Middle Tennessee. It is a liberal arts and general education institution with some professional schools. Tennessee Agricultural and Industrial State University is coeducational, operates on the quarter basis and offers both the bachelor's and master's degrees. It is accredited by the Southern Association of Colleges and Secondary Schools and has an enrollment of 2989.

Lincoln Memorial University

This coeducational institution is located at Harrogate in East Tennessee, near the Virginia and Kentucky borders. It is primarily concerned with liberal arts and general education and preparation of teachers, with only the bachelor's degree being conferred. The institution, which is controlled by a private corporation, is accredited by the Southern Association of Colleges and Secondary Schools. Lincoln Memorial University operates on the quarter basis and has an enrollment of 505.

For this study, Lincoln Memorial University was paired with Knoxville College.

Knoxville College

Knoxville College, which operates on the semester basis, is a coeducational institution controlled by the United Presbyterian Church. It is located at Knoxville in East Tennessee. It is a liberal arts and general education college, with emphasis also upon teacher preparation. The enrollment is 513 and the college is accredited by the Southern Association of Colleges and Secondary Schools.

The University of Chattanooga

The University of Chattanooga is located in the southeastern portion of the state near the Georgia border. It is a liberal arts and general education institution which offers both the bachelor's and master's degrees. It is privately controlled, is coeducational and operates on the semester basis. It is accredited by the Southern Association of Colleges and Secondary Schools and has an enrollment of 1881.

The University of Chattanooga was paired with Fisk University in this study.

Fisk University

Fisk University is a privately controlled institution located at Nashville in Middle Tennessee. Its primary functions are to provide training in liberal arts and general education and in teacher education. It is coeducational, operates on the semester basis and confers both the

bachelor's and master's degrees. Fisk University has an enrollment of 737 and is accredited by the Southern Association of Colleges and Secondary Schools.

Belmont College

This four-year Baptist-controlled institution, which is located at Nashville in Middle Tennessee, has an enrollment of 451. It is coeducational, operates on the quarter basis and confers only the bachelor's degree. Belmont is a college of liberal arts and general education, teacher preparation and terminal occupational preparation. It is accredited as a junior college by the Southern Association of Colleges and Secondary Schools.

Belmont College was paired with Lane College in this study.

Lane College

Lane College is coeducational, operates on the quarter basis and is controlled by the Christian Methodist Episcopal Church. It is located at Jackson in West Tennessee. Lane College is a liberal arts and general education institution, with teacher preparation also considered as an important function. The college, which has an enrollment of 444, confers only the bachelor's degree. It is provisionally accredited by the Southern Association of Colleges and Secondary Schools.

Organization of the Study

Chapter I consists of the introduction, statement of the problem and sub-problems, hypotheses to be tested and procedures utilized in the study.

Chapter II is devoted to a review of related literature and a discussion of the development and utilization of the evaluative criteria used in the study.

In Chapter III the facilities and equipment of each of the ten selected institutions are evaluated and a comparison is made between the facilities and equipment of white institutions and those of Negro institutions.

Chapter IV consists of a comparison of the staff personnel, organization of the program and curriculum of the white institutions with those of the Negro institutions.

In Chapter V, the summary, conclusions and recommendations are presented.

CHAPTER II

REVIEW OF RELATED LITERATURE AND DEVELOPMENT OF EVALUATIVE CRITERIA

Introduction

Information concerning previous surveys and evaluations of college physical education service programs of selected institutions are presented in this chapter. Significant changes in college physical education requirements in recent years are also cited.

A description is given of the origin, method of development and utilization of the evaluative criteria used in the study. Included is a description of the method by which three validated criteria were modified and combined for purposes of this study and of the manner in which the final established criteria were validated. The criteria are then presented and explained in relation to their utilization in the study.

Review of Related Literature

There is a notable scarcity of studies directly related to the comparison of physical education programs of white colleges with those of Negro colleges. There are, however, a number of recent studies concerning the evaluation

of physical education service programs of selected individual institutions or those of several selected institutions.

Important Developments in Physical Education Service Programs

As a background for recent studies concerning evaluations of physical education service programs, developments in the status of college physical education will be traced from the period preceding World War II to the present time.

In 1936 Jessen and Hutchins studied the recreational pursuits of 48,000 persons between sixteen and twenty-four years of age and reported that the most popular activities were baseball, swimming, tennis, football (for men), dancing, basketball, golf, bowling and hiking. College women were found to display little enthusiasm for team activities such as baseball, hockey, soccer and basketball.¹

After a comprehensive survey, Rogers in 1937 found that provision was made for physical education in all colleges and universities studied, with participation required in 80 per cent of the men's colleges. Approximately 50 per cent of the institutions possessed adequate indoor facilities. Facilities for golf were provided in 45 per cent of colleges and universities, and facilities for swimming were found in

¹Walter S. Monroe, editor, Encyclopedia of Educational Research (New York: The Macmillan Company, 1950), pp. 825-826.

more than 50 per cent of the coeducational colleges and in more than 75 per cent of women's colleges.²

Glass in 1938 summarized the data of seventeen studies of participation of adults in activities and five studies of activities most desired for participation.³ The activities of actual participation ranked as follows: (1) swimming, (2) hiking, (3) tennis, (4) social dancing, (5) golf, (6) horse-shoes, and (7) bowling. Activities ranked according to desire for participation were: (1) swimming, (2) tennis, (3) horseback riding, (4) skating, (5) golf, (6) camping, and (7) bowling. These summaries were similar to the results of a study by Butler in 1934 of the leisure time activities of 5,000 adults.⁴

Studies by Clarke in 1935, Haggerty in 1938 and Hewitt in 1942 revealed that training of professional physical education staff members was becoming increasingly better. In 1930 Haggerty discovered that of 426 college staff members 21 per cent held master's degrees while 7 per cent held doctor's degrees. Data presented by her in 1938 revealed that of 233 staff members, 65 per cent held master's degrees and 4 per cent held doctor's degrees. In 1943 Hewitt found that of 423 staff members who taught professional graduate

²Ibid., p. 822.

³Ibid., p. 826.

⁴Loc. cit.

courses, 10 per cent possessed bachelor's degrees, 54 per cent held master's degrees and 35 per cent held doctorates. Of those with master's degrees, thirty-nine were progressing toward the doctorate.⁵

World War II had a definite effect upon the status of physical education programs of colleges and universities in the United States.⁶

Greene reported that of 168 replies from regionally distributed colleges and universities in 1944, physical education was required for graduation at 96 per cent of the institutions. Physical education classes met generally three times per week. Almost 50 per cent of the institutions had a two-year requirement and approximately 33 per cent had a four-year requirement.

Credit was given for physical education in over three-fourths of the institutions, in most instances on the basis of one unit per semester or quarter. In most cases the credit given was the same as that for academic work.

Fifty-five per cent of the institutions had changed their physical education requirements since the war, with

⁵Monroe, op. cit., p. 832.

⁶Ibid., p. 822.

most changes being made in the time requirements in the men's departments.⁷

Shaw and Rogers' study disclosed that of data received from 246 replies of colleges throughout the United States, 96 per cent required physical education. It was found that 69 per cent granted full academic credit for physical education, 5 per cent gave some credit and 24 per cent gave no credit. Private schools were found to be more conservative in granting credit in physical education than were state-controlled colleges or universities. Practices concerning excuses from physical education in the two types of institutions were found to be similar.⁸

A study of required physical education in southern colleges, published in 1957, disclosed that of 194 responses to questionnaires, 96 per cent of the colleges required physical education for graduation. It was found that all but one of the state colleges required physical education and two-thirds of the colleges required four semester hours or six quarter hours of physical education. Sixty-one per cent of the colleges counted physical education credit and honors

⁷Margaret Duncan Greene, "Survey of the Requirement and Credit in Physical Education in Colleges and Universities as of the Fall Term, 1944," Research Quarterly, 16:127, May 1951.

⁸John H. Shaw and Millard R. Rogers "Status of Required Physical Education in Colleges and Universities of the United States," Research Quarterly, 17:9, March, 1946.

toward graduation. Exemptions from physical education in order of frequency were found to be physical disability, prior military service, ROTC and band.⁹

Adams' study published in 1948 stated that of 697 Columbia alumni answering questionnaires, 23.3 per cent said that they learned at Columbia the sports and games in which they participated in adult life. On the basis of the questionnaires Adams concluded that sports such as tennis, golf, swimming, and bowling, which can be played after graduation from college, should be taught in the physical education program at Columbia. He suggested that students be encouraged to participate in activities such as hunting and fishing, which cannot be taught at college.¹⁰

Adams emphasized the need for adequate facilities and equipment in order that students may participate in activities in which they are likely to engage in later life.

Probably the most thorough investigation every made of the physical education curriculum was conducted by the Committee on Curriculum Research of the College Physical

⁹R. B. Westkaemper and C. H. Shannon, "Required Physical Education in Southern Colleges," Journal of Health, Physical Education and Recreation, 28:19-20, March 1957.

¹⁰L. Carroll Adams, "Active Recreational Interests of Columbia College Alumni," Research Quarterly, 19:43-47, March 1948.

Education Association. This report was based on twenty-seven years of research.¹¹

The recommendations of the committee were that the college physical education program be more or less elective throughout, except for persons with physical handicaps, and that each activity be a semester course of an advanced type. They further suggested that emphasis be placed on adult recreative sports.¹²

The activities suggested by the curriculum committee for the college program were as follows: (1) apparatus, (2) archery, (3) badminton, (4) boxing, (5) diving, (6) fencing (7) folk dancing, (8) golf, (9) handball, (10) life saving, (11) modern dance, (12) social dancing, (13) social (recreational) games, (14) squash, (15) swimming, (16) tap and clog dancing, (17) tennis, (18) tumbling, (19) wrestling, (20) team games, when needed (basketball, volleyball, soccer, speedball, baseball, touch football, hockey, lacrosse, American football), (21) specialties, if needed (winter activities, outdoor activities), and (22) restricted and remedial activities for sub-normal cases.¹³

¹¹Monroe, op. cit., p. 826.

¹²William Ralph LaPorte, The Physical Education Curriculum (Los Angeles: College Book Store, 1955), pp. 32-33.

¹³Loc. cit.

Recent Research Concerning Evaluations of Physical Education Programs

Mumford in 1948 conducted a survey of the health and physical education programs of twenty-five Negro senior colleges in fifteen states of the Midwest, Southeast and Southwest United States. This study revealed that 20 per cent of the colleges had no gymnasias and 40 per cent of them met only approximate standards. Even in the remaining 40 per cent of colleges improvised facilities were used which did not approach acceptable standards. Inadequacies were particularly noticeable in the number and sanitation of shower, locker and toilet areas.¹⁴

It was found that the indoor facilities of public colleges more nearly approached acceptable standards than did those of private colleges, although both were below approved standards. The majority of institutions also lacked sufficient outdoor space. Inadequacies were found in equipment, provision for towel and laundry services and provision for physicians. Adaptive programs of physical education were almost nonexistent. The low standards of the health and physical education programs of the Negro colleges were due to: (1) limited funds, (2) inadequate facilities, (3) inadequate

¹⁴Arnett W. Mumford, "The Present Status of Health and Physical Education Programs in Negro Senior College," Research Quarterly, 19:192-195, October 1948.

number and training of staff members, and (4) attitude of the college administrators toward the programs. The lack of suitable facilities was the most important factor leading to low ratings of the programs.

A study by Johnson pointed out in an article published in 1949 that there were only eight swimming pools in Negro colleges at that time.¹⁵

Phillips' study of physical education service programs in higher education in New York State discovered that 87 per cent of the colleges had a required program in physical education. The following other findings were presented: (1) concerning staff personnel, 86 per cent of the institutions exceeded the essential standards; (2) the basic physical education programs exceeded the essential standards in 64 per cent of the institutions; (3) only 28 per cent of the institutions met essential standards in classification of students; (4) 57 per cent of the colleges exceeded the established standards concerning facilities; and (5) 93 per cent met established standards regarding equipment.¹⁶

¹⁵Thomas F. Johnson, "Swimming in Negro Colleges and Universities," Journal of the American Association for Health, Physical Education and Recreation, 20:379, 416-17, June 1949.

¹⁶Bryon M. Phillips, "Evaluation of Men's Physical Education Programs in Higher Education in New York State," Research Quarterly, 26:185-95, May 25, 1955.

The status of women's physical education in forty-four California junior colleges was surveyed by Wollett and published in 1948. She concluded that most colleges had adequate outdoor areas and also suitable indoor facilities such as showers, dressing rooms, rest rooms and class rooms. Dance studios and exercise rooms were needed in many colleges; and, although badminton courts were abundant, approximately one-fourth of the colleges needed tennis courts. It was also noted that about three-fourths of the colleges lacked swimming pools. Wollett also emphasized that more attention and planning was necessary for adaptive students in order for an adequate physical education program to be provided for them.¹⁷

A study by Kenney in 1955 revealed that the most popular sports of 447 graduates of the University of Illinois were swimming (72 per cent) and ballroom dancing (71 per cent). Among the first twenty most popular activities, the only team sports listed were basketball, baseball, softball, and volleyball.¹⁸ Sixty-five per cent of the alumni indicated that they participated in one or more sports or activities which they learned in the physical education service program.

¹⁷Mildred D. Wollett, "Present Status of Women's Physical Education in California Junior Colleges," Research Quarterly, 19:185-87, October 1948.

¹⁸Harold Eugene Kenney, "An Evaluative Study of the Required Physical Education Program for Men at the University of Illinois," Dissertation Abstracts Vol. 15 (Ann Arbor: University Microfilms, 1955), pp. 2088-9.

Over three-fourths of the graduates reported that their most important motive for participation was immediate enjoyment of the activity. On the basis of the above-mentioned findings, Kenney recommended that major emphasis in the physical education service program be placed on recreational or carry-over activities.

Buie in a study of women's physical education service classes of selected institutions made the following observations: (1) requirements, awarding of credit, grading and number of weekly class periods have remained relatively unchanged for the past twenty years, (2) the objective of use of democratic procedures was not being fulfilled, (3) leisure-time activities were not being stressed to a great enough extent, (4) grading procedures were not closely related to stated objectives, and (5) the major strength of the programs was the variety of activities offered.¹⁹

Chellman in an evaluation of the required physical education program at Emory University concluded that three of the four objectives of the program were being adequately fulfilled. These three objectives included physical conditioning, proper attitudes and carry-over values. The objective of improving personal health practices was not being

¹⁹Grace E. Buie, "An Evaluation of the Women's Non-Major Physical Education Programs in Selected American Colleges and Universities," Dissertation Abstracts Vol. 16 (Ann Arbor: University Microfilms, November 1956), pp. 2086-87.

adequately met.²⁰

A study of the women's physical education programs of twenty-four four-year colleges, attended predominantly by Negroes, concluded that the programs were widely varied, ranging from very poor to good.²¹ Standards were most adequately met in the area of professional training. The area which was in most need of improvement was outdoor facilities. Other major weaknesses of the programs were found to be in areas of instructor-student ratios, selection of activities, classification of students, participation requirements and indoor facilities.

Development of Evaluative Criteria

Origin of Criteria

No suitable criteria were found for use in the evaluations of the selected areas of the college physical education service programs included in the study. Therefore, it became necessary to devise such an instrument for this purpose.

²⁰John Chellman, "An Evaluation of the Two-Year Required Program of Physical Education for Men at Emory University, Georgia," Dissertation Abstracts, Vol. 17 (Ann Arbor: University Microfilms, March 1957), pp. 554-55.

²¹Mary G. Jacobs, "An Evaluation of the Physical Education Service Program for Women in Certain Selected Colleges," Dissertation Abstracts Vol. 18 (Ann Arbor: University Microfilms, May 1958), pp. 1715-16.

The following criteria were modified and combined to form the desired evaluative instrument: (1) the La Porte Health and Physical Education Scorecard Number II, which was extracted from the Physical Education Curriculum, a publication based upon the work of the Committee on Curriculum Research of the College Physical Education Association,²² (2) Evaluative Criteria (1950 Edition) of the Cooperative Study of Secondary School Standards,²³ and (3) Criteria of the Southern Association of Colleges and Secondary Schools.²⁴ The most extensively used criteria were those of La Porte.

The established instrument was called the Tennessee Scorecard for Evaluation of College Physical Education Service Programs, which will be referred to hereafter as the Tennessee Scorecard. A copy of the evaluation forms is included in Appendix A. In order to obtain additional data related to the study a supplementary checksheet was also devised from various items of the three previously mentioned sources. This included information concerning staff meetings, experience of staff members, requirements of students in the

²²La Porte, op. cit., pp. 72-86.

²³Cooperative Study of Secondary School Standards, Evaluative Criteria, 1950 Edition (Menasha, Wisconsin: George Banta Publishing Company, 1950), pp. 159-66.

²⁴Southern Association of Colleges and Secondary Schools, Proceedings of the Sixty-Third Annual Meeting of the Southern Association of Colleges and Secondary Schools (Louisville: Southern Association of Colleges and Secondary Schools, 1958), p. 190 ff.

activity program and program of activities available.

The La Porte Health and Physical Education Scorecard Number II. Practically all of the criteria of the Tennessee Scorecard were taken from La Porte's Evaluation Scorecard Number II, which was primarily designed for ratings of junior and senior high school programs. Of the nine sections of the Tennessee Scorecard, all or part of the individual items within each section were taken from La Porte's evaluative standards, either in exact or modified form.

The areas of the Tennessee Scorecard, which are almost identical with the major divisions of La Porte's Scorecard, include the following: (1) outdoor areas, (2) gymnasium areas, equipment offices and staff facilities, (3) locker and shower areas, (4) swimming pool, (5) supplies and equipment, (6) medical examinations and health services, (7) adaptive physical education classes, (8) organization of the program and available activities, and (9) staff personnel and instruction.

In instances where the same standards were applicable to both secondary and college programs, the exact form of the evaluative criteria of La Porte was used. Other items of evaluation were slightly modified so as to become adaptable for college use.

Evaluative Criteria (1950 Edition). This instrument was used to a limited extent in formulating the desired

evaluative criteria. In the actual evaluation scorecard, its use was confined primarily to the section concerned with organization of the program and available activities. It was used to a very limited extent in the sections on outdoor facilities and staff personnel and instruction.

In addition to being incorporated into the evaluation scorecard, the Evaluative Criteria (1950 Edition) was utilized also as an aid in acquiring supplemental information concerning the organization of the physical education programs.

Criteria of the Southern Association of Colleges and Secondary Schools. These standards were used in establishing for the evaluation scorecard the section on staff personnel and instruction. This included items of staff educational preparation, salaries and membership in learned societies. The standards were also helpful in securing supplemental data relating to staff fringe benefits.

Validation of the Established Evaluation Scorecard (The Tennessee Scorecard)

The nine major sections of the Tennessee Scorecard were weighted upon the basis of judgments of ten experts in the field of physical education. These persons were written and were asked to attach a per cent value to each of the nine sections of the scorecard. The replies of these persons and subsequent weightings of sections are presented in Table I, pages 33-34.

TABLE I

PER CENT VALUES AND WEIGHTINGS OF MAJOR SECTIONS OF TENNESSEE SCORECARD
(BASED UPON JUDGMENTS OF PHYSICAL EDUCATION EXPERTS)

Physical Education Experts' Judgments of Per Cent Value of Each of Major Sections													
Major Sections	Name Withheld Upon Request	N. P. Neilson	Name Withheld Upon Request	Paul Brechler	Karl Bookwalter	C. H. McCloy	A. W. Hobt	Mabel Lee	R. E. Laveaga	Josephine L. Rathbone	Totals	Average in Per Cent	Weighting of Scores of Tenn. Scorecard
I. Outdoor Facilities	9	20	10	10	9.5	18	2	10	11	10	109.5	10.95	1.1
II. Gymnasium Areas, Equipment Offices and Staff Facilities	8	20	10	10	12.5	18	2	10	11	10	111.5	11.15	1.1
III. Locker and Shower Areas	8	10	10	10	7.4	6	5	10	7	5	78.4	7.84	.8
IV. Swimming Pool	5	10	10	10	7.4	15	2	10	9	5	83.4	8.34	.8
V. Supplies and Equipment	10	5		10	9.5	6	5	10	6	10	71.5	7.15	.7
VI. Medical Examinations and Health Services	8	5	5	5	6.4	7	10	10	13	10	79.4	7.94	.8

TABLE I (continued)

PER CENT VALUES AND WEIGHTINGS OF MAJOR SECTIONS OF TENNESSEE SCORECARD
(BASED UPON JUDGMENTS OF PHYSICAL EDUCATION EXPERTS)

Physical Education Experts' Judgments of Per Cent Value of Each of Major Sections													
Major Sections	Name Withheld Upon Request	N. P. Neilson	Name Withheld Upon Request	Paul Brechler	Karl Bookwalter	C. H. McCloy	A. W. Hobt	Mabel Lee	R. E. Laveaga	Josephine L. Rathbone	Totals	Average in Per Cent	Weighting of Scores of Tenn. Scorecard
VII. Modified Individual (Adaptive) Activities	2	5	5	5	8.4	6	2	10	7	10	60.4	6.04	.6
VIII. Organization of the Program and Available Activities	10	10	25	15	15.5	10	10	10	16	10	131.5	13.15	1.3
IX. Staff Personnel and Instruction	40	15	25	25	23.4	14	62	20	20	30	274.4	27.44	2.8
Totals	100	100	100	100	100	100	100	100	100	100	1,000	100	10

The individual items within each major section of the scorecard were validated by the Physical Education Department of the University of Tennessee.

Presentation of the Established Evaluation Scorecard

The total possible scores of each of the nine areas of the established scorecard (the Tennessee Scorecard) are presented in Table II, page 36, while a breakdown of ratings of individual items under each area is located in Appendix A.

The content of each major section of the scorecard is discussed briefly below.

1. Outdoor Facilities. The items in this section were designed to evaluate the total available outdoor playing area, accessibility to students, condition of the area and provision for maintenance.

2. Gymnasium Areas, Equipment Offices and Staff Facilities. In this section, the items taken into consideration were the number and condition of gymnasium areas and the provision of rest rooms, dressing rooms and showers for staff members. Also included were items concerning the availability of equipment offices and the availability and location of instructors' offices.

3. Locker and Shower Areas. This section was designed to determine if adequate dressing room space was available and if provision was made for lockers and locks for all students. Another purpose of this section was to determine if adequate

TABLE II

THE TENNESSEE SCORECARD

Major Sections	Number of Items Included	Total Possible Points	Number Multiplied by (for Weighting)
I. Outdoor Facilities	5	15	1.1
II. Gymnasium Areas, Equipment Offices and Staff Facilities	5	15	1.1
III. Locker and Shower Areas	6	18	.8
IV. Swimming Pool	6	18	.8
V. Supplies and Equipment	8	24	.7
VI. Medical Examinations and Health Services	6	18	.8
VII. Modified Individual (Adaptive) Activities	7	21	.6
VIII. Organization of the Program and Available Activities	8	24	1.3
IX. Staff Personnel and Instruction	<u>10</u>	<u>30</u>	2.8
Totals	61	183	

shower rooms and showers, drying rooms and toilet facilities were provided.

4. Swimming Pool. The ratings under this area were concerned primarily with availability, sanitation and provisions for safety in connection with the swimming pool area.

5. Supplies and Equipment. Included in this section were items designed to rate the following: (a) amount and general condition of supplies and equipment for team and individual or dual sports, (b) towel and laundry services, (c) special equipment for dance or rhythmic activities, (d) use of equipment clerks, and (e) provision of first aid supplies in the immediate area of the gymnasium.

6. Medical Examinations and Health Services. The items of this area were designed to evaluate the provision for medical personnel, physical examinations and health services for students and the assignment of students to physical activity upon the basis of medical examinations.

7. Modified Individual (Adaptive) Activities. The adaptive programs of physical education were rated with respect to provisions for special classes for students with defects, special facilities for adaptive students, special training of staff members in adaptive work, limited enrollment of classes and provision for interesting activities for the students.

8. Organization of the Program and Available Activities. Ratings in this category were based upon the size of

regular service classes, basis of assignment to classes and the activities provided in the program. Evaluations were made of the variety of offerings in team games, adult sport activities, combative activities, tumbling, aquatic activities and dance and rhythmic activities.

9. Staff Personnel and Instruction. Evaluative criteria for staff personnel were established with emphasis upon educational preparation, training in the area of physical education, provision for in-service training, membership in learned societies, average class loads and salaries.

The items relating to the evaluation of instruction were designed to rate the objectives of instructors, procedures in attempting to accomplish objectives, provision for maximum participation of students with little waste of time and provisions for testing and grading of students.

Utilization of the Tennessee Scorecard and the Supplementary Checklist

The Tennessee Scorecard was utilized to evaluate each of the physical education service programs and in addition a comprehensive checklist was used to secure supplemental data related to the study. These instruments were used as guides in securing information and were followed strictly in interviews with department heads and other staff members. The Tennessee Scorecard was also used for rating equipment and facilities by means of observation.

On the basis of the data gathered, each institution was rated on eight of the nine areas of the Tennessee Score-card. The section on staff personnel and instruction was only partially completed due to the broad scope of the study which placed a limiting effect on an intensive concentration in any one area. Although staff personnel were evaluated, it was felt that the area of instruction, unlike other areas included in the study, could not be rated accurately without prolonged periods of observation of physical education classes.

Even though the section on instruction was not utilized, it was included in the evaluative instrument in order to complete the criteria considered essential for a successful physical education service program.

The information which was obtained through use of the supplementary checksheet was used to further describe and compare the physical education service programs.

Summary

Various studies conducted in recent years have revealed that physical education is required in most colleges and universities, but the programs are limited considerably in many instances by inadequate outdoor and indoor facilities. Another limiting factor, although to a lesser extent, was found to be a lack of adequate equipment.

The strongest area in the majority of institutions was found to be the educational preparation of staff personnel. The most popular activities among adults were found to be individual and dual sports such as swimming, hiking, tennis, golf and bowling.

The Tennessee Scorecard, the evaluative criteria used in this study, was derived from a modification and combination of three sources: (1) the La Porte Health and Physical Education Scorecard Number II, from the publication The Physical Education Curriculum by La Porte, (2) the Evaluative Criteria (1950 Edition) of the Cooperative Study of Secondary School Standards, and (3) Criteria of the Southern Association of Colleges and Secondary Schools.

The Tennessee Scorecard consists of nine sections: (1) outdoor areas, (2) gymnasium areas, equipment offices and staff facilities, (3) locker and shower areas, (4) swimming pool, (5) supplies and equipment, (6) medical examinations and health services, (7) adaptive physical education classes, (8) organization of the program and available activities, and (9) staff personnel and instruction.

A comprehensive checksheet was also utilized for interviews and observation in order to obtain supplemental data necessary for the study.

CHAPTER III

PHYSICAL EDUCATION FACILITIES AND EQUIPMENT

Ratings of physical education facilities and equipment of each of the institutions are presented and explained in this chapter. The facilities and equipment of each institution are discussed in relation to strengths and weaknesses. Additional information is supplied from the supplementary checksheet which was also used to collect data for the study.

From the ratings of all of the institutions generalizations are made concerning the overall strong points and also needed improvements in the areas of physical education facilities and equipment.

The physical education facilities and equipment of the white institutions are then compared with those of the Negro institutions. In these areas, comparisons were also made between ratings of the larger institutions and those of the relatively small institutions.

Ratings of physical education facilities and equipment of the institutions. Ratings of outdoor physical education facilities by use of the Tennessee Scorecard were based upon the total outdoor playing area available, type and general condition of the surface, accessibility to physical education classes and provision for maintenance.

Indoor facilities were evaluated in relation to number and condition of gymnasium areas, provision of equipment of-fices and staff facilities (instructors' offices, rest rooms, and showers), provision of adequate locker, shower and toilet areas and the availability, sanitation, and safety of swim-ming pools.

Ratings of physical education supplies and equipment were based upon the amount and general condition of equipment and supplies for team and individual or dual sports and the provision of towel and laundry services, first aid supplies and necessary musical equipment for dance or rhythmic ac-tivities.

The strong points and weaknesses of each institution in the areas of physical education facilities and equipment are described below.

Physical Education Facilities and Equipment of White Institu-tions

East Tennessee State College

A. Outdoor Facilities

1. Excellent or good features. Approximately fifteen acres of outdoor play area were available at East Tennessee State College. In addition, twenty acres of unde-veloped area had recently been purchased for use in physical education classes.

Tennis court areas, which consisted of two concrete courts and four clay courts, were in excellent condition and were well fenced. Most of the outdoor play areas were located within fifty yards of the gymnasium. Maintenance work on fields and courts was done largely by paid students and partly by full-time maintenance workers.

2. Fair or poor features. Much of the field area was not level and was also not well sloped for drainage purposes. In addition one of the softball fields was made of clay and would not dry rapidly after rain.

B. Indoor Facilities

1. Excellent or good features. The following gymnasium areas were available and in excellent condition: men's gymnasium, women's gymnasium, and two activity rooms, one each for men and women.

Adequate equipment offices were provided for both men and women. Also, adequate locker rooms, shower rooms, drying areas and toilet areas were available and were in excellent condition. Instructors' offices, rest rooms, dressing rooms and showers were provided for staff members. A swimming pool was available and proper provisions were made for sanitation and safety.

2. Fair or poor features. Individual lockers were not provided for all students.

C. Supplies and Equipment

1. Excellent or good features. Adequate supplies and equipment which were in excellent condition were available for team sports, individual or dual sports, and dancing classes. For a fee, towel and laundry services were provided for students. First aid supplies were also readily available in case of emergencies.

2. Fair or poor features. Since no equipment clerks were employed, supplies and equipment for physical education classes were distributed and collected by instructors.

Lincoln Memorial University

A. Outdoor Facilities

1. Excellent or good features. Outdoor areas were in excellent condition and were readily accessible. Maintenance work on fields or courts was done entirely by maintenance employees.

2. Fair or poor features. There was an inadequate amount (four and one-half acres) of developed outdoor space for use in physical education classes.

B. Indoor Facilities

1. Excellent or good features. The gymnasium, activity room and swimming pool were in good condition. Proper sanitation and safety precautions were taken in the swimming pool area.

Instructors' offices, rest rooms, dressing rooms and showers were provided for staff members and an equipment office was provided for physical education classes. Adequate locker rooms and individual locker facilities were provided for all students and shower rooms were in good condition.

2. Fair or poor features. Although toilets were located in the dressing room area they were in only fair condition.

C. Supplies and Equipment

1. Excellent or good features. Adequate supplies and equipment were provided for team sports. Supplies and equipment for all activities were in excellent condition. First aid supplies were available in instructors' offices.

2. Fair or poor features. Equipment and supplies for individual and dual sports were inadequate, and college equipment was borrowed for use in dancing classes. Also, no towel or laundry service was provided for students.

Belmont College

A. Outdoor Facilities

1. Excellent or good features. An adequate amount (five acres) of field and court areas was readily accessible and was in good condition. Maintenance work on outdoor facilities was done entirely by the maintenance crew.

2. Fair or poor features. Several fences needed replacing and additional fences were needed around the tennis

courts.

B. Indoor Facilities

1. Excellent or good features. The main gymnasium, special exercise room and four bowling alleys were in good condition. Instructors' offices were available and a rest room, dressing room, and shower were provided for the male instructor. An equipment office and a first aid room were provided for use in physical education classes.

Locker rooms were of sufficient size and half-length lockers were provided for all students. Shower room space and shower heads were adequate to care for peak class loads and women were provided with drying room space.

2. Fair or poor features. For men students, there was no drying room space and toilet facilities were not separate from the dressing room area. The swimming pool in the vicinity of the gymnasium was not used for instruction in physical education service classes.

C. Supplies and Equipment

1. Excellent or good features. Adequate supplies and equipment were available for team sports and supplies and equipment for all activities were in excellent condition. First aid supplies were also readily available.

2. Fair or poor features. The equipment and supplies for individual and dual sports were inadequate and towel and laundry services were not provided. In addition, there was no

equipment clerk and the instructors assumed the responsibility of distributing and collecting equipment and supplies during the class periods.

The University of Chattanooga

A. Outdoor Facilities

1. Excellent or good features. Maintenance work was done entirely by the maintenance crew and all field and court areas were in excellent condition.

2. Fair or poor features. The University of Chattanooga had an inadequate amount of outdoor area (approximately five acres) and some of the outdoor areas were more than one hundred yards from the gymnasium.

B. Indoor Facilities

1. Excellent or good features. Separate gymnasias and equipment offices were provided for men and women and an activity room was also available for men. Instructors' offices were provided for all staff members.

Adequate locker room space was available for both men and women and drying room space was available for women. Men had individual full-length lockers and sufficient shower room space and shower heads to accommodate the peak class load. In addition, adequate toilet facilities were available for both men and women and were in excellent condition.

2. Fair or poor features. Individual locker facilities were not provided for all women students. Women students

had access to only four shower heads, which was inadequate for most classes. There was no swimming pool and no provisions were made for rest rooms, dressing rooms and showers for staff members.

C. Supplies and Equipment

1. Excellent or good features. Adequate supplies and equipment were provided for peak class loads in team sports and dancing classes and for average size classes in individual or dual sports. All supplies and equipment were in good condition. First aid supplies were available in instructors' offices. Towel and laundry services were provided by the University for a fee and a full-time equipment clerk was provided for women's physical education classes.

2. Fair or poor features. There was no full-time equipment clerk for men's physical education classes, and instructors assumed this responsibility.

Southwestern at Memphis

A. Outdoor Facilities

1. Excellent or good features. Ideal outdoor facilities were available at Southwestern at Memphis. There was an abundance of outdoor play areas (forty acres) and fields and courts were in excellent condition and were located immediately outside of the gymnasium. Maintenance work on outdoor facilities was done primarily by maintenance personnel and partially by paid students.

2. Fair or poor features. Little if any improvement seemed necessary in the outdoor facilities at Southwestern at Memphis.

B. Indoor Facilities

1. Excellent or good features. A gymnasium, dance room, and two handball courts were available and in excellent condition. Equipment offices were provided in the areas of both the men's and women's locker rooms, and offices, rest rooms, dressing rooms, and showers were provided for staff members.

Adequate locker room space was provided, with half-length lockers provided for all men students and baskets available for women students. Adequate shower space and shower heads were available for men students and drying space was provided for women students. Both the men's and women's toilets were in excellent condition.

2. Fair or poor features. There was insufficient shower space and shower heads for women students and there was no drying space for men students. There was also no swimming pool located on the campus.

C. Supplies and Equipment

1. Excellent or good features. Adequate supplies and equipment which were in excellent condition were available for team sports, individual and dual sports and dancing classes. First aid equipment was also available. Towel and

laundry services were provided by the institution free of charge and a full-time equipment clerk was employed.

2. Fair or poor features. There appeared to be no specific weaknesses at Southwestern at Memphis in the area of physical education supplies and equipment.

Physical Education Facilities and Equipment of Negro Institutions

Knoxville College

A. Outdoor Facilities

1. Excellent or good features. Maintenance work on fields and courts was done entirely by maintenance men. Field and court areas were in very good condition except that work was not completely finished on the new tennis court area. All field and court areas were located within fifty yards of the gymnasium.

2. Fair or poor features. Outdoor facilities were limited in that only about two acres of space were available.

B. Indoor Facilities

1. Excellent or good features. An equipment office was provided which was suitable for use by both men and women. Also, office facilities for staff members were available.

Sufficient locker room spaces were available for both men and women and baskets were provided for all students, with adequate full-length lockers provided to care for peak class loads. Adequate shower areas, shower heads and drying

spaces were available to care for peak loads in men's and women's classes. Shower and toilet areas were relatively new and were in excellent condition.

2. Fair or poor features. There was one gymnasium area for indoor activities, but there were no swimming facilities at Knoxville College. No rest rooms, dressing rooms, or showers were provided for staff members.

C. Supplies and Equipment

1. Excellent or good features. Sufficient supplies were available for team sports and dancing classes. First aid equipment was also available in instructors' offices.

2. Fair or poor features. Knoxville College was in need of additional equipment for individual and dual sports. Equipment which was available was in fair condition. Neither towel nor laundry service was provided for students. Due to the absence of equipment clerks, instructors were responsible for distribution and collection of class supplies.

Fisk University

A. Outdoor Facilities

1. Excellent or good features. Upkeep of field and court areas was done by maintenance men and outdoor play areas were in excellent condition. Outdoor facilities were located within the immediate vicinity of the gymnasium.

2. Fair or poor features. An outdoor area of approximately two acres was available, which was inadequate for

physical education classes.

B. Indoor Facilities

1. Excellent or good features. In addition to the main gymnasium, activity or adaptive rooms were available for both men and women students. Equipment offices were provided for men and women; offices, rest rooms, dressing rooms and showers were provided for staff members.

Combination box and dressing lockers were provided for students in sufficient number to accommodate the largest classes. Adequate shower and drying space was available and toilets were in very good condition.

2. Fair or poor features. There was no swimming pool on the campus of Fisk University.

C. Supplies and Equipment

1. Excellent or good features. Adequate supplies and equipment were available for team sports and dancing classes and also for first aid. All supplies and equipment were in good condition. A full-time equipment clerk was available for the main equipment office.

2. Fair or poor features. Adequate equipment was not on hand for adult sports activities. Neither towel nor laundry services were provided for students in physical education service classes.

Lane College

A. Outdoor Facilities

1. Excellent or good features. Approximately five acres of outdoor physical education area were available and easily accessible at Lane College. One-half of the field and court maintenance work was done by maintenance men and one-half by paid students.

2. Fair or poor features. Field areas were not well-grassed and both field and court areas were dusty. One tennis court which was not well fenced was available.

B. Indoor Facilities

1. Excellent or good features. Instructors' offices were available and well-equipped, although they were not located in the gymnasium.

2. Fair or poor features. There was one gymnasium area; equipment rooms, lockers, showers, and toilets were in very poor condition and were not used. Students used dormitory facilities for showers and equipment was stored in other campus buildings. In addition, no facilities for swimming were located on the campus.

C. Supplies and Equipment

1. Excellent or good features. Supplies in adequate amount were available for team sports and dancing classes, and most equipment was in good condition. First aid supplies were available in instructors' offices and equipment offices.

2. Fair or poor features. Equipment and supplies for individual and dual sports were inadequate and no towel or laundry services were provided for physical education service classes.

Tennessee Agricultural and Industrial State University

A. Outdoor Facilities

1. Excellent or good features. Approximately ten acres of outdoor area were available for physical education classes. Field areas were easily accessible to the gymnasium and were in good condition. The four available tennis courts were in excellent condition. All maintenance work was done by the maintenance crew. An outdoor swimming pool forty by seventy-five feet was also available for summer use.

2. Fair or poor features. The tennis courts which were used at Tennessee Agricultural and Industrial State University were located three blocks from the gymnasium and were owned by the city.

B. Indoor Facilities

1. Excellent or good features. The following indoor physical education areas were available for service classes: the main gymnasium, dance studio, physical therapy room, boxing and wrestling room, handball court, corrective room, three bowling alleys and a swimming pool. Each of these facilities was in excellent condition.

An equipment office was provided which was satisfactory for use by both men and women. For staff members, offices, rest rooms, dressing rooms and showers were provided, all of which were in excellent condition. Adequate locker room space was provided and combination box and dressing lockers were available for all students. Shower and toilet areas were available and in excellent condition

2. Fair or poor features. Shower areas were overloaded during times when two or three classes met during the same hour. Due to this arrangement, the peak load for men was 150 and the peak load for women was 212.

C. Supplies and Equipment

1. Excellent or good features. Adequate equipment and supplies were available and in good condition for team sports, individual and dual sports, and dancing classes. First aid supplies were also readily available. A full-time equipment manager and two assistant managers were responsible for issuing equipment and supplies. Towel and laundry services were also provided for students in physical education service classes.

2. Fair or poor features. There appeared to be no major weaknesses in the area of supplies and equipment at Tennessee Agricultural and Industrial State University.

Le Moyne College

A. Outdoor Facilities

1. Excellent or good features. Outdoor play areas were in the immediate vicinity of the gymnasium and field areas were in excellent condition. Maintenance work was done entirely by maintenance personnel.
2. Fair or poor features. One acre of outdoor area was available and no court areas were marked off and equipped.

B. Indoor Facilities

1. Excellent or good features. A gymnasium, swimming pool and activity room were available for use by men and women physical education students. Each of these areas was in good condition.

Sufficient locker rooms were available and full-length dressing lockers were provided for all students. Adequate shower and toilet facilities were available and in excellent condition. Equipment offices were also available for both men and women. Staff members were provided with offices, rest rooms, dressing rooms and showers.

2. Fair or poor features. Facilities for adaptive physical education were inadequate.

C. Supplies and Equipment

1. Excellent or good features. Adequate supplies for team sports and dancing classes were available for physical education classes at Le Moyne College. First aid supplies

were also available in instructors' offices. In general, all physical education supplies and equipment were in good condition.

2. Fair or poor features. Supplies and equipment for adult sports activities were inadequate. Also, towel and laundry services were not provided for students.

Ratings of Physical Education Facilities and Equipment

Tables III through VII, pages 58-62, indicate evaluations of the institutions on items of the following five areas of physical education facilities and equipment: (1) Outdoor Facilities, (2) Gymnasium Areas, Equipment Offices and Staff Facilities, (3) Locker and Shower Areas, (4) Swimming Pool, and (5) Supplies and Equipment. Ratings of individual items were based on the following scale: Missing or Nothing = 0; Fair = 1; Good = 2; and Excellent = 3.

The raw scores and weighted scores of each institution in each of the five areas mentioned are presented in Appendixes B and C. In addition, the total weighted score is indicated for each institution in the entire area of physical education facilities and equipment.

In Table VIII, page 63, these scores are given in terms of possible scores of 100 per cent.

TABLE III

OUTDOOR FACILITIES
(Total Possible Points - 15)

	East Tennessee State College	Lincoln Memorial University	Belmont College	University of Chattanooga	Southwestern at Memphis	Knoxville College	Fisk University	Lane College	Tennessee Agricultural and Industrial State University	Le Moyne College
1. Total available field and court playing space	3	1	2	1	3	1	1	3	2	1
2. Condition of field areas	1	3	3	3	3	3	3	1	2	3
3. Condition of court areas	3	3	2	3	3	2	3	1	3	1
4. Maintenance work on fields and courts	2	3	3	3	3	3	3	2	3	3
5. Accessibility of outdoor facilities	<u>2</u>	<u>3</u>	<u>3</u>	<u>1</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>2</u>	<u>3</u>
Totals	11	13	13	11	15	12	13	10	12	11

TABLE IV

GYMNASIUM AREAS, EQUIPMENT OFFICES AND STAFF FACILITIES
(Total Possible Points - 15)

	East Tennessee State College	Lincoln Memorial University	Belmont College	University of Chattanooga	Southwestern at Memphis	Knoxville College	Fisk University	Lane College	Tennessee Agricultural and Industrial State University	Le Moyne College
1. Availability of gymnasium areas	2	2	3	3	3	1	3	1	3	2
2. Condition of gymnasium areas	3	2	3	2	3	2	2	1	3	2
3. Provision for rest rooms, dressing rooms and showers for staff members	3	3	2	0	3	0	3	0	3	3
4. Availability and location of instructors' offices	3	3	3	3	3	3	3	1	3	3
5. Provision for adequate equipment offices	<u>3</u>	<u>2</u>	<u>2</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>1</u>	<u>3</u>	<u>3</u>
Totals	14	12	13	11	15	9	14	4	15	13

TABLE V

LOCKER AND SHOWER AREAS
(Total Possible Points - 18)

	East Tennessee State College	Lincoln Memorial University	Belmont College	University of Chattanooga	Southwestern at Memphis	Knoxville College	Fisk University	Lane College	Tennessee Agricultural and Industrial State University	Le Moyne College
1. Provision of adequate locker room space for students	3	3	3	3	3	3	3	1	3	3
2. Provision for individual locker facilities for all students	1	3	2	2	2	3	3	0	3	3
3. Provision for adequate lock protection for lockers or baskets	3	2	2	3	3	2	3	0	3	3
4. Availability of adequate shower and drying space	3	2	2	2	2	3	3	1	3	3
5. Availability of adequate shower space and shower heads	2	2	3	2	1	2	2	1	1	3
6. Availability and condition of toilet facilities	3	1	1	3	3	3	3	1	3	3
Totals	15	13	13	15	14	16	17	4	16	18

TABLE VI

SWIMMING POOL
(Total Possible Points - 18)

	East Tennessee State College	Lincoln Memorial University	Belmont College	University of Chattanooga	Southwestern at Memphis	Knoxville College	Fisk University	Lane College	Tennessee Agricultural and Industrial State University	Le Moyne College
1. Availability of adequate swimming facilities	3	3	0	0	0	0	0	0	3	3
2. Pool construction	3	3	0	0	0	0	0	0	3	3
3. Provision for standard tests	3	3	0	0	0	0	0	0	3	3
4. Availability of machinery for heating, filtering, and sterilizing water	3	3	0	0	0	0	0	0	3	3
5. Provision for standard safety devices	3	3	0	0	0	0	0	0	3	3
6. Proper training of all life guards and swimming instructors	<u>3</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>3</u>
Totals	18	18	0	0	0	0	0	0	18	18

TABLE VII

SUPPLIES AND EQUIPMENT
(Total Possible Points - 24)

	East Tennessee State College	Lincoln Memorial University	Belmont College	University of Chattanooga	Southwestern at Memphis	Knoxville College	Fisk University	Lane College	Tennessee Agricultural and Industrial State University	Le Moyne College
1. Adequacy of supplies and equipment for team sports	3	3	3	3	3	3	3	2	3	3
2. Adequacy of supplies and equipment for individual and dual sports	3	1	1	2	3	1	1	1	3	1
3. Condition of supplies and equipment	3	3	3	3	3	1	2	2	3	2
4. Availability of towels for students	2	1	1	2	3	1	1	1	2	1
5. Provisions for laundry services	2	1	1	2	3	1	1	1	2	1
6. Availability of First Aid supplies	3	3	3	3	3	3	3	3	3	3
7. Provisions for equipment clerks	0	0	0	2	3	0	3	0	3	0
8. Availability of musical accompaniment equipment	<u>3</u>	<u>1</u>	<u>0</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>
Totals	19	13	12	20	24	13	17	13	22	14

TABLE VIII

PERCENTAGE SCORES OF PHYSICAL EDUCATION FACILITIES AND EQUIPMENT
(Total Possible Scores of 100 Per Cent)

Area	East Tennessee State College	Lincoln Memorial University	Belmont College	University of Chattanooga	Southwestern at Memphis	Knoxville College	Fisk University	Lane College	Tennessee Agricultural and Industrial State University	Le Moyne College
Outdoor Facilities	73	87	87	73	100	80	87	67	80	73
Gymnasium Areas, Equipment Offices and Staff Facilities	93	80	87	73	100	60	93	27	100	87
Locker and Shower Areas	83	72	72	83	78	89	94	22	89	100
Swimming Pool	100	100	0	0	0	0	0	0	100	100
Supplies and Equipment	79	54	50	83	100	54	71	54	92	58

Comparison of Ratings of Larger Institutions with Those of Relatively Small Institutions

For purposes of a comparison of ratings of larger institutions with those of relatively small institutions, colleges or universities with enrollments in excess of 1,000 were considered large institutions and those with enrollments less than 1,000 were considered small institutions. In this study, only three institutions fell into the category of large institutions: East Tennessee State College, with an enrollment of 3623, Tennessee Agricultural and Industrial State University, with an enrollment of 2829, and the University of Chattanooga, with an enrollment of 1881.

Institutions which were considered small institutions are listed below with enrollments in parentheses: Lincoln Memorial University (505), Belmont College (451), Southwestern at Memphis (612), Knoxville College (513), Fisk University (737), Lane College (444) and Le Moyne College (445).

Outdoor Facilities

The larger institutions possessed an average of approximately ten acres of outdoor physical education play area which was, in general, in good condition. Although three small institutions had access to less than three acres, the average acreage for the small institutions was nine, with most of the area being in excellent condition.

The larger institutions had an average of seven tennis courts per institution, while the small institutions averaged only three tennis courts per institution. Concerning accessibility to outdoor areas, the small institutions received an average rating of excellent and the larger institutions received an average rating of good.

In the entire area of Outdoor Facilities, the small institutions, with an average rating of 83 per cent, scored 7 per cent higher than the larger institutions, which averaged a rating of 76 per cent.

Gymnasium Areas, Equipment Offices and Staff Facilities

The average number of gymnasium areas (gymnasias or activity rooms) at the larger institutions was five, while the small institutions possessed an average of two gymnasias per institution.

The average rating on staff facilities (rest rooms, dressing rooms and showers) for the small institutions was 71 per cent, with the average score of the larger institutions being 67 per cent. All of the ten selected institutions provided instructors' offices and equipment offices, although at one of the seven small institutions these facilities were located in another building on the campus.

In the categories of Gymnasium Areas, Equipment Offices and Staff Facilities, the average rating of the larger institutions was 89 per cent. This rating was 13 per cent

greater than the average score of 76 per cent which was given to the small institutions.

Locker and Shower Areas

Adequate locker room space was provided at each of the three larger institutions and at six of the seven small institutions. On ratings of the individual locker facilities for physical education students, 33 per cent of the larger institutions were rated excellent, 33 per cent were rated good and 33 per cent were rated fair. Ratings on locker facilities of the small institutions were slightly better, with 57 per cent of the institutions being rated excellent, 29 per cent being rated good, and 14 per cent of the institutions having no locker facilities.

On ratings of the adequacy of shower room space and shower heads, 67 per cent of the larger institutions were rated good and 33 per cent were rated fair. Twenty-nine per cent of the small institutions were rated excellent, 43 per cent were rated good, and 29 per cent were rated fair.

On over-all ratings of locker and shower areas the larger institutions' average score was 10 per cent greater than the average score of the small institutions. The average rating of the larger institutions was 85 per cent, while the average rating of the small institutions was 75 per cent.

Swimming Pool

Two of the three larger institutions and two of the seven small institutions possessed swimming pools. In this area, the average rating of the larger institutions was 66 per cent and the average rating of the small institutions was 29 per cent, with the larger institutions averaging 38 per cent greater scores.

Supplies and Equipment

In the area of team supplies and equipment, all of the larger institutions were rated excellent while 86 per cent of the smaller institutions were rated excellent and 14 per cent were rated good. On ratings of supplies and equipment for individual or dual sports 67 per cent of the larger institutions were rated excellent and 33 per cent were rated good. In this area, 14 per cent of the small institutions were rated excellent and 86 per cent were rated fair.

At all of the larger institutions physical education supplies and equipment were in excellent condition. At the small institutions the condition of physical education supplies and equipment was rated excellent at 41 per cent of the institutions, good at 41 per cent of the institutions and fair at 14 per cent of the institutions.

Towel and laundry services were provided at all of the larger institutions and at 14 per cent of the small institutions.

In the entire area of Physical Education Supplies and Equipment the larger institutions received a score which was 22 per cent higher than the average score which was received by the small institutions. The average rating of the larger institutions was 85 per cent and the average rating of the small institutions was 63 per cent.

Over-all Ratings of Facilities and Equipment

In over-all ratings of Physical Education Facilities and Equipment the average score of 80 per cent which was received by the larger institutions was 16 per cent greater than the average score of 64 per cent which was received by the small institutions.

Comparison of Physical Education Facilities and Equipment of White Institutions with Those of Negro Institutions

Outdoor Facilities

In terms of per cent the average score on outdoor areas for white institutions was 84 and the average score for Negro institutions was 77, with white institutions averaging 7 per cent higher scores than Negro institutions.

Even with the exclusion of Southwestern at Memphis, which had approximately forty acres of outdoor play area, white institutions had almost one and one-half times as much outdoor field and court areas for physical education as did Negro institutions.

In general, maintenance work on outdoor field and court areas was done entirely or mostly by maintenance personnel at white institutions and at Negro institutions. Field areas were in good or excellent condition at 80 per cent of the institutions, with one white institution and one Negro institution being rated fair.

The five white institutions had a total of thirty-two tennis courts and the five Negro institutions had a total of eleven tennis courts, with an average of six courts for each white institution and two courts for each Negro institution. Also, tennis courts of white institutions were in general in slightly better condition than were those of Negro institutions.

Gymnasium Areas, Equipment Offices and Staff Facilities

The average score for white institutions on gymnasium areas, equipment offices and staff facilities was 87 per cent, or 14 per cent higher than the average score of 73 per cent for the Negro institutions.

Each of the five white institutions and five Negro institutions had a main gymnasium and two of the white institutions had separate gymnasia for women.

All of the white institutions had at least one auxiliary gymnasium or other areas suitable for physical education activity, with a total of ten and an average of two for each institution. In addition to main gymnasium areas Negro

institutions had a total of twelve areas suitable for physical education activities, with an average between two and three. However, nine of these areas were located at Tennessee Agricultural and Industrial State University, and two Negro institutions had no indoor play areas other than the main gymnasium.

Offices were furnished for staff members at all white institutions and at all Negro institutions. At one Negro institution, however, all of the staff offices were located in a building adjacent to the gymnasium and in one white institution, one of the staff offices was also located in another building.

In 80 per cent of the white institutions and in 60 per cent of the Negro institutions, staff members were provided with separate rest rooms, dressing rooms and showers.

Locker and Shower Areas

In the evaluation of locker and shower areas, the Negro institutions received an average score of 79 per cent, which was 1 per cent higher than the average score of 78 per cent for the white institutions.

Adequate locker room space was provided at 100 per cent of the white institutions and at 80 per cent of the Negro institutions, with one institution providing no locker room area for students.

Negro institutions had slightly better ratings than white institutions in the provision of lockers and/or baskets. Twenty per cent of the white institutions received a rating of excellent, 60 per cent received a rating of good, and 20 per cent were rated fair. Of the Negro institutions, 80 per cent were rated excellent and 20 per cent provided no lockers at all for physical education purposes.

The Negro institutions had somewhat better shower and drying facilities than did the white institutions. Eighty per cent of the Negro institutions were given a rating of excellent on shower and drying room areas, with 20 per cent receiving a rating of fair. Twenty per cent of the selected white institutions received a rating of excellent and 80 per cent were rated good.

Swimming Pool

White institutions and Negro institutions averaged a score of 40 per cent in evaluations of swimming pool areas. Swimming pools of over 1250 square feet were found at 40 per cent of the white institutions and 40 per cent of the Negro institutions. At one Negro institution, both an outdoor pool and an indoor pool were available.

At all institutions possessing swimming pools, proper machinery was provided for heating, filtering and sterilizing the water and proper precautions for sanitation and safety were taken.

Supplies and Equipment

In the area of supplies and equipment, the average score of the white institutions was 73 per cent, which was 7 per cent better than the average score of 66 per cent obtained by the Negro institutions.

All of the white institutions received a rating of excellent on physical education supplies and equipment for team sports, while 80 per cent of the Negro institutions were rated excellent and 20 per cent were rated good.

One of the areas most in need of improvement was equipment and supplies for individual and dual sports. In this area, 40 per cent of the white institutions received an evaluation of excellent, 20 per cent were rated good and 40 per cent were rated fair. Twenty per cent of the Negro institutions received a rating of excellent in this area with the remaining 80 per cent receiving a rating of fair.

In general, supplies and equipment at the white institutions were in excellent condition and those of Negro institutions were in good condition. Towel and laundry services were provided at 60 per cent of the white institutions and at 20 per cent of the Negro institutions. First aid supplies were on hand at all white institutions and all Negro institutions.

All Negro institutions received a rating of excellent in the provision of musical accompaniment equipment for dancing

classes, while 60 per cent of the white institutions were rated excellent, 20 per cent were rated fair, and 20 per cent possessed no such equipment.

For the distribution and collection of supplies and equipment, 40 per cent of the white institutions and 40 per cent of the Negro institutions provided adequate equipment clerks other than instructors.

Over-all Ratings of Physical Education Facilities and Equipment

In the combined areas of physical education facilities and equipment, white institutions received an average score of 72 per cent, which was 6 per cent higher than the average score of 66 per cent received by the Negro institutions.

The weakest area of physical education facilities and equipment was that of swimming pools, with 40 per cent of the white institutions and 40 per cent of the Negro institutions possessing swimming facilities. The next weakest area was that of physical education supplies and equipment. Areas which were comparatively strong were those of outdoor facilities, gymnasium areas, equipment offices, staff facilities, and locker and shower areas.

Summary

In the area of physical education facilities and equipment, in general, the strongest areas were those of outdoor

facilities; indoor gymnasium areas, equipment offices and staff facilities and locker and shower areas. The area of physical education supplies and equipment was rated somewhat lower and the area of swimming pool facilities was rated considerably lower than were other areas.

In ratings of physical education facilities and equipment, greater differences were evident between large and small institutions than were evident between white and Negro institutions.

Average ratings for large institutions and for small institutions were as follows: (1) Outdoor Facilities - large institutions, 76 per cent; small institutions, 83 per cent, (2) Gymnasium Areas, Equipment Offices and Staff Facilities - large institutions, 89 per cent; small institutions, 76 per cent, (3) Locker and Shower Areas - large institutions, 85 per cent; small institutions, 75 per cent, (4) Swimming Pool - large institutions, 67 per cent; small institutions, 29 per cent, and (5) Supplies and Equipment - large institutions, 85 per cent, small institutions, 63 per cent.

In ratings of the total areas of physical education facilities and equipment, the average score of 80 per cent which was received by the larger institutions was 16 per cent greater than the average score of 64 per cent which was received by the small institutions.

Over-all ratings indicated that standards concerning physical education facilities and equipment were met only

slightly more adequately in white institutions than in Negro institutions.

The following average scores were received on ratings of physical education facilities of the white institutions and the Negro institutions:

1. Outdoor Facilities.

The average score of white institutions was 84 per cent and the average score of the Negro institutions was 77 per cent, with the white institutions scoring 7 per cent higher.

2. Gymnasium Areas, Equipment Offices and Staff Facilities.

The average score of 87 per cent for white institutions was 14 per cent greater than the average score of 73 per cent for the Negro institutions.

3. Locker and Shower Areas.

In this category, the Negro institutions received an average score of 79 per cent, which was 1 per cent higher than the average score of 78 per cent for the white institutions.

4. Swimming Pools.

White institutions and Negro institutions received an average rating of 40 per cent in this area.

The average score of 73 per cent by white institutions in the area of physical education supplies and equipment was 7 per cent greater than the average score of 66 per cent

which was obtained by the Negro institutions. In general, for both white and Negro institutions, supplies and equipment for team sports were rated excellent and supplies and equipment for individual or dual sports received a rating of fair.

Totals for the entire area of physical education supplies and equipment indicated that the average score of 72 per cent by the white institutions was approximately 6 per cent higher than the average score of 66 per cent which was received by the Negro institutions.

CHAPTER IV

STAFF PERSONNEL, ORGANIZATION OF THE PROGRAM AND CURRICULUM

Included in this chapter are ratings of each institution in the areas of Medical Examinations and Health Services, Adaptive Physical Education, Staff Personnel, Organization of the Program and Curriculum. Each institution is discussed in relation to strengths and weaknesses in these categories.

Generalizations were made from the ratings of all of the institutions. In the areas of staff personnel, organization of the program and curriculum, comparisons were made between the white institutions and the Negro institutions. In these same areas, comparisons were also made between the larger institutions and the relatively small institutions.

Staff personnel were rated from the standpoint of educational preparation, teaching load, membership in physical education learned societies and adequacy of in-service training.

Ratings of the organization and curricula of the physical education programs of the institutions were based upon provisions for medical examinations and health services, provisions for adaptive physical education classes, and the variety of activities provided for students.

The following discussions of strengths and weaknesses of each institution in the areas of staff personnel, organization of the program and curriculum were based upon the ratings in these categories. Tables IX through XII on the following pages were presented to further describe the staff personnel and organization of the programs of the selected institutions.

Staff Personnel, Organization of the Program and
Curricula of the White Institutions

East Tennessee State College

Staff Personnel

A. Excellent or good features. Of eleven full-time staff members, two possessed doctorates, eight had master's degrees and one had a bachelor's degree. The average teaching load was fourteen clock hours per week. General staff meetings were held monthly. In addition, the men's department met twice a month and the women's department met four times a month.

Staff members were active in committee work in the study of educational problems. Ninety-one per cent of the staff belonged to at least one learned society in the field of physical education, and approximately one-half of the staff had attended at least one professional meeting during the year.

TABLE IX

EDUCATIONAL PREPARATION OF FULL-TIME PHYSICAL
EDUCATION STAFF MEMBERS

Institution	Number of Full-Time Staff Mem- bers	Number with			
		Ph. D. Degree	M. S. Degree	B. S. Degree	No Degree
East Tennessee State College	11	2	8	1	0
University of Chattanooga	5	1	2	2	0
Belmont College	2	0	1	1	0
Lincoln Memorial University	3	0	2	1	0
Southwestern at Memphis	5	0	2	3	0
Fisk University	4	0	4	0	0
Tennessee Agricul- tural and In- dustrial State University	19	2	15	2	0
Knoxville College	4	0	2	2	0
Le Moyne College	2	0	2	0	0
Lane College	3	0	2	1	0

Staff members were paid in excess of minimum standards of the Southern Association of Colleges and Secondary Schools and had the opportunity of summer teaching if they so desired. Provisions were made for staff tenure, retirement and group medical insurance.

B. Fair or poor features. Three persons had teaching loads in excess of fifteen clock hours per week. In the area of in-service training, no staff members were engaged in individual research or writing concerning the study of educational problems. Also the program of inter-visitation was voluntary and unorganized.

Organization of the Program and Curriculum

A. Excellent or good features. Comprehensive medical examinations by part-time school physicians were required of all students at the beginning of the Freshman year. Assignment to classes was based on the medical diagnosis and on the interests of students.

The average class size for women was thirty-five and the average class size for men was twenty-five. A wide variety of team sports, individual and dual sports, aquatic activities and dance and rhythmic activities was offered. One special class was provided for adaptive students while a number of adaptive students participated in modified activities within regular classes.

TABLE X

STAFF TEACHING LOAD IN CLOCK HOURS PER WEEK*

Institution	Lightest Teaching Load	Heaviest Teaching Load	Average Teaching Load	Customary Teaching Load of Department Head
East Tennessee State College	12	19	14	15
University of Chattanooga	2	15	12	14
Belmont College	11	16	15	21
Lincoln Memorial University	12	15	12-15	12-15
Southwestern at Memphis	15	20	15	15
Fisk University	8	12	12	8
Tennessee Agricultural and Industrial State University	4	17	12-13	10-12
Knoxville College	9	12	12	9
Le Moyne College	10	17	12	12
Lane College	10	14	10-14	6- 9

*All figures include heads of departments.

TABLE XI

ORGANIZATION OF PHYSICAL EDUCATION SERVICE PROGRAMS

	East Tennessee State College	Lincoln Memorial University	Belmont College	University of Chattanooga	Southwestern at Memphis	Knoxville College	Fisk University	Lane College	Tennessee Agricultural and Industrial State University	Le Moyne College
Quarter or Semester Basis Used	Q	Q	Q	S	S	S	S	Q	Q	Q
Number of Years Required Physical Education	2	2	2	2	2	2	2	2	2	2
Credit Hours Per Quarter or Semester	1	1	1	1	1	1	1/2	1	1 1/3 ^a 1/3 ^b	1
Credit Hours Required for Graduation	6	6	6	4	4	4	2	6	8 ^a 2 ^b	4
Number of Periods Service Classes Met Per Week	2	2	2	2	3	2	3	2	3 ^a 2 ^b	2
Availability of Summer Service Programs										
Yes	x	x		x	x	x		x ^c	x	
No			x				x			x

^aWomen^bMen^cDepends upon enrollment

B. Fair or poor features. None of the staff members assigned to conduct adaptive classes had been trained in adaptive physical education work. Another weakness in this area was that upon returning from illnesses, students in regular classes were not required to obtain physical inspections before resumption of class activities.

Lincoln Memorial University

Staff Personnel

A. Excellent or good features. Salaries of staff members were higher than minimum standards of the Southern Association of Colleges and Secondary Schools and no staff member had a teaching load in excess of fifteen clock hours per week. Provisions were made for tenure, retirement and group health insurance. Summer teaching was available for two persons or 67 per cent of the staff.

One hundred per cent of the staff members belonged to at least one learned society in the field of physical education and one person, or 33 per cent of the staff, had attended at least one meeting of a professional society during the year.

B. Fair or poor features. In educational preparation the physical education staff averaged less than a master's degree, with two persons having a master's degree and one person having a bachelor's degree.

The in-service training program was in need of improvement. Although some work was done in individual and committee studies of educational problems, the entire staff did not participate fully. Regular staff meetings were not held, inter-visitation was not conducted, and, in general, the in-service program was not comprehensive.

Organization of the Program and Curriculum

A. Excellent or good features. Instructional classes were limited in size for effective instruction, with average class sizes being twenty for men and fifteen for women. Students were assigned to classes on the basis of medical diagnoses. A variety of team games, individual and dual sports, aquatic activities and dance and rhythmic activities was offered. A modified program of activities within regular classes was provided for students with defects.

B. Fair or poor features. No full-time or part-time physician was available, and medical examinations were given by a part-time nurse, who was available for a total of only two and one-half hours per week. No special classes were provided for adaptive students and only one staff member was adequately trained in adaptive physical education.

Belmont College

Staff Personnel

A. Excellent or good features. The average teaching load of staff members was fifteen clock hours per week.

Provisions were made for staff tenure, retirement, and group medical insurance. Organization for in-service training was good. Staff meetings were held monthly, individual work was conducted concerning educational problems, both staff members attended professional meetings during the year, and one staff member was taking additional course work.

B. Fair or poor features. The educational preparation of staff members averaged less than a master's degree, with one person having a master's degree and the other having a bachelor's degree. According to standards of the Southern Association of Colleges and Secondary Schools, the salary of the person with the bachelor's degree seemed to be inadequate. Summer teaching was not possible because Belmont College conducted no Summer school.

Organization of the Program and Curriculum

A. Excellent or good features. Students were required to have comprehensive medical examinations by their personal physicians before entering the college. All instructional classes were limited in size to provide for maximum student participation. A wide variety of team games and adult sports activities was provided in the curriculum.

B. Fair or poor features. No full-time or part-time physician was employed by the college. Although there was a swimming pool on the campus, no aquatic activities were provided for physical education service classes. Also, students

TABLE XII

SALARIES OF FULL-TIME STAFF MEMBERS

	East Tennessee State College	Lincoln Memorial University	Belmont College	University of Chattanooga	Southwestern at Memphis	Knoxville College	Fisk University	Lane College	Tennessee Agricultural and Industrial State University	Le Moyne College
Professor	1* 2*							1*	3* 1*	
\$7,000 - \$9,000										
\$5,000 - \$7,000										
\$4,000 - \$5,000										
\$3,000 - \$4,000										
Below \$3,000										
Associate Professor	5*	2*	1	1 2	5	1	2*		4*	1*
\$7,000 - \$9,000										
\$5,000 - \$7,000										
\$4,000 - \$5,000										
\$3,000 - \$4,000										
Below \$3,000										
No Breakdown of Position										
\$7,000 - \$9,000										
\$5,000 - \$7,000										
\$4,000 - \$5,000										
\$3,000 - \$4,000										
Below \$3,000										

TABLE XII (continued)

SALARIES OF FULL-TIME STAFF MEMBERS

	East Tennessee State College	Lincoln Memorial University	Belmont College	University of Chattanooga	Southwestern at Memphis	Knoxville College	Fisk University	Lane College	Tennessee Agricultural and Industrial State University	Le Moyne College
Assistant Professor										
\$7,000 - \$9,000										
\$5,000 - \$7,000										
\$4,000 - \$5,000	1*	1		1					2 ^a	
\$3,000 - \$4,000										
Below \$3,000										
Instructor										
\$7,000 - \$9,000										
\$5,000 - \$7,000										
\$4,000 - \$5,000	2*			1					2*	
\$3,000 - \$4,000						3	2	1	7 ^b	1*
Below \$3,000			1					1		

*Indicates salaries for twelve months, otherwise salaries are for regular school year.

^a1 for twelve months, 1 for ten months.

^b1 for twelve months, 6 for ten months.

with defects were excused entirely from physical education activities.

University of Chattanooga

Staff Personnel

A. Excellent or good features. Salaries of staff personnel exceeded the minimum standards established by the Southern Association of Colleges and Secondary Schools. The average teaching load was twelve clock hours per week with no teaching loads in excess of fifteen clock hours per week. Summer teaching was available to two persons or 40 per cent of the staff members and provisions were made for staff tenure, retirement and group medical insurance. The entire staff belonged to at least one learned society in the field of physical education.

B. Fair or poor features. Although the head of the physical education department held the doctorate, two persons, or 40 per cent of the staff, held bachelor's degrees. The in-service training program was not comprehensive.

Organization of the Program and Curriculum

A. Excellent or good features. Comprehensive medical examinations by part-time school physicians were required of all students at the beginning of the Freshman year. Students with defects were assigned to modified physical education activity in regular classes.

Classes were limited in size to allow for proper instruction and maximum participation. The average class size for men was twelve to fifteen and the average class size for women was thirty. The physical education service curriculum included numerous team games, individual and dual sports and dance and rhythmic activities.

B. Fair or poor features. No special classes were scheduled for adaptive students and only one person working with these students within regular classes was trained in adaptive physical education. Also, students who had been ill were not required to obtain a physician's approval upon return to physical education classes. Since no swimming pool was located on the campus, the physical education curriculum was limited to some extent in that no aquatic activities were provided for students.

Southwestern at Memphis

Staff Personnel

A. Excellent or good features. Salaries for physical education staff members exceeded the minimum standards of the Southern Association of Colleges and Secondary Schools, and average teaching loads were limited to fifteen clock hours per week. Provisions were made for staff tenure, retirement and group medical insurance. Sixty per cent of the physical education staff belonged to a learned society in their teaching field and 40 per cent of the staff members attended

at least one meeting of a professional society during the year.

B. Fair or poor features. Three physical education staff members possessed bachelor's degrees and no person on the staff held the doctorate. The opportunity for Summer employment was available to one person, the head of the department. Provisions for in-service training were inadequate. Regular staff meetings were not held, and in general, the in-service training program was not comprehensive.

Organization of the Program and Curriculum

A. Excellent or good features. A medical examination by a part-time school physician was required of each student at the beginning of the Freshman year. Students were assigned to physical education activity upon the basis of the medical examination and their interests. For students with defects, modified activities were provided in regular physical education classes.

The physical education service curriculum provided numerous activities in the areas of team sports and individual and dual activities. The average class size was limited to thirty students.

B. Fair or poor features. No special classes were provided for students with defects and no staff members in charge of adaptive students in regular classes had been trained in adaptive physical education. In the area of dance

TABLE XIII

COLLEGE TEACHING EXPERIENCE OF FULL TIME STAFF MEMBERS

Institution	Minimum Number of Years Teaching Experience for Any Staff Member	Maximum Number of Years Teaching Experience for Any Staff Member	Average Number of Years Teaching Experience of Staff Members
East Tennessee State College	1	16	7.4
University of Chattanooga	2	28	13-14*
Belmont College	0	13	6.5
Lincoln Memorial University	3	10	5.3
Southwestern at Memphis	6	10	8
Fisk University	1	20	10.3
Tennessee Agricultural and Industrial State University	3	21	10
Knoxville College	1	13	7.5
Le Moyne College	1	7	4
Lane College	0	8	4.7

*Approximate

and rhythmic activities, no activities other than modern dance were offered and no swimming activities were taught since there was no pool on the campus.

Staff Personnel, Organization of the Program and
Curricula of the Negro Institutions

Knoxville College

Staff Personnel

A. Excellent or good features. Salaries exceeded the minimum standards of the Southern Association of Colleges and Secondary Schools and the average teaching load for staff members was twelve clock hours per week. Provisions were made for staff tenure, retirement and group medical insurance.

The physical education in-service training program at Knoxville College was good. Monthly staff meetings were held and the staff was active in committee work for educational improvement. Two staff members, or 50 per cent of the staff, had taken course work during the last three years. The entire staff belonged to a physical education society and 50 per cent of the staff had attended at least one meeting of such a society during the last year.

B. Fair or poor features. Of four full-time physical education staff members, two had earned bachelor's degrees and two had earned master's degrees. A disadvantage to staff members was that Summer teaching was not possible.

Organization of the Program and Curriculum

A. Excellent or good features. A medical examination by part-time school physicians was required yearly of each student. Students with defects were provided with modified activity in regular physical education classes.

The average class size of thirty for women and twenty-five for men was sufficiently limited to provide for adequate instruction and participation. Opportunities were provided for student participation in numerous team games, adult sports activities and dance and rhythmic activities.

B. Fair or poor features. No staff members were trained in adaptive physical education and no special adaptive classes were provided for students with defects. Since no swimming pool was located on the campus, swimming activities were not included in the curriculum.

Fisk University

Staff Personnel

A. Excellent or good features. All physical education staff members had master's degrees and were paid in excess of minimum standards of the Southern Association of Colleges and Secondary Schools. The average teaching load was twelve clock hours per week. Tenure, a retirement plan, and group medical insurance were available to staff members.

Concerning in-service training, monthly staff meetings were held and staff members were actively engaged in

individual and committee work in the study of educational problems. Also, the entire staff had taken course work during the last three years. All of the staff personnel belonged to a physical education society.

B. Fair or poor features. Summer teaching was available to the head of the department and occasionally to one other person.

Organization of the Program and Curriculum

A. Excellent or good features. All Freshman students were given a complete medical examination by part-time school physicians at the beginning of the year. Modified activities in regular classes were provided for students with defects, with all staff members in charge of modified activity cases having been trained in adaptive physical education.

A variety of experiences was provided for students in the areas of team sports, individual and dual sports and dance and rhythmic activities. Men's classes, which averaged thirty students per class, were sufficiently limited for maximum participation.

B. Fair or poor features. No special classes were provided for adaptive students and no swimming activities were provided. The average class size for women students was forty-five.

Lane CollegeStaff Personnel

A. Excellent or good features. Members of the physical education department were paid in excess of minimum standards of the Southern Association of Colleges and Secondary Schools. The average teaching load was limited to ten to fourteen clock hours per week.

Sixty-seven per cent of the staff belonged to a physical education society and had attended at least one meeting of a learned society during the year. Staff meetings were held twice a month and inter-visitation of classes was conducted. Provisions were made for staff tenure and retirement.

B. Fair or poor features. Two staff members possessed master's degrees and one had earned a bachelor's degree. Summer teaching was available to the head of the department. Also, no provision was made through the college for group medical insurance.

Organization of the Program and Curriculum

A. Excellent or good features. Medical examinations by a part-time school physician were required yearly of every student, and students with defects were assigned to modified activity in regular physical education classes. The average class size was limited to thirty students. Physical education students had the opportunity for participation in numerous team games and individual and dual sports.

B. Fair or poor features. No dance or rhythmic activities were provided as specific units of teaching and no special classes for adaptive students were provided. In addition, due to the absence of facilities, no swimming activities were provided for students.

Tennessee Agricultural and Industrial State University

Staff Personnel

A. Excellent or good features. Staff members averaged at least a master's degree, with the head of the department and one other staff member holding doctorates. The average teaching load was limited to twelve clock hours per week. Salaries of staff members were higher than the minimum standards of the Southern Association of Colleges and Secondary Schools.

Monthly staff meetings were held and staff members were active in individual and committee work in the study of educational problems. Organized inter-visitation of classes was conducted and several staff members were engaged in research activities and writing for professional publications. In addition, 84 per cent of the staff belonged to a physical education society. Provisions were made for tenure, retirement, and group medical insurance for staff members.

B. Fair or poor features. In the delegation of teaching duties, four staff members were assigned teaching loads in excess of fifteen clock hours per week and for some

members of the department Summer teaching was not available.

With the exception of one person, no staff members of the department had taken additional classwork during the last three years.

Organization of the Program and Curriculum

A. Excellent or good features. Medical examinations by a part time school physician were required of all students at the beginning of the Freshman year. Upon the recommendation of the physician, students with defects were placed in special adaptive classes. Most persons who were assigned to teach individual activity classes were specially trained in that area.

Regular physical education service classes were limited in enrollment, with the average for both men's classes and women's classes being thirty. A wide variety of activities from the following areas were provided for students: team games, individual and dual sports, combative activities, dance or rhythmic activities and swimming activities.

B. Fair or poor features. There seemed to be no major weaknesses in the organization of the program and curriculum at Tennessee Agricultural and Industrial State University.

Le Moyne College

Staff Personnel

A. Excellent or good features. Both staff members

held master's degrees and one had taken additional course work during the last three years. The average teaching load of staff members was twelve clock hours per week. Summer teaching was available for staff members and provisions were made for tenure, retirement, and group medical insurance. Both members of the staff belonged to a learned society in the field of physical education.

B. Fair or poor features. Staff meetings were not held regularly and in general the in-service training program was not comprehensive. One member of the department had a teaching load in excess of fifteen clock hours per week.

Organization of the Program and Curriculum

A. Excellent or good features. At the beginning of the Freshman year, each student was required to have a complete medical examination by a part-time school physician. Students with defects were assigned to modified activity in regular physical education classes. The instructor of women's physical education had been well trained in adaptive physical education work.

The average size of men's physical education classes was thirty and the average size of women's classes was thirty-five. A varied program of activities was available to students in the areas of team sports, adult sports, dance or rhythmic activities and swimming.

B. Fair or poor features. No special classes for adaptive students were provided and the male instructor, who was in charge of adaptive students in regular classes, had no special training in adaptive physical education.

Tables XIV through XVIII, pages 100-106, indicate ratings of each of the institutions in the areas of Medical Examinations and Health Services, Adaptive Physical Education Activities, Staff Personnel, Organization of the Program and Curriculum. Ratings are presented as percentage scores. Raw scores and weighted scores are also given for each institution (see Appendixes D and E).

Comparison of Ratings of Larger Institutions with
Those of Relatively Small Institutions

Medical Examinations and Health Services

In the areas of Medical Examinations and Health Services, the small institutions received an average rating of 82 per cent, which was 4 per cent greater than the average rating of 78 per cent which was received by the larger institutions. Each of the three larger institutions employed part-time physicians, while two of the seven small institutions did not.

Adaptive Physical Education

In general, lower ratings were scored in the category of Adaptive Physical Education than in any other area of

TABLE XIV

MEDICAL EXAMINATION AND HEALTH SERVICES
(Total Possible Points - 18)

	East Tennessee State College	Lincoln Memorial University	Belmont College	University of Chattanooga	Southwestern at Memphis	Knoxville College	Fisk University	Lane College	Tennessee Agricultural and Industrial State University	Le Moyne College
1. Provision for school physicians and/or nurses	2	1	1	2	2	2	2	2	2	2
2. Medical examinations of students	2	1	1	2	2	3	2	3	2	2
3. Requirement of medical examina- tions before participation in physical education activities	3	3	3	3	3	3	3	3	3	3
4. Inspection of students returning from sickness or accident	0	3	3	0	3	3	3	3	3	0
5. Diagnosis and treatment of health disorder by school physi- cian or nurse only	3	3	3	3	3	3	3	3	3	3
6. Modified activity assignments for students with defects	<u>3</u>	<u>1</u>	<u>1</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>
Totals	13	12	12	13	16	17	16	17	16	13

TABLE XV

MODIFIED INDIVIDUAL (ADAPTIVE) ACTIVITIES
(Total Possible Points - 21)

	East Tennessee State College	Lincoln Memorial University	Belmont College	University of Chattanooga	Southwestern at Memphis	Knoxville College	Fisk University	Lane College	Tennessee Agricultural and Industrial State University	Le Moyne College
1. Provision for adaptive physical education classes	3	2	0	2	2	2	2	2	3	2
2. Training of staff members in adaptive physical education	0	1	0	1	0	0	3	1	2	1
3. Provision of special rooms for adaptive physical education	3	2	0	0	2	0	3	0	3	2
4. Provisions for limited enrollment of adaptive physical education classes	3	0	0	0	0	0	0	0	2	0
5. Assignment of normal students to adaptive classes in case of accidents or illnesses	3	3	3	0	3	3	3	3	3	0

TABLE XV (continued)

MODIFIED INDIVIDUAL (ADAPTIVE) ACTIVITIES
(Total Possible Points - 21)

	East Tennessee State College	Lincoln Memorial University	Belmont College	University of Chattanooga	Southwestern at Memphis	Knoxville College	Fisk University	Lane College	Tennessee Agricultural and Industrial State University	Le Moyne College
6. Provisions for variety of interesting activities for adaptive students	3	3	0	3	3	3	3	3	3	3
7. Availability of facilities and equipment for adult sports (for use in adaptive physical education classes)	<u>3</u>	<u>3</u>	<u>0</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>2</u>	<u>3</u>	<u>3</u>
Totals	18	14	3	9	13	11	17	11	19	11

TABLE XVI

ORGANIZATION OF PROGRAM AND AVAILABLE ACTIVITIES
(Total Possible Points - 24)

	East Tennessee State College	Lincoln Memorial University	Belmont College	University of Chattanooga	Southwestern at Memphis	Knoxville College	Fisk University	Lane College	Tennessee Agricultural and Industrial State University	Le Moyne College
1. Size of instructional classes	2	3	3	3	3	3	2	3	3	2
2. Basis of assignment to physical education classes	3	2	2	3	3	3	2	2	3	2
3. Absence of substitution of managerial duties for physical education	3	3	3	3	3	3	3	3	3	3
4. Variety of offerings of team games	3	3	3	3	3	3	3	3	3	3
5. Variety of offerings of adult sports activities	3	3	3	3	3	3	3	2	3	3
6. Provisions for combative activities and tumbling	2	2	2	3	3	3	2	2	3	2
7. Provisions for aquatic activities	3	3	0	0	1	0	0	0	3	3
8. Variety of offerings in dance or rhythmic activities	<u>3</u>	<u>3</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>0</u>	<u>3</u>	<u>3</u>
Totals	22	22	16	21	20	20	18	15	24	21

TABLE XVII

STAFF PERSONNEL AND INSTRUCTION
(Total Possible Points - 30)

	East Tennessee State College	Lincoln Memorial University	Belmont College	University of Chattanooga	Southwestern at Memphis	Knoxville College	Fisk University	Lane College	Tennessee Agricultural and Industrial State University	Le Moyne College
1. Educational preparation of full-time physical education staff members	2	1	1	1	1	1	2	1	3	2
2. Specialized training of staff members in the field of physical education										
3. In-service training program	2	1	2	1	1	2	2	2	3	1
4. Membership of staff members in physical education learned societies	3	3	2	3	2	3	3	2	3	3
5. Adequacy of salaries of physical education staff members										
6. Average teaching load of staff members	3	1	3	3	1	3	3	3	3	3

TABLE XVII (continued)

STAFF PERSONNEL AND INSTRUCTION
(Total Possible Points - 30)

	East Tennessee State College	Lincoln Memorial University	Belmont College	University of Chattanooga	Southwestern at Memphis	Knoxville College	Fisk University	Lane College	Tennessee Agricultural and Industrial State University	Le Moyne College
7. Instructors' knowledge of objectives and methods of obtaining objectives										
8. Proper use of class time										
9. Maximum participation by students in classes										
10. Testing procedures	—	—	—	—	—	—	—	—	—	—
Totals	10	6	8	8	5	9	10	8	12	9

TABLE XVIII

SCORES OF SELECTED INSTITUTIONS IN AREAS OF STAFF PERSONNEL, ORGANIZATION
OF THE PROGRAM AND CURRICULUM (SCORES IN TERMS OF PER CENT)

Area	East Tennessee State College	Lincoln Memorial University	Belmont College	University of Chattanooga	Southwestern at Memphis	Knoxville College	Fisk University	Lane College	Tennessee Agricultural and Industrial State University	Le Moyne College
Medical Examination and Health Service	72	67	67	72	89	94	89	94	89	72
Adaptive Activities	86	67	14	43	62	52	81	52	90	52
Organization of Program and Available Activities	92	92	67	88	83	83	75	63	100	88
Staff Personnel and Instruction*	33	20	27	27	17	30	33	27	40	30

*Only 40 per cent of the section on Staff Personnel and Instruction was completed in this study.

Staff Personnel, Organization of the Programs and Curriculum.

At the larger institutions, much better provisions were made for adaptive physical education than were made at the small institutions. Two of the three larger institutions provided at least one special class for adaptive students while none of the smaller institutions did so. In the area of adaptive physical education, the average rating of the larger institutions was 73 per cent, which was 19 per cent higher than the average rating of 54 per cent received by the small institutions.

Organization of the Program and Curriculum

In the ratings of organization of the program and curriculum, the average score of 93 per cent which was received by the larger institutions was 14 per cent greater than the average score of 79 per cent which was received by the small institutions.

In general, a greater variety of activities was available at the larger institutions and students were allowed more freedom in the selection of activities in which they wished to participate.

Staff Personnel

The larger institutions averaged 83 per cent in ratings of staff personnel and the small institutions averaged 65 per cent. The most significant difference was in the educational

preparation of the staff. In this area, the larger institutions received an average rating of good, while the small institutions received an average rating of fair.

Over-all Ratings of Medical Examinations and Health Services, Adaptive Physical Education, Organization of the Program and Curriculum and Staff Personnel

In the combined areas of Medical Examinations and Health Services, Adaptive Physical Education, Organization of the Program and Curriculum, and Staff Personnel the larger institutions averaged a score of 82 per cent, while the average score received by the small institutions was 70 per cent, or 12 per cent less.

Comparison of Ratings of White Institutions
with Those of Negro Institutions

Medical Examinations and Health Services

In the area of Medical Examinations and Health Services, the average score of 88 per cent which was received by the Negro institutions was 15 per cent greater than the average score of 73 per cent which was received by the white institutions.

All of the Negro institutions employed part-time physicians, while 60 per cent of the white institutions did so. None of the white institutions or Negro institutions

employed a full-time physician.

At all white institutions and at all Negro institutions, a medical examination was required of each student at the beginning of the Freshman year. At 40 per cent of the Negro institutions, comprehensive medical examinations of all students were required yearly. None of the white institutions had such a requirement. At each of the ten institutions, no student was permitted to participate in physical education class activity without a previous medical examination.

Adaptive Physical Education

Although white institutions and Negro institutions were rated comparatively low in adaptive physical education, the Negro institutions received an average score which was 12 per cent higher than that of the white institutions. The average score for the Negro institutions was 66 per cent while the average score for the white institutions was 54 per cent.

Twenty per cent of the Negro institutions provided special classes for adaptive students and 80 per cent provided modified activities for adaptive students who were placed in regular physical education classes. Twenty per cent of the white institutions conducted special adaptive classes, 60 per cent provided modified activities in regular classes for adaptive students, and 20 per cent of the

institutions completely excused students with defects from physical education activities.

At 80 per cent of the Negro institutions, at least some staff members had received training in adaptive physical education, while 40 per cent of the white institutions had staff members who were trained in this area.

Sixty per cent of the white institutions and 60 per cent of the Negro institutions provided special rooms which were used at least partially for the purpose of adaptive physical education.

Organization of the Programs and Curricula

Evaluations of the Organization of the Programs and Curricula indicated that the white institutions, with an average score of 84 per cent, were rated 2 per cent higher than the Negro institutions whose average score was 82 per cent.

At all of the white institutions and at all of the Negro institutions, the men's physical education departments and the women's physical education departments were combined and the physical education programs were financed through the regular school budget.

At 80 per cent of the white institutions, physical education service classes met two times per week, while at 20 per cent of the institutions classes met three times per week. Physical education service classes were conducted two

times per week at 60 per cent of the Negro institutions and three times per week at 20 per cent of the institutions. At the remaining 20 per cent of the Negro institutions, women students were required to attend class three days per week and men students were required to attend class only two days per week.

At 40 per cent of the white institutions all physical education activities were elective, while at 20 per cent of the institutions only golf and tennis were required and at 40 per cent of the institutions, all physical education courses were required. At 60 per cent of the Negro institutions, all physical education service courses were required, while at 20 per cent of the institutions conditioning was required and at the remaining 20 per cent of the institutions all Freshman service courses were required and all sophomore service courses were elective.

In ratings concerned with variety of team sports provided for students, all of the white institutions and all of the Negro institutions received a rating of excellent. All of the white institutions received a rating of excellent in connection with variety of adult sports offered, while 80 per cent of the Negro institutions were rated as excellent and 20 per cent were rated as good.

In each of the areas of tumbling and combative activities, dance and rhythmic activities and aquatic activities,

average ratings of white institutions were nearly identical with average ratings of Negro institutions.

Ratings of provisions for tumbling and combative activities were somewhat lower than ratings of team sports and adult sports. In the area of tumbling and combative activities, 40 per cent of both white and Negro institutions received a rating of excellent and 60 per cent of both white and Negro institutions were rated good.

Forty per cent of both white and Negro institutions were rated excellent in the provision of aquatic activities while at the remaining institutions (with the exception of one white institution) no swimming pools were located on the campus.

Sixty per cent of the white institutions were rated excellent in the provision of dance and rhythmic activities, while 20 per cent were rated fair and 20 per cent made no provision for dance or rhythmic activities. In this area, 60 per cent of the Negro institutions were rated excellent, 20 per cent were rated good, and 20 per cent made no provision for dance or rhythmic activities.

Staff Personnel

In the areas of Staff Personnel and Instruction, only four of the ten items of the Tennessee Scorecard were used for evaluations. The category concerned with rating of instruction was completely excluded.

Ratings of the four items of staff personnel indicated that the average score of 80 per cent for the Negro institutions was 18 per cent greater than the average score of 62 per cent which was received by the white institutions.

In the area of educational preparation of physical education staff members, 20 per cent of the Negro institutions were given a rating of excellent, 40 per cent of the institutions were rated good, and 40 per cent of the institutions were rated fair. Ratings of white institutions were somewhat lower in this category, with 20 per cent of the institutions being rated good and 80 per cent being rated fair.

Twenty per cent of the Negro institutions were rated excellent in the area of in-service training, 60 per cent were rated good, and 20 per cent were rated fair. In this area 40 per cent of the white institutions were rated good and 60 per cent of the institutions were rated fair.

All of the Negro institutions received a rating of excellent in the area of average teaching loads, while 60 per cent of the white institutions were rated excellent and 40 per cent were rated fair.

Over-all Ratings of Medical Examinations and Health Service, Adaptive Physical Education, Organization of the Program and Curriculum and Staff Personnel

For white institutions and for Negro institutions, the Adaptive Physical Education Programs were rated lower than

any of the other areas which were discussed in this chapter. In general, the Organization of the Program and Curriculum was rated higher than other areas, while ratings on Medical Examinations and Health Services were also relatively high.

In over-all ratings of Medical Examinations and Health Services, Adaptive Physical Education, Organization of the Program and Curriculum and Staff Personnel, the average score of 78 per cent which was received by the Negro institutions was 8 per cent higher than the average score of 70 per cent of the white institutions.

Summary

In the combined areas of Medical Examinations and Health Services, Adaptive Physical Education, Staff Personnel, Organization of the Program and Curriculum, the strongest area for the majority of institutions was the Organization of the Program and Curriculum. The most noticeable weaknesses were in the area of Adaptive Physical Education.

A greater difference in ratings was evident between large and small institutions than was evident between white and Negro institutions.

The following average scores were received by the three large institutions and by the seven comparatively small institutions: (1) Medical Examinations and Health

Services - large institutions, 78 per cent; small institutions, 82 per cent; (2) Adaptive Physical Education - large institutions, 73 per cent; small institutions, 54 per cent; (3) Organization of the Program and Curriculum - large institutions, 93 per cent; small institutions, 79 per cent; (4) Staff Personnel - large institutions, 83 per cent, small institutions, 65 per cent.

In the over-all rating for the above four areas, the larger institutions received an average score of 82 per cent. This was 12 per cent higher than the average score of 70 per cent which was received by the small institutions.

In the area of Medical Examinations and Health Services Negro institutions received an average score of 88 per cent which was 15 per cent higher than the average score of 73 per cent which was given to the white institutions.

Ratings on Adaptive Physical Education revealed that the average score of 66 per cent which was received by the Negro institutions was 12 per cent greater than the average score of 54 per cent which was received by the white institutions.

In the area of Organization of the Program and Curriculum there was little difference in the average score of 84 per cent for white institutions and 82 per cent for Negro institutions.

On ratings of Staff Personnel Negro institutions received an average rating which was 18 per cent higher than

that received by the white institutions. The average rating of the Negro institutions was 80 per cent while the average rating of the white institutions was 62 per cent.

In the combined areas of Medical Examinations and Health Services, Adaptive Physical Education, Organization of the Program and Curriculum and Staff Personnel, an over-all average score of 78 per cent was received by the Negro institutions. This was 8 per cent higher than the over-all average score of 70 per cent which was received by the white institutions.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The purpose of the study was to compare the physical education service programs of selected white institutions of higher education in Tennessee with those of selected Negro institutions in the state, with emphasis upon facilities and equipment, staff personnel, organization of the programs and curricula.

For purposes of selection, white institutions and Negro institutions were paired on the basis of enrollments and types of institutions in general. Institutions were selected to represent each of the three grand divisions of the state--East, Middle and West Tennessee.

The following white institutions were selected for the study: (1) East Tennessee State College, (2) Lincoln Memorial University, (3) Belmont College, (4) the University of Chattanooga, and (5) Southwestern at Memphis. The selected Negro institutions were the following: (1) Knoxville College, (2) Fisk University, (3) Lane College, (4) Tennessee Agricultural and Industrial State University, and (5) Le Moyne College.

For ratings of the physical education service programs of the institutions, it was necessary to develop and validate

evaluative criteria. The instrument established, which was given the title of the Tennessee Scorecard for the Evaluation of College Physical Education Service Programs, was formulated by modification and combination of the following three evaluative criteria: (1) the La Porte Health and Physical Education Scorecard Number II, which was extracted from The Physical Education Curriculum, a publication of the College Physical Education Association, (2) Evaluative Criteria (1950 Edition) of the Cooperative Study of Secondary School Standards, and (3) evaluative criteria of the Southern Association of Colleges and Secondary Schools.

The Tennessee Scorecard is composed of the following nine major areas: (1) Outdoor Facilities, (2) Gymnasium Areas, Equipment Offices and Staff Facilities, (3) Locker and Shower Areas, (4) Swimming Pool, (5) Supplies and Equipment, (6) Medical Examinations and Health Services, (7) Modified Individual (Adaptive) Activities, (8) Organization of the Program and Available Activities, and (9) Staff Personnel and Instruction. Each major area is composed of from five to ten individual items.

Ten outstanding persons in the field of physical education were written and were asked to attach a value in percent for each of the nine major areas of the Tennessee Scorecard. Upon the basis of these replies, the major areas were weighted and a total possible score was established for the evaluative criteria. The individual items within each major

area were validated by the Physical Education Department of the University of Tennessee.

The Tennessee Scorecard was the major data gathering instrument utilized in the study. A supplementary checksheet was also used, however, to obtain additional information considered necessary for the study. This included such data as salaries and teaching loads of staff members and organization of the programs.

The primary method for obtaining data for the study was by means of visits to the selected institutions for purposes of interviews with the heads of the physical education departments and in some instances with other staff members. Other means of collecting information were through the observation and examination of physical education facilities and equipment and through reviews of available published information concerning the physical education service programs of the selected institutions.

The hypotheses which gave direction to the study were as follows:

- (1) The established evaluative criteria (the Tennessee Scorecard) will reveal deficiencies in the physical education service programs of the selected institutions.

- (2) In general, the evaluative criteria will be met more adequately in the white institutions than in the Negro institutions.

(3) The evaluative criteria will generally be met more adequately in the relatively large institutions than in the small institutions.

A summary of findings, which were made through utilization of the Tennessee Scorecard, are presented in the form of ratings in Tables XIX and XX, pages 121-123. Table XIX indicates average ratings of the white institutions compared with those of the Negro institutions. Table XX is presented to compare average ratings of the larger institutions with those of the small institutions.

The following additional findings were made possible through use of the Tennessee Scorecard and the supplementary checksheet.

Over-all Strengths and Weaknesses of the Institutions

In general, the strongest area of the physical education service programs was that of organization of the programs and curricula. Other comparatively strong areas were those of outdoor facilities, gymnasium areas, equipment of-fices, staff facilities, medical examinations, health services, and locker and shower areas.

Ratings were somewhat lower in the areas of supplies and equipment and staff personnel and were considerably lower in the areas of adaptive physical education and swimming pools. The weakest area of the physical education service programs was that of swimming pools.

TABLE XIX

COMPARISON OF RATINGS OF SELECTED WHITE INSTITUTIONS WITH
THOSE OF SELECTED NEGRO INSTITUTIONS

Area	Average Scores (in Per Cent) of Selected White Institutions	Average Scores (in Per Cent) of Selected Negro Institutions	Institutions with Greater Scores and Differences in Scores (In Per Cent)
I. Outdoor Facilities	84	77	White - 7
II. Gymnasium Areas, Equipment Offices and Staff Facili- ties	87	73	White - 14
III. Locker and Shower Areas	78	79	Negro - 1
IV. Swimming Pool	40	40	No Difference
V. Supplies and Equipment	<u>73</u>	<u>66</u>	<u>White - 7</u>
Overall Average of Facilities and Equip- ment	72	66	White - 6
VI. Medical Exami- nations and Health Services	73	88	Negro - 15
VII. Modified Indi- vidual (Adaptive) Activities	54	66	Negro - 12
VIII. Organization of Program and Avail- able Activities	84	82	White - 2
IX. Staff Personnel	<u>62</u>	<u>80</u>	<u>Negro - 18</u>
Overall Average of Staff Personnel, Organization of the Programs and Available Activities	70	78	Negro - 8

TABLE XX

COMPARISON OF RATINGS OF THE THREE SELECTED LARGER INSTITUTIONS
WITH THOSE OF THE SEVEN SELECTED SMALL INSTITUTIONS*

Area	Average Scores (in Per Cent) of Selected Larger Institutions	Average Scores (in Per Cent) of Selected Small Institutions	Institutions with Greater Scores and Differences in Scores (in Per Cent)
I. Outdoor Facilities	76	83	Small - 7
II. Gymnasium Areas, Equipment Offices and Staff Facili- ties	89	76	Large - 13
III. Locker and Shower Areas	85	75	Large - 10
IV. Swimming Pool	67	29	Large - 38
V. Supplies and Equipment	<u>85</u>	<u>63</u>	<u>Large - 22</u>
Overall Average of Facilities and Equip- ment	80	64	Large - 16
VI. Medical Exami- nations and Health Services	78	82	Small - 4
VII. Modified Indi- vidual (Adaptive) Activities	73	54	Large - 19

TABLE XX (continued)

COMPARISON OF RATINGS OF THE THREE SELECTED LARGER INSTITUTIONS
WITH THOSE OF THE SEVEN SELECTED SMALL INSTITUTIONS

Area	Average Scores (in Per Cent) of Selected Larger Institutions	Average Scores (in Per Cent) of Selected Small Institutions	Institutions with Greater Scores and Differences in Scores (in Per Cent)
VIII. Organization of Program and Avail- able Activities	93	79	Large - 14
IX. Staff Personnel	<u>83</u>	<u>65</u>	<u>Large - 18</u>
Overall Average of Staff Personnel, Organization of the Programs and Avail- able Activities	82	70	Large - 12

*(Institutions with enrollments in excess of 1,000 considered as large and those with enrollments less than 1,000 considered as small.)

Comparison of Ratings of Larger Institutions with Those of Small Institutions

In proportion to enrollments, the small institutions possessed more outdoor play area than did the larger institutions. The larger institutions had available an average of five gymnasium areas (gymnasium or activity rooms) as compared to an average of two at each of the small institutions.

In general, the larger institutions had more adequate supplies and equipment than did the small institutions. Two of the three larger institutions and two of the seven small institutions possessed swimming pools.

Small institutions were rated slightly higher than larger institutions in the provision of medical examinations and health services for students.

In general, the larger institutions provided a greater variety of activities for students than did the small institutions and physical education staff members of the larger institutions were more adequately trained than were those of the small institutions.

Comparison of Ratings of White Institutions with Those of Negro Institutions

Outdoor facilities. White institutions had available more than one and one-half times as much outdoor play area as did the Negro institutions. An average of six tennis courts was found at each of the white institutions, as

compared to an average of two at each of the Negro institutions.

Gymnasium areas, equipment offices and staff facilities. Each of the white institutions and each of the Negro institutions possessed a main gymnasium, and two of the white institutions had separate gymnasia for women. At least one auxiliary gymnasium was located at each of the white institutions, with an average of two at each institution. Although two Negro institutions had no indoor play areas other than the main gymnasia, Negro institutions possessed an average of between two and three auxiliary gymnasia.

Staff offices and equipment offices were provided at all of the white institutions and at all of the Negro institutions; however, at one of the Negro institutions these facilities were located in a building adjacent to the gymnasium.

Locker and shower areas. Sufficient locker room space was available at each of the white institutions and at 80 per cent of the Negro institutions. At 20 per cent of the Negro institutions, however, there was no locker room space for students.

In the area of shower and drying facilities, 80 per cent of the Negro institutions received ratings of excellent and 20 per cent received ratings of fair. Twenty per cent of the white institutions were rated excellent and 80 per cent were rated good.

Swimming pool. Swimming facilities were available at two of the five white institutions and at two of the five Negro institutions. At all institutions where swimming facilities were located, proper provisions were made for heating, filtering and sterilizing the water, and proper precautions were taken for sanitation and safety.

Supplies and equipment. In the area of supplies and equipment for team sports, all of the white institutions were rated excellent, while 80 per cent of the Negro institutions were rated excellent and 20 per cent were rated good.

In the area of supplies and equipment for individual and dual sports, 40 per cent of the white institutions received a rating of excellent, 20 per cent received a rating of good and 40 per cent were rated fair. Twenty per cent of the Negro institutions were rated excellent and 80 per cent were rated fair.

Over-all ratings of physical education facilities and equipment. In the entire areas of physical education facilities and equipment, the average score of 72 per cent which was received by the white institutions was 6 per cent greater than the average score of 66 per cent which was received by the Negro institutions.

Medical examinations and health services. All of the Negro institutions employed part-time physicians as compared to 60 per cent of the white institutions which did so. No

full-time physicians were employed at any of the institutions.

At all of the institutions medical examinations were required at the beginning of the Freshman year and no students were allowed to participate in physical education service classes until these examinations were completed.

Modified individual (adaptive) physical education.

Twenty per cent of the white institutions and 20 per cent of the Negro institutions provided special physical education classes for students with defects. Sixty per cent of the white institutions and 80 per cent of the Negro institutions provided modified activities for adaptive students who were placed in regular physical education classes. Twenty per cent of the white institutions excluded students with defects from physical education activities, while none of the Negro institutions did so.

Organization of the programs and available activities.

At least to some extent, students were permitted to elect physical education service courses at 60 per cent of the white institutions and at 40 per cent of the Negro institutions, with all of the physical education service activities being required at the remaining institutions.

All institutions were rated excellent on provisions for a variety of team sports and, with the exception of 20 per cent of the Negro institutions, all of the institutions were rated excellent on provisions for a variety of adult sports activities.

Aquatic activities were provided at 40 per cent of the white institutions and at 40 per cent of the Negro institutions.

Staff personnel. On evaluations of educational preparation of full-time physical education staff members, 20 per cent of the white institutions were rated good and 80 per cent were rated fair. In this area, 20 per cent of the Negro institutions were rated excellent, 40 per cent were rated good and 40 per cent were rated fair.

In the area of in-service training, 40 per cent of the white institutions were rated good and 60 per cent were rated fair. Twenty per cent of the Negro institutions received a rating of excellent, 60 per cent were rated good and 20 per cent were rated fair.

Over-all ratings of medical examinations and health services, modified individual (adaptive) activities, organization of the programs and available activities, and staff personnel. In the combined ratings in the areas of medical examinations and health services, modified individual (adaptive) activities, organization of the programs and available activities, and staff personnel, the average score for the Negro institutions was 78 per cent. The average score for the white institutions was 70 per cent, or 8 per cent less.

Conclusions

As a result of the findings of this study, the following conclusions were reached:

1. There was a wide variation in the ratings of the selected institutions.
2. The strongest area of the physical education service programs was that of organization of the program and curriculum. Other relatively strong areas were those of outdoor facilities, gymnasium areas, equipment offices, staff facilities, medical examinations and health services and locker and shower areas.
3. In general, physical education facilities and equipment were used to the fullest extent in the physical education service programs. This was not true, however, in the adaptive physical education programs.
4. Adaptive physical education programs were in general very weak. The weakest area of all, however, was that of provision of swimming pools and aquatic activities. Small institutions were especially in need of improvement in these areas.
5. There was little difference in the over-all evaluations of the physical education service programs of the white institutions and those of the Negro institutions. White institutions possessed slightly better physical education facilities and equipment, while Negro institutions were

rated slightly higher in the areas of staff personnel and organization of the programs and curricula.

6. In general, differences were much more evident between large institutions and small institutions than between white institutions and Negro institutions.

7. Generally speaking, the larger institutions possessed better physical education facilities and equipment, better trained staff members and a greater variety of physical education activities than did the small institutions.

8. In general, the smaller institutions made better provisions for medical examinations and health services than did the larger institutions. Also, according to enrollments the small institutions were rated higher than the larger institutions in the area of outdoor facilities.

Recommendations

The following recommendations are presented by the writer:

1. The use of the Tennessee Scorecard is recommended for consideration by physical education staff members in evaluations of college physical education service programs.

2. The Tennessee Scorecard is also recommended as a source for the further development of criteria for evaluations of college physical education service programs.

3. It is recommended that this study be used as a source of information for educational planning in which one factor is the present educational opportunities available to white students and those available to Negro students.

4. Upon the basis of the evaluations, it is recommended that improvements be made in the physical education service programs of the selected institutions. The following improvements are recommended:

(a) The in-service training programs at four of the institutions should be broadened and the staff members should participate to a greater extent.

(b) At eight of the institutions provisions should be made for special adaptive physical education classes for students with defects.

(c) Institutions with no staff personnel who were trained in adaptive physical education should encourage at least some of the staff members to become trained in that area.

(d) At one institution, the swimming pool should be utilized for physical education service classes.

(e) Some choice in the selection of activities should be made available to students at each of the five institutions in which all physical education service activities were required.

(f) Two of the institutions should attempt to provide part-time physicians for the benefit of students.

(g) At many of the institutions, attempts should be made to provide for additional indoor gymnasium areas, swimming pools and additional adult sports equipment.

(h) Comprehensive medical examinations should be given yearly to all students. This was done at only two of the institutions.

(i) If possible, full-time or part-time paid equipment clerks should be employed at each institution to free the instructors for supervision of students. This was done at only four of the institutions.

(j) At two of the institutions, attempts should be made to provide additional lockers for students.

(k) Additional shower room facilities should be provided at three of the institutions.

(l) Institutions with limited facilities for adult sports should investigate the possibility of use of community resources if they have not already done so. This is especially necessary in the small institutions.

5. It is recommended that the institutions continue to emphasize adult sports in the physical education service programs.



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APPENDIXES

APPENDIX A

TENNESSEE SCORECARD FOR THE EVALUATION OF COLLEGE
PHYSICAL EDUCATION SERVICE PROGRAMS

OUTDOOR FACILITIES

(Total Possible Points - 15)

1. Total available field and court playing space varies from four to ten or fifteen acres, according to size of school (four acres or less = 1; minimum of four acres, and one additional acre for each additional unit of four hundred students = 2; minimum of four acres, and one additional acre for each additional unit of three hundred students = 3).

Score _____

2. Field areas are well-grassed and relatively dustless; level (except sloping for drainage purposes); and are firm, but resilient. (Fair = 1; good = 2; excellent = 3).

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Very little grass
on fields, poor
sloping for drainage,
ground too loose or very
hard (or any one of
these to extreme degree)

Fields very well
grassed; level except
for sloping for
drainage purposes;
firm, but very
resilient

Score _____

3. Court areas are firm, but resilient (if dirt or clay courts); as dustless as possible; are equipped and marked off and are in good condition in general. (Fair = 1; good = 2; excellent = 3).

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Clay courts not firm (or too hard), very dusty, poorly equipped or fenced; courts not marked off (or any one of these to extreme degree)

Excellent asphalt or concrete courts; or if clay, are firm but resilient; courts very well equipped and fenced; courts marked off very well

Score _____

4. Maintenance work on fields and courts is done by workmen other than instructors or students. (Work done by instructors and/or students without pay = 1; all or most work done by paid students = 2; work done entirely by maintenance men or mostly by maintenance men and partly by paid students = 3).

Score _____

5. Outdoor facilities are readily accessible. (Over 100 yards from gymnasium = 1; 50-100 yards from gymnasium, or part within 50 yards and part more than 100 yards = 2; less than 50 yards from gymnasium = 3).

Score _____

GYMNASIUM AREAS, EQUIPMENT OFFICES AND STAFF FACILITIES

(Total Possible Points - 15)

1. One or more gymnasium areas sufficient for men's and women's inside class activities are available (according to size of school) for common use for apparatus, wrestling, rhythms, tumbling, adaptive, fencing and adult and team sports. (For each institution with enrollment over 2,000, two or three gymnasium areas suitable for above activities = 1; four or five = 2; six = 3. For each institution with enrollment less than 2,000, one gymnasium area suitable for above activities = 1; two = 2; three = 3).

Score _____

2. Gymnasium floors are of hardwood; lines are properly painted; walls are painted and are smooth and clear; painting is a light neutral color and there are no obstructions in the area. (Fair = 1; good = 2; excellent = 3).

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In general, floors are dark; lines painted only for basketball; walls not painted or need re-painting; or gymnasium areas have obstructions.

Floors are light-colored and of hardwood; lines are painted for three to four activities; walls are smooth and clear; painting is a light, neutral color; no obstructions are in gymnasium areas.

Score _____

3. Rest rooms each for men and women staff members are provided with appropriate dressing rooms and showers. (Satisfactory facilities for women or men only = 2; satisfactory facilities for both men and women = 3).

Score _____

4. Instructors' offices (separate for men and women) are available in good locations for adequate supervision of student activities. (Offices available, but not in gymnasium, or offices available for men or women only = 1; offices for both available in gymnasium, but poorly located for supervision = 2; offices available for both men and women, with good locations for supervision of one or more activity areas = 3).

Score _____

5. An equipment office is provided in both men's and women's locker rooms, or nearby, properly arranged for issuing towels, uniforms and supplies for both indoor and outdoor use. (Satisfactory equipment office for only one (men or women) = 1-2; satisfactory for both = 3).

Score _____

LOCKER AND SHOWER AREAS

(Total Possible Points - 18)

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 = 1; ten or eleven square feet per student = 2; thirteen or more square feet = 3).

Score _____

2. Individual locker facilities are provided for all students. (Baskets, box lockers or narrow vertical lockers available for all students, or full length lockers are provided, but not enough for all students = 1; combination box or half length lockers available for all students or baskets combined with half length lockers for peak load = 2; half length, standard size lockers; narrow vertical lockers; box lockers or self-service basket system; combined with full-length dressing lockers for peak load; or full-length dressing lockers for all students = 3).

Score _____

3. Adequate lock protection is provided for lockers or baskets. (Key locks = 1; permanent combination locks, or key locks and high-grade combination padlocks used = 2; high-grade combination padlocks = 3).

Score _____

4. Men's shower rooms are of the "gang" type, with adequate shower and drying room capacity; women's areas offer choice of "gang" type or closed booth type showers with drying room space. (Fair = 1; good = 2; excellent = 3).

--	--

Only "gang" type showers available to both men and women and/or no drying space.

Men have "gang" type showers and drying space; women have choice of "gang" or closed booth showers, and drying space.

Score _____

5. Shower rooms provide eight to twelve square feet of floor area per shower head, and sufficient showers to take care of peak load adequately. (Five students per shower at peak load or less than eight square feet of floor area per shower head = 1; four per shower = 2; three per shower = 3).

Score _____

6. Adequate toilet facilities are available in separate areas and contain adequate bowls, urinals, washbasins, hot and cold water, soap dispensers, mirrors, wastebaskets and paper towels or drying machines. (Fair = 1; good = 2; excellent = 3).

--	--

Toilets not in separate area from dressing rooms and/or two or more of above mentioned items missing; and/or toilet facilities in poor or only fair condition.

Men's and women's toilets have two or more wash-basins, two or more urinals for men, hot and cold water, mirrors, wastebaskets, and paper towels or drying machines; toilets in excellent condition in general.

Score _____

SWIMMING POOL

(Total Possible Points - 18)

1. Adequate swimming facilities are available for all students (both men and women). (Off-campus facilities, closely adjoining = 1; small pool (less than 1250 square feet) on campus = 2; large pool (over 1250 square feet) on campus = 3).

Score _____

2. Pool construction provides suitable scum gutters; non-slip decks; and white tile or other light finish on sides and bottom. (Only one standard met = 1; two standards met = 2; all standards met = 3).

Score _____

3. Standard tests are made daily for air temperature, water acidity, and residual chlorine content, and at least weekly for bacterial content of water. (Score = 3).

Score _____

4. Pool is equipped with machinery for heating, filtering, and sterilizing water, and for maintaining it in conformity with established health standards. (Score = 3).

Score _____

5. Pool is equipped with standard safety devices and doors are kept locked at all times except when life guard or instructor is on duty. (Score = 3).

Score _____

6. All life guards and swimming instructors are required to hold the Senior Red Cross Life Saving Certificate or Red Cross Instructors Certificate. (Score = 3).

Score _____

SUPPLIES AND EQUIPMENT

(Total Possible Points - 24)

1. Adequate supply of balls (in good condition) and similar equipment is available for class instruction in all team activities offered. (1 ball or other item for every 10 or more members of average size class = 1; 1 ball for every 7-9 members of class = 2; 1 ball for every 6 members of class = 3).

Score _____

2. Class sets of supplies for individual or dual sports are provided in all activities offered (archery, badminton, handball, golf, horseshoes, table tennis, etc.) (Equipment available, but not enough for each member of average size class = 1; individual supplies for each member of average size class = 2; individual supplies for each member of peak load class = 3).

Score _____

3. All supplies and equipment are kept repaired and in good condition for efficiency and safety. (Fair = 1; good = 2; excellent = 3).

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Much of equipment is in need of repair, and/or much of supplies are in need of repair.

All of equipment and supplies are in excellent condition.

Score _____

4. Towels where needed are made available. (Furnished by students = 1; furnished by school, with fee = 2; furnished by school without charge = 3).

Score _____

5. Towels are laundered daily, and uniforms weekly. (By students = 1; by school, with fee = 2; by school, without charge = 3).

Score _____

6. First aid supplies are available at all times, either in a first aid room, in instructors' offices or equipment offices. (Score = 3).

Score _____

7. Adequate equipment clerks (other than instructors) are provided at all activity hours to handle equipment and supplies (including towel dispensing). (Instructor gives out equipment = 0; volunteer student help (not for physical education credit) = 1; paid student help = 2; full time equipment clerk = 3).

Score _____

8. Piano, or phonograph, and other necessary musical accompaniment equipment are available in the department (for use in dancing classes). (Piano or phonograph available = 1; piano and phonograph are available, but with little other equipment = 2; piano and phonograph and numerous records are readily available = 3).

Score _____

MEDICAL EXAMINATIONS AND HEALTH SERVICES

(Total Possible Points - 18)

1. Medical examining, advisory, and emergency service is provided by school physicians with cooperative arrangements for handling handicapped and problem cases in school or public clinics or by private medical practitioners. (Adequate volunteer service by community physicians, or school nurse handles all medical services = 1; part-time paid school physician = 2; one or more full-time school physician = 3).

Score _____

2. A comprehensive examination by the school physician is required of every student at least once each year and includes at least a careful check for orthopedic and postural defects, vision, hearing, nose, mouth, throat, teeth, heart, lungs, nutrition, skin, nervous condition and possible hernia. (Examination given by students' personal physicians or by school nurse = 1; comprehensive examination given by school physician at beginning of Freshman year only = 2; comprehensive examination given by school physician at beginning of Freshman and Sophomore years = 3).

Score _____

3. No student is permitted to participate in strenuous class activity without a satisfactory medical examination. (Score = 3).

Score _____

4. Students returning after influenza or other serious illness are inspected by their personal physicians, or by the school physician or nurse, and assigned to a modified program until their condition justifies resumption of normal activity. (Inspected by their personal physician = 2; inspected by the school physician or nurse = 3).

Score _____

5. Nonmedical staff members or school officers are never permitted to diagnose or treat health disorders; but a close cooperation is maintained between physical education staff members and the school physician and/or nurse. (Score = 3).

Score _____

6. Assignment to rest, restricted, or individual activity, or excuse 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 or instructors. (Approved by students' personal physicians or school nurse = 1; approved by school physician in consultation with the physical education department head or instructors = 3).

Score _____

MODIFIED INDIVIDUAL (ADAPTIVE) ACTIVITIES

(Total Possible Points - 21)

1. Adaptive classes are provided for students with defects. (Students are excused completely from physical education classes = 0; students participate in activities which they can do in regular classes, and referee, keep score or rest during other times = 1; students participate in activities which they can do in regular classes, and at other times engage in modified activities = 2; at least one class is available for adaptive students only = 3).

Score _____

2. All staff members assigned to handle adaptive classes (or adaptive students in regular classes) have had training in adaptive work. (No teachers have had courses or other training in adaptive work = 0; some staff members (one-half or less) have had some training in adaptive work = 1; most staff members assigned to handle adaptive classes have had some training in adaptive work = 2; all staff members handling adaptive classes have had at least one or two courses or other training in adaptive work = 3).

Score _____

3. Special rooms are available for adaptive physical education (and are used). (No special facilities available = 0; at least one special room for adaptive students is available, and adaptive students placed in regular classes use the room sometimes (one instructor supervises both regular and adaptive students during same period) = 2; at least one special room is available and used for regular adaptive classes = 3).

Score _____

4. Adaptive activity classes have limited enrollment. (No special classes for adaptive students only = 0; maximum of 30 students per instructor = 1; 25 students per instructor = 2; 20 or less students per instructor = 3).

Score _____

5. Normal students, who are temporarily incapacitated for strenuous activity because of accident, operation, or serious illness, are assigned to modified activity, under supervision (either in their regular period or in a special class), until a physician or nurse approves their return to regular class work. (Score = 3).

Score _____

6. Whenever possible, interesting activities of the sports, gymnastic, aquatic, or rhythmical types are used in place of corrective drills, to secure corrective results. (Score = 3).

Score _____

7. Adequate facilities and equipment are provided for suitable games for modified cases (table tennis, deck tennis, horseshoes, croquet, archery, shuffle board, swimming, etc.) (Facilities and equipment available for less than 3 activities = 1; facilities and equipment available for 3 or 4 activities = 2; facilities and equipment available for 5 or more activities = 3).

Score _____

ORGANIZATION OF PROGRAM AND AVAILABLE ACTIVITIES
(Total Possible Points - 24)

1. Instructional classes for normal students are limited in size for effective instruction. (Over 35 students in average size class = 1; 31-35 students = 2; 30 or less students = 3).

Score _____
2. Assignment to activity classes is based upon physical condition and interest. (Assigned at random = 1; assigned by medical diagnosis = 2; assigned by medical diagnosis and interest = 3).

Score _____
3. Students are not permitted to substitute clerical work, janitor work, towel dispensing, or piano playing, etc., in place of physical education class activity. (Score = 3).

Score _____
4. A variety of team games are offered. (Less than three team games are offered = 1; three = 2; four or more = 3).

Score _____
5. A variety of adult sports activities are offered (archery, badminton, golf, handball, tennis and bowling). (Less than three adult sports are offered = 1; three or four are offered = 2; over four offered = 3).

Score _____
6. Combative activities and tumbling are offered. (Wrestling and fencing to be classified as combative activities) (One activity offered = 2; two = 3).

Score _____

7. Aquatic activities are offered (beginning swimming, intermediate swimming, advanced swimming, senior life saving, American Red Cross Instructor's Course). (One activity offered = 1; two = 2; three or more = 3).

Score _____

8. Dance and rhythmic activities are offered. (Social dance, folk dance, square dance, modern dance, tap dance). (One activity offered = 1; two = 2; three or more = 3).

Score _____

STAFF PERSONNEL AND INSTRUCTION

(Total Possible Points - 30)

1. The full-time staff has had adequate educational preparation. (Staff averages less than a master's degree = 1; staff averages at least a master's degree = 2; all staff members average master's degrees, with head or chairman of department having a doctor's degree = 3).

Score _____

2. All persons teaching are properly trained in the field of physical education. (Most of staff members have undergraduate majors in physical education; some have only a minor in physical education = 1; all have undergraduate majors in physical education and some have graduate majors or minors in physical education = 2; all have undergraduate majors and graduate majors or minors in physical education = 3).

Score _____

3. Staff members participate in in-service training for professional improvement. (Fair = 1; good = 2; excellent = 3).

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Staff meetings are only planned form of in-service training, or in-service is not comprehensive and/or all staff members do not participate to fullest extent.

In-service training is well-planned; regular staff meetings are held; organized inter-visitation of classes is conducted; at least some staff members take courses during summer terms or during regular school year; staff members attend professional meetings when possible; at least some staff members are engaged in individual or committee work in the study of educational problems. Some staff members have been or are now engaged in professional writing or research.

Score _____

4. Staff members belong to at least one learned society in their teaching field. (Less than 50 per cent of staff belong to at least one learned society = 1; 50 to 75 per cent = 2; 75 per cent or more = 3).

Score _____

5. Staff members are adequately paid for their services. (Full professors receive a minimum salary (for nine months) of not less than \$5,000, while the minimum for other ranks is not less than the following: associate professors - \$4,400; assistant professors - \$3,800; and instructors - \$3,200). (Score = 3).

Score _____

6. Average class assignments for staff members (including after-school responsibilities such as intramural sports or athletic coaching) are sufficiently limited for adequate instruction. (Maximum load, twenty or more clock hours per week and/or extra-curricular activities are not considered in making assignments = 1; sixteen through nineteen clock hours per week, with extra-curricular activities considered in making assignments = 2; fifteen or less hours per week, with extra-curricular activities considered in making assignments = 3).

Score _____

7. Instructors know what they are attempting to accomplish and go about it in a planned and skillful manner. (Fair = 1; good = 2; excellent = 3).

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Instructors not sure of objectives, or not sure how to carry them out; little instruction; little attention to safety, social and ethical standards.

Instructors know their objectives and in a skillful manner attempt to carry them out; instructors know material well; maximum participation by students; safety, social and ethical standards are stressed.

Score _____

8. Little or no time is wasted during the class period. (Much time is wasted in roll calling, explanations, demonstrations and moving from one activity to another = 1; some time is wasted = 2; little or no time is wasted = 3).

Score _____

9. Students have the opportunity for maximum participation in classes. (Less than two-thirds of students are active at one time = 1; at least two-thirds but not all of

students are active at all times except explanations, etc. = 2; all of students are active at all times except during explanations, etc. = 3).

Score _____

10. Testing for final grade in activity classes is distributed over: (1) performance skills, (2) knowledge of rules and strategy, (3) social attitudes (citizenship), (4) health practices and (5) regularity of attendance. (Fair = 1; good = 2; excellent = 3).

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Grading based only upon attendance and/or skill.

Attendance, social attitudes and health practices considered; skill and written tests given at end of each unit; physical fitness tests given at least twice a year.

Score _____

CONFIDENTIAL

APPENDIX B

TABLE XXI

TOTAL RAW SCORES OF PHYSICAL EDUCATION FACILITIES AND EQUIPMENT

Area	East Tennessee State College	Lincoln Memorial University	Belmont College	University of Chattanooga	Southwestern at Memphis	Knoxville College	Fisk University	Lane College	Tennessee Agricultural and Industrial State University	Le Moyne College	Total Possible Raw Scores
Outdoor Facilities	11	13	13	11	15	12	13	10	12	11	15
Gymnasium Areas, Equip- ment Offices and Staff Facilities	14	12	13	11	15	9	14	4	15	13	15
Locker and Shower Areas	15	13	13	15	14	16	17	4	16	18	18
Swimming Pool	18	18	0	0	0	0	0	0	18	18	18
Supplies and Equipment	<u>19</u>	<u>13</u>	<u>12</u>	<u>20</u>	<u>24</u>	<u>13</u>	<u>17</u>	<u>13</u>	<u>22</u>	<u>14</u>	<u>24</u>
Total Raw Scores	77	69	51	57	68	50	61	31	83	74	90

APPENDIX C

TABLE XXII

WEIGHTED SCORES OF PHYSICAL EDUCATION FACILITIES AND EQUIPMENT

Institution	Outdoor Facilities (Scores Weighted by 1.1)	Gymnasium Areas, Equipment Offices and Staff Facilities ^a	Locker and Shower Facilities (Scores Weighted by .8)	Swimming Pool (Scores Weighted by .8)	Supplies and Equipment (Scores Weighted by .7)	Total Weighted Scores
East Tennessee State College	80.66	102.66	66.66	80.00	55.42	385.40
Lincoln Memorial University	95.34	88.00	57.78	80.00	37.92	359.04
Belmont College	95.34	95.34	57.78	-o-	35.00	283.46
University of Chattanooga	80.66	80.66	66.66	-o-	58.33	286.31
Southwestern at Memphis	110.00	110.00	62.22	-o-	70.00	352.22
Knoxville College	88.00	66.00	71.11	-o-	37.92	263.03
Fisk University	95.34	102.66	75.55	-o-	49.58	323.13
Lane College	73.34	29.34	17.78	-o-	37.92	158.38
Tennessee Agri- cultural and In- dustrial State University	88.00	110.00	71.11	80.00	64.17	413.28
Le Moyne College	80.66	95.34	80.00	80.00	40.83	376.83
Total Possible Weighted Score	110	110	80	80	70	450

^aScores Weighted by 1.1.

APPENDIX D

TABLE XXIII

RAW SCORES OF SELECTED INSTITUTIONS IN AREAS OF STAFF PERSONNEL,
ORGANIZATION OF THE PROGRAM AND CURRICULUM

	East Tennessee State College	Lincoln Memorial University	Belmont College	University of Chattanooga	Southwestern at Memphis	Knoxville College	Fisk University	Lane College	Tennessee Agricultural and Industrial State University	Le Moyne College	Total Possible Raw Scores
Medical Examination and Health Service	13	12	12	13	16	17	16	17	16	13	18
Adaptive Activities	18	14	3	9	13	11	17	11	19	11	21
Organization of Program and Available Activities	22	22	16	21	20	20	18	15	24	21	24
Staff Personnel	<u>10</u>	<u>6</u>	<u>8</u>	<u>8</u>	<u>5</u>	<u>9</u>	<u>10</u>	<u>8</u>	<u>12</u>	<u>9</u>	<u>12</u>
Totals	63	54	39	51	54	57	61	51	71	54	75

APPENDIX E

TABLE XXIV

WEIGHTED SCORES OF SELECTED INSTITUTIONS IN AREAS OF STAFF
PERSONNEL, ORGANIZATION OF THE PROGRAM AND CURRICULUM

	Medical Examinations and Health Services	Adaptive Activities	Organization of the Program and Available Activities	Staff Personnel and Instruction	Totals
Score Weighted by	.8	.6	1.3	2.8	
East Tennessee State College	57.78	51.43	119.17	93.32	321.70
Lincoln Memorial University	53.34	40.00	119.17	56.00	268.51
Belmont College	53.34	8.57	86.67	74.68	223.26
University of Chattanooga	57.78	25.72	113.75	74.68	271.93
Southwestern at Memphis	71.11	37.14	108.33	46.68	263.26
Knoxville College	75.55	31.43	108.33	84.00	299.31
Fisk University	71.11	48.57	97.50	93.32	310.50
Lane College	75.55	31.43	81.25	74.68	262.91
Tennessee Agricultural and Industrial State University	71.11	54.29	130.00	112.00	367.40
Le Moyne College	57.78	31.43	113.75	84.00	286.96
Total Possible Score	80	60	130	112	382