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An Investigation of Certain Aspects of Physical Education as Conducted In selected Universities in the United States.

Helen Elizabeth Fant

Louisiana State University and Agricultural & Mechanical College

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OF PHYSICAL EDUCATION AS CONDUCTED IN
SELECTED UNIVERSITIES IN THE UNITED STATES

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The Department of Health, Physical
and Recreation Education

by

Helen Elizabeth Fant
M.S., Louisiana State University, 1956
May, 1964
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ABSTRACT

The purpose of this study was to discover common and unique elements in the physical education programs of seven outstanding universities and to relate the findings to pertinent literature. The following aspects of the programs were studied: organizational patterns and aims; professional preparation programs (undergraduate and graduate); basic programs for women; recreation programs for women; and policies concerning the faculties.

Seven universities were visited for periods of approximately two weeks and data were gathered in interviews with faculty and students and through visits to a variety of classes. Information gathered in a review of pertinent literature was used as a basis for relating practices at the universities studied with those reported in the literature.

Within the limitations of this study conclusions based upon findings were as follows:

1. Physical education appears to be moving toward departmental status within liberal arts colleges and away from colleges of education.
2. Departments and schools of physical education are becoming more aware of the need to define the scope and nature of the professional curriculum and to express the belief that physical education is indeed a unique field of knowledge.

3. The shortage of women physical education teachers will become even more acute in spite of increased numbers of students in higher education unless there is a reversal of the present trend.

4. It appears that there is a trend toward planning professional education courses for a fifth year in the curriculum.

5. It seems apparent that admission to graduate schools and to graduate study in physical education is becoming more selective with increased emphasis on grades and on entrance examination scores.

6. Experimental and measurement research will become increasingly important as an aspect of graduate study in physical education.

7. There is rising interest in individual and dual sports, in fitness and in coeducational activities in the basic programs.

8. Challenges to basic programs appear to be increasing in number and intensity, but physical educators are
preparing answers and strengthening programs.

9. Physical education fields are likely to be taken over for other construction, play areas are being de-centralized, and increased use of facilities outside the departments is essential.

10. On the basis of this study it would seem where programs are not required large numbers of students will enroll on an elective basis.

11. Apparently Women's Recreation Associations are being replaced by faculty-directed programs.

12. There is an increased interest in coeducational intra-murals but a decrease in other intramural participation for women.

13. There is indication of the growth of extramurals for women and the need for standards of competition.

14. It would seem that physical education faculty at the universities studied were fully accepted by administrators in light of the large number of high ranks and salaries comparable to those of faculty in other departments.

15. Men are more likely to be appointed to the rank of full professor than women with equal education.

16. There will be increasing demand for faculty members
competent in research techniques and in specialties within physical education.

17. The reputation of a department largely depends upon the quality of teachers within the department.
CHAPTER I

INTRODUCTION

In 1963 there were 2100 institutions in the United States devoted to higher education. Physical education was a part of the program in nearly every one of these colleges and universities, and 600 of them were training teachers of physical education. As can be imagined, there is tremendous variety in the basic skills offerings, in recreational opportunities and in the programs of teacher education throughout the country. As the profession continues to increase in size and stature, it is important that physical educators learn of developments in outstanding institutions in all parts of the country. Thus may programs be improved and blueprints found for the future.

I. THE PROBLEM

Statement of the Problem

It was the purpose of this study to discover common and unique elements in the physical education programs of seven

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outstanding universities and to relate the findings to pertinent literature.

From the numerous timely aspects of the physical education program that could have been selected for study, five were chosen. The scope of the investigation as related to each of the five aspects is shown below.

**Organizational patterns and aims.** This area was investigated to determine the place of physical education in the university organizational pattern, the internal structure of the physical education school or department, and the aims and philosophies of the departments and schools.

**Professional preparation programs.** The following aspects of the undergraduate professional preparation program were studied: the number of students and projected increase or decrease; undergraduate degrees offered and the courses required for each degree; skills and fitness standards required of the major students; and unusual teaching methods and evaluation techniques. Other factors relating to students included admission requirements of the university and the department; retention procedures; services to students such as advising; recruitment procedures; and student teaching or other internship requirements.

Identical aspects of the graduate program were studied, omitting student teaching procedures and including research
requirements and programs.

Basic physical education programs for women. Concerning the basic program for women, the following information was obtained: the number of students enrolled and the projected growth of the department; course and hour requirements of the university and the department; the scope of activities offered and the relative popularity of courses; the nature and extent of coeducational classes; fitness standards; grading and testing; unusual methods of teaching; and organizational procedures in the basic program for women. Challenges to the basic programs and plans for meeting these challenges were studied.

Recreation programs for women. Three areas of this program were studied: the intramural program, its organizational pattern and scope; the extramural program; and the informal but planned sports recreation activities for women.

Policies concerning physical education faculties. A number of items concerning the faculties were studied including the number of faculty persons involved in each aspect of the program; the policies and procedures concerning hiring and advancement of the members; salary scales; provision for inservice training; workloads; and graduate assistants.

Need for the Study

There is in the United States at the present time a
reevaluation of all aspects of education. In colleges and universities, as well as in the elementary and high schools, forces both in and out of education are questioning aims, curricular content of all areas, quality of teaching and standards of learning. There is the further complication of ever increasing enrollments and the need for bigger budgets in higher education.

In this field, as well as in a number of other disciplines, there will be many changes, all directed toward improving the education of American youth. Ruth Abernathy, professor at the University of California at Los Angeles, made this point in speaking to the American Academy of Physical Education:

Major changes are well underway affecting all levels of education. These changes involve purposes, fields of study, organization, and methods. They pose critical questions for physical education, health education, and recreation.

This is not a period in which a group such as this can wait until the 'heat is off' or pray for a return to the good old days or otherwise display an ostrich-like resistance to changes.

Health education, physical education, and recreation must maintain the opportunity to contribute to the wholeness of man in a period of population and knowledge explosion with
consequent pressures and stress. If physical educators are to meet the challenge of the future they must keep abreast of accomplishments and innovations in the field, and then they must go a step further to plan the direction physical education in colleges and universities must take.

There are a number of institutions whose programs of physical education are worthy of study because of their well-established contributions to the field, for the creative thinking of the faculties and for their willingness to move in new directions. It was hoped that an intensive study in selected, representative universities would determine practices that are common to successful programs as well as unique procedures that have proved valuable.

The identification of common and unique practices at the seven institutions augmented by research as reported in pertinent literature should prove useful in improving other programs and in planning for the future.

**Limitations of the Study**

A comprehensive study was made of programs and practices

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at seven universities. These universities were not a random sample but were considered representative of some of the good programs in the country. Travel time permitting, universities from a broad geographical distribution were chosen. The study was limited to five broad areas. Three of these areas were studied from the standpoint of programs and practices relating to women students only (undergraduate professional preparation, the basic program, and the recreation program).

II. DEFINITION OF TERMS

Department

The term "department" was used in this study to refer to the administrative unit of physical education when that unit was one of the sections of a college or school (as a department in the College of Education or of Liberal Arts).

School

The term "school" was used in this study to refer to the administrative unit of physical education when that unit was one of the larger constituent parts of the university with the right to recommend candidates for degrees.

Basic Program

In this report, the term "basic program" has been interpreted as the regularly scheduled instructional program of sports, dance and aquatics offered primarily to the general student body. This phase of the investigation was limited
to the women's basic program and to coeducational programs.

**Professional Preparation**

This term refers to the program of all courses and competencies leading toward degrees in professional fields (in this case, in physical education).

**General Education**

"General education (is) characterized by nonspecialized, nontechnical education...oriented toward preparing the student for intelligent living and competent citizenship (involving) a reasonable introduction to a variety of fields of human knowledge."\(^3\)

**General Professional Education**

The term as used here refers to courses which deal with general principles, objectives, methods, and class organization for all teacher trainees.

**Specialized Professional Education**

This term applies to courses in a particular professional field (in this case, physical education), especially designed for majors and minors in the field.

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Activity Classes

These are classes of skill development in sports, dance and aquatics which are part of specialized professional education.

III. PROCEDURE

Sources of Data

Data for the study were gathered from personal interviews with teachers and administrative officers in each of the seven universities; from observations of facilities and a variety of undergraduate, graduate, and basic classes; from a study of the universities' catalogues and printed departmental materials; and from a review of professional periodicals and texts.

Method of Procedure

Seven universities were selected on the basis of recommendations of the Graduate Studies Committee of the Department of Health, Physical and Recreation Education at Louisiana State University in the expectation of finding these institutions to be conducting dynamic and creative physical education programs. One university was visited near the Atlantic coast, one in the central United States, one in the south, two on the southern Pacific coast, and one each on the central and northern Pacific coasts.

Letters were sent by the chairman of the physical
education department at Louisiana State University to the chief administrative officer for physical education at each institution explaining the nature of the proposed study and requesting permission for the investigator to visit on selected dates. Permission was granted in each case.

Before visiting each university, questionnaire worksheets were developed for every area to be investigated. Questions were arranged by topics under the five broad headings. The worksheets were used by the researcher for recording data in interviews with administrators, faculty and students. No questionnaires were filled out by the person being interviewed and the talks were as informal as possible.

At each university the department chairman was asked to recommend persons to interview in each area to be studied. Some other faculty members and students were interviewed informally. Whenever possible a variety of both graduate and undergraduate classes was attended at each university. The visit to a campus lasted for approximately two weeks. It was concluded by a final meeting with the department chairman and any unexplained items were cleared up at that time.

Departmental printed materials and university catalogues as well as the interviews and observations described above were used to discover the "common and unique" elements of
the programs.

A review of professional periodicals and texts was made to form a frame of reference for reporting the findings.

Treatment of the Findings

The purpose of this study was to discover common and unique elements in the physical education programs of seven outstanding universities. Data from all universities were compiled by topics within each area studied. Common practices and unusual deviations from them were noted. Literature pertaining to each topic studied was reviewed and findings were compared with information gathered at the universities.

IV. ORGANIZATION OF THE REMAINDER OF THE STUDY

The findings will be reported in Chapters II through VI. Chapter II will be concerned with organizational patterns and aims. Chapter III will contain the report on the undergraduate and graduate professional preparation programs. Chapter IV will deal with the basic physical education programs for women while Chapter V will be concerned with recreation programs for women. Discussion of policies concerning physical education faculties will appear in Chapter VI. Chapter VII will present the summary and conclusion.
CHAPTER II

ORGANIZATIONAL PATTERNS AND AIMS

Physical Education in the University Structure

At University A there was a Department of Physical Education and Recreation which was one of eight departments within the School of Education. The Department of Health, also under the auspices of the School of Education, was completely separate from physical education.

University B had a School of Health, Physical Education and Recreation which was one of ten autonomous schools and colleges within the university.

In University C the Department of Physical and Health Education was one of five departments in the College of Education while the basic programs of physical education for men and for women were in separate departments in the College of Arts and Science. They were titled as "Required Physical Education for Men" and "Required Physical Education for Women."

At University D the Department of Physical Education was one of 33 departments in the College of Letters and Science.
At University E the lines of authority were less clear. The Division of Health, Physical Education and Therapy was one of six divisions in the College of Letters, Arts and Science for purposes of budgeting and promotions. All upper division major students and all teacher education courses were the concern of the School of Education.

The Department of Physical Education at University F was within the College of Letters and Science.

At University G the School of Health, Physical Education and Recreation was one of seven professional schools and two colleges.

The place of physical education in the organizational structure of the universities showed no predominant pattern. However, in a study of 239 institutions selected at random, Donnelly found that in 6 physical education was structured as a "college" within the university and in 7 it was titled a "school." Fifty-one institutions used the organizational term "division." The majority, 73%, had their physical education structured as a "department."1 The majority of

universities visited (4 of 7) also were structured as departments. Two were within the colleges of education while two others had departments within the liberal arts colleges. One university placed the physical education division under both the College of Education and the liberal arts college. Two universities had schools of health, physical education and recreation.

The place of physical education in the university had been studied recently at three of the institutions visited. The chairman of the department at University A in his biennial report to the president listed intramurals, the basic program, dance and professional recreation as areas unrelated to teacher education. He requested that physical education be separated from The College of Education, administratively. The department at University E had moved toward a more complete separation of physical education from The College of Education. The department was to be entirely within the College of Letters, Arts and Science except for the fifth year program of teacher certification. Physical education at University D had been in the College of Applied Arts. When this College was moved from the campus in 1960, following an evaluation of goals and curricula, physical education was the one department retained on campus. It was assigned to the College of Letters and Science, but this college ruled
physical education as unworthy. The chancellor prevailed upon the college to work with physical education in developing a new curriculum. It was deemed highly acceptable in March, 1963 and physical education became a full-fledged member of the college.

Physical education does not seem to be the distinct province of any one segment of a university. Most other disciplines are easily categorized and those found in the liberal arts college, for example, at one university are almost surely to be found in liberal arts at all universities. It is perhaps a mark of the unique nature of physical education that serious thought was being given to its administrative place at several of the universities studied.

Internal Organization of Physical Education Schools or Departments

The two universities having Schools of Health, Physical Education and Recreation will be discussed first.

At University B, the School had a number of divisions. Working directly under the dean were the graduate division and advisory committee. There were six departments under the assistant dean including the bureau of service and research, the departments of health and safety, of recreation, of physical education for men and of physical education for women. The sixth department was concerned with a two-year
division of the School in another city. See Figure 1, page 16.

There were five divisions within the School of Health, Physical Education and Recreation at University G. These were the Administrative Operations Divisions, the Graduate Division, the Undergraduate Division, the Intramural Division, and the Basic Division. See Figure 2, page 17.

The Department of Physical Education and Recreation at University A had three divisions, all of which were coeducational. These were concerned with the undergraduate, graduate, and basic programs. There was a research committee directly responsible to the chairman of the department. Campus recreation and intramurals were a joint responsibility of the basic program and of the non-academic Student Activities Division. See Figure 3, page 18.

The organizational pattern at University C was unusual in that the Department of Physical and Health Education which was concerned with teacher education and graduate programs was separated administratively from the Required Program for Men and the Required Program for Women. These latter two programs were under the liberal arts college, while the Department was within the College of Education. The woman in charge of the women's required (basic) program had an administrative assistant and division chairmen for the basic
Figure 1. Administrative organization of physical education at University B. ²

²Adapted from an unpublished organizational chart of the School of Health, Physical Education and Recreation at University B.
Figure 2. Administrative organization of physical education at University G.  

Developed from information obtained from the Dean, School of Health, Physical Education, and Recreation at University G.
Figure 3. Administrative organization of physical education at University A.

Adapted from an unpublished organizational chart of the Department of Physical Education and Recreation at University A.
classes, for sports clubs, for intramurals and for the co-
recreational program. The intramural and co-recreational
programs received their budgets from the Dean of Student Life.
See Figure 4, page 20.

In the Department of Physical Education at University
D, a Research Council and Departmental Directions Council
were directly responsible to the chairman. Responsible to
the assistant chairman were the coordinators for summer
sessions, for graduate affairs and for facilities. Also
responsible to the vice chairman of the department were the
chairmen for the units of kinesiology, physical education,
and recreation. The Kinesiology Unit was concerned with
professional preparation and the Physical Education Unit was
concerned with the basic program for men and women. The
Recreation Unit was concerned with preparing recreation
personnel. See Figure 5, page 21.

There were a number of coordinators within the Division
of Health, Physical Education and Therapy at University E.
They were responsible for health instruction, recreation
(both campus and instruction), research, the basic classes
for men and professional preparation for men. A coordinator
for women directed the basic and professional preparation
programs for women. Junior and senior students who were
teacher candidates were joint responsibilities of the Division
Figure 4. Administrative organization of physical education at University C.\(^5\)

\(^5\)Adapted from an unpublished organizational chart of the Department of Physical Education at University C.
Figure 5. Administrative organization of physical education at University D.\(^6\)

\(^6\)Adapted from an unpublished organizational chart of the Department of Physical Education at University D.
of Physical Education, Health and Therapy and of the College of Education. See Figure 6, page 23.

The internal organization of the physical education department at University F consisted of four divisions: The Graduate Division, The Division of Research, The Men's Division and The Women's Division. There was also a coordinator of campus recreation responsible to the chairman. The chairman of the department acted as head of the men's division and the vice chairman was in charge of the women's division. The latter two divisions were divided into intramurals, basic classes, and undergraduate professional preparation. See Figure 7, page 24.

No identical plans of internal organization were found but there were many factors in common. Departments within colleges predominated over separate schools of physical education and each department or school had a number of subdivisions.

There were separate divisions for men and women on three campuses. A woman served as chairman or coordinator for the women's division. She was ordinarily responsible for all administrative duties within her area including supervision of women teachers.

University C, with a small faculty, had no divisions within the professional preparation program. The basic
*Junior and senior major students are joint responsibilities of the Division and of the College of Education.

Figure 6. Administrative organization of physical education at University E.⁷

⁷Developed from information obtained from the Chairman, Division of Health, Physical Education and Therapy, University E.
Figure 7. Administrative organization of physical education at University F.

Developed from information obtained from the Chairman, Department of Physical Education, University F.
programs for men and for women were separate and administered under the Office of Student Life. Separate graduate and separate research divisions were found in the other six departments and schools.

There were separate divisions for health within the two schools of physical education. Four departments had divisions of recreation and a fifth (University G) offered a program of recreation studies.

The basic programs for men and women were coeducational at four universities but were administered by one person at only two of these. A man and woman shared administration at the others.

Donnelly found completely separate departments for men and women in 21% of the institutions and separate departments under one administrative division such as a college or school in 12%. The majority (approximately 67%) of women department heads were responsible to men physical educators. Administrators of physical education were responsible to various officers. Nearly one-half answered directly to high level administrative officers such as the president or dean of the university. Seventeen percent were responsible to the Dean of Education and the remainder are under the Dean or Director.
of the School or College of Physical Education.  

Several recent or suggested changes in internal organization were found at the universities visited. The most sweeping change was found at University D. When physical education moved to the liberal arts college, the dance curriculum was moved to fine arts, and health studies were moved to public health. Intramurals became a concern of Student Activities, a non-academic division. The status of the physical therapy curriculum and the recreation curriculum was undecided at the time of this study. No recent changes had been made at University A, but the chairman had recommended to the president that health education should be with physical education instead of being a separate department. There was discussion at University B about making dance studies interdisciplinary.

Donnelly found a number of changes in organizational patterns, but the direction of change was not always clear. He did find a tendency to create divisions or departments within the physical education organizational unit, a tendency to combine men's and women's departments, and a tendency to separate intramurals from physical education. Based upon

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opinions and comments from physical educators, he advised administrators to separate physical education from the colleges, schools or divisions of education. He pointed out the many programs within the total field of health, physical education, and recreation that are not related to teaching.  

Separate departments for men and women were found in less than half of the universities in Donnelly's study and in this one.

Decentralization of authority was evident in every department or school studied. The detailed charts of internal organization or statements of delegated responsibilities that were available bore out this impression. Departments and schools commonly assigned administrative duties to a number of faculty members.

Aims and Philosophies

Cordts and Shaw found that 82% of the physical education departments in 184 four-year colleges and universities drawn from a random sample had their educational philosophy in written form. Institutional and departmental philosophies

were found to be in agreement. By comparison, physical education departments in five of the universities visited had statements of aims in catalogues, departmental materials or reports.

**Professional preparation programs.** Teacher training was a primary purpose of the professional preparation program at five universities. Universities D and F (separate campuses of a state-wide system) listed teacher training as a secondary aim with the development of research workers and instruction in a body of knowledge being of primary importance. At University D the physical education faculty had written several statements explaining the aims and philosophy of the department. This department viewed the study of physical education as a discipline within its own right—the field of human movement—and not merely as a collection of facts picked from other fields and applied to physical education. Research, individual study, and a strong background in a closely related field characterized both undergraduate and graduate study in the department at University D. The chairman stated that graduate work was emphasized. The following

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statement reflects the philosophy of the undergraduate program:

Throughout the program, emphasis is given to individual appraisal and creative and independent studies leading toward the scientific solution of problems in the field. The fields are perceived as both disciplinary and professional.12

The aims and philosophy of the department at University F were similar to those just discussed. The following excerpts from a report to the liberal arts college at University F will serve to explain the aims and philosophy of the physical education department there:

It had become evident that a considerable body of knowledge existed in the areas of:

a. Kinesiology, body mechanics, exercise physiology, the effects of physical activity on bodily functions, the quantitative energy requirements of activity and their theoretical bases, neuromotor coordination, motor learning and the kinesthetic sense, various other psychological factors, and the relation of these factors to human development, the functional status of the individual, and man's ability to engage in motor activity.

b. The role of athletics, dance, and other physical activities in the culture, both historical and contemporary, and in

12"Agreements of the Faculty of the Department of Physical Education on the Revised Course Offerings," Unpublished bulletin of the Department of Physical Education (University D) March 4, 1963, p. 1.
primitive as well as advanced structures of society; the contribution of such activities to the emotional and physical health, aesthetic development, and well-rounded adjustment to the life of the individual.

The report further stated that while these topics might receive attention in other departments there was a need to coordinate them into

the study of man as a physical individual engaging in the motor performance of his daily life and in other motor performances yielding aesthetic values or serving as an expression of his physical and competitive nature (as in athletic games); accepting challenges of his capability in pitting himself against a hostile environment; participating in the leisure time activities that have become of much significance in our present culture. 13

The report was prepared to justify the right of physical education to continue to be a part of the College of Letters and Science which would not be possible were physical education to deal only with teacher education and not be a unique body of knowledge. Teacher education was a function of the departments at Universities D and F, but these courses were outside the degree program and were in a fifth year.

Both of these institutions were guided by the California

Master Plan for Higher Education\textsuperscript{14} which specifies that all departments within the universities are to conduct unique, experimental, research centered programs. University E and other private institutions in this state will be indirectly affected by the Master Plan.

The population of California and enrollment in higher education is increasing at such a rate that some sort of planning was essential. In 1959 the State Legislature appointed a committee and charged it to prepare a master plan for the development, expansion, and integration of the facilities, curriculum, and standards of higher education, in junior colleges, state colleges, the University of California and other institutions of higher education in the state, to meet the needs of the state during the next 10 years and thereafter...\textsuperscript{15}

Most of the recommendations of the committee, adopted by the Legislature in 1960, were concerned with the development of a "tripartite" system of higher education in which roles were assigned to three types of institutions to avoid duplication of purpose and consequent unnecessary expense. The plan

\textsuperscript{14}A Master Plan for Higher Education in California 1960-1975, Prepared for the Liaison Committee of the State Board of Education and the Regents of the University of California by the Master Plan Survey Team (Sacramento: California State Department of Education, 1960).

\textsuperscript{15}Ibid., p. 6.
called for the junior colleges (of which there were 70) to be governed by local boards and to offer liberal, general and terminal courses. They were to be tuition-free and open to high school graduates of their home counties. The 12 state colleges were to have one governing board and were primarily to offer four year liberal arts and science curricula. They were allowed to offer master's degrees for teachers but other advanced degrees could only be jointly awarded with the University of California. Faculty were allowed to do research but it was not a major function. The University of California with its eight campuses was to be at the top of the educational system, primarily concerned with upper division and graduate courses and all doctoral degrees. Teacher education was also to be a function of the university, but not a primary one. It was specified that students must rank in the upper third of their high school classes to be eligible for admission to college and in the upper one-eighth to enter the university. Transfer students must present a B average in all courses transferred.

University A was also affected by state-wide planning. It was one of two large state-supported universities within a state. The State Board of Control had recently assigned each the responsibility for certain professional areas of instruction, and both were to be responsible for advanced
graduate work and research. University A was to emphasize study in the biological and physical sciences. As a result, the graduate program in physical education is science and research centered. University A may offer either the Doctor of Philosophy degree or the Doctor of Education degree in physical education while the other university in the state may only offer the Doctor of Education.

Three universities had recently developed detailed plans for the future, Universities A and E in 1962, and University C in 1960. At University A, plans called for higher standards of admittance, increased research and services, emphasis on graduate curricula and a creative approach to learning. As reported in the school newspaper, the Ten Year Development Plan adopted by University C stressed a need for "excellence" in education and a platform to make it "among the five best state universities in the nation." The associate dean of the College of Arts and Sciences said this of the purposes:

We serve as the top of a 21-institution net-work of higher education (in this state). Being able to keep itself in the position of leadership is one of the main concerns of the university.  

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16 The Future of University A, The Final Summary Report to the President from the Steering Committee of the University Self Study, April, 1962, p. 6.

University F developed a Master Plan for Enterprise and Excellence in Education which called for spending $107 million within the next 10 years and $3 million within the next three years on facilities and on salaries. The president of University E said their goal was "to pursue excellence with vigor and without compromise."\(^{18}\)

Traditionally the degree offered in physical education has been designed for prospective teachers. Alterations from this pattern at some of the universities visited may indicate that the aims of the professional program are changing and broadening. The concept seems to be evolving that the degree program in physical education may be independent of teacher training for some students with interests other than teaching.

**Basic programs.** Aims of the basic program were available from University Catalogues in three institutions. From these and from statements by chairmen it would appear that the recreational values of physical education activity were considered the most important values. The learning of recreational skills was emphasized in the basic classes at three universities, fitness and recreational skills were of equal

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\(^{18}\)"Presenting the University's Master Plan for Enterprise and Excellence in Education," *University E Alumni Review*, XLI, No. 1 (October, 1959), pp. 41-42.
importance at three universities, and development of skill was the primary aim at one university. The emphases were reflected in the number and nature of various courses offered and in the methods used in teaching the classes. For example, in the voluntary program at University F, the department chairman stated that students' primary interest was skill development. Classes there were taught by expert specialists and grading was based primarily on skill achievement. In the universities where fitness was a major objective, there were numbers of conditioning classes.

**Inter-institutional cooperation.** Increased inter-institutional cooperation and planning were also evident from the literature although no such writings were found pertaining directly to physical education. Tead, Little and Davis each identified such cooperation among institutions as an important movement affecting higher education.⁰¹ Henderson found that inter-institutional councils have been developed to identify areas of specialization in teaching and research where

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cooperation may be feasible. While small colleges can provide a reasonably good general education to local citizens without large amounts of money, it is impossible to offer a variety of specialized subjects. Through cooperative planning, one college can be allotted a field of specialization, another college a second field, and so on, with students eligible to move among colleges without additional fees. Such plans were developed by the Southern Regional Education Board and the Richmond Area University Center.

Another plan involves sharing physical plants such as is done by six institutions in the Atlanta University Center and by the Associated Colleges of Claremont. The Association at Claremont, California was one of the first examples of cooperation among colleges. Here six liberal arts colleges outside of Los Angeles formed an association in which a student registered in any of the colleges may attend class and receive credit from any of the others. Each college offers basic courses in most fields and advanced study in only one field. Some administrative duties, fund raising, and service contracts for utilities and for health services are centralized. In other instances, joint faculty

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appointments have resulted in securing outstanding teachers for a group of Ivy League Colleges and for five liberal arts colleges in Minnesota. 21

No evidence of such cooperation was discovered at any of the universities studied. It would seem that a program such as physical education requiring expensive facilities and equipment in professional preparation, basic, recreation and research programs could profit from inter-institutional cooperation.

CHAPTER III

PROFESSIONAL PREPARATION PROGRAMS

I. UNDERGRADUATE

Enrollment and Recruitment

The number of undergraduate physical education majors enrolled in 1962-63 varied greatly among the universities studied, and ranged from 87 to 458. In six of the universities there were more men than women physical education majors. At University F women physical education majors outnumbered men 3:1. A summary of enrollment is shown below:

<table>
<thead>
<tr>
<th>University</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women......</td>
<td>74</td>
<td>161</td>
<td>36</td>
<td>60</td>
<td>50</td>
<td>63</td>
<td>55</td>
</tr>
<tr>
<td>Men.........</td>
<td>100</td>
<td>297</td>
<td>85</td>
<td>85</td>
<td>80</td>
<td>24</td>
<td>75</td>
</tr>
<tr>
<td>Total.......</td>
<td>174</td>
<td>458</td>
<td>121</td>
<td>145</td>
<td>130</td>
<td>87</td>
<td>130</td>
</tr>
</tbody>
</table>

The number of women physical education majors had decreased during the last several years at five of the universities visited. At Universities C, D, and F where high selective entrance standards had been established, the loss was acute. At University C, there were nine new women
physical education majors in 1962 and one in 1963. The 1962 figure showed a 20% drop in enrollment over 1961 which the chairman said was due to higher university entrance requirements. In recent years at this university there had been an average of 55 women majors and in 1963 there were 35. University D reported a steady decline of women majors within the last five or six years. There were 100 women students in 1945 and there were approximately 60 in 1963. From 1957 to 1963 the number of women engaged in student teaching dropped from 42 to 5. The chairman attributed the drop in enrollment to higher entrance standards and to unsettled certification requirements. University A and G reported slight decreases in numbers of women physical education majors and University B had an increase of over 50%. No major change in either direction was found at University E.

Shortages of women majors were considered acute at four universities while chairmen of the other departments said there was room in their programs for a number of additional women students.

Jackson Anderson in a talk to physical education majors at Louisiana State University in November, 1963 commented on the great shortage of women physical education teachers. The National Education Association cited the shortage as
acute and noted that the 1963 increase was below average. From the same source came the information that the field of men's physical education was again the most over-supplied field.¹ One positive step in the recruitment of qualified women was the appointment of an American Association for Health, Physical Education, and Recreation committee which subsequently published standards for selection.²

Two physical education departments actively recruited women students. One sent brochures to potential majors whose names were obtained from high school career day lists, from the American Association for Health, Physical Education, and Recreation scholarship applicants and from the National Honor Society lists. The home state of University G had a state commission for recruiting women physical education majors. Through this agency playdays and conferences were held, and many brochures were sent to several groups of students. Department chairmen at both of these institutions expressed disappointment in the results of recruiting


programs and felt that the efforts were largely wasted. Two other departments invited high school girls to the campus for play days and had brochures to distribute upon request. Most chairmen felt that alumni were the best source of new students and that good programs and reputations would attract good majors. Recruitment of high school students was complicated at several universities because entrance requirements were so high. These departments concentrated on attracting students after they had entered the university.

No department chairman expressed dissatisfaction with the caliber of women majors. Several commented that the image of the woman physical education major was a detriment in attracting women to the field. However it was the quantity rather than quality which gave most concern.

In contrast to the decrease in women physical education majors, every university visited had had substantial increases in the general student body. Each institution also expected continuing growth in numbers of students during the next 8 to 10 years. The percentages of anticipated increase varied from less than 25% at University F to approximately 110% at University G. Three universities expected approximately 50% more students (A, B, and D) while Universities C and F expected 25% more. The three institutions with the smallest expected increase had set maximum enrollment figures. Exact
figures were not available at University E, but their long range plans called for increased excellence rather than a great increase in numbers.

A number of references were made in the literature to projected growth in college and university enrollment.

George Hand, chairman of the Higher Education Department at Southern Illinois University wrote:

The most obvious trend in higher education today is the increase in enrollment caused by the larger birth rate starting in the early 1940s and the greater percentage of college age youth deciding to go to college, a phenomenon predicted to continue for at least the next 10-20 years. ³

How many students will there be? Nearly every book or article about education refers to the "tidal wave" of students soon to be upon colleges and universities, but estimates of numbers differ. According to the 1960 United States Census, there will be 40% more students of college age in 1970 than there were in 1950. Bernard Berelson, using projections of seven experts, estimated that the number of students who will actually enroll in 1970 will be between 4.5 and 6.5 million. These figures compare with 2.7 million enrolled in 1950 and

3.6 million in 1958.\(^4\)

Growth will not be evenly distributed among small and large, private and public, eastern and western colleges nor among graduate and undergraduate students. According to M. M. Chambers the number of upper class and graduate students will increase more than lower division students, public universities will grow more than private, and large universities will grow more than small.\(^5\) Davis estimated that while undergraduates double in number, graduates will triple, and he reported that liberal arts colleges will grow more slowly than universities. He also predicted that junior colleges eventually will have over one-half of the lower division students and that these colleges will triple in size while their home communities double.\(^6\) Little stated that a recent study of state legislation showed the establishment of junior and community colleges to be one of three important trends in higher education.\(^7\) The American Association of Junior Colleges reported that enrollments in two-year community colleges will grow more slowly than universities.\(^8\) Bernad Berelson, Graduate Education in the United States (New York: McGraw Hill, 1960), p. 73.


\(^5\)Paul H. Davis, op. cit., p. 141.

\(^6\)Little, loc. cit.
colleges were 20% greater in 1963 than in 1962. Colleges and universities in California will feel the effect of a birth rate three times greater than the average for the country. In that state between 1940 and 1959, the number of students in junior colleges increased by 176%, state colleges by 357%, the state university by 227%, private colleges by 190% for an average increase of 190%. Public institutions, nationwide, had 57% of the college enrollment in 1958 and will have an estimated 65% of students in 1970.

The shortage of women physical education teachers is apparently a problem of serious concern for the profession. Some study should be made of reasons for decreased interest in women's physical education as a career especially in light of increased general enrollment and demand for women physical education teachers.

Degrees

Physical education degrees. Three universities offered


10Berelson, op. cit., p. 74.
the Bachelor of Science in Education with a major in Physical Education. Two conferred the Bachelor of Science in Physical Education and one conferred the Bachelor of Arts in Physical Education. The seventh university offered the Bachelor of Science with a joint major in Physical and Health Education.

Health degrees. One School offered the Bachelor of Science in Education with a major in Health, and the other offered the Bachelor of Science in Health and Safety. The undergraduate degree in health was available in departments outside physical education at two other universities.

Recreation degrees. The Bachelor of Science in Recreation was awarded at four universities and recreation was available as a specialty within physical education at a fifth institution. One university conferred the Bachelor of Arts in Recreation.

Dance degrees. The Bachelor of Science in Education with a major in Dance was offered by one university and emphasis in dance within the physical education major was offered at two others. One school offered a Bachelor of Science in Dance. The Bachelor of Arts in Dance was awarded at two universities. The same two universities were among those also offering a dance emphasis within the physical education Bachelor of Science degree. See Table I, page 46.
TABLE I

UNDERGRADUATE DEGREES OFFERED BY PHYSICAL EDUCATION DEPARTMENTS AT SEVEN UNIVERSITIES

<table>
<thead>
<tr>
<th>Major in:</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
</table>

Bachelor of Science in Education

<table>
<thead>
<tr>
<th>Major in:</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
</table>

Bachelor of Science in Recreation

<table>
<thead>
<tr>
<th>Major in:</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
</table>

Bachelor of Arts in Dance

<table>
<thead>
<tr>
<th>Major in:</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
</table>

*An emphasis within the physical education degree.*
Donnelly, in the study previously cited, found that the Bachelor of Science degree was given in physical education more than twice as often as the Bachelor of Arts degree. He found the most frequent undergraduate major to be Physical Education alone followed in order by: Health, Physical Education; Recreation; Health Education; and Health, Physical Education and Recreation. The majority of institutions polled offered only one of the above undergraduate majors.

It seems worthwhile to note that a variety of degrees in physical education and related fields were available among the universities. This tends to emphasize the scope and variety of goals of professional programs in physical education.

Certification

Recent certification changes had affected six of the universities visited. In 1963 the first certification revision in nearly 20 years was made in the home state of University B. The requirements for general education increased from 30 to 50 semester hours. The 20 hours in education courses were reduced by two to four semester hours. The agency recommended a fifth year of study in the candidate's field. New teachers with only the bachelors degree

must begin work on a master's degree within five years to renew certification. They must complete the degree within 10 years for standard certification. The State Education Agency in the home state of University C also revised standards in 1963. Courses in general education were increased by six semester hours with a corresponding decrease in professional education. The Agency specified that professional and specialized education courses must be "content" courses.

The state in which Universities D, E, and F were located enacted legislation in 1963 which had a tremendous effect on many programs of teacher education. Enrollment in those programs was substantially reduced. Pertinent parts of the bill were these:

1. Certain fields of study were identified as "academic." However, a college or university could declare any field academic if it chose.

2. New teachers must have an "academic" major or minor to be certified.

3. Teachers already in the field with non-academic majors could not become supervisors or principals. Among those fields declared non-academic were physical education, art, music, business administration and home economics. At the same time, a five year program to begin
in September, 1963 was made compulsory. Before this time, four year special certification was available to prospective teachers of physical education at most colleges and universities in the state. Department directors at the three universities hoped and expected that physical education would be declared "academic" at their institutions.

New certification requirements affecting University G go into effect in 1965. They specify a fifth year of study for standard certification and a period of full-time internship in student teaching.

There were many new developments in teacher certification and standards reported in the literature. One recent significant milestone cited was the publication of a set of general standards for professional preparation in health education, physical education and recreation education. These were developed by a Professional Preparation Conference which was a project of the American Association for Health, Physical Education, and Recreation. In the foreword was a statement of commitment to higher standards of professional preparation. Another milestone was the acceptance in 1960

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of The National Council for Accreditation of Teacher Education as the official accrediting agency by the American Association for Health, Physical Education, and Recreation. At that time, the American Association for Health, Physical Education, and Recreation also recommended to state departments of education that they certify as physical education teachers only graduates of institutions accredited by The National Council for Accreditation of Teacher Education. It also recommended to the National School Boards Association and to the American Association of School Administrators that only teachers from such accredited institutions be hired. Its final recommendation was that professional membership in the American Association for Health, Physical Education, and Recreation be contingent upon graduation from such an accredited institution. This was to go into effect in 1964 but was subsequently extended until 1966 to allow more time for visits of accreditation. The standards developed at the Professional Preparation Conference read that at least 50% of the total undergraduate curriculum should be in general education. 13

Many writers expressed the need for an increased amount of general education for physical education teachers. Rees

found in a survey of 107 colleges physical education department heads that 85% considered general education as important as professional and specialized education. He found that a number of institutions were moving toward physical education curricula in which general education was part of the curriculum for all four years.  

It is imperative that our professional programs of teacher education give increased attention to general education. Professional programs in physical education must concentrate on providing experiences that will motivate greater understanding of the social, political, moral and spiritual issues of the day.

Dexter and Morehouse found that between 1953 and 1957, 9 of 26 State Departments of Education increased the amount of professional education while 3 reduced the amount; 12 increased the number of hours in general education while 2 reduced them for an average increase of 5 semester hours. Simmons reported the following findings in a study of state

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certification requirements in Health and Physical Education.

### TABLE II

**SEMESTER HOURS REQUIRED FOR STATE CERTIFICATION IN HEALTH AND PHYSICAL EDUCATION IN 1957**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>37</td>
<td>10-60</td>
</tr>
<tr>
<td>General Professional Education</td>
<td>17</td>
<td>9-26</td>
</tr>
<tr>
<td>Specialized Professional Education</td>
<td>24</td>
<td>15-60</td>
</tr>
</tbody>
</table>

Directed teaching was the course most often required by the 33 states that specified certain courses. Courses in psychology and general teaching methods were in second position being required in 16 states.  

**Courses**

Requirements in general education in the seven universities ranged from 31 to 60 semester hours. See Table III, page 53. One university, however, which prescribed 57 semester hours in general education, required from 31 to 38 additional hours concentrated in one of the three areas of sociology, psychology or zoology. A university with 60 semester hours of general education also required a minimum

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<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>45</td>
<td>31f</td>
<td>60</td>
<td>57</td>
<td>56</td>
<td>60</td>
<td>42</td>
</tr>
<tr>
<td>Professional Education</td>
<td>23</td>
<td>20</td>
<td>18</td>
<td>0</td>
<td>13</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>Specialized Professional Education</td>
<td>39</td>
<td>50</td>
<td>33</td>
<td>24</td>
<td>42</td>
<td>24</td>
<td>31</td>
</tr>
<tr>
<td>Theory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>10</td>
<td>22</td>
<td>0c</td>
<td>4</td>
<td>11</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>Electives</td>
<td>7</td>
<td>1</td>
<td>9</td>
<td>35d</td>
<td>2</td>
<td>30e</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>124</td>
<td>124</td>
<td>120</td>
<td>120</td>
<td>124</td>
<td>120</td>
<td>124</td>
</tr>
</tbody>
</table>

- Additional hours required for students seeking teacher certification.
- Includes kinesiology and physiology of exercise where required.
- The equivalent of 12 semester hours required but for no credit.
- 31 additional hours of psychology or 33 of sociology or 38 of zoology to comprise this 35 hours of electives.
- Minor requirement.
- To become 50 in 1963-64.
of 20 additional hours in a minor field. Counting these additional semester hours, approximately 75% of the degree program at one of these universities and 66% at the other were in general education. General education at four other institutions ranged from 25% to 45% of the total semester hours in the degree program, while at University C it comprised one-half of the physical education curriculum.

Courses in professional education were part of the degree program at five universities and were part of the fifth year certification program at the other two. The number of semester hours required was 23 at University A, 20 at University B, 18 at Universities C and G, and 13 at University E. These figures represent from 10% to 18% of the total course work.

The number of semester hours in specialized professional education, excluding activity courses, varied from 24 to 50 semester hours. They comprised the following percentages of the degree programs: University B, 40%; University E, 34%; University A, 31%; University C, 28%; University G, 25%; and Universities D and F, 20%. In addition to these courses, physical education majors in all of the universities took activity classes but at University C no credit was received. The equivalent of 12 semester
hours of class was required. The number of semester hours spent in activity classes at the other universities was 4 at University D, 6 at F, 10 in University A, 11 in E, 18 in G, and 22 in B.

Curriculum changes and evaluation were on-going projects at each university. A number of revisions were proposed or had been recently completed. Although not a recent change, the re-examination of the major at University F in 1945 was a forerunner of other more recent changes. Their letter to the liberal arts college in defense of physical education as an academic subject was quoted in Chapter II, page 29. A curriculum strong in the sciences basic to physical education was developed on this campus.

In their successful defense of physical education as a legitimate member of the liberal arts college in 1963, University D developed a curriculum with a unique content designed to integrate concepts of human movement.18 The field of study was named kinesiology. Courses taken in the major emphasized the variables that work upon man as he develops and as he moves, upon the environment in which man

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moves, and emphasized varying movement patterns.

In summary, the scholarly study of the phenomenon of human movement is characterized by the following broad problem areas: (1) The kinesiological nature of man; (2) Development of man through movement; (3) Development of movement capabilities; (4) The individual's variables affecting movement; (5) Environmental factors affecting human movement; (6) Man's control of his environment through movement; and (7) Movements as human expression.

Students were also to take additional semester hours in psychology, sociology or physiology as an allied field of study.

At University E the entire liberal arts college was undertaking a curriculum revision that would combine courses. All would be for four semester hours credit and each student would take four courses per semester. General education was to extend over the four years. Content of physical education courses was not to be substantially changed. This revision was undertaken because of the number of one and two hour courses that had been added in the 30 years since the last curriculum revision in the liberal arts college. Graduate courses would also be four hours each. Those that had met three hours once a week would now meet two hours, have an hour break, and meet two more hours.

19 Ibid.
A number of authors discussed the evaluation of all college curricula as an important trend in higher education. Snyder identified primary forces acting upon education as 
(1) the struggle between democracy and communism, (2) the explosion of human knowledge, (3) the growth of world population, and (4) increasing leisure brought about by automation.

These forces will create a critical evaluation of the undergraduate program which has already started in California. This evaluation will continue for some time, and we will have to meet exacting demands. In meeting these demands the issues will be brought into clear focus and the only answer to meet this challenge is to rise to excellence.

He saw the first issue for physical education as the need to develop academic respectability and establish itself as a discipline. This concept of physical education as a basic discipline with a distinct body of knowledge was also expressed in the recent report on professional preparation.

Earl Armstrong, director of The National Council for Accreditation of Teacher Education, wrote that more

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21Ibid., pp. 143-148.
concentration on basic disciplines such as physiology, sociology and psychology was needed in the physical education professional curriculum. He advocated spending less time developing skills in sports and increasing entrance requirements to include a considerable degree of skill.²² Kasch wrote that the future would bring increased studies in the humanities and sciences with elimination of duplicate methods courses.²³ Snyder said that in the future undergraduate physical education professional courses would be condensed to a few introductory courses.²⁴ Gardner spoke of the need for a different type of undergraduate preparation for those planning to do advanced work. Such students should major in a scientific or scholarly subject basic to


their profession, and professional education courses should be on the graduate level. He said, "The trend in all professional education is to emphasize the underlying scientific and scholarly fields, and to diminish emphasis on 'how to do it' courses." 25

A move toward five year programs of teacher education was found. Tead wrote of a "marked tendency to defer professional courses until the 4th, 5th, or 6th years" and said this trend should be encouraged. 26 Armstrong agreed, saying:

The trend is in the direction of a four-year preservice collegiate program for both elementary and secondary teachers, with a fifth year to be completed either while the teacher is in service or after at least one year of teaching experience. 27

The average number of required semester hours in general education was larger in this study than in either of the two earlier ones. The average number of semester hours in specialized professional education was also larger while the requirements in general professional education


26Tead, loc. cit.

were less. As determined both from visits to selected universities and from the literature, a number of factors are affecting curricula in physical education. Certification standards at the state and national levels will continue to influence college programs. There seems to be an increasing insistence that physical education prove itself to be "academic". More five year programs for prospective teachers are being required.

Good teaching and effective methods were in evidence at all of the universities. Courses or methods somewhat out-of-the ordinary were found at Universities B and E. University B used much audio visual material especially in the teaching of body mechanics. The school had access to an extensive university film library with a generous budget. Each physical education lecture room at University B was equipped for movies, having a permanent screen and heavy blinds. There was a photographer available to the School of Health, Physical Education and Recreation.

The chairman at University E cited several courses which were organized in a particularly effective way. At the suggestion of a panel of outstanding seniors, an eight semester hour course for juniors in scientific bases of physical education was organized to include adapted physical education, physiology of exercise, kinesiology, training, and
body mechanics. This combination helped eliminate duplication. In the senior year there were two courses of seven semester hours each in educational foundations of physical education which combined studies in history, principles, organization, curriculum, methods, and student teaching. Students at University E were given an early introduction to research when as juniors they do original research in the physical education laboratory and undertake two cinemagraphic studies. A senior professor on the staff said that experimentation epitomized the department of physical education at University E on the undergraduate as well as the graduate level.

Skills and Fitness

All seven universities required activity courses of their women physical education majors, but the emphasis on such courses varied greatly ranging from 4 to 22 semester hours. (See Table III, page 53).

These courses were taught to majors separately from students in the basic program in six departments. The exception was University F. Students with scheduling problems or those who needed extra work were occasionally enrolled in basic classes for non-major students. At University G, however, classes in the basic program were too crowded to allow major students to be added to them.
It was the exception to excuse women from the activity classes, however Universities A and F had pretesting programs which allowed exemptions with credit. Tests for women at University F were based upon demonstration of good form and knowledge of rules during participation in sports or dance. Team sports tested were basketball, field hockey, soccer or speedball, softball and volleyball. Skill in tennis, archery and badminton were also evaluated. Oral tests on the rules were included. The folk, modern, and social dance tests included demonstration of basic steps and of style. Testing was done each fall under the supervision of one teacher who was assisted by the staff. In addition each student was rated by teachers who had her in class. The exemption program for women at University A was set up so that students were observed in a number of individual and dual sports and team sports. They were required to receive a ranking of at least "B" and to pass a written examination with the same grade or better.

The teachers' rating on skill became part of the students' records in four universities and two of the same universities also used self ratings of students.

Fitness or motor ability tests were given at three universities. University B gave the Scott Motor Ability test to freshmen and juniors. The results were used for guiding
students with low scores into other fields or for placing them in body mechanics and movement fundamentals classes.

During the first week of school, women students at University C were given subjective swimming and posture examinations, a motor ability battery and a fitness battery. The latter two were optional for basic program students but were required for physical education majors. The results were used for guidance but not for grading. Physical education majors at University G took a motor performance test which was used for guidance. The other four universities did not give fitness or motor ability tests as part of the regular program for majors.

**Entrance Requirements**

Of the universities studied, all had selective admission policies in addition to requiring high school graduation.

University A accepted graduates of accredited high schools who had a C average and who ranked in the upper 40% on the State Twelfth Grade Test. Those ranking between the 40th and 60th centiles could be admitted with recommendations from the high school principals.

University B accepted in-state students from the top one half of their high school classes and out-of-state students from the top one-fourth. Students also had to
score at or above the median point on the College Entrance Examination Board Scholastic Aptitude Test or another standardized test. (The College Entrance Examination Board Scholastic Aptitude Test will hereafter be referred to as the CEEB).

University C required a "satisfactory" grade on the CEEB and also considered the student's rank in high school class. Those in the lowest quarter were urged not to attend.

University D had highly selective admissions, accepting students from the upper 10% to 12% of their high school classes. Certain courses from high school and a B average were required as well as a "satisfactory" showing on the CEEB. High school students with a C average could enter with a CEEB score of 500 and satisfactory entrance examination scores in three subject fields.

University E required a "satisfactory" grade on the CEEB, and also considered high school grades.

University F had highly selective admissions very similar to those of University D. A score of at least 500 on the CEEB and a B average in high school were requisite for admission. This, in effect, chose the top 10-12%.

University G required in-state students to present at least a C average or "satisfactory" showing on the CEEB, or to make a C average or better in six semester hours of college
work after conditional admission. Non-residents had to have a C+ high school average.

Universities requiring a "satisfactory" grade on standardized examinations did not publish the score required because it varied with the number of applications received. As more applications were made, the "satisfactory" grade became higher.

Every university visited had raised its entrance requirements since 1960. Universities A and E had stabilized the freshmen classes and admitted the best students who applied. Universities D and F began to accept the top 10% rather than 12.5% of high school graduates. University G required a C+ rather than a C average from high school records and University B introduced entrance examinations. University C began the College Entrance Examination Board Scholastic Aptitude Test in 1961 and was the first state university in the United States to require a definite score for admission. The score required varies with the quartile of high school graduation class in which the student finished. Those in the lowest quartile of their high school class had to meet the highest minimum score requirement on the entrance examination. Of 3000 freshmen in 1963, nearly one-half were in the top one-fourth of their high school classes. Transfer students at University C will have to present a B average in 1965.
It seems extremely important to note that all seven universities had raised their entrance requirements since 1960. The possible connection between raising these standards and a decreased number of women physical education majors is a fertile field for discussion. It would be interesting to study the effect of the higher standards on majors in departments other than physical education.

**Required Grades**

Each of the universities required students to maintain at least a C average in all courses to remain in good standing. At University A, physical education majors had to have a C+ average in physical education courses to be admitted to student teaching.

**Screening and Retention**

There were no formal programs of screening or retention at four universities. According to the chairman of the department at University F, there was no need for such a procedure there since entrance requirements effectively eliminated the scholastically weak student. Lack of rigorous screening procedures at the universities seemed to stem from a general feeling that the students were quite acceptable and from the fact that there was a shortage of students. Screening at the other three departments was subjective in nature and involved large faculty committees or the whole faculty.
University A had a committee on the Qualifications of Students that screened all women physical education majors before they were admitted to junior standing. A student was subject to rejection if the committee found any physical, mental or personality handicap which might be detrimental to successful teaching. The evaluation was subjective but used all records available on each student. A student was very rarely rejected.

At University B every woman major was discussed at a meeting of the faculty each semester. Her advisor took notes regarding the agreed-upon strengths and weaknesses and used them in counseling the student.

At University E the senior faculty met twice yearly to discuss strengths and weaknesses of major students. Letters were sent to the exceptionally good students and to the exceptionally poor students as agreed upon by the faculty. These latter were asked to meet with a teacher for further counseling. The department chairman stated that several men and an occasional woman were dropped from the program in this manner each year.

Orientation and Advising

All the universities studied had some form of orientation procedures established. At three institutions courses in orientation to physical education were part of the freshman
curriculum and such a course was optional at a fourth institution. Two other departments used several meetings in the professional preparation or skills courses to discuss common problems, department procedures, and academic plans. At University C an orientation guide was prepared for each student and some advising and orientation was done through meetings of the majors' club. At University A advisors were assigned to students at random and at University E one woman advised all the women majors. At the other universities one or two women were assigned to be advisors for each class. Cumulative records were kept on students at all institutions. With the exception of University B, where conferences concerned both academic and personal problems, almost all formal advising was of an academic nature.

**Follow-up Procedures**

The extent to which universities maintained contact with their graduates varied a great deal.

Newsletters were sent out to alumni by four departments. Several of these included articles of professional interest as well as news. The two largest departments had the most alumni activities. One sponsored fall and spring luncheons and a yearly dinner for the 100 to 150 doctoral graduates of the department. The other department had conferences, a special lecture, sports days and convention activities for
alumni. In both of these universities the supervisor of student teaching visited new graduates who were teaching in the area in order to help the new teacher. Most departments honored alumni at homecoming receptions. Alumni were regularly invited to two campuses to review curricula in physical education.

**Student Teaching**

All the universities required student teaching for certification. One semester of teaching was done at three universities and two semesters were done at three. One university required a full-time teaching experience for one trimester with students spending the last several weeks back on campus for follow-up seminars and critiques on teaching methods. Two semesters of student teaching were required by state law in three of the universities.

Except for students at University A, none had a full-time teaching experience. At six universities a minimum block of three free hours was required with students teaching one of these hours daily. At University A students taught full-time at schools throughout the state. University supervisors from both the Physical Education and Education Departments visited these students for a total of six visits during the trimester of teaching.

Student teaching was done near the university at the
six other institutions in city high schools or, in two instances, in university laboratory schools. City schools were chosen at the discretion of the supervisor except that schools were assigned to Universities D and E and so the supervisor was limited in choice. These two universities were in the same large city and over 30 teacher-training institutions used the city schools for student teaching.

Supervision was done by a member of the physical education staff at four institutions while at Universities D and F there was a specialist from the College of Education. As was mentioned above, students at University A were visited by supervisors from both departments. At one institution a man supervised both men and women while at another a woman supervised both groups.

Student teachers at five universities did their supervised teaching only in the major (physical education). At University F students taught in their minor during a second semester. At University G students taught health education during one-third of their student teaching. In every case teaching was done at the secondary level although students teaching two semesters commonly taught in both junior and senior high schools.

Two universities provided leadership experiences for major students prior to their student teaching. At University
E women majors were required to assist in the basic program every semester. In addition they worked 15 hours per semester on a paid or voluntary basis at a variety of recreation jobs. These could be at recreation centers, in campus recreation, at the YWCA, and so on.

II. GRADUATE

Admission Requirements

Standards for admission to graduate study varied among universities. The Graduate Record Examination Aptitude Test was required at four universities and the Miller Analogies Test was required at two universities. Physical education graduate students at University B took an aptitude test and a general culture examination. Scores of 800 on the Graduate Record Examination for the master's program and 900 for the doctoral program were the minimums for admission at University A. At University C both master's and doctoral students had to score 1000 on the aptitude section of the Graduate Record Examination and 600 on the education section. A "satisfactory" score was required on the examination at Universities D and E for all physical education graduate students. At University E, graduate students entering the School of Education had to score at or above one standard deviation below the mean for education students. This
screened out the lower 16%.* The Miller Analogies Test was used at University F as a prerequisite for entrance into its doctoral program. No set score was required. At University G master's applicants had to score 30 and preferably 40 on the Miller Analogies Test while doctoral applicants had to score 50.

All seven universities required higher academic averages for admittance to graduate study than were required for earning the bachelor's degree. Averages of B were necessary at University A in undergraduate specialized professional preparation and at Universities D and F in all undergraduate work. However, at University F, grades in physical education and education were not used by the graduate school in determining averages. An average of B in all junior and senior courses was necessary at University C. Undergraduate averages of C+ were required at Universities B and G. Standards at University E were indefinite but the catalogue specified that students "must show intellectual promise."

Before admittance to doctoral candidacy, Doctor of Education students at three universities had to have two years of successful experience in teaching or related professional education.

A number of these standards had been developed recently including the requirement of the Graduate Record Examination
Aptitude Test at University A. The required score of 1000 at University C was new. Although the tests at University B were not new, stanine scores had been recently set up to standardize them.

Standards for students already in the physical education program had been raised recently at three institutions. The qualifying examinations to screen doctoral students were new at two universities and the final written and oral examinations for the doctor's degree were new at another. Grading policies had come in for review at Universities A and B where grades were thought to be too high.

In a study of prerequisites for entering graduate work in physical education, Simmons found that undergraduate grades were important to 80% of institutions with 48% requiring a C+ average, 16% requiring a B average and 16% requiring a B average in the junior and senior years. Poindexter found that of 7 selected universities, each had different requirements for graduate school entrance.

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28 Simmons, loc. cit.

In general, higher undergraduate grade averages were required by universities in the present study than Simmons found in 1955. It seems apparent that admission to graduate schools and to graduate study in physical education is becoming more selective with increased emphasis on grades and on entrance examination scores.

**Enrollment**

The number of students registered for graduate work during the 1962-1963 school year at each institution is shown in Table IV, page 75. Master's degree candidates out-numbered doctoral candidates except at University E, and men out-numbered women by approximately three to two. Only University A had more women than men in graduate physical education.

Four universities visited had fewer than 10 doctoral students and the shortage was a primary concern of the faculties. The shortage of master's candidates was a little less acute but three universities had fewer than 13 candidates. No department was crowded. The shortages had developed over a period of years for four universities while three institutions reported yearly increases. The department at University F, which in the 1930's had had over 200 graduate students, was down to 10 in 1963. The enrollment at University D was approximately one-third of its
<table>
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<tr>
<th>DEGREE SOUGHT</th>
<th>Universities</th>
<th>A&lt;sup&gt;a&lt;/sup&gt;</th>
<th>B&lt;sup&gt;b&lt;/sup&gt;</th>
<th>C&lt;sup&gt;c&lt;/sup&gt;</th>
<th>D</th>
<th>E&lt;sup&gt;b&lt;/sup&gt;</th>
<th>F</th>
<th>G&lt;sup&gt;b&lt;/sup&gt;</th>
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</thead>
<tbody>
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<td>Master's</td>
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<td>Men</td>
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<td>6</td>
<td>34</td>
<td>37</td>
<td>3</td>
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<td>Men</td>
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<td></td>
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<tr>
<td>Doctor's</td>
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<tr>
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<td>23</td>
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<td>4</td>
<td>61</td>
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<td>6</td>
<td>35</td>
<td>99</td>
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<td>133</td>
<td>20</td>
<td>74</td>
<td>200</td>
<td>10</td>
<td>60</td>
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</tbody>
</table>

<sup>a</sup>Includes recreation majors.

<sup>b</sup>Includes health and recreation majors.

<sup>c</sup>Includes health majors.
earlier peak enrollment. In the departments reporting increases, University B had 30 more students in 1963 than in 1962, an increase of about 11%. At another university the number of graduate students in physical education had been steadily increasing over the years, but had leveled off in the last two years. A third department reported a steady but small increase yearly.

All chairmen emphasized the particular need for women graduate students and for more outstanding students. The Dean of the school at University B was outspoken on this latter point. He stated that physical education cannot be satisfied with the caliber of its graduate students as long as they continue to rank at the bottom of nationally standardized tests. His comment was intended to be general in nature and was not meant as a particular indictment of students at his University.

Graduate school or departmental screening procedures were cited as primary factors in eliminating numbers of possible candidates at every university. At each institution more students applied for physical education graduate work than could qualify. However, there was some difference of opinion among department directors concerning the ultimate effect of raised standards upon enrollment. Two departments reported that the Graduate Record Examination had reduced
substantially the number of graduate students through failure of applicants to make the cut-off score and had stopped numbers of others from applying. However both chairmen expressed the view that while higher standards may initially cause enrollment to fall off, the final result will be the attraction of more students. The department chairman at University F disagreed, saying that students will go where the program is easiest. Chairmen at two of the other universities stated that raising standards had not affected enrollments and one stated that enrollment had increased immediately.

In spite of shortages of graduate students in some departments, there were no formal plans of recruitment in the universities visited. Most department heads considered contacts through alumni as the best source of good students. Another factor frequently cited as attracting students was the reputation of faculty and the department. One university was very satisfied with a summer school plan where outstanding faculty were brought in from other institutions. This attracted students who then often planned to enter the regular session. Students were also interested, according to the Dean, in the wide variety of courses offered, the microcard service of the School, the number of other students with whom to work, and the reputation for high academic
requirements. All chairmen agreed that the way to attract the best students was to raise standards.

Poindexter found no direct recruitment of graduate students at selected universities.  

Definite projections of expected over-all graduate enrollment were found at three universities. These were A, B, and E, all of which anticipated double their present number of graduate students by 1970. At University F, 34% of the student body in 1963 were graduate students with some increase expected. The registrar at University C said in an interview that while the University wants to increase the proportion of upper division and graduate students, there were two other considerations. In his opinion it would be "political suicide to deny admittance to too many undergraduates." He went on to point out, too, that undergraduate education is less expensive for the institution and, in a sense, supports graduate work.

Berelson found that between 1939 and 1959 the number of bachelor's degrees awarded increased 206%, the number of master's degrees increased 260%, and the number of doctor's

30Ibid., p. 44.
degrees increased 248%. No figures were available on the number of physical education degrees awarded over that period.

Few conclusions can be drawn in comparing the growth of physical education graduate programs at the seven universities with Berelson's report because of insufficient data. However, further study of factors contributing to growth and causes for loss of students should prove valuable.

**Number of Courses**

To give an idea of the scope of the programs, the number of graduate courses (masters and doctors) offered at each university was tabulated. See Table V, page 80.

As would be expected, as the number of courses within a department increased they tended to become much more specialized in nature. The 50 graduate courses at University B were concerned with physical education on various levels (such as for the elementary school) and with specialized administrative problems such as public relations, intramurals, facilities and business procedures. This School also offered three courses in statistics. A large number of critique (analysis of published research), seminar

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31 Berelson, *op. cit.*, p. 32.
TABLE V

NUMBERS OF GRADUATE COURSES IN HEALTH, PHYSICAL EDUCATION AND RECREATION AT SEVEN UNIVERSITIES

<table>
<thead>
<tr>
<th>Universities</th>
<th>Physical Education</th>
<th>Numbers of Courses</th>
<th>Recreation</th>
<th>Health</th>
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<tbody>
<tr>
<td>A</td>
<td>18</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>25</td>
<td>10</td>
<td>15*</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>10</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>13</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>26</td>
<td>7</td>
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<td></td>
</tr>
<tr>
<td>F</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>37</td>
<td>12</td>
<td>14</td>
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</tbody>
</table>

*Includes health and safety.
and problems courses was found at another University where the doctoral enrollment was larger than the master's. At University G the number of doctoral courses was increased by seven courses in correctives and eight courses in child growth and development and by three statistics courses.

Continuous evaluation and improvement of graduate programs was being carried out at each university. At the time of this study, physical education faculty at five of the seven universities were planning important revisions of the graduate programs. One was defining courses, two were setting up policies handbooks, and two were completely reworking courses and credits.

Master's Degrees

**Distribution of degrees.** Master's degrees with majors in physical education were available at all seven universities, majors in recreation were offered at six universities, majors in health or health and safety were found at four institutions. At University A both Master of Arts and Master of Science degrees were available in recreation or in physical education. At University E the Master of Arts was available in recreation or in dance while the Master of Science was offered with majors in physical education, health education, dance or recreation.

At University G, majors could be taken in
health, physical education or recreation leading to either degree. See Table VI, page 83. In general, Master of Arts candidates were majoring in dance or recreation and took more courses in the liberal arts (especially art and music) while Master of Science candidates took physical education courses and sciences related to physical education.

In a study similar to this one, Poindexter found the Master of Arts and Master of Science degrees to be offered in equal number in seven physical education graduate programs. 32

Programs of study. There was a great deal of variation in course and hour requirements for the master's degree at the seven universities. See Table VII, pages 84 and 85. Analysis in this study was limited to the degree in physical education most generally earned at each institution. The number of semester hours required varied from 24 to 36 for the non-thesis plan and from 20 to 36 for the thesis plan. The three universities requiring the lowest number of hours were located in the same state and the teacher certification courses were taken largely in the fifth year. These courses added to the degree program and increased the number of

32 Poindexter, op. cit., p. 69.
### TABLE VI

DEGREES OFFERED TO MASTER'S STUDENTS IN PHYSICAL EDUCATION AT SEVEN SELECTED UNIVERSITIES

<table>
<thead>
<tr>
<th>Degrees Offered</th>
<th>Universities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Master of Arts in Physical Education</td>
<td>X*</td>
</tr>
<tr>
<td>Health Education</td>
<td></td>
</tr>
<tr>
<td>Recreation</td>
<td></td>
</tr>
<tr>
<td>Dance</td>
<td></td>
</tr>
<tr>
<td>Master of Science in Physical Education</td>
<td>X</td>
</tr>
<tr>
<td>Health Education</td>
<td></td>
</tr>
<tr>
<td>Recreation</td>
<td></td>
</tr>
<tr>
<td>Health and Safety</td>
<td></td>
</tr>
<tr>
<td>Master of Science in Education, major in</td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td></td>
</tr>
<tr>
<td>Health Education</td>
<td></td>
</tr>
<tr>
<td>Dance</td>
<td></td>
</tr>
<tr>
<td>Recreation</td>
<td></td>
</tr>
</tbody>
</table>

*Degrees available but seldom used.
### TABLE VII

**SUMMARY OF SEMESTER HOURS REQUIRED FOR MASTER'S DEGREES IN PHYSICAL EDUCATION AT SEVEN UNIVERSITIES**

<table>
<thead>
<tr>
<th>University</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
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</thead>
<tbody>
<tr>
<td>Research methods</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2(^b)</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Research readings</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td>2(^a)</td>
<td></td>
</tr>
<tr>
<td>Administration</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervision</td>
<td>2 or</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adapted</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curriculum</td>
<td>3</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measurement</td>
<td>3 or</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statistics</td>
<td>3</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Library Science</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Trends</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent study</td>
<td>3</td>
<td></td>
<td></td>
<td>2(^c)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philosophy</td>
<td></td>
<td></td>
<td></td>
<td>3(^d)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor development</td>
<td>3</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td>2(^a)</td>
</tr>
</tbody>
</table>

\(^a\) Requirement depends on student's background.

\(^b\) Required for thesis-plan.

\(^c\) Required for non-thesis plan.

\(^d\) Either individual study or thesis required.
<table>
<thead>
<tr>
<th>University</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body mechanics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Historical foundations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physiology exercise</td>
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<td></td>
<td></td>
<td></td>
<td>2&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological bases</td>
<td></td>
<td>3-6&lt;sup&gt;e&lt;/sup&gt;</td>
<td>5&lt;sup&gt;e&lt;/sup&gt;</td>
<td>6</td>
<td>no&lt;sup&gt;e&lt;/sup&gt;</td>
<td>4&lt;sup&gt;d&lt;/sup&gt;</td>
<td>no&lt;sup&gt;e&lt;/sup&gt;</td>
</tr>
<tr>
<td>Thesis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6&lt;sup&gt;e&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6&lt;sup&gt;e&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>5</td>
<td>5-6</td>
<td>9-15</td>
<td>2 or 6</td>
<td>4</td>
<td></td>
<td>6 or 18&lt;sup&gt;f&lt;/sup&gt;</td>
</tr>
<tr>
<td>Outside electives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical education or outside electives</td>
<td>6-18</td>
<td>5 or 15</td>
<td>0-6</td>
<td>12</td>
<td>22-15</td>
<td>8 or 12</td>
<td>8</td>
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<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9-12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total: Thesis plan</td>
<td>30</td>
<td>30</td>
<td>36</td>
<td>20</td>
<td>28</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Non-thesis</td>
<td>36</td>
<td>35</td>
<td>24</td>
<td>30</td>
<td>24</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>Requirement depends on student's background.

<sup>b</sup>Required for thesis-plan.

<sup>c</sup>Required for non-thesis plan.

<sup>d</sup>Either individual study or thesis required.

<sup>e</sup>Thesis available but optional.

<sup>f</sup>6 hours in each of 3 areas of concentration for non-thesis plan and 6 hours in 1 area of concentration for thesis-plan.
hours that most master's degree students take.

A thesis was required only at University C and was optional at other institutions.

Programs tended to be rather flexible with an average of a little over one-half of the courses required. The specified courses were in physical education while the elective courses varied. Only University G required that some courses be taken outside of physical education, health, or recreation, although all other institutions allowed this. As few as 8 hours in physical education could be taken at University D while the minimum number at the other universities ranged upward to 20. At University D the thesis, which counted for no credit, increased the study done in physical education.

University G provided for the most specialization in physical education at the master's level. Students following the non-thesis program of studies took a minimum of six hours in each of three areas of concentration chosen from the following: administration; child growth and development; correctives; health education; history, principles or philosophy; recreation; physiological sciences; or research and measurement. Students following the thesis plan chose one of the above areas of concentration.

At University F there was a core of six seminars for
master's candidates. The number of seminars taken depended upon a student's background.

Simmons found that of colleges and universities offering advanced degrees in physical education, a master's thesis was optional in 81%, but that 50% commonly required either a thesis or a project. McCloy wrote in 1957 that much less scholarly work was being done in physical education at the master's level than had been done 10 years before. He found a definite trend to do away with the thesis.

Although the institutions in this study do not constitute a random sample, it is interesting to note that 28% of the universities require a thesis or a project compared with Simmon's 50% in 1955. This may indicate a trend toward non-thesis programs of study for master's students.

**Skills and fitness.** No fitness or motor ability tests were given to graduate students at any institution. However, three universities required certain skill proficiencies of master's and doctoral students.

All graduate students at University A had to demonstrate a "reasonable" amount of skill in four individual

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33 Simmons, *loc. cit.*

or dual sports, two team sports and a dance form. Evaluations were made through observation in game situations and through oral questioning on rules and strategy. Deficiencies were made up by auditing basic classes.

At University G all graduate students were required to be moderately skilled and acquainted with methods in a number of activities. Women had to meet the requirements in aquatics, three kinds of dance, conditioning, body mechanics, sports and locomotor skills, four individual sports, and three team sports. Transcripts were used in evaluating courses and grades or informal testing was conducted. The Dean was adamant about the need for degree candidates' having adequate proficiency in "the basic tools of physical education" even though some students were not happy with the requirement. Deficiencies could be made up for non-credit in the basic program. While fitness was not evaluated by objective tests, appearance and physique were factors considered in screening.

At University B if the undergraduate record showed deficiencies in specified activities, activity classes were required for non-credit.

Poindexter found no skills competencies required of
graduate students in the universities she visited. It was unusual to note that while Poindexter found no skill competencies required, three universities in this study, done six years later, had such requirements of graduate students. The number of institutions visited in both studies was too small to conclude that there is a trend toward such a requirement, but the need for further study is indicated.

Academic requirements. The only departmental examination required of beginning master's students once they were admitted to graduate school was a standardized aptitude test at one university and it was used almost entirely for guidance rather than screening. Final comprehensive examinations were required by five universities for students choosing the non-thesis program. Two of these also examined students who chose the thesis plan. At one university students with a B+ average could request a comprehensive examination in order to be eligible for honors graduation. The one university where a thesis was required had no final comprehensive examination for master's candidates.

At every university visited all master's students had to maintain a B average while in graduate school except at

Poindexter, op. cit., p. 58.
University E where the Master of Education students could average 2.75 (B = 3).

Advising. The common practice at the universities studied was to have one or two persons advise all graduate students. These advisors were appointed and their duties were routine as most master's programs were rather set.

Doctoral Degrees

Distribution of degrees. Three universities offered both the Doctor of Education and the Doctor of Philosophy degrees for physical education majors. Three universities offered only the Doctor of Education degree and University B offered only the Doctor of Physical Education degree. For students in related fields, University B offered the Doctor of Health and Safety and the Doctor of Recreation. A Director's degree was also available at that university. It required two years of graduate study, was intermediate between the master's and doctor's degrees and was designed for supervisors and administrators of physical education. Table VIII, page 91, shows the doctoral degrees offered by each institution.

The Doctor of Philosophy degree was not available in physical education at four institutions and two of the department chairmen felt it was needed. One other chairman said that the Doctor of Philosophy in physical education was
TABLE VIII

DEGREES OFFERED TO DOCTORAL STUDENTS IN HEALTH, PHYSICAL EDUCATION, AND RECREATION AT SEVEN SELECTED UNIVERSITIES

<table>
<thead>
<tr>
<th>Degrees Offered</th>
<th>Universities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Doctor of Philosophy in</td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td>X</td>
</tr>
<tr>
<td>Health Education</td>
<td>X</td>
</tr>
<tr>
<td>Recreation</td>
<td>X</td>
</tr>
<tr>
<td>Doctor of Education with majors in</td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td>X</td>
</tr>
<tr>
<td>Health Education</td>
<td></td>
</tr>
<tr>
<td>Recreation</td>
<td></td>
</tr>
<tr>
<td>Physical Education-Education</td>
<td></td>
</tr>
<tr>
<td>Doctor of Physical Education</td>
<td>X</td>
</tr>
<tr>
<td>Doctor of Health and Safety</td>
<td>X</td>
</tr>
<tr>
<td>Doctor of Recreation</td>
<td>X</td>
</tr>
</tbody>
</table>
a "doubtful" degree at most universities. He expected it to develop as a unique body of knowledge was defined. At two universities the Doctor of Education degree with a major in physical education had come more under the administrative control of the physical education department in the last two years. At these universities, the departments of education and physical education work together in offering the Doctor of Education degree.

In his study of a large number of institutions, Simmons found the following degrees available to doctoral students in physical education: 41% of the institutions offered Doctor of Philosophy and Doctor of Education degrees; 31% offered the Doctor of Education degree only while 21% offered the Doctor of Philosophy degree only; and 7% offered the Doctor of Physical Education degree only. 36

Poindexter found the Doctor of Philosophy degree to be most often offered in selected universities. 37

Programs of study and specializations. Doctoral programs tended to be very flexible and were almost completely unstructured except at one university. However, due

36 Simmons, loc. cit.
37 Poindexter, op. cit., p. 69.
to the small number of advanced physical education courses available at more than half of the universities, little choice was possible.

Specialization within doctoral programs was possible only through the dissertation at four universities. University G had six definite areas of concentration from which a student chose. These were administration, correctives, child growth and development, health, recreation and scientific bases. Each specialty included a core of approximately seven courses supplemented by the same number of related electives. A certain amount of specialization was available at the two other universities with large programs but the areas of emphasis were less defined than at University G. Plans were being made for two general areas of specialization within physical education at another university. These were to be an area of science and research and an area emphasizing history, administration and curriculum.

At three universities the dissertation was the only graduate physical education course limited to doctoral students. These were Universities C, D, and F whose doctoral programs were very small and who offered only the Doctor of Education degree to physical education students. Physical education majors at these institutions principally took
education courses at the doctoral level. University A with a small graduate program in physical education offered one course in addition to the dissertation for doctoral students only. Students who had earned their master's degrees from University A took the bulk of their doctoral work outside the physical education department.

Graduate programs were much larger at the two schools of physical education and at University E. Many more advanced courses were available at these institutions and the bulk of doctoral work could be done in physical education.

Further analysis of doctoral courses in physical education showed that each of the three universities with large programs had a different approach toward doctoral work. The curriculum at University B was practical, with courses designed to help teachers and administrators in methods and procedures. The curriculum at University E was weighted toward philosophical and historical foundations of physical education and especially toward the psychology of motor learning. This department rather than adding new content for specializations as was done at University G, treated subjects in more depth. The curriculum at University G was heavily oriented toward the biological sciences and was designed to develop specialists in research or other areas.
Graduate courses in experimental research had been recently added at three universities and statistics courses were added at two more.

Berelson and Bent both list post doctoral studies as a trend in American higher education. One physical education department visited appointed a research fellow each year with laboratory and library privileges. The person chosen was usually a doctoral graduate of that university.

**Characteristics of doctoral courses.** Doctoral courses were characterized by being problem-centered and usually of the seminar type. They included broad readings and research by the individual student guided by a faculty advisor. They differed from undergraduate courses in being less structured, requiring a variety of texts, and in containing new material and more advanced material.

Berelson reminds us that the emphasis in graduate study is upon research rather than upon teacher training even though the need for teachers is great. His impression from studying a number of universities, however, was that

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while more attention is being paid to the development of teachers currently, the balance has not yet shifted from research.

Skills and fitness. There were the same skills and fitness requirements for doctoral candidates as there were for master's. See page 87.

Examinations and other requirements. All departments and schools administered examinations at the beginning of doctoral work following admittance to graduate school. Six of these examinations tested a student's knowledge of physical education and the other was a general aptitude test. Two of the six were made up of objective type questions while the others consisted of discussion questions. Five were used primarily for screening while two were primarily for guidance.

During his first semester the student at University A took an objective qualifying examination in the areas of philosophical bases of physical education, physiology of exercise, tests and measurements, techniques of research, recreation, mechanical analysis of motor skills, curriculum, history, and applied anatomy. The results were used to

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determine future course work for the student.

During the first semester at University B doctoral students took a standardized aptitude test and a general culture examination. A profile sheet for each student was drawn up. Percentile scores were recorded for each section of the aptitude test, for the general culture examination, and for undergraduate grade averages. Three letters of recommendation were subjectively evaluated and the opinion entered upon the profile sheet. The percentiles based on national norms were averaged and those scoring in the lowest quartile were not allowed to continue study.

The examination at University C was oral and consisted of general questions on physical education and education. It was used primarily for screening.

Students at Universities E, D and F took written tests during or after their first semester of study. The first university tested on general physical education plus a specialized area of physical education. At the other two universities, examinations covered general areas of education and physical education. The examinations were used both for screening and to determine future course work.

The test at University G was partly objective and partly subjective and was used primarily for guidance.

Each department or school examined graduate students
when they had finished most of their course work and had passed the language or statistics competencies. These tests were known as qualifying examinations, and students passing them were admitted to doctoral candidacy. In no case was the examination a formality. It was used not only to screen but to determine any further courses a candidate needed. A dissertation was required of all doctoral students. The candidate’s final examination was an oral defense of the dissertation.

Doctor of Philosophy degrees required proficiency in reading foreign languages. The most common pattern was for two languages to be mastered as was the case at three universities. At University C proficiency in one language was required for both the Doctor of Education and the Doctor of Philosophy degrees. This was the only university that required a language examination for the Doctor of Education degree.

Most of the universities required proficiency examinations in statistics or required a number of hours in statistics courses. Examinations were given at two universities while six semester hours of course work were required at the others.

Doctoral students were required to maintain a B average except at University D where a B+ was necessary. No grade
below C was acceptable for graduate work at any institution.

Advising. Doctoral committees consisted of five members at each university. They were appointed at four universities and were asked to serve by students at three. The student secured an advisor who conferred with the student and the department director in choosing the other committee members.

Research Programs

Research was a vital part of the graduate program at each university with students doing individual studies, assisting faculty members, or acting as subjects in various projects. Although several kinds of research were done by departments and schools, this report will be concerned primarily with experimental research involving the use of laboratories.

Laboratories and equipment. Each university had a laboratory for physical education studies. Facilities ranged from the simplest home-built equipment in one room to expensive apparatus throughout a special complex. Each laboratory was individual in nature and use and so will be described separately.

At University A the research director described the laboratory as having adequate breadth but as being shallow
in depth. An outline of types of research possible included anthropometry, physiology of exercise, motor fitness, motor learning, and cinematography.

University B had the most extensive equipment and facilities for research including a number of laboratories and workrooms. Some experiments were conducted in two driver education laboratories which contained three driver trainers and a number of devices to test vision, hearing, distance judgment, and reaction-time. A measurement laboratory contained a $1700 Elgin table as well as other testing devices, and a photographic laboratory was equipped with a dark room and a variety of cameras and enlargers. Special rooms for electrical equipment and for shop tools were part of a four-room research complex. Thousands of dollars were invested in research facilities here.

Two former class rooms were available for physical education research at University C. Equipment was available for strength testing and for some time and motion studies. Faculty here constructed much of their own equipment. Physical education majors taking physiology of exercise had access to a zoology laboratory.

A Human Performance Laboratory was in operation at University D and consisted of one large and three small rooms converted from class rooms. It was the first of three
planned laboratories. The others were to be a Human Behavior Laboratory and a Human Fitness Laboratory. Important pieces of equipment included a treadmill, a bicycle ergometer, and apparatus for determining heart action, blood pressure and reaction time.

The laboratory at University E was housed in a converted basement room and contained a great variety of equipment, some of it designed by faculty or students in the department. An outline of laboratory facilities and their use listed the following categories of possible experiments: photographic, energy metabolism, reaction and movement time, and motor learning. There were also a dirt track with back stop and starting equipment and a workshop area with tools. The laboratory equipment included 300 microcards of research studies of a type that could be done in that laboratory. There was a Recordak for viewing the microcards.

The rooms for research at University F were scattered throughout the physical education building. The physiology of exercise laboratory was well equipped with devices for monitoring the heart, a closed circuit room for determining metabolic rate under controlled temperature and humidity, ergometers, and a variety of gas analysis apparatus. A recent addition to the research program was a $20,000 shop with tools where faculty and students could construct
equipment. Other rooms contained apparatus for experiments being carried out by faculty and graduate students.

The several research rooms at University G housed equipment for measuring strength, reaction time, heart action, metabolic rate, and gas volume and content. A Tissot tank with treadmill was extensively used as was a mechanical heartometer.

Types of research. Although most of the laboratories were found to have a variety of equipment, certain kinds of research were customarily done at each.

At University A experiments were primarily in physiology of exercise. At the time of this study, the director of research was experimenting in radio cardiography (in which he telemetered the exercising heart) under a $2000 grant received through the Research Council of the American Association for Health, Physical Education and Recreation.

Research at University B was primarily of the applied type and was often done under grants for study in special areas. Several recent grants for research in recreation had been received. Studies recently completed or underway concerned camping for the emotionally handicapped child, camping for the physically handicapped child, and leisure for the aging. The University Foundation had awarded a $3600 fellowship for unspecified research in recreation. Two projects
were being jointly carried out by the School and the American School Health Association on school medical services. The Eli Lilly Company had made a $30,000 grant to the Dean of physical education for a curriculum study.

Research at University C was both basic and applied. Strength and time and motion studies were most often done in the laboratory. Projects in which public school children were tested and measured after various types of programs were underway during most semesters. One professor had a grant for developing a physical education program for asthmatic boys. Curriculum guides and teaching units were commonly developed in summer workshops and distributed throughout the state.

At University D strength and motor learning experiments were emphasized. This Human Performance Laboratory was designed for elementary kinesiological and physiological experiments. The planned Human Behavior Laboratory was to be designed for advanced studies in human movement and the planned Human Fitness Laboratory for new concepts of fitness in the space age. Motor learning and movement were the emphases at University E. Physical education faculty had received three grants from the liberal arts college for specific projects the semester in which this study was made.
A fatigue and motion study done in collaboration with the dental school had resulted in a movie and a set of suggested on-the-job exercises for relaxation. Other such studies were being planned.

Research at University F was basic, not applied, in accordance with the philosophy of the university. It concerned the physiology of exercise and motor learning. In particular, fatigue and recovery time were being investigated at the time of this study. Faculty here were expected to spend one-half time in research and there were many publications.

The largest research project at University G was a long-range growth study of young boys. They were tested or measured every three years beginning at age seven and continuing through high school. Test items included measures of flexibility, the Rogers Physical Fitness Index, height, weight, and genitalia maturity. Wrist x-rays were made and personality scales were administered in cooperation with the psychology department. To date, 27 master's theses had been based on this study. Other cooperative projects in research included work with the psychology department in developing persons trained in both counseling and vocational rehabilitation and in somatotyping in relation to psychology. A
recent study of physical fitness as measured by a state physical fitness test showed a great difference in the level achieved by high school students who had 10 years of physical education opposed to those who had 12. Three projects were being financed by research grants.

Organization for research. Directors or coordinators of research had been appointed at six of the seven departments or schools. One director had a full load of teaching but all the others had varying amounts of time allocated to their research responsibilities. There was a full-time instructor at University G who supervised the laboratories and taught graduate students the use of equipment. Two research directors spent one-half of their time supervising the laboratories and doing their own research, and two others spent one-fourth of their time in the same way. The need for laboratory technicians and for graduate assistants in research was stressed at several institutions.

Six laboratories were financed through the physical education department and one directly through the university. Regular amounts were not always budgeted for research but a few figures for equipment and part-time help were available: University A, $1500-$2000 yearly; University D, $1000 yearly; University E, $500 yearly; and University F, $1000 for 1962-1963. Two departments had received recent gifts for research:
Various sources of supplementary money were used in every case. The biggest part came from grants outside the university although several institutions had research funds for allocation among departments. The opinion most commonly expressed by department chairmen was that the hope of a sustained program of research in physical education rested upon the ability of the profession to attract grants. The chairman and the research chairman of one department had recently met with seven agencies in Washington, D.C., to solicit grants for research in their laboratory. Agencies visited included the armed services, NASA, and others.

**Student use of laboratories.** Although most extensive use was made by graduate students, undergraduates were being brought into laboratories for special units in such courses as tests and measurements and physiology of exercise. Especially in universities with five-year programs more research was being planned for the fourth year because the fifth would be taken up with student teaching. The use of laboratories as teaching devices was probably more common than their use for research.

No report was found in the literature on types of research done in university departments of physical education, and only one study was found regarding laboratory
facilities available for research in that field. Hunsicker reported in 1950 that of 124 college and university physical education departments, 16 have a laboratory, 35 have future plans for a laboratory, and 47 said their graduate students have access to laboratories in other departments. Only one-fifth of the departments had money for research. His survey showed the median number of laboratory rooms to be 2.5 while a median number of 3.3 faculty and 6 graduate students use each laboratory.

CHAPTER IV

THE BASIC PHYSICAL EDUCATION PROGRAMS FOR WOMEN

Status of the Programs

Two universities had voluntary or non-required basic physical education programs. Three required four semesters, one required two semesters and one required three trimesters. Classes met two times weekly for one hour at six of the seven universities and three times weekly at the other.

Students had complete freedom of choice of activities in four programs. The other three had courses in movement fundamentals which all students took. No department had requirements within certain areas such as dance or sports except that two of the three having movement fundamentals courses also required swimming proficiency or registration for swimming.

Grades and credits in basic classes were given at five universities. Physical education grades were used in computing academic averages at three of these universities. The grades were not counted in computation of academic averages at one university while this question was left up
to individual colleges at another. Two universities required physical education, but gave neither grades nor academic credits.

A number of authors reported on the status of physical education at universities and colleges in the United States. Cordts and Shaw found that 67% of 167 randomly selected four year institutions in 1960 required physical education of all students and that 58% gave academic credit.¹ Donnelly, however, found in 1962 that 88% of 239 colleges and universities required physical education and that 83% gave academic credit.² Both studies were of randomly selected subjects and there is no apparent explanation for the difference in results found. Steinberg reported that 92% of four-year institutions required physical education.³ Fornia found in 1959 that 95% of 366 institutions required physical education for graduation and that 76% gave academic credit.⁴ Institutions were chosen on

¹Cordts and Shaw, op. cit., pp. 409-419.

²Donnelly, op. cit., p. 154.


the basis of physical education department chairmen holding memberships in the College Physical Education Association or the National Association of Physical Education for College Women. Oxedine surveyed 265 randomly selected institutions in 1961 and found 84% requiring physical education with 76% giving academic credit. The greatest number (68%) required physical education for two years while 25% required one year. Three percent have a three-year requirement while 5% have a four-year requirement.  

Although the findings of the investigators differed, it was deemed significant that they all found physical education required in a high percentage of the colleges and universities studied. In descending order these were 95%, 92%, 88%, 84%, and 67%. The range in percentage of institutions giving academic credit was from 83 to 58, with two investigators reporting 76%. It should be noted that from 1960 to 1961 the percentage of universities requiring physical education increased from 67% to 84% and then to 88% in 1962. Fornia's study in 1959 did not deal with a comparable sample. All samples were large and selected at random which may

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indicate a trend toward required physical education.

**Enrollment and Expected Growth**

On every campus including the one where physical education had been on an elective basis for nearly 30 years, enrollment had kept pace with university growth. The chairman of the voluntary program cited above reported a small increase in rate during the last five years and attributed it to (1) new facilities, (2) new activities, (3) more coeducational classes, (4) the national fitness emphasis, and (5) the addition of credit for physical education in 1960. He commented that expert instruction was absolutely essential to a voluntary program. The number of women in basic physical education had increased from about 1100 in 1956 to nearly 1800 in 1963. At University D where the program became voluntary in 1960, enrollment had dropped sharply and then risen steadily. In 1959 there were 3000 students in the program, 1785 in 1960, 2000 in 1961 and 2611 in 1962.

Two universities expected their physical education basic programs to double in size in ten years to keep pace with university growth, but one was severely limited by space. The other departments expected moderate yearly increases of approximately 200 women students until the university limit was reached.

It is very important to note that where physical
education was not required large numbers of students chose to elect it.

Courses

A large variety of courses within the basic program was available at every institution. The range of numbers of courses, counting beginning, intermediate and advanced courses, was from 20 to 28 with the average number being 23.

Tennis was cited by six departments as being among the most popular activities. Dance of various kinds, bowling and intermediate swimming were high on most lists. Golf, badminton and conditioning classes were also popular. At no university were team sports an important part of the program, and only one or two sections of these sports were commonly offered. Among the somewhat unusual courses offered were scuba diving at two universities, ice skating at three, skiing at two, and track and field at three. Theatre dance was available at three universities while students in one department could take basic classes in circus stunts. A yearly student circus was a joint project of the physical education and student life departments. Bait and fly casting was part of one program and tap dancing was part of another.

University C was one of three requiring a movement fundamentals course. Students chose a section with a sports, dance or exercise emphasis. Each of the sections contained
a posture unit based on analysis of good posture and exercises to correct unsatisfactory posture. The sports oriented course included instruction in stunts and tumbling; footwork and locomotor skills; and in throwing, catching, batting, striking, climbing and kicking. Games requiring these skills were introduced. The dance oriented course included an introduction to various kinds of dance and a number of basic steps. In the exercise oriented course, students worked on fitness, figure improvement including diet information, and on relaxation. These divisions of movement fundamentals were new and the content was being developed.

The required movement fundamentals courses at Universities E and G included conditioning, posture, relaxation techniques, and body mechanics as related to basic movements.

With very few classes in team sports, all chairmen reported that programs centered around individual and dual sports. Each commented on the increased interest in fitness activities such as body dynamics, conditioning, figure control and circuit training (for men). Rising interest in gymnastics and tumbling was also indicated.

In order to compare the findings with a broad range of programs, the literature was surveyed. In an early study of a number of four-year colleges and universities, Hunsicker found that more students were enrolled in swimming than in
any other single activity (10.9%). Basketball and volleyball ranked second and third with 7.3% and 6.7% of students enrolled in them. After swimming, the most popular individual sport was tennis with an enrollment of 5.8% of students. The total percentage taking team sports was approximately 30% while approximately 39% were taking individual and dual sports. Only 2% of the total enrollment was in dancing. The remaining 29% were enrolled in a variety of fitness, track and field, recreational and club activities.

In a study of changes over the period between 1954 and 1958, Cordts and Shaw found more types of courses being offered with an emphasis on individual and dual sports, swimming, dance, and body mechanics. Oxedine found that in a four-year period two-thirds of institutions studied offered more individual and dual sports and fewer team sports.

Comparing Hunsicker's findings from 1954 with later literature and with programs at the universities studied, it

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7Cordts and Shaw, op. cit., p. 416.

8Oxedine, loc. cit.
would appear that basic programs in physical education are becoming more individual and dual sport-centered. At the same time, there seems to be a rising interest in fitness activities of various kinds.

The Adapted Program

Provisions were made for students who needed modified activities in every program. At four universities, a student upon recommendation of her doctor was placed in an activity appropriate to her condition. These activities were in the regular basic program and were not limited to students in the adapted program.

Senior staff members at two institutions had had extensive experience and advanced training in corrective work. A physical therapist was on the staff in another basic program. At one of these universities (University A) no screening was done and remedial work was carried on largely through regularly scheduled clinics. The other two institutions with trained teachers selected girls for special classes through their screening procedures (Universities C and G discussed above) or upon doctor's recommendations. As in University A, at University G there was extensive clinic work in the late afternoon hours. All students on the campus were eligible to attend the clinics whether enrolled in physical education basic classes or not.
Grading

Written final examinations and skill tests were given in all basic classes at two universities and were given in most classes at four others. The department at University F gave no written or skill finals. Theirs was one of the voluntary programs.

Written examinations were commonly developed by sports committees within the department, and skill tests varied widely with teacher-made, departmental and standardized tests being used. Departmental written examinations were available in five universities but teachers were not limited to their use in four of these.

Grading was an individual matter at most universities. The department at University F, whose program was voluntary for students, had a policy by which A and B grades could be given to 65% of students and as many as 70% of these could be A's. Thus, about one-half of the students in the program could and did receive grades of A.

In the literature were a number of studies concerning grading in physical education. Fox reported that 90% of 257 colleges represented by the National Association for Physical Education of College Women gave grades in physical education classes, with the great majority awarding letter grades and 9% awarding "pass" or "fail" marks. One-half of the
institutions had departmental grading systems with the most important factors being rules, knowledge of techniques, and skill. Improvement, dress and daily work were given less weight. Cordts and Shaw found that 76% of physical education departments gave skill or practical tests and 65% gave written tests in determining physical education grades. Oxedine reported 74% of 265 institutions gave letter grades in physical education and that over one-half gave final written examinations. His study showed that the larger institutions were much more likely to give grades and to count physical education for graduation credit than were small colleges. Davis reported that 30% of colleges and universities regularly included fitness or motor testing as part of the basic skills program.

Written and skill grades were commonly given in physical

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10Cordts and Shaw, op. cit., p. 417.

11Oxedine, loc. cit.

education basic classes, but most of the departments studied left the decision to each teacher. Only one of the universities in this study had a departmental grading system while Fox found 50% of 257 departments to have standardized grading in 1956.

Coeducational Basic Classes

The programs were almost completely coeducational at three universities with contact sports and conditioning classes being the exceptions. One of these institutions was a pioneer in coeducational physical education having begun its program over 30 years ago. Four or five activities were coeducational at three universities. These activities were commonly social and folk dance, bowling and golf, and occasionally badminton, fencing, tennis or rebound tumbling. There were no coeducational classes in the basic program at University C. Where instruction was on a coeducational basis, classes were taught by either a man or a woman selected for his or her skills and interests. At no university did a man and woman teach a coeducational class together. An increase in coeducational activities was reported at three institutions and two others had had coeducational physical education for some years. At University F where students could enroll in either coeducational or separate classes, a large number elected the coeducational program. There had been a
considerable increase in coeducational activities in the last few years in this department.

The literature also indicated an increase in coeducational physical education. Cordts and Shaw reported one-half of the institutions surveyed had some form of coeducational physical education andPornia found that 88% of institutions surveyed had such programs. Oxedine found the number of coeducational classes to have increased over a four-year period.

Apparently coeducational physical education is increasing in popularity in a number of universities. Such interest may be related to increased interest in recreational sports. Fitness and conditioning, as well as contact sports are still separate in most instances. No mention was found in the literature regarding teachers of coeducational activities, but it seems important to note that at the universities studied either a man or woman was assigned to teach coeducational classes, the designation being on the basis of special skill and interest. In no case was instruction

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13 Cordts and Shaw, op. cit., p. 415.
14 Pornia, loc. cit.
15 Oxedine, loc. cit.
shared and no difficulties were reported.

**Facilities in the Basic Program**

Physical education administrators were asked their greatest need for facilities and their answers varied widely. Indoor space was most needed by one department and outdoor space was too limited at two others. Universities E and G critically needed both. University A particularly needed a teaching pool and University B needed a new recreational gymnasium.

Fields or courts had been lost at five campuses to dormitories or class room construction. At University C only one shortened soccer field was available to women for field sports in outdoor basic classes. Only at University B was there some assurance that more fields would not be taken away.

Several important facilities had been recently completed or renovated. There was a new gymnasium at University A, a new two million dollar physical education complex at University B, and an extensive addition to the men’s gymnasium at University C.

Important facilities in the planning stage included an outdoor education center at University G, a women's gymnasium at University G and additions to the women's gymnasium at University F.

Play fields on top of underground parking lots have
already been mentioned. At University F there were a number of such fields which were constructed of a thick layer of gravel covered by several inches of turf. Underground hand-ball courts were new at the same university and a substantial number of men's facilities at another university were beneath athletic fields. Roofs of gymnasias were used for circuit training at one university and for class rooms and a physical education psychological laboratory at another. The midwestern university planned to convert tennis courts to ice rinks in the winter.

**Challenges to the Basic Program**

On three campuses visited there had been serious challenges to the basic program within the last four years. Several attempts had been made by individual faculty members in one university senate to lessen or eliminate the requirement in basic physical education. The question had come to a vote several times, but the physical education chairman reported enthusiastic support for the program from the majority of professors. In a compromise move the requirement was reduced from four semesters to three trimesters but the credit was increased from one-half to one credit per course. Area requirements were dropped in favor of free choice of activities. Proficiency examinations had been added three years before this study was made in anticipation of over-
crowded programs. It was felt that these examinations strengthened the case for required physical education.

One other university was likely to lose one year of a two-year requirement primarily due to lack of space and increased growth. The legislature in this state had passed a bill limiting physical education programs in state supported colleges and universities to exercises and conditioning. While this bill was later declared unconstitutional by the attorney general, the matter was not dropped. Hoping to avoid controversy, the department was eliminating a number of such activities as canoeing, badminton and horseback riding.

One university had changed from a required to voluntary basic program in 1960 but enrollment was very good.

Another university was to lose the credit given for physical education in June, 1964, but they were not to lose or lessen the requirement of four semesters.

Rising costs, jealous demand for time, and a scramble for space are reasons cited in the literature to explain why the basic program is being challenged at many universities, but perhaps more important were reasons given by the Committee to Study Attacks on the Basic Instruction Program formed by the College Physical Education Association. The Committee blamed inadequate programs and poor teaching at the secondary
as well as college levels, saying, in effect, that college physical education deserves a long hard look at its effectiveness. In this same report, H. E. Kenney brought out the point that the chief opponents of physical education within universities are the "scholasticists" and the "local autonomists." The scholasticists are those who feel that a university career should be concerned only with an "academic" field of study. Their position is strengthened by the great increase in knowledge and the resulting increase in numbers of courses. The local autonomists believe that individual colleges within a university should have complete control over curricula within that college. This may result in physical education being dropped as a requirement.

Montebello in case studies of five universities whose physical education programs had been reviewed by the university administration found these factors most frequently mentioned: (1) more time needed for academic subjects, (2) no requirement of any subject should be made of all students, (3) scheduling


17 Ibid.
problems, (4) poor teaching, and (5) doubt about real benefits. Donnelly found that in the five years before 1962, 2 of 239 institutions had lost their requirements and 8 had had theirs reduced.

Plan for Dealing with Challenges to the Basic Program

Revision of the university calendar. One factor at the heart of the problem is campus-wide lack of space and facilities. One commonly recommended procedure is the revision of the university calendar. Those studying the situation agree that it is poor planning to have extensive and expensive facilities lying unused for many hours of the day and many days of the summer. Following visits to a number of colleges and universities Davis predicted that university calendars would increase from 36 to 48 weeks. According to McKenna, "year-round operation seems to be accepted as an inevitable part of the future for most colleges and universities in

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18 Robert A. Montebello, "Should Physical Education be Required during the Undergraduate Program?" *Journal of Health, Physical Education, and Recreation*, XXX, No. 9 (December, 1959), p. 35.

19 Donnelly, *loc. cit.*

20 Davis, *op. cit.*, pp. 141-147.
American higher education.\textsuperscript{21} He found, however, that from 1956 to 1960 34 institutions made changes in their calendars with 28 of them shifting to the semester system. Twenty-six of these changes were from the quarter system to the semester system.\textsuperscript{22} The quarter system is usually thought of as a year-round system.

One university visited had changed to the trimester system (48 weeks) in 1962-63, but no other university had immediate plans for changes.

Revision of teaching and organizational methods. Numerous other ideas have been advanced to alleviate the overflow of students in the basic program. Cassidy suggested experimenting with new methods, increasing class sizes, using student aids, or resorting to restricted enrollments and lower teacher standards.\textsuperscript{23} Esslinger suggested the overcrowding could be eased by reducing the requirement in physical education; using facilities from 7 a.m. to 5 p.m.


\textsuperscript{22}Ibid.

and at night; using more facilities outside the department; substituting intramural participation for part of the requirement; restricting the basic courses through proficiency examinations; increasing class sizes; cancelling small sections; and requiring students to participate in class two days and outside class one day weekly.  

An increased use of facilities outside the physical education department was noted at five universities. Most common was the use of bowling and games rooms in new student unions. City playgrounds, ice rinks, riding stables and bowling lanes were needed to supplement facilities when programs were crowded.

Proficiency examinations and substitutions. A number of other authors have suggested proficiency examinations.  

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Such a plan would depend upon the establishment of standards of performance in agreed upon areas. The authors agreed it would strengthen the position of physical education to be able to show objective scores indicating deficiencies while exempting students who score well. Brace said that the requirement was historically in terms of time with the original programs being characterized by health appraisal and correctives. Now classes are based on teaching of skills.

He went on to say:

We should abandon efforts to enforce a time requirement for physical education in college, and in its place base the requirement upon an appraisal of needs and abilities and of competencies which should be expected of men and women who graduate from American colleges and universities.  

Kireilis found that of 123 colleges and universities, 9 used proficiency examinations in physical education to alleviate the enrollment overload problem. Of these, three used standardized tests. The executive dean of Purdue University commented that the trend toward reduced requirements would continue and that the intramural program should fill the void. He saw the role of intramurals shifting away from organized tournaments to unorganized but supervised free

26 Brace, op. cit., p. 117.
27 Kireilis, op. cit., p. 33.
Four of the departments visited had examinations through which students could demonstrate skills and knowledges to earn exemptions from some or all of the requirements in the basic program.

At University A proficiency examinations were introduced in 1959. These were offered in a variety of sports each trimester. Students who passed written and practical tests in an activity with minimum grades of B were given one credit but no grade. Three teachers used evaluation forms to grade students as they played with another teacher, a student or a team. Bowling and archery standardized norms were available for the practical tests in those sports, and so teacher ratings were not used. All teachers were not satisfied with the subjective ratings. Written tests were the same ones used as final examinations in the basic program. An average of 40 students each semester had taken the exemption tests over the last three years. Of these, 46% had passed both the written and the practical. With the help of

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the University Testing Service which computed standard deviations and item analyses, the department was setting up norms and improving tests.

In order to be exempt from the required movement fundamentals course in physical education, students at University C could take a motor ability test (basketball throw, obstacle run, standing broad jump) and a fitness test (30-second sit-ups, chair step for time, push-and-pull arm strength measured by a dynamometer). Norms had been established on each item during a two year period when all students were required to take the tests. While these two tests were optional for those students seeking exemptions, all students had to take a subjective posture examination and a practical swimming test. Those passing all four tests were not given credit but were exempt from the movement fundamentals course and could choose any activity. They still had to take the same amount (two semesters) of physical education. Students passed the fitness battery with a total percentile score of 180 for the three items. They passed the motor ability test if their total percentile score on the three items was 225. Students who did not pass the swimming test were required to take swimming and those failing the posture examination were scheduled for individual gymnastics. Students who enrolled in individual gymnastics or in swimming the first semester
took a movement fundamentals course the second semester unless they had passed the exemption examinations.

A series of proficiency examinations was available at University E. Entering students were required to take a conditioning class and a swimming class unless they passed the exemption tests. The conditioning tests for women were as follows:

1. Perform the lie-sit-stand exercise seven or more times in 15 seconds.
2. Perform ten consecutive push-ups from the knee position.
3. Perform ten consecutive curl-ups, hands clasped behind the head.
4. Exhibit satisfactory body mechanics in standing, walking, stair-climbing, jumping down from a three-foot height, stooping, lifting one-quarter of one's weight, carrying, reaching, sitting, and rising.
5. Demonstrate the ability to relax at will.
6. Pass a written test covering the uses and limitations of exercise for general organic stimulation, increasing strength and tone of specific muscle groups, as an aid to relaxation, for relief of menstrual pain, for prevention of constipation, and as an aid in the control of body weight.²⁹

The swimming test was as follows:

(1) Pass a written test from pages 1-190 in the American Red Cross *Swimming and Diving* book.

(2) Without touching the bottom or resting:
   Jump or dive into deep water.
   Swim 100 yards demonstrating a side or front stroke for 25 yards and a resting back stroke for 25 yards.
   Float in deep water until 10 minutes have elapsed from the time of entry.

At University G few women scored high enough on the motor performance test required of all entering women students to be exempted from the movement fundamentals and conditioning course. The items included a bent arm hang, curl-ups, and Wells' and Dillon's revision of the Scott flexibility tests. Local norms were used. Judges evaluated the walk, run and jump. The results of these tests were also used to screen students who needed adapted physical education. Students could qualify for credit in advanced swimming, in one individual or dual sport and in a dance form. Examinations were given twice yearly. The written test was given first, followed by observation of playing skill and strategy. Over several years' time, only 5 to 10 persons had any courses waived in this manner. Credit, but no grade, was given when students did qualify for exemption.

Departments having proficiency examinations were quick

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30 Ibid.
to point out their value as public relations devices. Such examinations implied specific goals as well as course content. It seems that in such a role they are very valuable. However, in no case was a large number of students exempted. If proficiency examinations are to alleviate overcrowding in the basic program, realistic standards should be set using skill achieved by students who take the classes at a university as a criterion.

Public relations. Several authorities have emphasized the need for improved public relations to introduce or interpret physical education to other faculty and to college administrators. Hand recommended various services such as classes for handicapped students or recreational and instructional classes for faculty and faculty children. In 1960 physical education departments at 50 universities participated in television shows in efforts to acquaint the public with their programs. Hand further suggested that physical education and athletic budgets be submitted separately in order to improve the appearance of the physical education budget.

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31 Hand, op. cit., p. 59.


33 Hand, loc. cit.
Montebello suggested administrative separation of the two areas so that physical education would not be included in criticism of athletics. Tied in with comments on the need for good public relations and interpretation of physical education was the insistence that physical education must decide upon its real role and not try to be all things to all men. Abernathy urged that the profession choose among its varieties of purpose and redefine its aims. Daniels also stated that physical education must define its role in American education and indicate its unique service to society.

A national conference on interpretation of physical education was held in 1961, with Ben Miller from the University of California, Los Angeles, presiding. Participants represented the American Association for Health, Physical Education, and Recreation, the Athletic Institute, the Society of State Directors, the College Physical Education

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34 Montebello, op. cit., pp. 35-36.


Association (for men) and the National Association of Physical Education for College Women. A report was published to aid college departments in the interpretation of their programs. 37

In discussing the need for good public relations in physical education Miller offered the opinion that the public was in a receptive mood for better understanding the program and that citizens’ interest could be the most significant professional trend of this generation. He stressed that the progress of a group depends upon the image it projects and that the image must appear to be in the public interest. 38

The majority of universities visited had physical education faculty who felt that the best type of public relations was public service rendered. Within the universities it was common to find provisions made for university-wide faculty and staff by use of physical education facilities. In a new gymnasium at University C there were 500 lockers for faculty and staff men who could use any facilities including a steam room and two masseurs. Plans were made to


38 Ibid.
have an organized noon program for interested faculty there. At University D there were 700 faculty lockers and at University G there was growing interest in a running program sponsored by the school of physical education. The two schools of physical education had sports programs for faculty children, one on Saturdays during the regular school year, and one in the summer months.

A great number of services to community, state and country were found. Faculty at most schools served as consultants at professional meetings or as directors of workshops. University B, in particular, was host for a number of national workshops in aquatics, recreation and health as well as conducting a Peace Corps training project. Summer workshops under the auspices of the state education agency at University C resulted in high school curriculum guides in health and physical education. Two television programs in health and physical education for upper elementary grades were sponsored by this department. One school underwrote an extensive microcard service in physical education and related fields. Universities D, E, and F felt the real test of the effectiveness of public relations was to come when each institution would decide if professional preparation in physical education were to be "academic."

*Emphasis on the intellectual content of physical*
education. Several authors discussed the need to emphasize the intellectual content of physical education and its place as an integral part of general education. Oberteuffer would "enrich in an organized way the intellectual concept of physical education," and Scott said that while the first 100 years of physical education were concerned with the development of a system of exercise the second half of the century would be devoted to making physical education an integral part of the general education of all students. Teachers at two universities wrote on basic physical education programs in which a considerable amount of intellectual content was included. At the University of Southern California students in the basic program for men use two texts and hear a series of lectures on conditioning and the values of muscular activity. At Florida Presbyterian University


the basic physical education program lasts four semesters and consists of one hour lecture and two hours of laboratory each week. By semesters the content includes physical education in historical perspective; physical education, recreation, and health; and sports on the national and international scene. 42

At every university visited except P written examinations were given to women students in the basic program. No other special attempts were made to stress the intellectual content of physical education in the basic courses for women at any of the universities visited.

**Improving programs.** According to Oberteuffer the best way to improve the image of physical education was to improve the program itself. He strongly recommended a graded, sequential program with established standards. 43 A nationwide effort to improve the college physical education program was made in the appointment and subsequent published guide of a Joint Committee on Physical Education for College Men

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43Oberteuffer, *loc. cit.*
and Women which met in Washington in 1962. The participating organizations were the American Association for Health, Physical Education, and Recreation, the College Physical Education Association and the National Association of Physical Education for College Women. The committee was charged:

- to consider the special problems of the present, and to lend direction to the improvement of existing and future programs of physical education. It was a special purpose of this conference to find ways of developing and maintaining high quality programs for all students in colleges where expanding populations make demands upon facilities and teaching personnel which call for new ways of planning, programming, and teaching.

The guide was organized into study questions in these six areas: (1) student needs and program objectives, (2) program content, (3) method, (4) administration, (5) staff implementation of research. It was designed to be used by organizations and institutions in discussing college physical education programs.

*Maintaining historical perspective.* Leona Holbrook, current president of the National Association of Physical Education for College Women, looking to the future of the

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basic program in college physical education, stressed the need of learning the lessons of history and keeping the best of what we have. She said that people will continue to be essentially the same and that men and women will still have the same needs they have always had.

Human spirits with human bodies were made for active living upon this earth.

In the physical education of the future, well-born, well-dressed, well-fed and well-taught young men and women will play soccer on green grassy fields in bright sunlight; and clean-limbed youth will swim in clear pools making trailing swirls of water.  

CHAPTER V

RECREATION PROGRAMS FOR WOMEN

**Women’s Intramurals**

**Organization.** Every university visited provided for women's intramurals. Budgets were administered solely by the physical education department at one university and solely by campus recreation at another. At four others, physical education and the Dean of Student Life jointly provided funds, and at the seventh university physical education cooperated directly with the student government. In this latter institution the Student Senate allocated funds to intramurals based upon budgets submitted yearly.

Students were primarily responsible, with faculty help, for the program in four universities. Officers were elected and sports chairmen were responsible for drawing tournaments and keeping teams notified of games. At one university students submitted the budget and planned tournament schedules. A woman from the physical education faculty served as sponsor of intramurals at each of these four institutions. Their workload reduction ranged from one-half to one-sixth.
At three of the universities, most women on the physical education faculty were assigned intramural duty as part of their workload.

A woman faculty member at University C was assigned full-time to the intramural program and was assisted by a secretary and a half-time aide. At University D a man headed the intramural office and had a full-time man and a full-time woman as assistants. At University E the man in charge of the recreation division headed both men's and women's intramurals. He had help equivalent to one and one-half teaching loads spread among several graduate assistants.

Teachers were present at all intramural games in two universities and were available in a near-by office in the other five programs.

Coeducational intramurals. Three universities had popular and well-established coeducational intramural programs in addition to their separate programs for men and for women. The most popular intramural activities at University D were coeducational softball with 32 teams representing 64 organizations and coeducational volleyball with 41 teams. Badminton, swimming, tennis and volleyball were coeducational at University E and a nine-year old program of coeducational softball had been dropped in 1963 due to loss of fields. Bowling, table tennis and volleyball were in this program at
University G. Other universities reported increased interest in coeducational intramurals. Bowling was most often mentioned as a first step in such a program. Several chairmen commented on the increase in a social as opposed to a competitive emphasis in intramurals which they attributed to the increased interest in coeducational activities.

Activities. Approximately 10 intramural activities were offered to women at each university. Basketball, volleyball, tennis, golf, badminton, bowling, and table tennis were common to most programs. Team sports had the most participants with 27 touch football teams in one program and 36 volleyball teams in another. Where they were available, however, coeducational sports were the most popular.

Problems. Participation was down on four campuses, had leveled off at one, and had increased slowly but steadily at two others. Rising academic demands were cited as the reason for losses in numbers of participants. In the opinion of the department chairman at University A, "leisure for the college student is on the way out." Several sponsors stated that fewer women without club affiliations were entering intramurals.

Excessive forfeits were a problem at five of the seven universities. At one of the largest universities nearly every individual or dual sport tournament was unfinished in
1963. The sponsor felt this was because women were not motivated to participate unless pushed by an organization or a feeling of loyalty to a team. Fewer forfeits in team sports supported this observation.

Of the four universities having Women's Recreation Associations in which students were largely responsible for the intramural program, three indicated that it was increasingly difficult to find well qualified students to serve as officers or managers. It was felt that the administrative details of large programs were too much for busy students to handle. Most sponsors felt that a full-time faculty member with secretarial help and a central office was needed for optimum results. Several said that Women's Recreation Associations, as such, were on the way out and should be replaced by intramural staffs. One university had recently dropped the Women's Recreation Association to form an intramural office.

Communication problems were evident on large campuses. It was difficult to keep teams informed of playing times and this was considered a main reason for forfeits.

Crowded facilities, difficulty in scheduling fields or gymnasiums, and conflicts with basic classes, athletics, military or band were problems at some of the universities. University C had only one short field for out-of-doors
intramurals, and three other programs were curtailed when dormitories were built on playing fields. City parks and pools were used to supplement facilities in several areas.

Two universities in a large city had a number of commuters, and intramurals could not be scheduled at hours convenient for these people. The program was geared to the students in residence.

Women officials were in short supply at most universities. Commonly the officiating class members served at intramural games. In several programs, however, paid students covered most games. They were usually men students and officiated for both men's and women's games. At one university it was a student's responsibility to train officials and to schedule games for them.

Clubs

Strong sports clubs for women existed at four universities, occasional seasonal interest groups had been developed at another, and coeducational clubs were found at two. The clubs were sponsored by the physical education department at five universities with faculty members acting as advisors. Clubs at the other universities were in the budget of student government or student life.

In the departments with well-established clubs,
swimming, tennis, and riding groups were most often found. Clubs for dance, badminton, bowling, basketball and hockey were each found at two institutions. Where clubs were sponsored outside the physical education department, they were coeducational, included a variety of activities other than sports, and had as advisors faculty members from various departments of the university.

The character of clubs changed somewhat from year to year at different institutions. The strongest program with most participants was found at University C. Membership was somewhat off due to increased academic requirements. Skilled students were pressured by sorority, dormitory or church affiliations to play in intramurals for team points, and so the busy student dropped her club activities. The department was considering replacing some clubs with advanced classes in the basic program to be offered for credit.

On the West Coast where extramurals for women were growing, clubs were caught between intramurals and extramurals. Most highly skilled students preferred the increased competition provided by the new extramural program.

Informal Recreation

The question of informal sports recreation was discussed with each department chairman. Only at University A
did the chairman feel that intramurals were likely to be replaced by informal play. He foresaw changing patterns of physical education with gymnasia open early and late for the convenience of students. Teachers would be available for instruction on an informal basis. Other chairmen thought the competition of organized intramurals was an inherent part of American mores. Several felt that women would be much less likely to participate informally than in an organized program.

At four universities there was a definite trend toward having play facilities near living areas. At University B there were tennis and basketball courts, fields and picnic areas near four or five residence centers. At another university there were volleyball and picnic areas scattered around the campus. At University F as each new underground parking lot was built near dormitories, an all-purpose grass field was constructed at street level on top of the lot. At University G there were plans for five recreation areas away from the physical education center and near dormitories. A sports arena at University D was planned with 15,000 seats, a pavillion, and rooms for clubs. Money was to come from student fees, and the arena was to be used primarily for informal recreation, intramurals, and as housing for the
university health service. On several campuses sponsors noted increased participation in informal activities due to new student unions.

A new recreation area approximately two miles from the campus was built through private donations to University F. The area contained a number of playing fields, tennis courts, two swimming pools and a spacious club house for student parties.

Extramurals

Extramural sports for women were found at the four west coast universities. The programs were relatively new at each campus. Sponsors and other faculty members felt that these competitive activities were what the skilled players needed and wanted.

At University D there was a Student-Faculty Advisory Committee on Competition for Women. It was organized to formulate policies for the orderly development of extramurals for women. Continued growth of the teams and increased need for money were problems to be dealt with. The teams were not official clubs and so were not provided for through the University Recreation Association budget. The committee had recommended that extramural activities be one of three divisions under the intramural director with a part-time staff member in charge. Activities in which women
competed with other colleges and universities were tennis, volleyball, basketball, badminton, skiing, swimming, and fencing. Physical education teachers sponsored the clubs but at the time of this study no work load credit was assigned for this duty.

Interest was also growing at University E where there were tennis and volleyball teams. Money was the biggest problem here with requests for funds being made of the athletic department. The chairman of the intramural program stated that the athletic department might take over the extramural program for women completely if the program grew larger. A woman on the physical education faculty was assigned on a part-time basis to work with the teams, but the teams had no formal coaches.

Tennis and volleyball were also played by extramural teams at University F where they were sponsored by physical education faculty who were given workload credit. There was no provision in the budget for other expenses. The chairman stated that extramurals for women would continue to grow and that policies, money and sponsors were pressing needs.

Sports interest groups at University G engaged in matches with other colleges and universities whenever teams were strong. There was no formal provision for funds or
sponsors although the physical education department had assumed the responsibility up to the time of this study.

Sponsors at each university stressed the need for setting up standards of participation for women in extramural competition. This area was felt to be one in which there would be a great deal of growth in the near future.

Summary

Administration of intramurals was approximately equally divided between Women's Recreation Associations and intramural directors in the universities visited. Most sponsors felt that for large universities, faculty directors were much more efficient, and they stated that there seems to be a trend in this direction. Coeducational activities were increasing in popularity and several chairmen felt that intramurals were becoming more social rather than competitive. Common problems in administering intramurals included decreased participation in individual and dual sports, excessive forfeits, difficulties in communication, overcrowded facilities, and lack of women officials. New facilities for informal recreation were found with four universities constructing fields near living areas instead of near the gymnasium center. Growing interest and participation in extramural sports for women were found at the four west coast universities.
CHAPTER VI

THE FACULTIES

Sizes and Ranks

Ranks held by physical education faculty at the universities visited are shown in Table IX, page 151. At three universities more men in the departments held the rank of professor than any other rank. At two others, equal numbers held the ranks of professor and assistant professor. There were more assistant professors than any other single rank at one university and more instructors at another. Of the total number of men on the faculties, there were most full professors and fewest associate professors.

At two universities the rank of associate professor was held by more women than any other single rank and at another university equal numbers were associate professors and instructors. Assistant professorships were the one most common rank on one campus and instructorships were the one most common on another. At University E most women were full professors and at University F there were equal numbers of full professors and assistant professors.
TABLE IX
RANKS HELD BY PHYSICAL EDUCATION FACULTIES AT SELECTED UNIVERSITIES

<table>
<thead>
<tr>
<th>Rank</th>
<th>Associate Professor</th>
<th>Assistant Professor</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
</tr>
<tr>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Women</td>
<td>1</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>7</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Women</td>
<td>0</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Women</td>
<td>0</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>5 + (2)</td>
<td>3 + (1)</td>
<td>2 + (4)</td>
</tr>
<tr>
<td>Women</td>
<td>1 + (1)</td>
<td>6 + (4)</td>
<td>3 + (4)</td>
</tr>
<tr>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Women</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>2 + (2)</td>
<td>0 + (4)</td>
<td>2 + (4)</td>
</tr>
<tr>
<td>Women</td>
<td>2 + (1)</td>
<td>0</td>
<td>2 + (6)</td>
</tr>
<tr>
<td>G</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>8</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Women</td>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td><strong>Men</strong></td>
<td><strong>Women</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>31 + (4)</td>
<td>20 + (5)</td>
<td>25 + (8)</td>
</tr>
<tr>
<td></td>
<td>13 + (2)</td>
<td>21 + (4)</td>
<td>23 + (10)</td>
</tr>
</tbody>
</table>

aNumber of men teaching only in the basic program excluded.

bFigures in parentheses represent persons with supervisory ranks analogous to professorial ranks.
The basic program faculty at University C was separate from the professional preparation staff. There were 17 women teaching basic courses of whom two were associate professors, three were assistant professors and 12 were instructors. At two universities, persons who taught in the basic program held "supervisor" ranks rather than professorial ranks. The emphasis upon publication and research was so great at these universities that it was hard to find persons qualified in sports or dance who could also meet the research requirements. Persons in the supervisory ranks were expected to be expert in their fields and able to write about their specialties, but they were not required to publish in order to be raised in rank or salary. At University D there were two men and one woman supervisors, one man and four women associate supervisors, four men and four women assistant supervisors, and two women junior supervisors. These ranks correspond to professorial ranks as shown on Table IX, page 151. At University F there were two men and one woman supervisors, four men associate supervisors, four men and six women assistant supervisors, and six men and one woman junior supervisors.

Of the total 98 women faculty members, the following approximate percentages of ranks were found: 15% were full
professors or supervisors; 25% were associate professors or supervisors; 35% were assistant professors or supervisors; and 25% were instructors or junior supervisors.

Of 125 men faculty members, approximately 28% were professors or supervisors, 20% were associate professors or supervisors, 27% were assistant professors or supervisors, and 25% were instructors or junior supervisors.

The graduate faculties at four universities included all teachers with doctor's degrees. At two others there were faculty with doctor's degrees who were not on the graduate faculty while at one university a person without the doctor's degree served on the graduate faculty. It was usual for graduate faculty members also to teach undergraduates. There were 11 on the graduate faculty at University A of 28 on the entire faculty. At University B there were 13 of 55. An additional 18 men were coaches with undergraduate faculty status. Two men and two women were on the graduate faculty at University C. Of the 20 on the professorial faculty at University D, 5 men and 5 women served on the graduate faculty. Nine of 13 teachers at University E were graduate faculty members. There were 25 graduate teaching assistants at this university who taught in the basic program and did not have faculty status. Of the eight on the professorial faculty at University F, four
were graduate faculty members. At University G, 14 of 35 faculty members taught graduate students. Fourteen coaches who also taught some physical education basic and professional preparation classes had undergraduate faculty status.

The only reference found in the literature concerning faculty ranks was by Simmons who reported that of the faculty who had doctorates, 80% held the rank of professor or associate professor.¹

**Degrees Held**

The degrees held by the full-time physical education faculty members are shown in Table X, page 155.

The most common degree was the doctorate. There were 99 doctoral degrees (41 Doctors of Philosophy, 39 Doctors of Education and 18 other doctoral degrees), 7 Director's degrees, and 87 Master's degrees. There were only 13 Bachelor's degrees as the highest ones earned.

Of 17 women teaching in the basic program at University C, 15 had Master's degrees and 2 had Bachelor's degrees.

The supervisory faculty at University D (men and women) included 5 Doctors, 11 Masters, and 2 Bachelors. The supervisory faculty at University F included 4 with Doctor's, 18

¹Simmons, loc. cit.
TABLE X

HIGHEST DEGREES HELD BY PHYSICAL EDUCATION FACULTY AT SELECTED UNIVERSITIES

<table>
<thead>
<tr>
<th>University</th>
<th>Degrees</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PhD</td>
</tr>
<tr>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>4</td>
</tr>
<tr>
<td>Women</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>3</td>
</tr>
<tr>
<td>Women</td>
<td>0</td>
</tr>
<tr>
<td>C&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>1</td>
</tr>
<tr>
<td>Women</td>
<td>0</td>
</tr>
<tr>
<td>D&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>3(1)</td>
</tr>
<tr>
<td>Women</td>
<td>4</td>
</tr>
<tr>
<td>E</td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>2</td>
</tr>
<tr>
<td>Women</td>
<td>3</td>
</tr>
<tr>
<td>F&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>4(1)</td>
</tr>
<tr>
<td>Women</td>
<td>3</td>
</tr>
<tr>
<td>G</td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>8</td>
</tr>
<tr>
<td>Women</td>
<td>3</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>25(2)</td>
</tr>
<tr>
<td>Women</td>
<td>15</td>
</tr>
</tbody>
</table>

<sup>a</sup>Excluding men who teach only basic courses.

<sup>b</sup>Figures in parentheses represent persons with supervisory ranks.
with Master's and 2 with Bachelor's degrees.

There were no important differences evident in the degrees held by men and by women.

Simmons reported that of faculty teaching graduate courses in physical education, 35% have Doctoral degrees, 48% have Master's degrees and 13% have Bachelor's degrees. He did not account for the remaining 4%. Poindexter also found that the great majority of faculty members who teach graduate students held the Doctor's degree.

Staley made a similar study but included both graduate and undergraduate teachers. Based upon data from catalogues, he estimated the percentages of types of degrees held by college and university physical education teachers throughout the country in 1960. Table XI, page 157, shows his conclusions.

Faculty at the universities visited had a much larger percentage of doctoral degrees and a small percentage of bachelors' degrees than both Simmons and Staley reported.

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2Ibid.

3Poindexter, op. cit., p. 90.

### TABLE XI

**TYPES OF DEGREES HELD BY COLLEGE AND UNIVERSITY PHYSICAL EDUCATION TEACHERS THROUGHOUT THE COUNTRY IN 1960***

<table>
<thead>
<tr>
<th>DEGREE</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor of Philosophy</td>
<td>3.2%</td>
</tr>
<tr>
<td>Doctor of Education</td>
<td>9.2%</td>
</tr>
<tr>
<td>Doctor of Physical Education</td>
<td>0.8%</td>
</tr>
<tr>
<td>Master of Arts or Master of Science</td>
<td>58.5%</td>
</tr>
<tr>
<td>Master of Education</td>
<td>7.1%</td>
</tr>
<tr>
<td>Bachelor of Arts or Bachelor of Science</td>
<td>20.0%</td>
</tr>
<tr>
<td>Other, or no degree</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

*Adapted from S. C. Staley study. See page 156.
It seems important to point out again that over one-half of the faculty members in this study had doctoral degrees.

Selection

At every university in both the basic and professional preparation programs, teachers were selected who were specialists in certain areas or in certain sports. Particular emphasis was placed upon having experts in the basic program at three universities. However, at one university basic program teachers were chosen entirely upon their merits as prospective graduate students. In this program almost all the basic classes were taught by graduate assistants.

Four universities employed no tenure faculty for the professional preparation program who had not published research. At three of these the quality of research done was the primary consideration in selection.

Choice of faculty for the basic program was usually rather simple with the chairman of that division simply recommending persons to the department head. At four universities the chairman consulted with other faculty members before making recommendations.

At all seven universities faculty members had a part in the selection of new teachers for the professional preparation program. This bears out the findings of Poindexter who noted a trend toward increased faculty participation in
the selection of new teachers. Three faculties had committees which assisted the department head in his recommendations.

At one large university the Dean of the School of Health, Physical Education and Recreation sent credentials of applicants to division chairmen. After conferences with the division faculty, the chairman selected two persons to recommend to the Dean. These two were invited to the campus for visits. Occasionally teachers for an instructor's rank were hired without the campus visit.

For tenure positions in any department at another university, a President's committee arranged visits to the campus. The candidate met with several faculty members in various colleges, individually with every member of the interested college or division, and was entertained socially. His credentials were circulated among faculty members. Recommendations were made by the faculty through the department head and the Dean of Education to the President's committee and through it to the President. Applicants who had no research record were turned down.

Teachers at two universities were chosen for their

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5 Poindexter, loc. cit.
specialized training in fields related to physical education (sociology, psychology, or physiology) as well as for their research contributions. Recommendations, including a complete dossier of the applicant's publications, were considered, in order, by the liberal arts dean, the university budget committee, a committee which read the publications and the Dean of the University. This procedure was followed for all ranks above that of instructor.

At one university the Dean of the Graduate School and the Vice President for Educational Affairs visited prospective teachers rather than bringing them to the campus.

Policies at University G prevented employment of its own graduates.

When asked to predict changes in the education of college physical education teachers in the professional program, all seven department chairmen cited increased training in research as essential. New positions of research coordinator had been filled recently at three of the universities and two others had hired teachers to do research as well as teach. The general need for specialists in such areas as philosophy, history, and physiology was listed by six chairmen. Two were planning to hire physical education historians in the near future. Additional revision of the
training of college teachers was suggested by three chair-
men. They felt that teacher certification courses should be
omitted for those who did not expect to teach in the public
schools. They stated that such candidates should be iden-
tified early and encouraged to work toward the advanced
degrees in a short period of time in order to begin their
teaching careers earlier. All agreed that teachers of
methods courses and supervisors of student teaching should
have public school experience, but none felt it was necessary
for the other specialists.

The need for specialists in the basic program was also
listed by most chairmen, and this was the main factor con-
sidered in hiring teachers for the basic program. Only one
chairman preferred teachers who were not specialists.

Tenure and Advancement

Tenure was established upon advancement to an associate
professorship at five universities, upon advancement to an
assistant professorship at another, and with the seventh
contract at University B. Tenure was also achieved in the
supervisory ranks with advancement to associate supervisors.

Four universities had policies of retaining only those
faculty members who advanced to the next rank in a specified
time. Instructors at one campus had four years in which to
move to assistant professor and three more in which to
advance to associate professor. At another university there was a five-year time limit as an assistant professor. Instructors and junior supervisors had three-year limits at two universities. They could serve in the next rank for 14 years. For the professorial faculty at these institutions there was little hope of skipping ranks. Eight years were required as Assistant Professor I and six years were required as Assistant Professor II.

Research by faculty members was required for advancement in the professional preparation program at four universities. Teachers in separate basic programs were not required to do research. At three others research, along with good teaching and service to the university and state, was a major consideration in advancement.

Workloads

Every department had established standards for determining work-loads. Computing individual loads was complicated in six universities where teachers had responsibilities in both the basic and professional preparation programs.

A full load of basic classes ranged from 14 to 24 clock hours per week with 18 being the most common figure. Four classes in undergraduate theory were usually considered a full load, but one university required five classes and
another accepted three. Three graduate classes constituted a full load at four campuses while two such courses were a full load at three institutions. In every case workloads were said to be comparable to those in other departments.

Teachers received workload credit whenever they assisted with intramurals, clubs or other extra class activities. At two universities women teachers did not assist with intramurals. The most common practice was to assign credit for intramurals to equal one class in the basic program.

Major administrative duties in the professional preparation program were shared among a number of senior faculty members at five universities. In most cases workload credit was assigned for these duties. Administration was also shared in the basic programs at five universities with credit always given.

At University A three faculty members shared the administrative load with the chairman. The chairman's workload included one-half time allotted to administration while the faculty members were each allotted one-fourth time for administration.

At University B there were eight major administrative positions requiring up to one-half time for faculty members involved.
At University C the professional preparation faculty was very small but in the basic program three women had administrative responsibilities credited to their workloads. This department also had an administrative assistant who was not a teacher in addition to the usual full-time secretary.

There were detailed job analyses available at University D where five faculty members had administrative responsibilities in the professional preparation program. However, only two of the five persons received a reduced workload. These were the department director and the chairman of the graduate division. In the basic program one person handled all administration.

There was a rotating plan at University E where eight senior faculty members shared the various administrative duties. Only the department director received workload credit for administration.

At University F women in the basic program were assigned and given workload credit for planning registration, making faculty schedules, for dealing with equipment and uniforms, and for coordinating the undergraduate major program.

Four women shared the administrative responsibility for the women's basic program at University G. There was a
rotating chairmanship of the women's division. In the professional preparation program, each division chairman was assigned approximately one-sixth of his time for administering his division.

The question of reduced workloads for physical education with administrative duties was studied by Brumbach in 1963. He found that in 89 large colleges and universities, the majority of faculty members who have administrative duties have reduced teaching loads. Chairmen of departments average 62% reduction in teaching load while other major administrative positions average 33% reduction. He concluded that there was no standard policy discernible.\(^6\)

Teachers who counseled and advised students counted this as part of their load at four universities. Two departments reduced loads for faculty directing graduate research. Three hours credit (equal to a three-hour undergraduate theory course) were given to all graduate advisors on one campus while directing five theses was a full load at another.

**Salaries**

Three universities paid new instructors approximately

$5000 yearly, two paid approximately $6000, and two others began at $6700. These last two had a lower scale for beginning junior supervisors who were paid $5900. Salaries for the upper ranks were less definitely set down and were not available at two institutions. For assistant professors the range was from approximately $7100 to $7700 at the lower end to $8200 after a series of raises. Again, the assistant supervisor made less, earning $7000 rising to $8000 as compared with $7700 rising to $8200 for the assistant professors at the same institutions. Associate professors' salaries commonly began at approximately $9000 with upper limits of $11,000 at two universities. These latter two paid their associate supervisors $8600 to $10,000. Salaries for full professors averaged $10,500 and $11,500 at the two schools of physical education. At Universities D, E, and F salaries of professors began at $12,000 and had a maximum of approximately $16,000. The maximum salary for supervisors was $11,000. Professors' salaries at Universities A and C were not available.

No university gave automatic raises in salary, although at six of the seven there had been yearly increases granted for several years. Salary raises were based on research, publications, quality of teaching and service. In general,
salary raises were less dependent upon research than were raises in rank.

**Graduate Assistants**

Every physical education department visited had graduate assistantships available for students. Only one non-working fellowship was found with selection being made by the graduate school on the basis of grades.

Universities A through G had the following approximate numbers of graduate assistants: 9, 35, 6, 10, 25, 5, and 23. Of the 35 at University B, 18 were assisting in the athletic program. Men outnumbered women by approximately four to one at each university except at University A where there were six women and three men.

Stipends ranged from $1200 to $2300 for two semesters. Graduate assistants at University A worked two and one-half trimesters. Three special positions for doctoral students at University B paid $3000. Fees were customarily waived or reduced, and at University E, where tuition was $36 per credit, graduate assistants got as many semester hours tuition-free as they were teaching.

Graduate assistants primarily taught in the basic program and assisted with intramurals. However, at University C, five of the six graduate assistants taught under-
graduate methods and majors' activity courses in the professional preparation program. They were also used as laboratory assistants at University G. University E was the only place where graduate assistants taught nearly all the basic courses. Only estimates were available on other campuses, but usually one-third to one-half of basic classes were assigned to graduate assistants.

Several advantages of having graduate assistants were frequently mentioned: the attraction of students to the graduate program, the benefit to the department of low-salaried teachers, the constant influx of new ideas, and service to the individual and to the profession. The disadvantages most commonly cited were the unending job of orienting new teachers each year and the necessity for scheduling teaching assignments around classes being taken.

There were openings for graduate assistants at three universities having strenuous requirements for graduate school entrance. At University F graduate assistants had to have a 3.3 upper division average and a 3.0 over-all average (A = 4). Furthermore, the graduate school would not use grades earned in physical education or education in computing the averages. Although a large number of students applied for the assistantships here, few could meet the requirements. At University G one man in four and two women
in three who applied were accepted as graduate assistants. At University B there were twice as many applicants as the number chosen, and at University E there were more applicants than could be accepted.

With the exception of University F, graduate assistants were subject to the same graduate school and department requirements concerning entrance and grades as were other graduate students. All departments gave preference to doctoral students as candidates for graduate assistantships. Recommendations, experience and grades were other factors in making selections for the positions.

**Inservice Training**

Two departments had formal plans for inservice training of the professional preparation faculty. At one university a junior member of the physical education faculty attended classes taught by a senior member in order to provide program continuity. The other department had planned the faculty so that at least one senior and one junior member were specialists in each area.

Inservice training of basic program teachers was consistently done through sports committee work. Two departments had prepared detailed pamphlets concerning departmental policies. New faculty at one of these institutions had several days of orientation before school began.
Public Relations and the Faculties

Department chairmen felt that the physical education faculty was highly regarded by other teachers and by administrators. Salaries were comparable to other departments except at one university where they were lower than the average. Membership on university committees was on a par with that of other faculty members. At University E a woman in the department had served two terms as president of the University Senate.

It was generally agreed that college physical education departments achieved status in relation to the quality of faculty members in the department. Chairmen felt that a department was respected when its teachers were widely known as experts, when they served as consultants, when they were leaders in professional organizations and when they contributed to professional publications. The point was also made that excellent teaching, not only in the professional preparation program, but in the basic classes, could be a department's best means of public relations.
CHAPTER VII

SUMMARY OF FINDINGS, CONCLUSIONS, AND IMPRESSIONS

It was the purpose of this study to discover common and unique elements in the physical education programs of seven selected universities and to relate the findings to pertinent literature.

The universities were chosen from a wide geographical distribution on the basis of recommendations of the Graduate Studies Committee of the Department of Health, Physical and Recreation Education at Louisiana State University in the expectation of finding these institutions to be conducting dynamic and creative physical education programs.

Each university was visited for approximately two weeks. Data were gathered through interviews with teachers and administrators, from observation of a variety of undergraduates, graduate and basic classes and from a study of university catalogues and printed departmental materials.

Analysis of the data indicated the following conclusions:
Summary of Findings

1. Physical education had the status of a school at two universities, of a department at four (two each within the Colleges of Education and Liberal Arts), and of a division within the College of Liberal Arts at another.

2. The appropriate administrative place of physical education had been recently reviewed or revised at three universities.

3. Within departments there were separate divisions for health in two universities and for recreation in four. Separate men's and women's divisions were found at three universities while administration of both groups was combined in four programs.

4. The majority of universities in this study were structured as departments and the same findings were indicated by reports in the literature.

5. A number of divisions within departments were found as could be expected from the literature which indicated an increase in such divisions.

6. Decentralization of authority was evident in every department or school visited.

7. Teacher training was the primary purpose of the professional preparation program at a majority of universities.
Two departments listed the development of research workers and instruction in a body of knowledge as most important.

8. Two departments had prepared statements defending physical education as a discipline within its own right containing a distinct body of knowledge.

9. Aims of the professional program of physical education reflected aims of the parent university which in turn was determined most often by state agencies or legislation.

10. Recreational values of the basic program were emphasized at a majority of institutions.

11. No evidence of interinstitutional cooperation in physical education programs was found at any university.

Conclusions

1. Physical education does not seem to be the distinct province of any one segment of a university and its diversity of purpose is reflected in the serious thought being given to its administrative place.

2. As reflected in recent changes at the universities visited, physical education appears to be moving toward departmental status within liberal arts colleges and away from colleges of education.

3. Physical educators must be aware of forces affecting the
aims of education and attempt to direct these forces whenever possible toward the best interests of students.

4. Departments and schools of physical education are becoming more aware of the need to define the scope and nature of the professional curriculum and to express the belief that physical education is indeed a unique field of knowledge.

5. Although no evidence of interinstitutional cooperation in physical education was found at any university visited, it would seem that such a program requiring expensive facilities and equipment in professional preparation, basic, recreation and research programs could profit from planned cooperation.

II. PROFESSIONAL PREPARATION PROGRAMS

Summary of Findings Concerning Undergraduate Programs

1. There were decreases in numbers of women physical education majors in most programs within the last five years. Other studies indicated that the shortage of women physical education teachers was nationwide.

2. A number of authorities cited increased numbers of students in higher education as an outstanding trend. Each university visited reflected this trend in recent and anticipated growth.
3. The Bachelor of Science degree in physical education was most commonly offered. One department awarded only the Bachelor of Arts in this field and three departments offered both the Bachelor and Arts and Bachelor of Science.

4. Although a review of the literature revealed that universities commonly offered only one major in physical education or its related fields, such was not the case at the universities in this study.

5. Many new developments in teacher certification were reported in the literature and this was borne out by changes at six of the seven universities visited.

6. The change to compulsory five-year programs for teacher certification at three institutions visited and plans for such a program at two other universities reflected a national trend as reported by several authors.

7. One State Department of Education had recently declared physical education a "non-academic" subject with the effect of denying certification to majors in this field. This ruling affected three of the universities in this study.

8. Requirements in general education for physical education majors varied greatly among universities (from approximately 25% to 75% of the degree program.)
9. Requirements in professional education for physical education majors comprised from 10% to 18% of the degree program at five universities while such courses were part of the fifth year certification program at two others.

10. Courses in specialized professional education comprised from 20% to 40% of the total semester hours required.

11. The average number of semester hours required of physical education students both in specialized professional education and general education at the universities in this study was considerably more than the averages in a much larger study. The amount of general professional education was approximately the same in the two studies.

12. Several studies stressed the need for increased general education for physical education professional students.

13. At one university, the equivalent of a second major in psychology, sociology or physiology was required in the degree program, and the major was called kinesiology, not physical education.

14. There was evidence that curricula in several universities were being geared to the concept of physical education as a body of knowledge.

15. Exemptions from activity courses with credit were found in two programs.
16. Motor ability tests were given to physical education majors at three universities and were used primarily in guiding and advising.

17. All universities required entrance examinations (six used the College Entrance Examination Board Scholastic Aptitude Test and one used a state test), and two accepted only the top 10-12% of high school graduating classes.

18. Entrance requirements at every university had been raised since 1960 and one of the universities was the first state-supported institution to require a definite score on the College Entrance Examination Board Scholastic Aptitude Test.

19. Three departments required two semesters of student teaching and three required one semester for one hour daily. Only one required a full-time student teaching experience and it lasted for nine weeks.

Conclusions

1. The shortage of women physical education teachers will become even more acute in spite of increased numbers of students in higher education unless there is a reversal of the present trend.

2. The variety of degrees in physical education and related fields seems to indicate a wide scope and variety of
professional programs at the universities selected.

3. It appears that there is a trend toward planning professional education courses for a fifth year in the curriculum.

4. Curricula for physical education majors will contain more general education and more courses in sciences allied with physical education.

5. Declaring physical education a "non-academic" subject in one state led to more serious shortages of women majors. The ultimate effect of such a measure could well be the dropping of professional physical education from the college curriculum as a major in these schools.

6. The possibility of a relationship between higher entrance requirements and fewer women physical education majors should be investigated.

Summary of Findings Concerning Graduate Programs:

1. For acceptance into graduate school, the Graduate Record Examination was required at four universities, the Miller Analogies Test at two, and an unspecified aptitude test at one.

2. Standards for entrance to graduate school had been recently raised at three universities as had requirements for students already in the physical education graduate programs.
3. In general higher undergraduate grade averages were required by universities in this study than were reported in earlier studies.

4. Master's degree candidates out-numbered doctoral candidates except at one university, and men out-numbered women by approximately three to two.

5. Enrollment had decreased in four programs when university standards or departmental screening procedures were made more rigorous; however, one department reported an immediate rise in the number of students when standards were raised and two others reported no change in the pattern of steady growth.

6. Women students and students with research interests were needed in the programs.

7. All chairmen agreed that the way to attract good students was to raise standards.

8. The Master of Science degree was the master's degree most often awarded to physical education majors.

9. Minimum requirements for masters' degrees ranged from 20 to 36 semester hours with about one-half of the courses being specified.

10. A thesis was required of physical education masters' candidates at one university and was optional at the others.
11. Specialization within the master's degree was rare although eight options were available at one university.

12. Two universities required skills proficiencies in a variety of sports and dance of graduate students. In another study, no skill competencies were required.

13. Final comprehensive examinations were given to master's degree candidates in five universities.

14. Three universities offered only the Doctor of Education degree to physical education students, three offered both the Doctor of Education and the Doctor of Philosophy, and one offered only the Doctor of Physical Education degree. These results were in agreement with a study of a large number of institutions report in the literature.

15. At two of the four institutions where the Doctor of Philosophy degree was not offered to physical education graduate students, chairmen felt the degree was needed.

16. Specialization within the doctoral program was done primarily through the dissertation although one university offered six areas of concentration. Other universities had plans for increasing specializations.

17. Doctoral courses were characterized by being problem-centered and were usually conducted as seminars.

18. All departments administered examinations at the
beginning of doctoral work following admittance to graduate school. Results were used for screening in five institutions and for guidance in two.

19. Research was an integral part of graduate programs in all universities.

20. New positions of "Research Coordinator" had been filled recently at three universities.

21. New laboratories had been constructed for physical education research at three universities and a new three million dollar laboratory was planned at another.

22. Increased use of laboratories was reported by all departments.

Conclusions

1. It seems apparent that admission to graduate schools and to graduate study in physical education is becoming more selective with increased emphasis on grades and on entrance examination scores.

2. The effect of higher standards upon enrollment in graduate programs needs more investigation and cannot be definitely determined from this study.

3. If the universities selected are representative, the thesis for master's degree candidates is no longer a common requirement.
4. No definite conclusion can be reached concerning sports and dance skill proficiency requirements for graduate students. However, within the limitations of this study, a move toward such requirements is indicated.

5. With the increase of five year programs, masters degrees will become much more common for the average student.

6. Experimental and measurement research will become increasingly important as an aspect of graduate study in physical education if the universities are typical.

III. THE BASIC PHYSICAL EDUCATION PROGRAMS FOR WOMEN

Summary of Findings

1. Four semesters of basic physical education were most commonly required although in two departments the programs were on an entirely elective basis. The literature also indicated that a high percentage of colleges and universities required physical education and the percentages have increased over a period of approximately five years.

2. Classes in movement fundamentals were required of all freshmen women at three campuses.

3. Most programs were recreation-centered and emphasized a variety of individual and dual sports, dance, and aquatics. Other studies also indicated increased numbers
of these courses and a decrease in team sports.

4. Increased interest in fitness, in gymnastics, and in tumbling was found.

5. Provision was made for students needing modified activities in every program, but only three had special classes for such persons.

6. Most teachers gave both skill and written examinations to students in the basic program.

7. Only one departmental grading policy was found and this limited the numbers of particular letter grades to be given and was not concerned with factors considered in grading. Findings were in contrast with an earlier study which indicated one-half of institutions had departmental grading policies.

8. Basic classes were almost completely coeducational at three universities and growth in such a program was evident in every university. Other studies indicated that coeducational classes were increasing.

9. All universities expected the number of students in the basic program to increase with two of them anticipating a doubled enrollment in 10 years.

10. When physical education became elective on one campus in 1960, an initial drop in enrollment was followed by steady growth.
11. Challenges to basic programs were reported in a number of other studies with primary reasons being listed as increased demands for students' time and doubtful values of the programs.

12. Challenges to basic programs studied had resulted in one program becoming elective. In another program the requirement was reduced from four semesters to three trimesters while credit increased from one-half to one semester hour per course. In one program the requirement was retained but grade credits for courses were dropped.

13. A variety of plans to deal with increased enrollment and challenges to the basic program were advanced in the literature: year-round use of facilities, revision of teaching and organizational methods, proficiency examinations, improved public relations, emphasis upon intellectual content and improved programs.

14. One university studied had changed to a trimester system, five reported increased use of facilities outside the department, and most regarded excellence of program and services as the best means of public relations.

15. Proficiency examinations by which students could be exempted from requirements in the basic program were available at four universities. One of these had
recently established the examinations.

16. Sports playing fields had been lost to other construction at five universities and only one department was assured of adequate outdoor space for the next decade.

17. Recent major additions to facilities included a new gymnasium, extensive additions to another gymnasium, and a new two million dollar physical education complex.

18. Facilities were being decentralized and built near living areas at four universities.

Conclusions

1. No real change in numbers of colleges and universities requiring physical education was evident within the limitations of this study.

2. Basic programs in physical education are becoming more individual-and-dual-sport-centered.

3. There is a rising interest in fitness activities in the basic program.

4. The lack of departmental grading policies at the universities studied is an indication of their uniqueness in contrast with institutions selected in a much larger study.

5.Apparently coeducational physical education is increasing in popularity in a number of universities and colleges. Such interest may be related to increased interest in
recreational sports.

6. Challenges to basic programs appear to be increasing in number and intensity, but physical educators are preparing answers and strengthening programs.

7. It appears from this study that physical education fields are likely to be taken over for other construction, play areas are being decentralized, and increased use of facilities outside the departments is essential.

8. On the basis of this study it would seem where programs are not required large numbers of students will enroll on an elective basis.

IV. RECREATION PROGRAMS FOR WOMEN

Summary of Findings

1. Administration of women's intramurals was approximately equally divided between student-run programs (Women's Recreation Associations) and faculty intramural directors.

2. It was becoming increasingly difficult to find capable students to administer intramural programs, and a preference for full-time intramural directors was expressed.

3. Participation was decreasing on four campuses with rising academic standards and lack of motivation to play
individual and dual sports cited as reasons.

4. Coeducational intramurals were found on three campuses. Where they existed they were among the most popular activities.

5. Very little increase in informal sports-type recreation for women was found even though fields and courts were being built near living units.

6. Strong sports clubs for women were found at four universities but in universities with extramural programs club membership fluctuated.

7. Extensive extramural sports programs for women were found at four West Coast universities. All departments were concerned that standards be developed and one university had worked out statements of standards.

8. A large recreation area had been recently completed at one university. Two other universities planned an outdoor education and recreation center and a sports arena to be built with student funds.

Conclusions

1. If the intramural programs in this study are typical, it appears that Women's Recreation Associations are on the way out to be replaced by faculty advisors working in an intramural office.

2. At large universities there seems to be a decreasing
interest in intramural sports, particularly team sports, probably due to higher academic standards.

3. Within the limitations of this study it appears that interest in coeducational intramurals is rising.

4. Extramural sports programs for women will probably grow and will meet needs of the skilled girls.

5. In the near future universities must set up standards for extramural competition for women.

6. Informal sports recreation programs for women will apparently not grow. Investigation of the reasons for lack of student interest in such a program should prove useful.

V. THE FACULTIES

Summary of Findings

1. More men in the physical education programs held the rank of professor than any other single rank.

2. More women were assistant professors (closely followed by associate professors) than any other single rank.

3. At two universities teachers in the basic program held supervisory rather than professorial ranks. They were expected to be experts in their field but research and publication requirements were much less demanding.

4. Over one-half of physical education faculty at the
universities visited had doctoral degrees. This is approximately four times more than an estimated percentage reported in the literature.

5. Faculty were increasingly being employed for research accomplishments and for specialties in the sciences basic to physical education.

6. At most universities, faculty members had a part in the selection of new teachers. The same findings were reported in another study.

7. Teachers in the basic programs were primarily employed as specialists.

8. Four of the universities had policies whereby only faculty who moved to the next rank in a specified time were retained.

9. Workloads were very similar on all campuses and were approximately equal to those of other teachers in the universities.

10. Salaries of physical education teachers were also comparable to those of faculty members in other departments.

11. Some revisions of education for potential college teachers were suggested at several universities including early identification of a specialty and elimination of teacher certification courses.

12. All universities had graduate assistants and considered
them essential for attracting graduate students.

13. The images of physical education among the other faculty members was felt by department directors to be quite good.

14. The quality of teaching was a main factor in establishing a good image of physical education.

15. Services to university, community and state were considered essential for good public relations at each university.

Conclusions

1. It would seem that physical education faculty at the universities studied were fully accepted by administrators in light of the large number of high ranks and salaries comparable to those of faculty in other departments.

2. Men are more likely to be appointed to the rank of full professor than women with equal education.

3. The high percentage of physical education faculty with doctor's degrees is another indication of the quality of programs at the universities selected.

4. There will be increasing demand for faculty members competent in research techniques and in specialities within physical education.

5. The reputation of a department largely depends upon the
quality of teachers within the department.

VI. IMPRESSIONS

The physical education programs studied varied in a number of ways. Each was unique, as it should be. Studies such as this are of value, not when they are used to compare programs to make them alike, but when they indicate the diversity that can be strength. There is a place for the sports-centered program, the science-centered program, the research-centered program, and for persons educated in each. They are needed to serve in the several aspects of the discipline known as physical education.

A few general impressions were crystalized during close study of the selected departments and schools. These things were evident: a striving on the part of faculty members to improve; a continuing evaluation of philosophy; a close look at standards; an insistence that physical education deserves a place in the academic world; a realization that the basic program is the window through which others see physical education; a growing number of individuals with a vision for physical education; a dissatisfaction with things as they are and a dedication to higher service.
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E. NEWSPAPERS

VITA

The author was born in Port Arthur, Texas on April 28, 1928. She received her elementary and high school education there graduating from Thomas Jefferson High School in 1946.

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