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A Study of Adapted Physical Education for Men in Selected Colleges and Universities in the United States

Robert W. Strand

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A STUDY OF ADAPTED PHYSICAL EDUCATION FOR MEN IN
SELECTED COLLEGES AND UNIVERSITIES IN THE UNITED STATES

by

Robert W. Strand

B. S. in Physical Education, St. Cloud Teachers College 1948

A Thesis

Submitted to the Faculty

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University of North Dakota

in partial fulfillment of the requirements

for the Degree of

Master of Science

Grand Forks, North Dakota

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1960

This thesis submitted by Robert W. Strand in partial fulfillment of the requirements for the Degree of Master of Science in the University of North Dakota, is hereby approved by the Committee under whom the work has been done.

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TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	ii
LIST OF TABLES	v
Chapter	
I. STATEMENT OF THE PROBLEM	1
The Problem	
Purposes of the Study	
The Background of the Problem	
Limitations	
Definitions	
II. REVIEW OF LITERATURE	6
III. METHODOLOGY	14
Source of Data	
Selection of Cases for the Study	
IV. THE ADAPTED PHYSICAL EDUCATION PROGRAM IN SELECTED COLLEGES AND UNIVERSITIES	18
Provisions Made for the Handicapped	
Lack of Provisions for the Handicapped	
Terminology Used for the Program	
Classification and Assignment of Students	
Teaching Personnel	
Types of Disabilities	
Evaluation of the Program	
Organization of Special Classes	
Comparison of Common Practices	

Table of Contents—Continued

	Page
V. SUMMARY AND CONCLUSIONS	42
Provisions Made for the Handicapped	
Classification and Assignment of Students	
Teaching Personnel	
Types of Disabilities	
Evaluation of the Program	
Special Classes for the Handicapped	
Comparison of Common Practices	
Conclusions	
Recommendations	
APPENDIX	58
BIBLIOGRAPHY	67

LIST OF TABLES

Table		Page
1.	Provisions Made for Handicapped Students. .	19
2.	Common Terms Used as Titles in the Program for the Handicapped	26
3.	Physicians Administering the Medical Examinations	28
4.	Personnel in Charge of Adapted Physical Education	30
5.	Professional Preparation of the Personnel in Charge	31
6.	Policies Regarding Special Classes for the Handicapped	37
7.	Activities in the Adapted Physical Education Program	39
8.	Comparison of Common Practices	40

CHAPTER I

STATEMENT OF THE PROBLEM

The Problem

The purpose of this study was to determine the common practices with regard to the organization and administration of the adapted physical education programs for college men. It was hoped that the information gained might furnish guidance to schools interested in re-evaluating or reorganizing their adapted programs. It was also hoped that the results might furnish a certain insight into the qualitative status of existing administrative policies.

First the author desired to find what was being done in the way of adapted physical education in a selected group of colleges and universities. Actual practices in the adapted program for college students with disabilities were noted. It was also important to determine if the trend of colleges and universities had been away from the correction of physical defects by formal exercise and toward the provision of opportunities through developmental activities, games, sports, and rhythms properly supervised and adapted to the needs of the atypical student.

Purposes of the Study

The main purpose of this study was to determine the extent and scope of adapted physical education in selected colleges and universities. The amount or lack of uniformity of common practices as they pertain to the program were considered. Specific sub-problems arising from the main

purposes are:

1. The absence or presence of provisions made for the handicapped student within the physical education program.
2. The types of activities provided for the atypical students and the assignment of these students to the program.
3. The qualification and preparation of personnel teaching this phase of the program.
4. The types of disabilities found, and methods of evaluating the program.

The Background of the Problem

The acceptance of physical education as an integral part of the general education of college students has been established. Hunsicker surveyed the service programs of physical education in colleges and universities and found that ninety per cent had some form of requirement. Of these, twenty-one per cent required physical education for one year; fifty-seven per cent for two years; six per cent for three years; two per cent for four years; and four per cent had a requirement which varied for different schools or departments of the institution.¹ The handicapped college students are entitled to physical education whether the disability be temporary or permanent. The students who face the combined problem of seeking an education and overcoming a handicap have physical, psychological and social needs as great as, or greater than, similar needs of average or typical students. A program for the handicapped in physical education should be a factor in attaining maximum growth and development within the limits of each student's disability. It should

¹Paul Hunsicker, "A Survey of the Service Physical Education Programs in American Colleges and Universities". Fifty-Seventh Annual Proceedings of the College Physical Education Association (Chapel Hill, North Carolina, 1954), p. 29.

help the atypical students face the future with confidence.

Programs at the college level specifically adapted to meet the needs of students who are permanently or temporarily handicapped physically have been variously called corrective, therapeutic, orthopedic, medical or individual gymnastics. Restricted, reconstructive and individual physical education have also been common designations.² The American Association for Health, Physical Education and Recreation appointed a committee in 1946 to study the whole program of physical reconditioning as it was developed and utilized by the armed forces and its implications for postwar use with special reference to schools and colleges.³ By 1948-49 the appointed committee was concerned with the terminology then employed in the field of physical education for the handicapped. An opinion poll among professional workers was obtained. The name receiving the most ballots was "adapted physical education".⁴ In many colleges, the term "corrective physical education" has changed to "adapted physical education" or "adaptive activities".⁵

An American Association for Health, Physical Education and Recreation committee on adapted physical education has since been organized. It has established guiding principles for adapted physical

²William L. Hughes, Administration of Health and Physical Education in Colleges (New York: A. S. Barnes & Company, 1935), p. 202.

³American Association for Health, Physical Education and Recreation, Proceedings-Fifty-Fourth Annual Convention (Boston, Massachusetts, 1949), p. 280.

⁴Ibid

⁵Clifford Lee Brownell and Patricia E. Hagman, Physical Education-Foundations and Principles (New York: McGraw-Hill Book Company, Inc. 1951), p. 125.

education which have been endorsed by the Board of Directors of the American Association for Health, Physical Education and Recreation and the Joint Committee on Health Problems in Education for the American Medical Association and National Education Association. The name "adapted physical education" was used in this study on the basis of recommendation set down by the American Association for Health, Physical Education and Recreation.

Limitations

The data for this thesis were secured through a questionnaire. A sampling of various size colleges and universities was established. Schools representing wide geographic areas were selected to determine common practices of adapted physical education programs throughout the country. Although the method of securing the data by questionnaire limited the study, this was used because of the impossibility of visiting various colleges and universities throughout the country. The content of the questionnaire, however, arose out of the suggestions found in a survey of literature in the field.

Definitions

In this study the following terms will be used in the light of the meaning indicated unless otherwise specified:

adapted physical education—a diversified program of developmental activities, sports and rhythms, suited to the interests, capacities, and limitations of students with disabilities who may not safely or successfully engage in unrestricted participation in the vigorous activities of the general physical education program.⁶

⁶"Guiding Principles for Adapted Physical Education," The Journal of Health, Physical Education and Recreation, vol. XXIII (April 1952), p. 15.

atypical--denotes students who deviate from normal.

corrective--the attempt to correct remediable conditions.

rehabilitation--restoring of the handicapped to the fullest physical, mental, social and emotional usefullness of which he is capable.

students--those who attend a college or university on the undergraduate level.

CHAPTER II

REVIEW OF LITERATURE

A review of literature revealed that research studies on the administrative practices of adapted physical education in colleges and universities were primarily done prior to or during the World War II period. World War II opened new avenues for the physical educator in the phase of the program for the handicapped. Advances in physical medicine during the war years established definite values and techniques of reconditioning and rehabilitation for military personnel. Many physical educators contributed to the armed forces rehabilitation programs indicating that physical education played an important role in the success of the over-all program.

Stafford found that:

World War II resulted in 17,000 amputations, but, during the same period, 120,000 major amputations were made necessary by disease and accidents among our civilian population. For every disabled World War II veteran, there are five disabled civilians.¹

Although the war contributed somewhat to the total number of handicapped in our country, the important contributing factors to adapted physical education following the war were the direction of attention to the number and types of handicaps in our society and to the re-direction of our educational interest to these individuals in our schools and colleges.

¹George T. Stafford, Sports For The Handicapped (New York: Prentice-Hall, Inc., 1947), p. 1.

Ellis Rhys Davies in 1930 studied the trend of corrective work in physical education in American colleges and universities. His thesis stated:

A newer conception of the corrective program should attempt to place the burden of the remedial responsibility upon the student. It should attempt to shift the emphasis from the subjective to the objective, and provide instruction and practice in the correction of important health defects which are likely to be benefited by isolated muscle group controls. It should realize that little of value has been accomplished for the college student because of his age, and because of the time he can allot to corrective exercise.²

Davies continued by stating that "the chief aim of the newer plan is to assist the student in fitting himself as best he can to take his place in life with the highest possible degree of efficiency."³ This newer trend placed more emphasis on the whole individual for development of all his potentialities. It also placed greater importance on the cooperation of the medical profession with the college physical education departments with regard to the diagnosis and recommendation of activity program for the atypical student.

In 1941, Port Glen Robertson made a survey of corrective physical education in selected colleges and universities. Robertson defined the terms:

"Corrective physical education", "adapted sports", or "body mechanics" as the mechanical correction of the various systems of the body with special reference to the skeletal, muscular, and visceral systems and their neurological associations. Normal body

² Ellis Rhys Davies, "The Trend of Corrective Work in American Colleges and Universities" (unpublished Master's thesis, University of Southern California, 1930), p. 44.

³ Ibid, p. 45.

mechanics may be said to be obtained when the mechanical correlation is most favorable to the function of these systems.⁴

Dividing the colleges and universities into three sizes according to enrollment, Robertson found that the largest sized colleges had a more developed corrective physical education program than did either the middle or smallest sized group of colleges.

Dorothy E. Huffman defined the "'corrective' class as that class designed to take care of all students unable to participate in the vigorous activities of the physical education program or those students withdrawn from the regular physical education program for the correction of specific defects."⁵ The main purpose of Huffman's study was to determine the common practices with regard to the organization and administration of the corrective program for college women.

Brownell and Hagman observed that "At times, and in certain schools and colleges, corrective physical education takes priority over such activities as games and sports or rhythmic events. At other times, or in other educational institutions, corrective exercises receive either limited emphasis or total disregard."⁶ Formerly the work attempted in the field was actually limited to a few gymnastic exercises

⁴Port Glen Robertson, "A Survey of Corrective Physical Education In Sixty-Nine Selected Colleges and Universities" (unpublished Master's thesis, University of Michigan, 1941), p. 5.

⁵Dorothy Elizabeth Huffman, "A Comparison and Critical Evaluation of the Corrective Programs of Physical Education in Selected Colleges and Universities To Determine Common Practices and To Establish Criteria for Studying the Effectiveness of Programs" (unpublished Master's thesis, Louisiana State University and Agricultural and Mechanical College, 1944), p. ix.

⁶Brownell and Hagman, op. cit., p. 122.

prescribed for the purpose of strengthening certain muscle groups. The newer trend is an attempt to assist the atypical student in a wide variety of ways and through many diversified activities.

The authorities cited in this study did not all agree upon the terminology used for the program of the handicapped student. In 1946-47, a committee of Physical Education and Recreation in Rehabilitation was appointed by the National Therapeutic Section of the American Association for Health, Physical Education and Recreation. The committee worked with representatives from the American Medical Association. This group was concerned with the nature and extent of physical reconditioning and the place of therapeutic exercise in schools and colleges.

During the committee's third year in existence, 1948-49, an opinion poll among professional workers was obtained to determine a name descriptive of the function of this phase of the physical education program. The final balloting revealed two names at the top. Doctors of physical medicine had a definite preference for "physical reconditioning", while this designation was a close second to "adapted physical education" as expressed by the physical educators.⁷ "Corrective physical education" was approved by a large number of ballots in the preliminary voting. On the basis of the opinion poll, the American Association for Health, Physical Education and Recreation adopted the term "adapted physical education" to designate the program for the disabled in schools and colleges.

⁷Proceedings-54th Annual Convention, op. cit.

The professional organization for physical educators went on record endorsing "adapted physical education" as the recommended name. A few authorities expressed disagreement on the use of this term. Lamb, Rathbone and Karpovich stated "physical educators can give corrective exercises under the guidance of physicians who have had experience in orthopedics."⁸ The same authors noted that "some physical educators do not like the term 'corrective' and prefer the use of the word 'adapted'."⁹ The writers feel, however, that physical activity always should be "adapted" to the sex, age and condition of the individual, whether or not a reason for correction exists. Therefore the word "adapted" may not imply correction at all.

Hughes substantiated the committee's work by stating "'Corrective Gymnastics' had a bad psychological effect upon students required to take the course."¹⁰ Uniformity in terminology is vitally important to this field of physical education. All physical educators should be working toward the same direction and purpose through educational implications of total growth and development and individual differences.

Adapted physical education programs on the college level have been divided into main areas. Daniels¹¹ suggested the main areas of:

⁸ Arthur S. Lamb, Josephine L. Rathbone, and Peter V. Karpovich, "Contributions of Physical Education to Medicine," American Association of Health, Physical Education and Recreation Journal, Vol. XXI (February 1950), p. 68.

⁹ Ibid.

¹⁰ Hughes, op. cit.

¹¹ A. S. Daniels, Adaptive Physical Education (New York: Harper & Bros., 1954), p. 124.

(1)special conditioning with specific or general developmental exercises to improve range of motion, increase muscle power, preserve function, improve coordination, reduce or remove uncomplicated postural deviations, increase general strength and endurance following prolonged or acute illness; (2)aquatics to meet the remedial, adjustment, recreational and safety needs; and (3)recreational sports which includes games and rhythms. The staff of the Physical Education Department of the University of California, Los Angeles, indicated that the two parts of the developmental program should be: (1)an adaptive sports program; and (2)a corrective and conditioning exercise program.¹² Later the same institution, University of California, Los Angeles, noted:

Owing to the types of diagnoses and recommendation of students enrolled, the program consists of two phases: therapeutic exercises and sports. As a result of the frequency and similarity of certain disabilities, therapeutic exercise routines for ankle, back, knee, shoulder, and general condition have been accepted by or were developed in cooperation with the Student Health Service. The sports were selected on the basis of applicability of the greatest number of students with various medical recommendations.¹³

Stafford cited an earlier program at the University of Illinois:

Experiments were started at the University of Illinois as early as 1928 by assigning certain atypical students to physical education activities with normal students. Possibly one of the reasons why this method of teaching was not questioned was the fact that many students who were "taking corrective" had defects which could not be corrected...The students who did not take regular physical education work as a part of their corrective work spent all of their physical education periods under the direction of the corrective instructor, participating in adapted sports such as shuffleboard,

¹²Hilda Clute Kozman (ed.), Group Process in Physical Education (New York: Harper & Bros., 1951), p. 349.

¹³James G. Dunkelberg and Gene A. Logan, "Let the Doctor Recommend Adapted Physical Education," Journal of Health, Physical Education and Recreation, Vol. XXIX (May 1958), p. 28.

volleyball, badminton, table tennis, horseshoe pitching, softball, handball, and so on.¹⁴

In 1939, W. G. Wittman¹⁵ made a study of oxygen debt as a criterion for evaluating adapted sports at the University of Illinois. A small group of men, half with weak hearts, were tested to determine the strenuousness of four different types of activities in terms of oxygen debt. The four activities tested were badminton, handball, box hockey and table tennis. Box hockey seemed to be the most strenuous. Badminton and handball almost on par and table tennis was the least strenuous by Whittman's study. H. G. Metcalf¹⁶ noted that archery was the best all around activity from the standpoint of safety and interest for the greatest number for the physically handicapped.

The review of literature indicated isolated cases of adapted programs. However, most of the research had been done during or prior to the World War II era, indicating the necessity of studying current trends of the adapted physical education programs in colleges and universities. With the advent of newer approaches of physical medicine for the treatment of abnormalities, the educational process should be modified accordingly. There has been some growth of authentic information in this field. With changing practices, standards change. The need for standards should be directed through intelligent experi-

¹⁴Stafford, op. cit., pp. 43-44.

¹⁵William G. Wittman, "A Study of Oxygen Debt as a Criterion for Evaluating Adapted Sports at the University of Illinois", University of Illinois Thesis Abstracts, 1924-1953 in Physical Education, ed. Thomas K. Cureton (Urbana: University of Illinois, 1953).

¹⁶Harlan G. Metcalf, "The Individual Physical Education Program," Research Quarterly, Vol. IV (March 1933), p. 117.

mentation by educators in cooperation with the medical profession. Some authorities cited seemed to lack consistency in the use of terminology of the field. Is this still prevalent or has a trend toward uniformity been established?

CHAPTER III

METHODOLOGY

Source of Data

In education there is an ever-present need for continuous evaluation and revision of administrative practices. With this in mind, a questionnaire was constructed to determine current trends in physical education programs for the handicapped on the college level. The questionnaire was chosen for two main reasons. First, the literature of the field did not adequately deal with the existing common practices. Secondly, it was impractical to make first-hand personal observations at a large sampling of colleges and universities.

The questionnaire was constructed as objectively as possible to simplify answering and checking for final tabulation of the results. Whenever possible, multiple choice questions were stated for the convenience of the respondent. It was not practical to reduce all questions to the multiple choice form. Blanks were provided for the respondents to check off answers in most cases so that little writing or explanation would be necessary. Several answers to questions were necessary in statement or discussion form. An attempt was made to hold this practice to a minimum. Provision was made for additional comment on each sheet of the five-page questionnaire whenever the person filling in the information felt the need for explanation. If the space provided was

inadequate, respondents were encouraged to use the back of page five for any addition to points enumerated in the questionnaire.

The content of the questionnaire was divided into five parts. The first part contained questions on the types of provisions made for handicapped students in the general service physical education program and the name given to this phase of the program. The second part stated questions on the preliminary medical examination administered to the men students prior to entrance or upon entrance into college. Questions concerning the person in charge of the program, his preparation and special training were included in part three. Part four contained questions on the types of cases currently found in the program and incidence of the temporary classification of handicapped students within the program. The evaluation of the program was included in part five. This part was concerned with periodic medical examination for determining progress and grading practices including components of the grading system.

Selection of Cases for the Study

Since a sample consists of a part of a larger population, one hundred sixty-five institutions were selected to be representative of the universities and colleges in the United States. The Blue Book of College Athletics which lists colleges and universities and gives varied information about them, provided enrollment figures for the study. Three general sizes of schools were surveyed. Those in Group I were schools with male enrollment 2,500 and under, Group II consisted of schools with male enrollment between 2,500 and 5,000, and Group III included

schools with male enrollment 5,000 and over. Fifty-five schools were selected from each of the three general groups of schools, including all the state universities.

A letter of explanation enclosed with the questionnaire was addressed to the Chairman, Department of Physical Education for Men. It was mailed May the sixth, nineteen hundred sixty to the one hundred sixty-five colleges and universities selected for the study. Both the letter and the questionnaire are included in the Appendix. A request was made that returns be mailed before June first. A self-addressed, stamped envelope was also enclosed. By the first of June, one hundred two returns were received. This included thirty-eight returns from Group I, thirty-two from Group II, and thirty-two from Group III. Eight schools, included in the one hundred two returns, did not complete the questionnaire. "Physical education is not required for men" was indicated by six schools. One college stated that "no department of physical education for men" was in existence and another noted that "no remedial, corrective, or adapted physical education program" was in effect. These answers were recorded in the final study.

All schools were listed and given key numbers. The code number indicating enrollment size and geographical location was noted on each returned questionnaire. Master check sheets were set up for the questions which were answered. All marginal comments and additional notations were summarized if it was possible to do so without distorting the problem or any of the sub-problems. Some individual comments were given with no attempt at summary. Tables were included in Chapter IV

for the purpose of clarifying the answers to the content of the questionnaire. The data were presented in most cases in percentages. These were figured on the basis of the ninety-four questionnaires giving information complete enough to use for the study. The number and size of schools used in the study necessitated many varied responses to the questions. An attempt was made to foresee and list all of the possible answers as far as was practical. Since all the questions did not apply to each reporting school, it was impossible to use answers from all ninety-four cases in any one of the questions.

CHAPTER IV

THE ADAPTED PHYSICAL EDUCATION PROGRAM IN SELECTED COLLEGES AND UNIVERSITIES

It has been established that ninety per cent of colleges and universities in the United States have required physical education programs in some form or another. The problem under study concerns itself with that phase of the program for the male students who are permanently or temporarily handicapped.

A total of one hundred two questionnaires were received from the original list of one hundred sixty-five colleges selected for the study. This amounted to a sixty-two per cent return. Thirty-eight of the returns were received from colleges and universities in Group I (male enrollment 2,500 and under), thirty-two from colleges in Group II (male enrollment between 2,500 and 5,000), and thirty-two from colleges in Group III (male enrollment 5,000 and over).

Provisions Made for the Handicapped

Of the one hundred two returned questionnaires, ninety-four colleges (ninety-two per cent) had a physical education requirement in some form or another. As was previously mentioned, eight colleges did not complete the questionnaire. Provisions were made for the handicapped students on the college level in eighty-one of the ninety-four returns which were complete enough for analysis. In Group I,

thirty-two of the thirty-seven colleges stated that provisions were made for the handicapped in the physical education program. Twenty-four of the thirty-one colleges in Group II made provisions for the disabled student, and twenty-five of the twenty-six colleges in Group III made provisions for these students. Table 1 shows the provisions made and the break-down of these provisions into groups according to enrollment. Twenty-four of the eighty-one schools assigned the handicapped to special classes primarily for these cases. Twenty-eight colleges included the handicapped students in the general service program while the remaining twenty-nine colleges included these

TABLE 1
PROVISIONS MADE FOR HANDICAPPED STUDENTS

Common Practices	Colleges and Universities							
	Group I 2,500 & under		Group II 2,501 to 4,999		Group III 5,000 & over		Total	
	No.	Per cent	No.	Per cent	No.	Per Cent	No.	Per cent
Physical education required.	37	97	31	97	26	81	94	92
Schools making provisions.	32	86	24	77	25	96	81	86
Special classes	11	34	9	37	4	16	24	30
In general service program.	15	47	5	21	8	32	28	34
Assigned to special or general program	6	19	10	42	13	52	29	36

students either in special classes or the general service class whichever best fit the individual case.

Colleges reporting on the provisions made for the handicapped indicated the need for flexibility in the program. Several colleges stated that the placement of students either into special classes or into the general service program with the regular students was practiced whenever possible. As noted in Table 1, the large colleges followed this practice more frequently than did the other groups of colleges. The small colleges reported that most of the disabled students are absorbed into the general program with the normal or typical students.

Several colleges and universities commented that handicapped students are permitted to elect the activity in the physical education program with some type of guidance following a medical examination. One report from a college specified that the Health Service notified the Physical Education Department of the nature of the disability and indicated types and amount of activities in which the student could safely participate. The student entered a regular class should he be capable of participating on equal terms with the non-handicapped. A large-sized college stated that, if possible, it had the handicapped take his special work during the time conditioning was offered in the regular program.

Colleges and universities from the middle-sized group, Group II, made these notations:

1. The Health Service physician either exempted the student from

all physical education or sent notice of the students limitations and activities which are prohibited for him.

2. All handicapped were placed in regular classes after an evaluation of their physical status was made.
3. The student health department assigned work for handicapped students. They were usually excused from regular classes, and placed in special work.

Terms used for the type of physical education program in which the handicapped is engaged can imply a stigma by emphasizing student differences. Two schools from Group II cited the following practices. One stated that courses were numbered as other courses but entitled "Developmental Exercise." These particular numbered courses were weight training and this designation kept the adapted program as nearly like the regular program in appearance as possible. The other stated that no name was given for this program and it was not singled out. It had a regular physical education number.

Other comments by the middle-sized schools were that only students who could not participate in the regular program were placed into the corrective and remedial classes. Limited handicaps were placed in activities suited to their disability. Another middle-sized college noted that a wide variety of physical activity classes were promoted for all students required to take physical education. A great many students with limited handicaps found themselves in the standard program which was entirely elective as to choice of activity. The manifestly crippled or seriously handicapped got medical permission and registered for physical education class, "Adaptive Activities". Referring to

provisions made for the handicapped, one college mentioned that they had a special class which all handicapped students were required to take. No university student could be excused from physical education. A three hour theory course might be substituted but only in very rare cases.

Colleges falling into the small-sized category, Group I, stated in several instances that the number of handicapped students in their program was limited and felt the justification of a program for such a few was questionable. The defense for the justification of their programs follows:

1. The college did not have many men listed as handicapped. They had a great selection of activities within the required course--- ranging from pocket billiards to roller skating and sailing. The handicapped elected an activity class within the regular program.
2. Another college commented that they should have a special class for the handicapped but had so few students needing adapted. The available hours of the students were scattered, therefore, the college felt they could not justify a class.
3. Another had seven people on campus with defects. The director of physical education did not feel that he should place an instructor over so few when the college could and did easily absorb them into the regular program.

A small college wrote that in their handicapped class they made little or no attempt to correct defects. The objective was to teach the handicapped some sport skills that they could use during their college life and in post college life. Little effort was made to correct defects that were not remedial or of such a type that only an orthopedic specialist could be of assistance. The greatest benefit

that the college derived from the handicapped program was to discourage students from attempting to escape the physical education requirement by medical excuse. If the students knew that a medical excuse only placed them in the handicapped class, they stayed in the regular class unless they had a real handicapped condition. By instigating the handicapped class, the director of physical education stated they reduced the application for medical excuse by 250%.

Another college mentioned that if a student had some kind of a physical disability, he was asked to register for physical education, "Adaptives", at the beginning of the semester. A conference was held with the director of the college of education during the first week of school. The purpose of this conference was to place the student into a service physical education course which would not aggravate his condition or subject him to unnecessary injury. This college did not have a special class because of the few handicapped students enrolled.

The preceding comments reflect some of the common practices in regard to provisions made for the handicapped student in colleges and universities throughout the United States. Generally, three practices were observed through data received: (1) the disabled student was assigned either to special classes or to the regular service program; (2) the student was assigned to activities in regular service program which best suited the individual needs and limitations; or (3) the student was assigned to a special class.

Lack of Provisions for the Handicapped

Some of the colleges indicated that no provisions were made for the handicapped student. Twenty-five colleges checked that modified activities were given in the regular class period. The degree of modification of these activities was not given. Three colleges assigned the handicapped student to special classes or special projects in lieu of assignment to the service physical education program. One of the three stated that the student health department assigned the work. Another university mentioned that, depending upon the degree of disability, a student was placed either in a modified activity or a hygiene class. Another college stated that the handicapped were permitted to work for athletic managerships. Nine colleges assigned students to observe and assist in routine class duties, such as officiating, score keeping, towel and equipment checking, etc.

Fourteen colleges indicated that students were excused entirely from the physical education program even though a requirement may exist. To justify this action, five colleges stated that the students were excused for rare or exceptional cases only. Another commented that the college physician determined the activity as restricted for the student. A middle-sized college commented that no provisions were made for the handicapped. They were excused by a medical physician. It was noted that seven colleges from Group I; three from Group II, and four from Group III excused some of their physically handicapped students. Leaders of the field believe that a program for the atypical student

medical examination is to determine the status of the student's health. After the health status has been established, the necessary and proper assignment can be made. The medical examination for classification and assignment of students into the general physical education program was given to all male students in ninety-one per cent of the ninety-four schools providing data for the study. Dividing the percentage into school sizes revealed that medical examinations were given to:

1. Ninety-two per cent of the small colleges.
2. Eighty-four per cent of the middle-sized colleges.
3. One hundred per cent of the large colleges.

One college stated that a medical examination was not given to any of the male students in its program. Another school commented that the physical education department could recommend a medical examination for the student.

The medical examination was administered either before or upon entrance to college in ninety per cent of the institutions. This practice was followed in eighty-nine per cent of the small colleges, eighty-seven per cent of the middle-sized colleges and in ninety-six per cent of the large colleges. Nineteen colleges gave the medical examination upon entrance and upon request thereafter. One college gave the examination upon entrance and upon graduation and another administered it upon entrance and each semester thereafter.

Table 3 shows the personnel administering the medical examination for the purpose of determining the needs of the student. The college physician administered the examination in forty per cent of the

TABLE 3
 PHYSICIANS ADMINISTERING THE
 MEDICAL EXAMINATION

		Colleges and Universities							
Common Practices	Group I 2,500 & under		Group II 2,501 to 4,999		Group III 5,000 & over		Total		
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	
College physician.	15	40	12	39	10	39	37	40	
Family physician. .	10	27	7	23	11	42	28	30	
College physician or family physician.	8	22	6	20	4	15	18	19	
College physician assisted by another doctor. .	2	5	2	6	...	...	4	4
Misc. responses. .	1	3	2	6	...	...	3	3
No responses. . . .	1	3	2	6	1	4	4	4	

cases and, in comparison, the family physician administered the examination in thirty per cent of the colleges.

More colleges (sixty-one per cent) used a record card or form which indicated the defects needing attention than any other method of informing the student of his health status following a medical examination. Seventeen per cent of the colleges held a conference which included the student, the doctor and an instructor of the adapted program. Many other combination of practices were revealed but since they represented insignificant data, percentage-wise, no attempt is

made to analyze them. However, three colleges used the services of the the health service nurse to inform the student of his health defects.

A great variance of procedures were used in class assignment for the handicapped. In forty-two per cent of the colleges the head of the physical education department assumed responsibility for making class assignments. This practice was observed by the greatest number of cases in schools in Group I and Group II. With an increase in the number and type of handicaps and the personnel teaching the disabled, the colleges in Group III used the services of the supervisor of the adapted program more than did the other two groups of colleges. The director of the student health service was also used in class assignment in some cases.

Other classification methods used besides the medical examination in the order listed were skill tests, strength tests, coordination tests, cardio-vascular tests, personal observation and referral by teachers, physical fitness classification test, and silhouettograph.

Teaching Personnel

Professional education is one of the important qualifications necessary for successful guidance and competent teaching in the adapted program. Other qualifications are vital to educate the handicapped student successfully. Certain insight into the needs of the disabled, patience, understanding and willingness to be of assistance, are some of these important competencies. The professional preparation of the

personnel in charge was analyzed in the study.

The personnel in charge of the adapted program varied among the colleges reporting. Table 4 shows that twenty-eight per cent of the colleges had the regular teacher in charge. More large colleges (forty-two per cent) had a specialist in charge than either the middle-

TABLE 4
PERSONNEL IN CHARGE OF ADAPTED PHYSICAL EDUCATION

Person in Charge of Adapted Program	Colleges and Universities							
	Group I 2,500 & under		Group II 2,501 to 4,999		Group III 5,000 & over		Total	
	No.	Per ^a cent	No.	Per ^a cent	No.	Per ^a cent	No.	Per ^a cent
Regular phys. educ. instructor.	11	30	7	23	8	31	26	28
Specialist in adapted phys. ed.	4	11	7	23	11	42	22	24
Phys. education dept. head.	8	22	3	10	2	8	13	14
Specialist--also teaches regular program.	1	3	3	10	1	4	5	5
Specialist--also dept. head.	2	5	1	3	1	4	4	4
Dept. head--also teaches regular program.	2	5	1	3	...	...	3	3
Others.	1	3	3	10	1	4	5	5
No response.	8	22	6	19	2	8	16	17

^aBecause percentages are given to the nearest whole number, it is not always possible for the total percentage to equal one hundred by adding component parts.

sized colleges (twenty-three per cent) or the small colleges (eleven per cent). Fourteen per cent of all colleges had the head of the physical education department in charge.

The professional education of the person in charge in forty-four per cent of the schools included a Master's Degree with a major in physical education as shown in Table 5. As the enrollment of the colleges increased a greater percentage of instructors having a Master's Degree with a major in physical education increased. Twenty per cent

TABLE 5
PROFESSIONAL PREPARATION OF THE PERSONNEL IN CHARGE

Preparation of Personnel	Colleges and Universities							
	Group I 2,500 & under		Group II 2,501 to 4,999		Group III 5,000 & over		Total	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Master Degree— major in phys. educ. . .	13	35	13	42	15	58	41	44
Ph.D. Degree ^a . .	8	22	5	16	6	23	19	20
Ed.D. Degree. . .	4	11	2	7	...	...	6	7
Bachelor Degree— major in phys. educ. . .	2	5	2	7	...	...	4	4
Master Degree ^b — minor in phys. educ. . .	2	5	1	3	1	4	4	4
Others. . . . .	...	...	1	3	2	8	3	3
No response . . .	8	22	7	23	2	8	17	18

^aMajor in physical education in thirteen of the nineteen colleges.

^bThe majors of these Master's Degrees were health education, psychology, anatomy and physiology.

of the colleges reported that the person in charge had a Ph.D. Degree. Specialized courses on the graduate level were indicated by sixteen different colleges. Other special training of personnel in the adapted program included physiotherapy with three colleges indicating registered physical therapists, orthopedic training, military service rehabilitation programs, community and public health programs, hospital rehabilitation programs, psychology, adapted physical education work in college, and medical social work in hospital rehabilitation.

A regular teacher was in charge of the program in twenty-six colleges. If a regular instructor taught in the adapted program he was under supervision of the following persons:

1. The head of the physical education department in thirty-four colleges.
2. The specialist in charge of the program in eleven colleges.
3. The health service physician in three schools.
4. The adapted physical education instructor or director in two colleges.
5. The director of the service course program in one college.

In nine colleges, the regular instructor taught the adapted class without supervision. The indication was that in these nine colleges the regular instructor had complete reign over the program.

Types of Disabilities

The types of disabilities found within the adapted program in the order listed were cardiac conditions—functional and or structural; post operative cases; joint disabilities; foot disorders; faulty body mechanics including kyphosis, lordosis and scoliosis; amputations; paralysis—flaccid and spastic; respiratory and nasal disorders;

endocrine malfunction; malnutrition; broken bones; and low fitness.

Seventy-three per cent of the colleges had handicapped students classified as temporary cases. This included seventy-three per cent of the small colleges, sixty-eight per cent of the middle-sized colleges, and eighty per cent of the large colleges. The temporary classification lasted until the defect was corrected in sixty-five per cent of the sixty-nine colleges.

Upon termination of the temporary classification, the student is returned to a regular service activity in seventy-nine per cent of the cases. Four colleges indicated that the student is allowed to elect the class activity after his temporary classification. In another college the student reported to the student health service for reclassification.

The school physician recommended the transfer of the student upon completion of the temporary classification in forty-three per cent of the colleges. More of the small colleges (forty-eight per cent) and the middle-sized colleges (forty-seven per cent) followed this practice than did the large colleges (thirty-three per cent). However, the instructor of the adapted class and the school physician together recommended the transfer in fifty-seven per cent of the large colleges. The large colleges are able to have an instructor and the college doctor consult in regards to the disposition of the student more readily than the other two groups of colleges.

Evaluation of the Program

A. S. Daniels states that "evaluation of student progress serves two main purposes. The first is concerned with the student's achievement in terms of improvement or adjustment. The second purpose of evaluation is to provide the bases for marking or grading in physical education."¹ Both of these factors of evaluation were given consideration. To help determine the progress made in the program, periodic medical examinations should be given. Fifty-two per cent of the schools indicated that periodic medical examinations were given. This represents forty-nine colleges and universities. Twenty-four per cent of the schools replied that they did not give periodic medical examinations.

Periodic conferences or consultations were arranged for the students in fifty-eight per cent of the cases. These were given ranging from twice a week to twice a year. The most common practice was arranging the conference or consultation through the judgment or discretion of personnel instructing the class. The next most frequent practice was having the conference about once or twice a semester. A weekly conference and one given quarterly were indicated by the same number of schools.

Evaluating student progress by grading or marking has become traditional in American education. The pattern of grading in the

¹A. S. Daniels, Adapted Physical Education (New York: Harper & Bros., 1954), p. 114-115.

adapted program should follow that established for the general program. Seventy-two per cent of the institutions graded students in the adapted program upon completion of the course work. This was done in seventy per cent of the colleges in Group I, sixty-eight per cent of the colleges in Group II, and eighty per cent of the colleges in Group III.

The factors most commonly used in grading or marking handicapped students were:

1. In forty-nine colleges, the student's knowledge of the prescribed activities and understanding of his limitations provided one basis for grading.
2. In forty-seven colleges, knowledge of his own defect, his needs, limitations and capacities are considered.
3. Actual skill in sports participation is a criterion in thirty-seven colleges.
4. In twenty-seven colleges the criteria for determining grades is the same as in the general physical education program.
5. Six colleges utilized improvement and progress records.
6. Six colleges stated that cooperation and attitude are considered.
7. Attendance in five colleges.
8. Written knowledge of sport activities and personal application and effort to accomplish the objective in three colleges.

Organization of Special Classes

The colleges and universities which have special classes provided for the handicapped gave information revealing the total number of disabled students within the program. Three small and two middle-sized colleges had as few as five handicapped students enrolled

in their programs. One large university indicated that five hundred students were included in the adapted program. The total number of handicapped students enrolled in the adapted program according to group classification was as follows:

1. Fifty-four per cent of the small colleges have on the average between five and twenty handicapped students.
2. In thirty per cent of the middle-sized colleges there were between five and twenty-five students enrolled.
3. The large colleges, as was expected, have more students enrolled than the other two groups.
 - a. Thirty per cent had between fifty to one hundred students.
 - b. Twelve per cent had two hundred or more students enrolled.

The number of special classes provided for the students varied as to size of the college. Several colleges indicated as many as fifteen to seventeen separate classes in the adapted program. Thirty-eight per cent indicated that there were between one and four classes provided. This included: (1) thirty-five per cent of the small colleges, (2) thirty-eight per cent of the middle-sized colleges, and (3) forty-two per cent of the large colleges.

Table 6 shows two general administrative policies concerning program planning as they pertain to sixty-five colleges and universities giving data complete enough for this analysis. The first policy involved the length of the class period and the second the number of days each week the class meets. Forty-five per cent of the colleges had a class period of fifty minutes duration, which has been a standard practice in universities. Eighteen per cent reported a class period

TABLE 6
 POLICIES REGARDING SPECIAL CLASSES
 FOR THE HANDICAPPED

Colleges and Universities								
Length of Period (in minutes)	Group I 2,500 & under		Group II 2,501 to 4,999		Group III 5,000 & over		Total	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
50 minutes	12	63	11	48	6	26	29	45
30	2	11	4	17	6	26	12	18
60	...	...	4	17	2	9	6	9
40	2	11	1	4	2	9	5	8
45	1	5	...	...	2	9	3	5
15 to 45	1	5	...	...	1	4	2	3
35	...	...	2	9	...	...	2	3
over 60	...	...	...	...	2	9	2	3
55	...	...	...	...	1	4	1	1
others	1	5	1	4	1	4	3	5
Days Per Week Class Meets								
2 days	14	61	11	52	9	43	34	52
3 days	7	30	9	43	11	52	27	42
1 day	2	9	...	...	...	...	2	3
4 days	...	...	1	5	1	5	2	3

of thirty minutes.

The number of days each week the class meets was also given in Table 6. The most common practice was having the class meet two days per week in fifty-two per cent of the colleges reporting. The next most common practice was having the class meet three days a week in forty-two per cent of the colleges.

The average length of time the student was enrolled in the adapted program varied in the colleges reporting. Thirty-five per cent of the colleges indicated that the average length of time was between thirteen to eighteen weeks. Twenty-one per cent indicated between seven to twelve weeks and seventeen per cent stated the time of over thirty-six weeks.

The nature of the class work in the adapted program should be individualized, therefore the class size should not be too large. Some authorities cite a class of fifteen to twenty students as the maximum. Of the sixty-five colleges and universities giving information, twenty-nine per cent had an average class size of six to ten students. Twenty-seven per cent had an average class size of eleven to fifteen students. However, fourteen per cent had the class size of twenty-one to twenty-five students and three per cent of the colleges had an average class size of twenty-six to thirty students.

A diversified amount of activities including individual, dual and team sports was in evidence in the program for the handicapped. Table 7 lists the activities according to their rank. The type of

TABLE 7
ACTIVITIES IN THE ADAPTED PHYSICAL EDUCATION PROGRAM

Individual-Dual Activity	No. of Responses	Percent	Individual-Dual Activity	No. of Responses	Percent
Swimming	68	72	Table tennis	41	44
Badminton	62	66	Handball	49	42
Tennis	56	60	Wrestling	37	39
Golf	55	58	Horseshoes	32	34
Archery	55	58	Bait-fly casting	29	30
Bowling	53	56	Fencing	27	29
Tumb.-Gymnastics	48	51	Golf-Cage driving	26	28
Rhythms	42	45	Deck tennis	15	16
Team Sport			Team Sport		
Volleyball	47	50	Touch football	22	22
Basketball	34	36	Soccer	19	20
Softball	33	35	Baseball	14	15

activities in the adapted programs revealed that an emphasis falls upon preparation for worthy use of leisure time. The individual and dual activities ranking highest have definite "carry-over" value.

Calisthenics, adapted exercise, and prescribed exercise were indicated by twelve schools as part of the program. Rest, ice skating, weight training were also included in a number of responses. Speedball

was included in nine schools as a team sport activity.

Swimming was included in more adapted programs than any other activity. Badminton was second and tennis, golf, and archery were grouped closely together. Volleyball was the most popular team sport. Basketball and softball ranked second and third respectively.

Comparison of Common Practices

Table 8 gives a summary of common practices which compare the

TABLE 8
COMPARISON OF COMMON PRACTICES

Common Practices in the Adapted Program	Colleges and Universities					
	Group I		Group II		Group III	
	No.	Per cent	No.	Per cent	No.	Per cent
Provisions made for handicapped.	32	86	24	77	25	96
Excused entirely from phy. education . .	7	19	3	10	4	15
"Adapted" used in title.	7	35	5	26	15	71
Medical exam. given all men students . .	34	92	26	84	26	100
Family physician administers exam. . . .	10	27	7	23	11	42
Class assignment by supervisor of adapted physical education.	4	11	6	19	9	35
Class assignment by head of department of physical education.	14	38	8	28	1	4
Specialist in charge of program.	4	11	6	19	9	35
Regular physical education instructor in charge of program.	11	30	7	23	8	31
Periodic medical exam. given.	17	46	16	52	16	61
Periodic conferences given.	17	46	16	52	22	85

three groups of colleges with each other. In most cases throughout this chapter, percentages were given for the entire ninety-four colleges and universities returning the questionnaire. It should be noted here that, on a percentage comparison, all three groups of colleges observed common practices similarly. However, in other situations, one of the groups deviated in certain practices to the extent that the average percentage was lowered or raised significantly. Since comparisons of the three groups of colleges is being made, total percentages have been omitted as they have been previously mentioned in the chapter.

A certain amount of flexibility is necessary in the adapted physical education program. The practices incorporated in a large college may be impractical in a small college due to inadequacies of staff, facilities or equipment. However, accepted practices and guiding principles have been established for the program. These should be observed as an important part of the college adapted program.

CHAPTER V

SUMMARY AND CONCLUSIONS

The purpose of this study was to determine the common practices in the organization and administration of the physical education programs for the handicapped on the college level. It was hoped that the information gained might furnish guidance to schools interested in re-evaluating or reorganizing their programs.

A questionnaire was used to determine the current trends in the adapted physical education programs for college men. The summary of the findings contained statements regarding the most common practices and, in some instances, statements regarding the opinions of personnel within the program itself. These were used as a basis for the conclusions of the study.

The summary and conclusions have been divided into the following seven general areas covering different phases of the adapted programs: (1)provisions made for the handicapped, (2)classification and assignment of the student, (3)qualification and preparation of teaching personnel, (4)types of disabilities, (5)methods of evaluating the program, (6)organization of the special class for the handicapped, and (7)a comparison of common practices of the colleges and universities according to enrollment. In each

of the areas, summarizing statements have been given in regard to the common practices as indicated by selected colleges and universities. After each series of practices, conclusions of the findings have been stated.

In most cases, percentages were given for the entire number of colleges and universities returning the questionnaire complete enough for analysis. This included ninety-four colleges from the three general groups of colleges selected according to enrollment. In certain instances when one of the groups of colleges either raised or lowered the average percentage of the other two groups of colleges significantly, notations were made in the summary.

Provisions Made for the Handicapped

1. Provisions were made for the handicapped students in eighty-six per cent of the ninety-four colleges reporting.
 - a. Eighty-six per cent of the small colleges.
 - b. Seventy-seven per cent of the middle-sized colleges.
 - c. Ninety-six per cent of the large colleges.
2. Handicapped students were generally assigned to either a special class or to the regular service program in sixty-six per cent of the colleges.
3. In thirty-four per cent of the colleges, handicapped students were assigned to the regular service program activities whichever best fit the individual case.
4. Fourteen (or fifteen per cent) of the colleges indicated that students were excused entirely from the physical education program

even though a requirement might exist.

5. Nine colleges (or ten per cent) assigned students to observe and assist in routine class duties, such as officiating, score keeping, towel and equipment checking, etc.

Educators should realize that their responsibility is not only concerned with the education of the mind, but with the whole life of the student. The care of the handicapped student must be extended to include not only physical health but social, emotional, and mental health as well. Provisions should be made by all colleges and universities in which handicapped students are enrolled.

Segregation from normal students may be necessary in some cases, but modification of all activities is not what the handicapped wants. Stafford cited, "the handicapped person does not want an activity modified to allow for his disability; he wants activities which are adapted to his remaining abilities."¹ Assignment of students should be made in activities based upon the individual needs, limitations, interests and capacities of each handicapped student.

According to the philosophy of physical education, all students enrolled should be considered as part of the total education process. No justification can be made for excusing students from the program. Assigning menial tasks will not help develop the student to his full potentiality. If the program embraces all of the normal students,

¹George T. Stafford, Sports for the Handicapped, (New York: Prentice-Hall, Inc., 1947), p. 41.

have not the physical educators a greater responsibility to encompass all of the students, handicapped or not?

Classification and Assignment of Students

1. The medical examination was required of all men students in ninety-one per cent of the ninety-four cases reporting.
 - a. Ninety-two per cent of the small colleges.
 - b. Eighty-four per cent of the middle-sized colleges.
 - c. One hundred per cent of the large colleges.
2. The medical examination was administered before or upon entrance to college in ninety per cent of the colleges.
 - a. Eighty-nine per cent of the small colleges.
 - b. Eighty-seven per cent of the middle-sized colleges.
 - c. Ninety-six per cent of the large colleges.
3. The college physician administered the medical examination in forty per cent of the cases.
4. The record card indicating these defects needing attention was used by sixty-one per cent of the ninety-four cases.
 - a. Forty-eight per cent of the small colleges.
 - b. Sixty-four per cent of the middle-sized colleges.
 - c. Seventy-three per cent of the large colleges.
5. In schools using a record card, the physician recommended or prohibited specific activities in seventy-three per cent of the cases.
6. Forty-two per cent of the colleges indicated that the physical education department head made the class assignment in the adapted program.

The medical examination is a primary classifier for physical education activities. Its purpose is to permit safe and successful

participation in the program. To detect any cases needing attention and to assure proper assignment, the medical examination should be given before or upon entrance to college.

The National Committee of School Health Policies of the National Conference in School Health² has established the position that the medical examination should be administered by a private practitioner of medicine, preferably the student's own physician. This was not the policy of many of the colleges in the study.

A method of informing the student of the defects needing attention is imperative. Policies, procedures and record forms are necessary to safeguard the student in a safe and effective adapted physical education program. These should be in harmony with educational purposes. Complete cooperation is necessary between the college or university and the family of the individual involved, the family physician and any other person or agency concerned with the individual's handicap.

Actual assignment may be made by the director of the student health service with the cooperation of the chairman of the department of physical education, supervisor of adapted program, family physician, dean of the college and university guidance personnel. In certain cases all personnel who work with the handicapped may be in consultation concerning class assignment. For the most part, however, the assignment

²National Committee on School Health Policies of the National Conference in School Health, Suggested School Health Policies (2d ed.; Health Education Council, 1946), p. 28.

will involve a much smaller number of persons.

Teaching Personnel

1. The regular physical education instructor was in charge of the adapted program in twenty-eight per cent of the colleges and a specialist in adapted physical education in twenty-four per cent of the colleges.

2. The professional preparation of the personnel in charge of the adapted program included a Master's Degree with a major in physical education in forty-four per cent of the colleges.

- a. Thirty-five per cent of the small colleges.
- b. Forty-two per cent of the middle-sized colleges.
- c. Fifty-eight per cent of the large colleges.

3. If a regular teacher taught in the adapted program, he was under supervision of the head of the physical education department in thirty-five per cent of the colleges.

- a. Forty-three per cent of the small colleges.
- b. Forty-two per cent of the middle-sized colleges.
- c. Nineteen per cent of the large colleges.

4. Thirty-five per cent of the large colleges had a regular teacher supervised by the specialist in charge of the adapted program.

5. In nine schools (four from Group I, two from Group II, and three from Group III) the regular instructor had complete reign over the program without supervision.

The amount of credit hours, whether on the undergraduate or graduate level, does not guarantee a successful teacher of adapted physical education. The personnel teaching in this phase of the

program needs special training and education in addition to the well-rounded preparation necessary for teaching in the general program. The type of professional preparation is of prime importance. The teacher, in order to utilize his specialized education, must first establish the proper rapport with the handicapped student. A regular instructor teaching in the adapted program under the supervision of the physical education department head merits consideration. Here again the department head should have the qualification and preparation necessary to supervise the adapted program.

Types of Disabilities

1. The most common types of disabilities found in the college adapted program were cardiac conditions, post operative cases, joint disabilities, foot disorders, and faulty body mechanics.

2. Handicapped students were classified as temporary cases in seventy-three per cent of the ninety-four colleges.

- a. Seventy-three per cent of the small colleges.
- b. Sixty-eight per cent of the middle-sized colleges.
- c. Eighty per cent of the large colleges.

3. Upon termination of the temporary classification the student is returned to the regular service class in seventy-nine per cent of the sixty-nine colleges making the classification.

4. Upon completion of the temporary classification, the student is transferred upon recommendation of the school physician in forty-three per cent of the sixty-nine colleges and universities indicating a temporary classification.

- a. Forty-eight per cent of the small colleges.
- b. Forty-seven per cent of the middle-sized colleges.
- c. Thirty-three per cent of the large colleges.

The nature of the disability should have bearing upon the type of activity in which the student can safely and successfully engage. The medical profession should determine the proper classification. Close cooperation and mutual understanding is needed between physicians and school officials, especially teachers in charge of the adapted program. The program should be broad and flexible enough to meet any and all types of handicaps.

Evaluation of the Program

1. Periodic medical examinations were given in fifty-two per cent of the colleges.
2. Periodic conferences or consultations were arranged for the handicapped students in fifty-eight per cent of the cases.
3. The most common practice was arranging the conference with the student through the judgment or discretion of the personnel instructing the class.
4. Seventy-two per cent of the schools graded or marked the students in the adapted program upon completion of the course work.
 - a. Seventy per cent of the small colleges.
 - b. Sixty-eight per cent of the middle-sized colleges.
 - c. Eighty per cent of the large colleges.
5. The commonly used factors in grading the handicapped student are: (1) his knowledge of prescribed activities and understanding of his limitations; (2) the knowledge of his own defect, his

needs, limitations, capacities; and (3) actual skill in sports participation.

Periodic medical examinations are necessary. The physician is the best judge of the need for additional examinations and for their frequency thereafter. An unobstructed channel for referrals should be available to the adapted teacher in cases where deviation or abnormalities are noted.

The Committee of Adapted Physical Education in the formation of guiding principles for adapted physical education listed the following direct and related services that should be available to the schools: "guidance of individuals needing special consideration with respect to physical activity, general health practices, recreational pursuits, vocational planning, psychological adjustment, and social development."³ Also cited was the importance of evaluating and recording the progress of the handicapped students through observation, appropriate measurements and consultations. Conferences and consultations play an important role in determining progress made by the student in the program.

The pattern of grading in the adapted program should follow that established for the general program, providing a satisfactory plan exists in the college or university. Skill tests, knowledge tests, developmental ratings and achievement tests from the general

³"Guiding Principles for Adapted Physical Education," The Journal of Health, Physical Education and Recreation, vol. XXIII (April 1952), p. 15.

program should be the bases for the handicap's grades. These should be supplemented by functional ability tests, range of motion and strength tests, conferences and consultations.

Special Classes for the Handicapped

1. The total number of handicapped students enrolled in the adapted program in the three groups of colleges and universities varied as follows:

- a. Fifty per cent of the small colleges had between five and twenty students.
- b. Thirty per cent of the middle-sized colleges had between five and twenty-five students.
- c. Thirty per cent of the large colleges had between fifty to one hundred students and twelve per cent had two hundred or more.

2. The number of special classes provided varied as to size of college. Thirty-eight per cent indicated that there were between one and four of such classes provided.

3. Forty-five per cent of the sixty-five colleges and universities had a class period of fifty minutes duration.

- a. Sixty-three per cent in small colleges.
- b. Forty-eight per cent in middle-sized colleges.
- c. Twenty-six per cent in the large colleges.

4. Fifty-two per cent of the colleges held the classes two days per week.

- a. Sixty-one per cent of the small colleges.
- b. Fifty-two per cent of the middle-sized colleges.
- c. Forty-three per cent of the large colleges.

5. Fifty-two per cent of the large colleges held classes three days per week.

6. Thirty-five per cent of the colleges enrolled the student in the adapted program for the average length of time between thirteen to eighteen weeks.

7. The average class size of colleges reporting included:

- a. Twenty-nine per cent of the colleges had an average class size of six to ten students.
- b. Twenty-seven per cent of the colleges had the class size of eleven to fifteen students.
- c. Fourteen per cent had the class size of twenty-two to twenty-five.
- d. Three per cent had twenty-six to thirty students.

Class periods should run as long as other classes in the physical education program. Flexibility should prevail, however, for individual cases. Rest may be needed in some cases after short periods of activity. Others may not be able to be active the entire class period.

Because of the individualized nature of adapted physical education, the size of the class should be small. The maximum of ten to fifteen students would be ideal. Greater needs of the handicapped students are apparent in physical education. Close personal contact improves teacher-student relationship so necessary for success. Much more can be accomplished in small classes to establish rapport between teacher and student.

8. The activities provided for the handicapped were many and varied as was in evidence by the responses. Swimming was included in more adapted programs than any other activity. Badminton was second and tennis, golf, and archery were grouped closely together. Volley-

ball was the most popular team sport as indicated by the colleges reporting. Basketball and softball ranked second and third respectively as team sports.

The nature and number of the activities in the study indicated that the adapted programs provided many opportunities for participation by the handicapped. The wide variety of activities allows the student to participate in those within his capacity, many with normal individuals, with the satisfaction of recognition by his peers, with outlets of expression and with "carry-over" value.

9. The term "adapted" was most frequently used in the title for the program. This occurred in forty-six per cent of sixty colleges reporting. The next most common title used included the term "restricted".

Prior to World War II, the terminology of the field leaned toward the term "corrective". Realizing the greater number of handicapped enrolled in our colleges with conditions which are not corrective, authorities in the field became interested in the terminology employed. The American Association for Health, Physical Education and Recreation organized a committee to study the entire field of reconditioning, including the terminology used in the program. The term "adapted" was chosen by the committee as a common designation for this phase of physical education.

Comparison of Common Practices

On a percentage basis, sixteen of twenty common practices were

found to be more prevalent in the large colleges and universities. The inference drawn from the data indicated that the large colleges generally had a more developed adapted physical education program than did either of the middle-sized or small colleges.

Some of the common practices in which the large colleges ranked highest are the same ones recommended by authorities in the field. Most colleges were cognizant of the need of an adapted program for the handicapped student.

Generally the large colleges and universities (male enrollment 5,000 and over) had the highest percentage of cases reported in the following common practices of the adapted program:

1. Ninety-six per cent of the colleges made provisions for the handicapped.
2. Seventy-one per cent used the term "adapted" in the title for the program.
3. One hundred per cent administered the medical examinations to all male students.
4. Ninety-six per cent administered medical examinations to the students before or upon entrance to college.
5. Fifty-seven per cent transferred or re-assigned the student upon completion of a temporary classification by the joint recommendation of an instructor of the adapted class and the school physician.
6. Sixty-one per cent of the colleges evaluated the student's progress in the adapted program through periodic medical examinations.
7. Eighty-five per cent held periodic conferences with the handicapped student. The adapted instructor usually scheduled the conference at his discretion.

The small colleges (male enrollment 2,500 and under) ranked

highest in the following common practices:

1. Nineteen per cent of the colleges excused a few of the handicapped students from the physical education program.
2. In twenty-two per cent of the colleges either the college physician or the family physician administered the medical examination.
3. In thirty-eight per cent, the head of the department of physical education assigned the handicapped to class activity.
4. Forty-eight per cent of the colleges indicated that the school physician recommended transfer upon completion of the temporary classification.

The middle-sized colleges (male enrollment between 2,500 and 5,000) ranked between the large and small colleges in most of the common practices.

Conclusions

General weaknesses discovered in existing adapted physical education programs as a result of the study are:

1. Lack of provisions made for the handicapped. Two reasons which seemed to contribute to these are: (a) students excused entirely from physical education and (b) colleges assigned students to observe and assist in routine class duties. Neither of these two practices are in agreement with physical education philosophy.
2. The family physician did not administer the medical examination before or upon entrance to college in many cases. Programs of adapted physical education should not be attempted without the diagnosis, written recommendation, and supervision of a family physician who best knows the medical history of the individual involved.

3. Cases were noted in which a regular instructor had complete reign over the adapted program without any supervision. This seemed apparent even though he lacked professional preparation and qualification.

4. In many colleges in the study, periodic medical examinations were not given to determine progress of the student in the program. For proper safeguards and maximum student benefits, medical examinations should be given periodically.

5. The lack of periodic conferences with the handicapped student enrolled in the program was noticeable, also. Guidance of the handicapped is necessary with respect to physical activity, general health practices, recreational pursuits, vocational planning, psychological adjustment, and social development.

The findings indicated that there is a need for some colleges to re-evaluate and reorganize their existing adapted physical education programs. Criteria developed through accepted practices should be used in this reorganizational process. This does not indicate, however, that the other colleges were perfect and can henceforth be ignored. Evaluation of these colleges should be progressive and continuous.

Recommendations

During the writing of this thesis, additional problems were revealed. The writer would like to suggest that some of these be developed for further research. Not all phases of the program were

considered. Due to the fact that the data was incomplete and inadequate in certain phases of the study, it would seem desirable to recommend additional follow-up studies in the following items:

1. The degree of similarity or difference between the general physical education program and the adapted program with regards to general class organization and administrative policies. A method of evaluating the success of the adapted program as it relates to the success of the general program.

2. A study of the evaluation of the adapted program to its "carry-over" value after the student has left the class and college. The amount of activity carried on by the student in later years. Most colleges indicated that personal observation was used as the method of evaluating the program in this report. How is evaluation provided for those students who never return or report back to the college?

3. A development of a philosophy in regard to the area of adapted physical education, evolving from such problems as the educational values, needs, and objectives.

102 Golf Terrace Drive
Crockston, Minnesota
May 6, 1960

Chairman, Department of Physical Education for Men

Dear Sir:

It has been established that 90 per cent of colleges and universities in the United States have required physical education programs in some form or another. The enclosed questionnaire primarily concerns itself with that part of the program for the male students who are permanently or temporarily handicapped, hereafter known as the adapted physical education program for men.

It is hoped that the information contained in the questionnaire will serve as the basis for determining the common practices in operation and of existing administrative policies in the field of adapted physical education. It is also hoped that the information gained may furnish guidance to schools interested in re-evaluating and re-organizing their adapted programs.

All of the information contained will be held strictly confidential, and will be used only as a basis for drawing some definite conclusions concerning this problem.

The success of this study depends upon your willingness to complete the questionnaire. May I look forward to your reply before June 1. A self-addressed, stamped envelope is enclosed for your convenience. In event that this questionnaire has been misdirected, will you kindly pass it along to the person with these responsibilities.

Sincerely yours,

Robert W. Strand

Enclosure

ADAPTED PHYSICAL EDUCATION IN COLLEGES AND UNIVERSITIES

Name of college or university _____ Location _____

1. Total enrollment of men in current academic term _____.
2. Physical Education is required for (please check) Fresh. ___ Soph. ___ Jr. ___ Sr. ___
3. Number of students currently enrolled in the service or required physical education program _____.
4. Are provisions made for handicapped students within the service or required program? Yes ___ No ___
 - a. If provisions are made, are the handicapped assigned to separate classes? Yes ___ No ___
 - b. Are these classes required of Fresh.? ___ Soph.? ___ Jr.? ___ Sr.? ___
 - c. Are they included in the regular physical education classes? Yes ___ No ___
 - d. Are any elective classes provided for the handicapped? Yes ___ No ___
 - e. Are any prerequisites required for the elective classes? Yes ___ No ___
If yes, explain what they are.
 - f. If no provisions are made for the handicapped, is a program contemplated? Yes ___ No ___
 - g. If no provisions are made, are the physically handicapped students requiring special attention:
 - ___1. assigned to special classes, such as handicraft, etc.?
 - ___2. given modified activities in the regular classes?
 - ___3. assigned to observe and assist in routine class duties; such as, officiating, etc.?
 - ___4. excused entirely from physical education?
 - ___5. others (indicate)

I. PROGRAM OF ADAPTED PHYSICAL EDUCATION

1. If your school has a program for the handicapped, what is it called?

2. Total number of handicapped students enrolled in your program _____.
3. Number of separate classes for the handicapped within the program _____.
 - ___a. Length of class period (in minutes).
 - ___b. Average length of time student is enrolled (in weeks).
 - ___c. Days per week class meets.
 - ___d. Number of students in average size class.
 - ___e. The hour of day classes meet.

4. The type of activities included in your program:

- | | | |
|---|--|--|
| <input type="checkbox"/> Archery | <input type="checkbox"/> Fencing | <input type="checkbox"/> Ice skating |
| <input type="checkbox"/> Badminton | <input type="checkbox"/> Golf-cart driving | <input type="checkbox"/> Nature lore |
| <input type="checkbox"/> Bait & fly casting | <input type="checkbox"/> Golf | <input type="checkbox"/> Rest |
| <input type="checkbox"/> Bowling | <input type="checkbox"/> Gymnastics | <input type="checkbox"/> Rope spinning |
| <input type="checkbox"/> Box hockey | <input type="checkbox"/> Handball | <input type="checkbox"/> Swimming |
| <input type="checkbox"/> Dancing-social | <input type="checkbox"/> Hiking | <input type="checkbox"/> Table tennis |
| <input type="checkbox"/> Deck tennis | <input type="checkbox"/> Horseshoes | <input type="checkbox"/> Tennis |
| <input type="checkbox"/> Others (indicate) | | <input type="checkbox"/> Wrestling |

If team sports included, indicate if these are modified activities:

- | | | |
|--|-----------------------------------|---|
| <input type="checkbox"/> Baseball | <input type="checkbox"/> Soccer | <input type="checkbox"/> Touch football |
| <input type="checkbox"/> Basketball | <input type="checkbox"/> Softball | <input type="checkbox"/> Volleyball |
| <input type="checkbox"/> Others (indicate) | | <input type="checkbox"/> Speedball |

II. CLASSIFICATION AND ASSIGNMENT OF STUDENTS

1. A medical examination is given:

- a. to all men students
- b. to those recommended to the physician following a physical exam
- c. to none
- d. others

2. The medical examination is administered:

- a. upon entrance to college
- b. annually
- c. upon request
- d. others

3. It is given by a:

- a. college physician
- b. family physician
- c. specially employed doctor
- d. others

4. Following a medical examination, the student is informed of his health status by:

- a. a record card or form indicating those defects needing attention.
- b. a conference with the doctor administering the examination.
- c. a conference with an instructor of the adapted class.
- d. others

5. If a record card is used, does the physician recommend specific activities?

Yes No

6. After the medical examination, class assignment for the handicapped is made by:
- a. the director of student health service
 - b. the head of department of physical education
 - c. the supervisor of the adapted program
 - d. family physician
 - e. university guidance director
 - f. committee of _____
 - g. others
7. Other classification methods used besides the medical examination are:
- a. skill tests
 - b. strength tests
 - c. cardio-vascular tests
 - d. coordination tests
 - e. silhouettograph
 - f. photographic record
 - g. others

III. TEACHING PERSONNEL

1. The person in charge of the adapted program is:
- a. a specialist in the field of adapted physical education
 - b. the head of the physical education department
 - c. a regular physical education instructor
 - d. a graduate assistant under supervision
 - e. others
2. His preparation includes:
- a. Bachelor Degree—major in physical education
 - b. Bachelor Degree—minor in physical education Major is _____.
 - c. Masters Degree—major in physical education
 - d. Masters Degree—minor in physical education Major is _____.
 - e. Major in special education. Degree is _____.
 - f. PHD with major in _____.
 - g. MD degree
 - h. specialized courses on the graduate level
 - i. others
3. He has had special training in:
- a. Physiotherapy
 - b. Orthopedics
 - c. Hospital internship
 - d. Others

4. If regular instructor teaches in the adapted program, he is under:
- a. supervision of the specialist in charge
 - b. supervision of the head of the physical education department
 - c. supervision of _____
 - d. no supervision, has complete reign of program
 - e. others
5. Number of instructors giving full time to program _____
6. Number of instructors giving part time _____
7. The percentage of time each part time instructor gives to the program is:
- a. 25% or less
 - b. 25% to 50%
 - c. 50% to 75%
 - d. others

IV. TYPES OF DISABILITIES

1. Check the types of cases currently found in your program. If records are immediately available, place the number of cases found in each category.

- | | |
|---|--|
| <input type="checkbox"/> a. Amputations | <input type="checkbox"/> f. Foot Disorders |
| <input type="checkbox"/> b. Blind and partially sighted | <input type="checkbox"/> g. Joint Disabilities |
| <input type="checkbox"/> c. Cardiac Condition | <input type="checkbox"/> ankle <input type="checkbox"/> knee |
| <input type="checkbox"/> functional | <input type="checkbox"/> back <input type="checkbox"/> neck |
| <input type="checkbox"/> structural | <input type="checkbox"/> elbow <input type="checkbox"/> shoulder |
| <input type="checkbox"/> d. Endocrine Malfunction | <input type="checkbox"/> h. Malnutrition |
| <input type="checkbox"/> e. Faulty Body Mechanics | <input type="checkbox"/> i. Paralysis |
| <input type="checkbox"/> Kyphosis | <input type="checkbox"/> flaccid |
| <input type="checkbox"/> Lordosis | <input type="checkbox"/> spastic |
| <input type="checkbox"/> Scoliosis | <input type="checkbox"/> j. Post Operative cases |
| | <input type="checkbox"/> k. Respiratory and nasal disorders |
| <input type="checkbox"/> l. Others | |

2. Do you have handicapped students classified as temporary cases?

Yes No

3. If yes, how long is the student in this temporary classification?

- a. until the defect is corrected?
- b. one semester or quarter (indicate which) _____
- c. others

4. The student is transferred upon completion of temporary classification by the recommendation of the :
- a. school physician
 - b. instructor of the adapted class
 - c. head of physical education department upon recommendation of adapted instructor
 - d. school nurse
 - e. others

V. EVALUATION OF PROGRAM

1. Are periodic medical examinations given to determine progress made in the program? Yes___ No___
 2. If yes, how often are these given?
 - a. upon recommendation of instructor in charge
 - b. routine time arranged by physician at first medical examination
 - c. at regular prescribed intervals (indicate how determined)

 - d. others
3. Are periodic conferences or consultations arranged for the students included in the program? Yes___ No___
 4. If yes, how often are these given?
 5. Do the students in the adapted program receive grades upon completion of course? Yes___ No___
 6. If grades are given, are the following factors considered?
 - a. knowledge of his own defect—his needs, limitations, capacities.
 - b. knowledge of prescribed activities, or routines and reasons they help.
 - c. actual skill in sports participation.
 - d. same as the criteria determining grades for students in service or required program.
 - e. indicate other factors.
 7. Is there any evidence that your program is continued by the student after he has left class, or after he has left your school? Yes___ No___
 8. If there is, please give evidence. Use back side of the page for additional comments.

Name

Position

Do you desire a summary of this study? Yes___ No___

COLLEGES AND UNIVERSITIES RETURNING THE QUESTIONNAIRE

1. Alabama Polytechnic Institute, Auburn, Alabama
2. Alabama University, University, Alabama
3. Allegheny College, Meadville, Pennsylvania
4. Arizona State College, Tempe, Arizona
5. Arizona University, Tucson, Arizona
6. Arkansas University, Fayetteville, Arkansas
7. Baylor University, Waco, Texas
8. Boston College, Chestnut Hill, Massachusetts
9. Boston University, Boston, Massachusetts
10. Bowling Green State University, Bowling Green, Ohio
11. Bradley University, Peoria, Illinois
12. Bridgeport University, Bridgeport, Connecticut
13. Brigham Young University, Provo, Utah
14. Brooklyn College, Brooklyn, New York
15. Buchnell University, Lewisburg, Pennsylvania
16. Central Michigan College, Mt. Pleasant, Michigan
17. Cincinnati University, Cincinnati, Ohio
18. Clemson College, Clemson, South Carolina
19. Colgate University, Hamilton, New York
20. Colorado State University, Fort Collins, Colorado
21. Colorado University, Boulder, Colorado
22. Columbia University, New York, New York
23. Dayton University, Dayton, Ohio
24. Delaware University, Newark, Delaware
25. Denver University, Denver, Colorado
26. DePaul University, Chicago, Illinois
27. DePauw University, Greencastle, Indiana
28. Drake University, Des Moines, Iowa
29. Duke University, Durham, North Carolina
30. Eastern Michigan College, Ypsilanti, Michigan
31. Florida University, Gainesville, Florida
32. Georgia University, Athens, Georgia
33. Gustavus Adolphus College, St. Peter, Minnesota
34. Harvard University, Cambridge, Massachusetts
35. Hawaii University, Honolulu, Hawaii
36. Howard University, Washington, D. C.
37. Idaho State College, Pocatello, Idaho
38. Idaho University, Moscow, Idaho
39. Illinois University, Urbana, Illinois
40. Indiana State Teachers College, Terre Haute, Indiana

41. Indiana University, Bloomington, Indiana
42. Iowa State College, Ames, Iowa
43. Iowa State University, Iowa City, Iowa
44. John Hopkins University, Baltimore, Maryland
45. Kansas City University, Kansas City, Missouri
46. Kansas State Teachers College, Emporia, Kansas
47. Kansas State College, Manhattan, Kansas
48. Kansas University, Lawrence, Kansas
49. Kentucky University, Lexington, Kentucky
50. LaFayette College, Easton, Pennsylvania
51. Long Island University, Brooklyn, New York
52. Maine University, Orono, Maine
53. Mankato State College, Mankato, Minnesota
54. Marquette University, Milwaukee, Wisconsin
55. Marshall College, Huntington, West Virginia
56. Miami University, Oxford, Ohio
57. Michigan State University, East Lansing, Michigan
58. Michigan University, Ann Arbor, Michigan
59. Minnesota University, Minneapolis, Minnesota
60. Minnesota University, Duluth Branch, Duluth, Minnesota
61. Missouri Central, Warrensburg, Missouri
62. Missouri Northwest, Maryville, Missouri
63. Missouri University, Columbia, Missouri
64. Montana State University, Missoula, Montana
65. Nebraska University, Lincoln, Nebraska
66. New Mexico College, Las Cruces, New Mexico
67. New York City College, New York, New York
68. New York University, New York, New York
69. North Carolina State College, Raleigh, North Carolina
70. Ohio State University, Columbus, Ohio
71. Ohio University, Athens, Ohio
72. Omaha University, Omaha, Nebraska
73. Oregon State College, Corvallis, Oregon
74. Oregon University, Eugene, Oregon
75. Pennsylvania State College, University Park, Pa.
76. Pennsylvania University, Philadelphia, Pennsylvania
77. Pittsburg University, Pittsburg, Pennsylvania
78. Princeton University, Princeton, New Jersey
79. Rice Institute, Houston, Texas
80. Rhode Island University, Kingston, Rhode Island
81. Richmond University, Richmond, Virginia
82. Rutgers University, New Brunswick, New Jersey
83. St. Louis University, St. Louis, Missouri
84. St. Cloud State College, St. Cloud, Minnesota
85. St. Olaf College, Northfield, Minnesota
86. San Jose State College, San Jose, California
87. South Dakota State University, Vermillion, South Dakota

88. Southern California University, Los Angeles, California
89. Southern Methodist University, Dallas, Texas
90. Syracuse University, Syracuse, New York
91. Temple University, Philadelphia, Pennsylvania
92. Tennessee University, Knoxville, Tennessee
93. Texas University, Austin, Texas
94. Tulane University, New Orleans, Louisiana
95. Vermont University, Burlington, Vermont
96. Virginia University, Charlottesville, Virginia
97. Wake Forrest College, Winston-Salem, North Carolina
98. Washington State College, Pullman, Washington
99. Washington University, Seattle, Washington
100. Wisconsin LaCrosse State, LaCrosse, Wisconsin
101. Wyoming University, Laramie, Wyoming
102. Yale University, New Haven, Connecticut

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