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A MODEL GRADUATE PROGRAM IN PHYSICAL EDUCATION FOR  
THAI COLLEGES AND UNIVERSITIES

DISSERTATION

Presented to the Graduate Council of the  
North Texas State University in Partial  
Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

By

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The primary purpose of this study was the development of a model graduate program leading to a master's degree in physical education which could be used in Thailand and provide suitable guidelines for Thai colleges and universities interested in establishing such a program. A secondary purpose was to develop a systematic approach for student admission and a retention plan which would be compatible with the current trends and administration of higher education in Thailand.

Following a review of the literature that included the history of general education, higher education, and physical education in Thailand as well as graduate study in physical education in the United States, a research instrument was devised to elicit responses from chairpersons of physical education departments in 156 U.S. institutions of higher learning and from a professional panel of five physical educators in Thailand concerning four aspects of master's degree programs in physical education: patterns and organization, curricular concepts, admission and retention requirements, and core course requirements. The return rate

for the chairpersons surveyed in the United States was 85 per cent.

The responses received from the U.S. and Thai professionals revealed a consensus between the two groups with regard to a number of the items in all four of the topic areas covered by the questionnaire. Based upon the survey results, guidelines were suggested for a model master's degree program in physical education in Thai colleges and universities. In addition, recommendations for further research were made, notably a review of master's programs in physical education in other countries which could provide valuable information for further modification of the model and systematic evaluation of the model program as implemented within a university setting.

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## CHAPTER I

### INTRODUCTION

During recent years interest has increased in the study of various dimensions of physical education, and a number of studies have been conducted on physical education programs for graduate students. The first graduate work in physical education was offered at Springfield College in Springfield, Massachusetts, in 1891; ten years later, in 1901, Columbia University offered the first graduate degree with a major in physical education (11, p. 8).

Change is on the scene. The expansion of functions and services provided by institutions of higher education has resulted in substantive changes in disciplinary foci and the need to adopt new models for accommodating and facilitating process. Organizational structure and administrative procedures have assumed greater visibility and gained perhaps undeserved attention during this period of transition and innovation (20).

Education as a governmental function is relatively new in Thailand, dating from the last part of the nineteenth century (2, p. 13). Until that time, the only education of a semi-public nature was that offered by the Buddhist

monasteries. Only a very small portion of the population received any formal education.

In the reign of King Mongkut (Rama IV, 1851-1868), the turning point was reached in the modernization of Thailand and the growth of western influence. Mongkut's son, King Chulalongkorn (Rama V), continued and greatly expanded the modernization process his father had started. In his reign the influence of western education was strongly felt, and soon a number of centers of higher education were introduced and flourished in the kingdom. The first of these institutions was created as the Royal Medical College at Siriraj Hospital in 1889 (22, p. 1). Less than a decade later, in 1897, the Law School was founded under the auspices and supervision of the Ministry of Justice. In 1902, the Royal Pages' School was opened to educate and train students for government positions. Eight years later, in the reign of King Rama VI, this school was reorganized and expanded as the School of Civil Servants.

The first of the modern institutions of general higher education was established in 1917 and called Chulalongkorn University in memory and honor of the late beloved ruler whose reign had seen great strides made in public education. Chulalongkorn University was formed by consolidating two of the institutions previously mentioned-- the Royal Medical College and the School of Civil Servants--

and the recently founded Engineering School, and four faculties were in existence at its inception: Arts and Science, Medicine, Engineering, and Political Science.

The revolution of 1958 gave added impetus to education in Thailand because of the strenuous effort exerted by the government and the people to accelerate the pace of national economic and social development. In the period immediately following the revolution, substantial progress was made in the improvement and expansion of higher education. From 1917 to 1974, the number of institutions of higher learning in Thailand increased from one (Chulalongkorn University) to a total of fourteen government universities and ten private colleges (25).

In 1959, the National Education Council was created to serve as an advisory and coordinating agency for the development of all education in Thailand. In the area of higher education, the Council works in conjunction with all of the country's universities towards the national goal of development and efficient utilization of human resources.

The future of higher education in Thailand is presently very bright indeed. The government has recently created the Thailand University Development Commission to deal with the present and future problems of higher education, focusing specifically on creating a graduate program that will enable Thailand to produce its own graduates with master's degrees and doctorates.

During the 1966-1967 school year, 28,235 students were enrolled in all of Thailand's universities; during the 1970-1976 period, however, that figure almost doubled to 56,061 (28). Because of this great increase in enrollment--especially among undergraduates--and the need for future education, both the government and the people of Thailand recognized that more graduate training must be offered in various fields of study. The strongest universities have therefore been encouraged to establish new graduate programs to fulfill this need for education beyond the baccalaureate level.

#### Statement of the Problem

A need presently exists for a model graduate program or guidelines leading to a master's degree in physical education for colleges and universities in Thailand.

#### Purposes of the Study

The primary purpose of this study was the development of a model graduate program leading to a master's degree in physical education which could be used in Thailand and provide suitable guidelines for Thai colleges and universities interested in establishing such a program. To accomplish this purpose, the investigator addressed the following questions.

1. What areas of physical education are appropriate for scholarly study, relative to the needs and resources available in Thailand?

2. What are the major curricular concepts underlying the master's degree program?

3. What should constitute the common core of course experiences in physical education required of all master's degree students?

4. What are the criteria which should serve as a basis for retaining master's candidates in the program?

5. What aspects of Thailand's culture require special consideration in program development?

Specifically, the study sought to determine

1. The major curriculum concepts of the master's degree program,

2. The courses that might best be offered as a core requirement, and

3. The areas of sub-specialization within the field of physical education that have the greatest priority to the immediate needs of the country and the availability of resources necessary for the operation of such programs.

A secondary purpose of the study was to develop a systematic approach for student admission and a retention plan which would be compatible with the current trends and administration of higher education in Thailand.

## Background and Significance of the Study

### Graduate School in Thailand

Chulalongkorn University offered the first graduate courses in Thailand in various disciplines long before the idea of establishing a graduate school was discussed and accepted at a meeting of the Dean's Council in December, 1956. After preparatory work by a special committee, the Graduate School of Chulalongkorn University opened on an interim basis in 1961 and was established officially by royal decree in July, 1962 (3, p. 1). The functions and objectives of the Graduate School have focused primarily on the teaching of graduate level courses and the conducting of research in the fields within existing graduate departments. The Graduate School also functions in the capacity of an administrative center, promoting and improving the standard of graduate programs and activities. In brief, the Graduate School was established to achieve the following objectives:

1. To coordinate and organize departmental graduate programs through an efficient administration in order to maintain high academic standards;

2. To fulfill the aims of Chulalongkorn University by producing scholars, researchers, administrators, and professionally trained individuals to meet the needs of the country;

3. To improve and expand graduate studies in various fields and to establish interdisciplinary programs; and

4. To encourage graduate students to conduct independent research in various fields for the benefit of the academic community and the nation.

Programs of study offered by the Graduate School differ in several ways, including admission standards, status of students, structure of programs, length of time allowed for completion of programs, and number of credits required.

Chulalongkorn University initiated a master's degree program in physical education in 1964 and granted its first degree in 1966 (4, p. 1). At the present time, nine of fifty-one colleges in Thailand offer certificates in the area of physical education, four of fourteen universities offer bachelor's degrees, and the same four universities plan to offer master's degrees in the field (24, 26, 27).

Only two universities in Thailand offered graduate programs in physical education in 1964, and both of them have faced an uncertain future. Very limited research has been done in the past, and advancement for professional growth has been limited to a four-year degree in physical education. Consequently, potential students in search of educational advancement in physical education have been forced to take up other fields of study in which greater opportunities for further training are available. This

condition has resulted in important administrative positions in schools, colleges, and universities and in state athletic departments, as well as college-level teaching positions, being staffed with personnel who have, at most, a bachelor's degree in physical education. The lack of opportunity to pursue graduate work was generally considered to be one of the major handicaps to the further development of physical education as a profession in Thailand.

The physical education profession needs qualified men and women who possess enthusiasm for, skills in, and knowledge of the subject-matter in their field; who are articulate; and who command the admiration and respect of their students (6, 7, 9, 13, 29). The teacher of physical education should be committed to and maximally involved in a program designed to provide physical educators with the knowledge and relevant skills to promote optimum efficiency in their area of concentration (1, 17, 31). In order to raise the standards of professional preparation in physical education in Thailand, to encourage physical educators to carry on research, and to solve the major problems hindering the improvement of the quality of physical education personnel, the establishment of graduate programs in physical education is an essential and immediate need.

The important function of graduate education has been pointed out by several scholars. Snyder and Scott write,

It is futile to expect physical education to be completed in the few short years of undergraduate preparation. There is not enough time available for students to accomplish all that is expected of them before they enter upon their professional careers. It is at this point that graduate instruction enters into the picture, since it is one of the purposes of graduate study to provide opportunities for selected students to narrow the broad base of their undergraduate educational experiences to the point where they become educational or recreational specialists (23, p. 178).

Livesey and Robbins state,

The national concern over the quality and effectiveness of education must now be extended to include graduate and professional study. . . . The realization of lofty hopes for the future depends in large measure upon the maximum utilization of the talents of young men and women educated to the fullest extent of their abilities (16, p. 9).

In Whaley's view,

Education in a general sense is concerned with the transmission of a cultural heritage and with providing knowledge useful in a meaningful life. Graduate education has two other important functions: training in the pursuit of knowledge and, by utilizing this training, accumulation of new knowledge (30, p. 288).

Snyder and Scott again observe,

Teachers and leaders must have opportunities, under supervision, to observe the process of education in action and to serve as student teachers or leaders before they are entrusted with full-time responsibility in schools (23, p. 178).

These statements clearly describe the important functions of graduate education in society. If the talents of young men and women are to be fully utilized, advanced

training opportunities should be provided through higher education.

No formal research has been conducted for the purpose of developing a model graduate program in physical education for Thai universities, and it is therefore hoped that the current investigation will provide the basis for quality graduate study in the field. The quality of a professional program depends upon the total atmosphere in which it is implemented as well as the quality of its instruction (5). In support of the philosophy underlying physical education, the teacher of the educational program and the program's organization in terms of selection, retention, and structure should provide appropriate experiences for prospective physical education professionals (15, 19).

Physical education professionals should be familiar with the role of preparation in their field in order to understand what constitutes adequate preparation for physical education leaders. In turn, these professionals can bring their influence to bear on teacher education institutions so that proper experiences may be provided (8, 12, 14).

The possible values of this study include the following.

1. The study should be of great value to the faculty of departments of health, physical education, and recreation in Thai universities that offer master's degree programs.

2. The study should be a source for determining the extent to which a program may achieve desired objectives as stated by departments of health, physical education, and recreation in Thai universities that offer the master's degree in a physical education program.

3. The study may be of assistance to colleges and universities considering the initiation of a master's degree program in physical education, and it may suggest ideas for appropriate procedures in establishing the scope for such a program.

4. The study may enhance the public relations programs of physical education departments by providing another avenue of communication between those departments and applicants who wish to enroll in a master's degree program.

5. The study may afford the investigator an opportunity to conduct similar studies with appropriate formats upon returning to Thailand.

#### Definition of Terms

The following terms are defined in order to clarify the terminology used throughout the study.

Professional preparation--This term refers to a formal institutional approach to higher learning which prepares teachers in the field of physical education.

Physical education experts--This term refers to a group of 156 physical educators in the United States who were directors of physical education departments in 156 institutions of higher learning in the United States.

Physical education panel in Thailand--This term refers to all current Thai physical educators who hold an earned doctorate and to the directors of physical education programs in universities in Thailand.

#### Limitations of the Study

The limitations of the study are the following.

1. This study was limited to the development of a graduate program leading to a master's degree in physical education for Thai colleges and universities.
2. This study was limited to the major curricular concepts of the master's degree, basic required courses, and selected admission and retention practices.
3. This study is based on data collected in 1978.
4. Controls were not set on numbers of faculty.

#### Basic Assumptions

This study was based on three general premises.

1. The organization and administration of higher education in Thailand are similar to those in the United

States. The transferral of some aspects of master's degree programs in physical education from the United States, with proper modifications, is therefore appropriate to meet the educational needs of Thailand.

2. Professional physical educators in the United States can best identify the curricular concepts and other requirements for master's degree programs due to their experience with graduate work.

3. Professional physical educators in Thailand can best provide information to serve as a basis for modification of the concepts and requirements for master's degree programs to meet the needs of Thailand.

#### Procedures for Collection of Data

One hundred fifty-six institutions of higher learning in the United States were selected for this study on the basis of the following criteria:

1. Listed as institutions accredited by the National Council for Accreditation of Teacher Education (NCATE (10; 18, pp. 467-470),
2. Offered graduate programs in physical education,
3. Listed as recognized with reputable graduate programs in the field of physical education, and
4. Represented institutions geographically located throughout the United States.

The chairpersons of the departments of physical education in these institutions were asked to indicate their opinions on various criteria for excellence in graduate physical education programs.

To collect the data for the study a questionnaire was developed by the investigator and mailed to the 156 selected professionals in the United States. The questionnaire consisted of five sections devoted to the topics of

1. Patterns and organization,
2. Graduate faculty,
3. Curricular concepts of the master's degree program,
4. Admission and retention criteria, and
5. Core course requirements.

The responses of leaders in physical education in the United States were used as guidelines for the construction of a model graduate program in physical education. In addition, to validate the applicability of the guidelines for use in Thailand, a professional panel consisting of four Thai physical educators was assembled. They were considered to be authorities in curriculum development, and they held earned doctorates from U.S. institutions. Each of the panel members was sent a copy of the questionnaire accompanied by a cover letter and a pre-stamped return envelope. The cover letter was designed to inform the respondents of the nature and significance of the study. The chairperson

and the minor professor of the investigator's doctoral committee signed the cover letter in order to gain the respondents' cooperation. Pertinent comments and suggestions from the respondents served as the basis for the construction of the model program.

#### Instrument

According to a review of literature, one of the most widely used instruments for data gathering is the questionnaire. The questionnaire has several advantages--it is economical because it can be sent through the mail, and it can therefore be used to reach larger numbers of people; each respondent receives the same set of questions constructed in exactly the same way; and it can be considered a standardized situation that yields more comparable data (21, pp. 214-215). On the basis of the information gathered through a review of institutional graduate catalogues, regulations governing master's degree programs in selected colleges and universities, and a review of related professional literature, a questionnaire was constructed to collect data for this study.

A preliminary questionnaire was first formulated by the investigator from the compilation of questions and statements related to master's degree programs. The questionnaire was then reviewed by a panel of experts composed of four members of the investigator's doctoral committee

at North Texas State University. The elimination by substitution of an item in the questionnaire depended on the recommendation of the majority of the panel (three out of four members). The final version of the instrument was then constructed and prepared for distribution.

## CHAPTER BIBLIOGRAPHY

1. Briggs, Paul W., "The Opportunity to be Relevant," JOHPER, XLI (May, 1970), 41-43.
2. Bunnag, Tej, Education in Thailand, a Century of Experience: A Revised Version of the Third Academic Conference Report, 1969, Bangkok, Karrsasorna Press, 1970.
3. Chulalongkorn University, "Bulletin of Graduate School," Bangkok, Chulalongkorn University, 1976.
4. Chulalongkorn University, "Bulletin of Physical Education Department," Bangkok, Chulalongkorn University, 1976.
5. Combs, Arthur W. and others, The Professional Education of Teachers, Boston, Allyn and Bacon, Inc., 1974.
6. Conant, James B., Conceptual Foundation in Physical Education, Health, and Recreation, Dubuque, Iowa, William C. Brown Company, 1973.
7. Conant, James B., The Education of American Teachers, New York, McGraw-Hill Book Company, Inc., 1963.
8. Dougherty, N., "An Experience-Based Teacher Program," JOHPER, XLIV (February, 1973), 57-59.
9. Dowell, Linus J., "Action Analysis," The Physical Educator, XXVI (May, 1969), 63-64.
10. Graduate Record Examinations Board and the Council of Graduate Schools in the United States, Directory of Graduate Programs: 1984 and 1985, Princeton, New Jersey, Educational Testing Service, 1983.
11. Graduate Study in Health Education, Physical Education, and Recreation, National Conference Report of Père Marquette State Park, Illinois, January, 1950, Chicago, Chicago Athletic Institute, 1962.
12. Gutin, B., "A Graduate School Seminar to Train Quality Research," JOHPER, XLIII (May, 1972), 66-67.
13. Heisler, B. and R. Park, "Total Involvement," JOHPER, XLII (October, 1971), 24-27.

14. Hetherington, Clark W., "Professional Education in Physical Education," JOHPER, V (November, 1934), 3-6.
15. Kinder, Thomas M., "Justification of Physical Education Programs," The Physical Educator, XXX (October, 1973), 132-133.
16. Livesey, Herbert B. and Gene A. Robbins, Guide to American Graduate Schools, New York, Viking Press, 1967.
17. Love, A. and P. Barry, "The Teacher Education Center in Physical Education," JOHPER, XLIII (April, 1971), 33-35.
18. National Council for Accreditation of Teacher Education, 20th Annual List, Washington, National Council for Accreditation of Teacher Education, 1973-74.
19. Park, Roberta J., "The Philosophy of John Dewey and Physical Education," The Physical Educator, XXVI (March, 1969), 55-57.
20. Razor, Jack E., "Merging Departments of Physical Education: Rationale, Implications, and Generalizations," The Physical Educator, XXXIII (October, 1976), 122-125.
21. Sax, Gilbert, Empirical Foundations of Educational Research, Englewood Cliffs, New Jersey, Prentice-Hall, Inc., 1968.
22. Shaw, Archibald B. and Thamrong Buasri, Education in Thailand--Teachers in Thailand's Universities: An Analysis and Forecast, Bangkok, Thai Watana Panich, 1964.
23. Snyder, Raymond A. and Harry A. Scott, Professional Preparation in Health, Physical Education, and Recreation, New York, McGraw-Hill Book Company, Inc., 1954.
24. Thailand, Ministry of Education, Department of Educational Techniques, "Statistics, Academic Years 1967-1973 (Annual)," Bangkok, Ministry of Education, 1974.

25. Thailand, Ministry of Education, Department of Educational Techniques, "Universities Census," Bangkok, Ministry of Education, 1977.
26. Thailand, National Statistical Office, School and Teacher Census, "Number of Graduates by Department and Institution," Bangkok, National Statistical Office, 1976.
27. Thailand, Office of National Education Council, "Report of Universities Census, 1973-1976," Bangkok, Office of National Education Council, 1977.
28. UNESCO Regional Advisory Team, The Numbers of Actual Enrollment and Planned Projection Compared with "Long-Term Projection for Education in Thailand," Bangkok, Division of Research, Educational Sub-Ministry of the University of Thailand, 1977.
29. Welsh, Raymond, "Futurism in Physical Education," JOHPER, XLIV (October, 1973), 28-30.
30. Whaley, W. Gordon, "In Place of Slogans," The Graduate Journal, VII (Spring, 1967), 281-300.
31. Williams, C. Inge, "The Professional Process," The Physical Educator, XXIV (March, 1967), 23-24.

## CHAPTER II

### REVIEW OF THE LITERATURE

At the time of this study, two universities in Thailand, Srinakorin Traviroti and Chulalongkorn University, offered graduate programs in physical education leading to a master's degree. The field of study in these schools still remains in a developmental stage. Only a small amount of literature has been written in Thailand about professional preparation in physical education. Therefore, in reviewing the related professional literature, the investigator concentrated upon graduate programs offered in the United States. This focus was further warranted by the fact that the organizational pattern of higher education in Thailand is closely related to that in the United States.

In this chapter the literature reviewed for the current study is organized into the following sections: 1) Summary of Thai History and Culture, 2) General Education in Thailand, 3) Development of Higher Education in Thailand, 4) Development of Modern Physical Education in Thailand, 5) Preparation of Physical Education Teachers in Thailand, 6) Graduate Education in Thailand, 7) Graduate Education in the United States, and 8) Development of Graduate Study in Physical Education in the United States.

## Summary of Thai History and Culture

### Political History

Thai history is divided into the Sukhothai period (1257-1377), the Ayutthaya period (1377-1767), the Thonburi period (1767-1782), and the Ratanakosin (Bangkok) period (1782-present). The Sukhothai dynasty was founded by King Sri Inratit, commonly known as Pha Ruang (36, p. 171). During this period, in 1283, under King Ram Khamhaeng, the first alphabet was introduced. The present Thai alphabet is a modification of this old system of writing. Literature from the Sukhothai period revealed that a few women were given the opportunity to become literate, but, generally, this privilege was extended primarily to men in the court and temples. The end of King Ram Khamhaeng's reign in 1317 marked the decline of the kingdom of Sukhothai, largely as the result of political strife.

As the Sukhothai dynasty declined, the Ayutthaya kingdom emerged as a powerful state and annexed its predecessor. Ramatibodi I (1360-1367) was the founder of the Ayutthaya dynasty, which flourished for some three hundred years. During his reign, the legal, administrative, and social systems of Thailand crystalized in a form that endured until the close of the nineteenth century (36, p. 177).

The Ayutthaya period marked the first introduction of the Thai people to the western world. Historical records

indicate that the Portuguese came to Thailand in 1511 (72, p. 18). Later, in 1662, French missionaries arrived in Thailand, bringing many skills and ideas that helped to further educational programs in the kingdom. Private schools were organized to teach the tenets of Christianity and western culture to the natives, but the Thai government maintained tight control over these schools because the motives of the missionaries remained suspect. Increasing attention was also given to the development of reading and writing skills. New textbooks were compiled to further these skills, and they were widely used until the early Ratanakosin (Bangkok) period (80, p. 3).

The fall of the Ayutthaya dynasty occurred in 1767 as a result of an invasion from Burma, but within seven months the independence of Thailand was restored by the energetic military leaders Phya Tak Sin and Chao Phya Ckaki. Having defeated the Burmese, Phya Tak Sin was crowned king and established his capital city at Thonburi; thus the Thonburi era began. Although no official name was given to Phya Tak Sin, he was generally known to the people as King Tak Sin (17, p. 73). Few advances in the educational system were made during this period, due to the numerous wars in which the country was involved. The Thonburi era ended abruptly with the untimely death of Phya Tak Sin.

King Ramtibodi (Rama I) inaugurated the Ratanakosin period under the present Chakri dynasty named after his

title, Chao Phya Chakri (17, p. 80). At the outset of the Chakri dynasty, the improvement of education and the encouragement of cultural development in Thailand were emphasized. King Rama I wrote several books and urged others to follow his example. King Rama II and other Thai poets produced many literary masterpieces. Ramakian, an epic Thai poetic work based on the ancient Hindu poem Ramayana, was written during this time (17, p. 94).

Thailand was again brought into contact with the west during the reign of King Rama II. Presbyterian missionaries organized schools to teach religion in Thailand, and American missions contributed greatly to the improvement of Thai education. In 1837, one of the mission leaders, the Reverend Dr. D. B. Bradley, established a printing press to print Thai books.

Thailand's next king, Rama III, was one of the first monarchs to show an interest in public education. He urged the learned men of the country to record their knowledge in written texts so that it could be made available to all literate people. When Rama III rebuilt the temple of Wat Prachetapon, he had many of these texts inscribed on the stones around it. Thus, Wat Prachetapon is sometimes called the first public university of Thailand.

The reigning period of the succeeding monarchs closely parallels the educational history of Thailand. Therefore,

these men will be discussed in detail in later sections of this chapter.

### Religion and Education

The attitudes of the Thai people toward authority and hierarchy seem to have emerged from their attitudes concerning religious merit. A high position in politics, society, or the like is thought to be the consequence of merit attained either in this or in a previous existence. Many persons prefer to wait for the merit to come to them, believing that they have no control over such matters (13, p. 491). Most Thais, particularly inhabitants of rural areas, are satisfied with their way of life and feel no urge or compulsion to change. The spiritual basis for the lives of Thai people involves their emotional attachment to the doctrines and rites of Buddhism (36, p. 366).

Buddhism--specifically, Hinayana Buddhism, which originated in Ceylon and is referred to as Pali or Southern Buddhism--is the traditional religion of Thailand (87, p. 623). On the other hand, Sanskrit or Northern Buddhism is the religion characteristic of Tibet, China, and Japan. As a religion, Buddhism is not based on the worship of a god but, rather, on adherence to an ethical code of living. However, to some people Buddha was a god, and to some he was a great teacher. To the former group, Buddha was a figure representing security to whom they could pray for

advice and help; to the latter group, the Buddhist teaching "Do good and receive good; do evil and receive evil" was the guideline of life (51, p. 183). Moreover, this philosophy is the foundation for the morals and character of the Thai people and profoundly influences their attitudes toward life, government, authority, and hierarchy.

Buddhism also played an important role in the development of education in Thailand. Buddhist monasteries were the country's earliest institutions for general as well as religious education, similar to the monastic and cathedral schools of medieval Europe. Primarily, the schools were designed to provide moral and religious instruction for the male members of society.

Vocational training was carried out within individual family units. Young boys were taught how to farm, hunt, fight, and develop basic handcraft skills. Girls were taught domestic and farming skills. Only the children of aristocrats received training in the arts and other areas associated with "higher education."

Monastic education in Thailand continued for approximately six hundred years, from the Sukhothai period through the first stage of the Ratanakosin period. Few significant changes in the country's educational system occurred during these centuries. The government did not take an active role in education because it was felt that this was

primarily the responsibility of religious leaders. Hence, Buddhist priests (monks) assumed the major responsibility for "public" instruction. At the present time, Thai religious leaders are still actively working with educational administrators for the progress of education.

#### Westernization of Thai Institutions

The westernization of Thailand probably began during the reign of the fourth monarch of the Chakri dynasty, King Mongkut, the most renowned king in Thai history. Mongkut instigated the policy of shaping Thailand along western lines. The first step toward this goal was the signing of a new set of treaties with the western powers. In April of 1855, King Mongkut approved a treaty of friendship and commerce with Britain (17, p. 198). While opening the country to foreign commerce, the king also opened men's minds to new ideas that extended to Thai education. The king was given English lessons by the American missionaries Dr. Bradley and the Reverend J. Caswell (17, p. 182), and this initial knowledge of English unlocked the door to other studies in Thailand.

In 1862, the famous Mrs. Anna Leonowens was engaged to tutor Prince Chulalongkorn and other royal children. Women from American missions were also allowed to teach the women of the palace, and during the reign of King

Mongkut a foundation was established for educational reform and expansion.

This modernization policy, which benefited the country as a whole although it was concentrated in the capital city of Bangkok, was continued and expanded by King Mongkut's successor, King Chulalongkorn (Rama V), who ruled Thailand for forty-two years (1868-1910). Foreign advisors from many nations were appointed to remold governmental administration, to liberalize and reform the legal system, and to bring about economic improvements. Furthermore, several ministries were established to maintain the welfare of the people and the country: the Ministries of Defense, Foreign Affairs, Interior Local Government, Royal Household, Finance, Agriculture, Justice, and Public Instruction (Education and Public Works). King Chulalongkorn also promulgated a law for the abolition of slavery in 1905, a work begun by his father (36, p. 642).

Vast numbers of social, political, and economic changes were brought about in Thailand between 1851 and 1910. Notable among these were the restructuring of government organization, administration, agriculture, education, and sport participation patterns. The social behavior patterns of the people of Thailand were also in flux, and the emergence of a politically and economically astute citizenry was becoming a reality (16, pp. 488-496).

### General Education in Thailand

King Chulalongkorn established one of the first modern schools in Thailand in 1871. The Royal Command or Palace School, built on the palace grounds, was designed primarily to train boys for office work or civil service. It differed from other schools of the time because the latter were dedicated simply to bringing up boys to be well-read men of good behavior. The Palace School maintained regular hours for learning and employed laymen as teachers. The subjects taught included reading and writing, arithmetic, and other disciplines which were required for employment in government offices.

Government expansion and the desire to set common standards for public instruction prompted the establishment of more schools in 1884. Public instruction was extended into the provinces, but students were taught in Buddhist temples. In this way, the expense involved in the construction of new schools was curtailed, while the old custom of wat learning was preserved. Thus, a new era of educational advances in Thailand began.

In 1887, a Department of Education was founded in Thailand. Five years later this department became a ministry responsible for religious and cultural affairs as well. The Ministry of Education laid the foundation for educational expansion and better administration.

At the end of the nineteenth century, a tendency developed toward establishing a broader national scheme of education. In 1898, a systematic plan of education was formulated encompassing all the provinces of the kingdom. Within this national scheme, curricular content was outlined and grade levels were established. In addition, a specific reference to girls' education was included.

By 1909, education in Thailand was divided into two streams: academic and vocational. Grade levels within the complete educational system were revised in 1913 by King Rama VI in order to extend the period of primary education from three to five years, comprising three years for general education and two years for pre-vocational training. The period of secondary education was also extended to six years for the junior secondary level and two years for the senior secondary level (Figure 1)

The first Private School Act, passed in 1918, dealt with the registration and government supervision of private schools. This was also the first Compulsory Education Act, stipulating that all children, both boys and girls, were to attend school from the ages of seven to fourteen years. Advanced studies were offered at Chulalongkorn University, which was founded in 1916. Thus, a system of national education was underway.

The year 1932 marks the beginning of the present period of Thai educational history. The new revolutionary

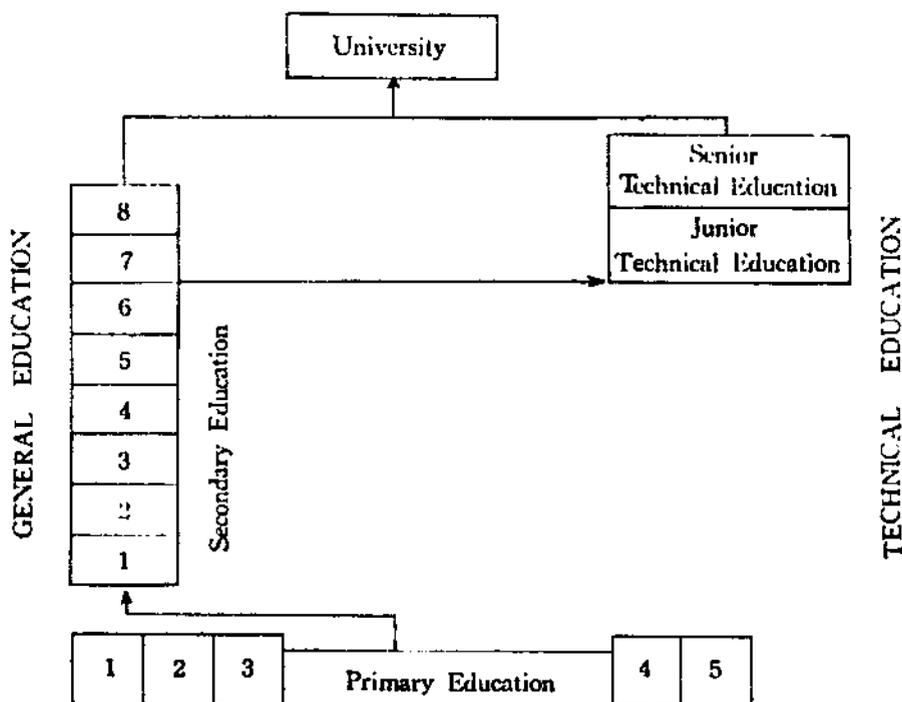


Fig. 1--Structure of the Thai educational system, 1913.\*

\*Source: Ekavidya Nathalang, editor, Education in Thailand: A Century of Experience (Bangkok, Karnsana Press, 1970), p. 73.

government made many efforts to improve the country's educational system. Increased emphasis was placed on meeting the needs of the individual, although the primary focus of education continued to be meeting social needs that supported the economic and political structures of the country. In 1935, a second Compulsory Education Act was passed which required children to attend school until the age of fifteen, and the Thai educational system

underwent yet another revision, resulting in the adoption of a 4-3-3-2 plan--four years for primary education, three each for junior and senior secondary education, and two years for pre-university education--in 1936 (Figure 2).

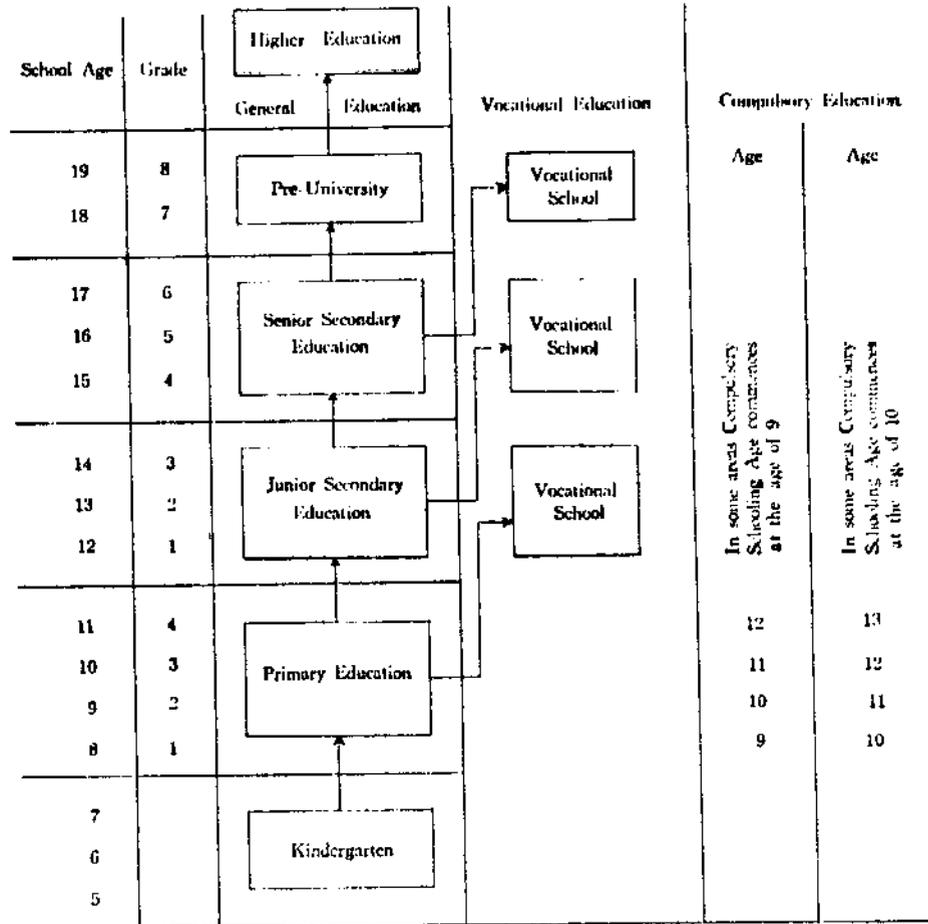


Fig. 2--Structure of the Thai educational system, 1936.\*

\*Source: Ekavidya Nathalang, editor, Education in Thailand: A Century of Experience (Bangkok, Karnsasana Press, 1970), p. 78.

Major changes in the educational system of Thailand occurred during 1936. The revolutionary government wanted to expand elementary education as quickly as possible, spurred by certain "provisional articles" in the constitution. The constitution stated that the nation's Parliament was to be composed of two types of members, elected and appointed. Provinces in which more than half of the adult population was literate would have full elected representation. Thus, the rapid expansion of elementary education was undertaken throughout the country. However, since a considerable amount of the national budget was being spent on this literacy campaign, little money was available for developing secondary education. As a result, the period of secondary training was cut from eight to six years (grades 5-10).

Pre-university schools (grades 11-12) were designed to educate a select group of tenth graders. Students not entering pre-university schools went to higher vocational schools. Vocational schools on lower levels (grades 5-7 and 8-10) were established to discourage students from academic study and to encourage them to train for specific occupations.

To curtail expenditures on academic secondary schools, the Thai government maintained a limited number of secondary institutions which served as examples for private

schools. Consequently, the majority of secondary students were taught in private schools.

World War II greatly disrupted the activities and functions of Thai secondary schools. Many schools were closed during these years, and children were forced to study at home. Furthermore, academic standards continued to decline after the war, even though industrial development and the standard of living began to rise.

In 1960, a National Scheme of Education was implemented with a renewed emphasis on meeting the needs of the individual and of society. The goal of the Karachi Plan (compulsory education through grade 7) was reaffirmed, and some significant curricular experimentation at the secondary level was introduced. The most novel change in educational development was the experimental comprehensive type high school, whose curriculum included both academic and pre-vocational subjects. The school was intended for students who would not pursue further education at the college or university level, but it was not employed as a barrier to higher education.

To facilitate new plans and advanced curricula, administrative changes in Thailand's national educational system have been made during the past several years. For example, the kingdom has been divided into twelve regions, each with supervisory centers and a single regional

educational officer in charge. In every region as well as in every province an advisory committee considers problems related to education.

In 1959, the National Education Council was created to legally coordinate all aspects of education. In practice, however, it was limited primarily to matters pertaining to higher education. In light of the need for the development of human resources and manpower in Thailand, the Ministry of Education believed that secondary education should be given high priority. Secondary education is considered critical to meeting Thailand's social and economic goals, and a demand for broadly educated secondary graduates is included in the country's national development plans. Various studies have been conducted and projects planned to meet these needs, among them the Loan Project for the Improvement of Vocational Education (1966-1970) and the Experimental Comprehensive Secondary School Project.

The most significant recent study of Thai education was the Preliminary Assessment of Educational Human Resources in Thailand conducted by a joint Thai-United States Operations Mission (USOM) study group in 1963. Two of the major recommendations of this study were that an agency for educational planning should be established and that a more comprehensive study of secondary education was necessary.

The 1974 constitution of Thailand provided that all persons have equal rights to be educated at the primary level, in accordance with the Compulsory Education Act. Furthermore, it is the duty of all persons to be educated under the conditions and in the manner stipulated by law. The state will support and promote education, and the management of the educational system is the sole responsibility of the state. Higher education institutions will operate in accordance with their respective legislation. Compulsory education will be free, and the state will give aid and support to needy students at all educational levels, as deemed necessary. Research, statistical work, and the use of science and technology for the development of the country will be promoted, and the state will preserve and promote all phases of national culture.

The educational administration system is operated on three levels, corresponding with those of the governmental administration system: central, provincial, and local. At the central level, the National Education Commission, under the jurisdiction of the Office of the Prime Minister, is responsible for the formulation of educational policies and plans on the national level; for the coordination of all efforts in education, both private and governmental; and for the evaluation of overall educational operations. Moreover, the Bureau of State Universities, under the same

jurisdiction, controls governmental and private higher education institutions. Whereas the Ministry of Education is responsible for the operation and control of the education, religion, and culture of the country, the National Education Commission is, in effect, in charge of developmental techniques, curriculum and instruction, and evaluation in all educational institutions, excepting institutions of higher learning. Secondary, vocational, and teacher training schools are supervised by the Ministry of Education, as are kindergartens (a division of elementary compulsory schools) and all private schools. For academic purposes, the Ministry of Education maintains twelve regional offices throughout the country. All educational institutions under the Ministry's jurisdiction in the Bangkok area report directly to their respective departments within the Ministry; teacher colleges and vocational colleges in the provinces do the same. The governor is empowered to act for the Ministry of Education in dealings with academic and vocational secondary schools in the provinces, although, in practice, the governor delegates his authority to provincial and district education officers. Thailand is divided into 71 provinces, each headed by a governor, and about 600 districts, each supervised by a district officer. The district education officer reports to the provincial education officer on matters related to

education, and the provincial education officer then passes that report on to the governor.

#### Development of Higher Education in Thailand

The word Mahavidhyalai, or university, did not exist in the Thai language before 1917. Higher education was preserved and handed down by the Buddhist temples; theology, philosophy, law, astronomy, mathematics, and medicine were taught long before the Ayutthaya period (35, p. 279). The aim of ancient education was to train the mind rather than to train the whole man. Women had no opportunity for education outside the family. Initially, institutions of higher learning served as training centers for the administrative ministries of the government. Despite this utilitarian beginning, Thai universities have succeeded in maintaining a tradition of independence throughout nearly a century of development.

The first of Thailand's modern higher education institutions was the Royal Medical College at Siriraj Hospital, opened in 1889. Less than a decade later, in 1897, the Law School was founded, following the establishment of the Ministry of Justice and under its supervision (67, p. 1). In 1911, King Rama V opened the Civil Service College in the palace to train men for the new administration. Political science, government, medicine, and pedagogy were taught

at this college, and it was the foundation of Chulalongkorn University, organized in 1917.

In 1914, King Rama VI proposed a new university to Chao Phya Damasakmontri (18, p. 112), the Minister of Public Instruction. "In the future there must be a university in Thailand," the king said. "Why not start one now?" Damasakmontri was of the opinion that there was little demand for universities in far eastern countries because they lacked the university spirit, but, fortunately, the king was far-sighted enough to persuade him to consent.

From 1910 to 1924, there were twelve ministries and eighteen circles (state governments) in Thailand, and competent men for the civil service were in great demand. In 1914, King Rama VI announced the amalgamation of the Civil Service College with the Medical College at Siriraj Hospital and the Engineering School at Hor Wang, founded in 1913, to form a single university. The aim of this consolidation was fourfold:

1. To organize all professional institutions of different ministries under one administration,
2. To reduce government expenditure,
3. To prevent overlapping and to serve the needs of the departments of all ministries, and
4. To organize and establish a national higher institution of learning for the elite of the country.

The first group to govern the institution was composed of high officials from various ministries. Eight fields of specialization were offered. Only males were admitted to the institution, and they were required to dress according to regulations: medical students in green, law students in white, government students in black, engineering students in maroon, agriculture students in light green, and teacher training students in yellow.

In 1916, the sum of 950,982.39 baht, the remainder of the fund subscribed for the Royal Equestrian Statue of King Chulalongkorn, was granted for the erection of university buildings. When the new buildings were completed, King Vajiravudh named the institution Chulalongkorn University in memory of King Rama V.

In 1917, the university comprised four departments: the faculty of medicine and related subjects such as pharmacy, nursing, midwifery, and surgery; the faculty of government and political science, including law, political science, finance, commerce (business), and economics; the faculty of engineering, including civil, mechanical, and electrical engineering; and the faculty of arts and science, including education, literature, science, and physics. In 1918, the department of education, until that time a part of the faculty of arts and science, was separated from the university and placed directly under control of the Ministry

of Public Instruction. This Ministry established a normal school which admitted students who were junior high school graduates. The university, on the other hand, offered secondary teacher training to high school graduates (63, pp. 25-26).

In 1919, the university became coeducational when six females enrolled in the faculty of arts and science to be trained as teachers. In 1923, the Rockefeller Foundation rendered valuable help in developing the faculty of medicine by giving scholarships for study abroad.

Progress in higher education has been slow in Thailand. King Rama VII wrote in the guest book of the university in 1929 that there were very few students and that the Thai people had not yet comprehended the need for higher education. Within the last decade popular demand has arisen for six and eight matayom (secondary grades), but few parents even consider the university for their children. Although the university has tried its best to maintain high standards, the faculty is small and it is feared that the nation cannot use the abilities and skills of a large number of university graduates.

Baccalaureate degrees were given by all faculties in 1930, and new departments in agriculture, mathematics, government/law, and engineering were later added. More foreign professors were engaged from Europe and the United States.

In 1934, the Thai House of Representatives enacted a bill regarding higher education which stated that the university was "person by law (corporation)" and guaranteed freedom to teach and to learn. The university was made responsible only to the board of higher education, composed of the Minister of Public Instruction, the president of the university, and other high officials. Many changes and additions have taken place since the university was founded.

The university presently consists of the following seven faculties: education, commerce and accountancy, political science, science, engineering, architecture, and arts. The department of mass communication and public relations is not under any faculty. Two institutions are also affiliated with the university, the SEATO Graduate School of Engineering and a Practical Chemistry Institute. Faculties of medicine and veterinary science were added in a separate school affiliated with the university in 1967.

The constitutional form of government introduced with the revolution in 1932 in Thailand created a demand for other types of institutions of higher learning which was met with the establishment of Thammasat University in 1933 (67, p. 1). Thammasat soon became the center for advanced studies in the social sciences.

In the next decade three more universities were created. The University of Medical Science was established

under the supervision of the Ministry of Public Health in 1942, and both Kasetsart University and Silpakorn University were founded in 1943. Kasetsart University was formed from already existing colleges of agriculture and forestry attached to the Ministry of Agriculture and was placed under the supervision of that Ministry. Silpakorn University was charged with instruction and research in areas of fine arts and national culture.

During this period a number of other institutions of higher education came into existence, including the College of Education. These were primarily institutions for teacher training and advanced technology.

The revolution of 1958 gave added impetus to education in Thailand because of the strenuous efforts exerted by the government and the people to accelerate the pace of the country's national economic and social development. In the period immediately following the revolution, great strides were made in the improvement and expansion of higher education.

In 1958, the National Educational Council was established under the Office of the Prime Minister. Its major responsibility was the administration, control, and planning of all higher education in the nation. With the establishment of the National Educational Council, the administration of universities, formerly fragmented among

various ministries, began to be carried out by a single agency for the first time (84, p. 3).

In the 1960s, the higher education effort in Thailand was extended to different parts of the country with the establishment of Chiang Mai University in the north (1964), Khon Kaen University in the northeast (1964), and Prince of Songkla University in the south (1967). Four new colleges of education were established in Pitsanuloke (1967), Mahasarakam (1968), Songkla (1968), and Pra NaKorn (1969), and Phra Chomklao Institute of Technology was founded in 1970 (43, pp. 917-918; 84, p. 8).

Various changes occurred in educational administration in 1973-1974. The College of Education, the Phra Chomklao Institute of Technology, and all private degree-granting colleges were transferred from the Ministry of Education to the Office of State Universities. In addition, the four new colleges of education were merged into one university, Srinakarinvirote (44, p. 326; 80, p. 110).

Two significant changes within the Ministry of Education should also be mentioned. First, the Primary and Adult Education Department and the Secondary Education Department were consolidated to form the General Education Department. Second, the Educational Radio and the Teaching Aids Center were merged to create the Center of Educational Technology under the Department of Educational Techniques.

The present school system in Thailand consists of four levels of education: kindergarten, elementary, secondary, and higher. A diagrammatic representation of the Thai educational system appears in Figure 3.

At the local level, Bangkok and all municipalities throughout the country are responsible for municipal schools. The Provincial Administrative Authority of each province is responsible for the management of its local primary schools, with the exception of those under the jurisdiction of the Ministry of Education. However, as the administrative authority, the Ministry of Education is still in charge of all technical aspects of education, such as curriculum, textbooks, and educational evaluation.

Attendance at kindergarten or pre-primary classes for children aged four to seven years is strictly on a voluntary basis. However, elementary levels grades 1 to 6 are compulsory for all children from the age of seven until they pass grade six or reach the age of fifteen.

Secondary education is divided into two levels: lower secondary, junior high school with a three-year cycle, and upper secondary, senior high school with a three-year-cycle. Generally, the secondary school program comprises required courses and a large number of electives that are suitable for students who are college bound as well as for those who are preparing to enter an occupation.

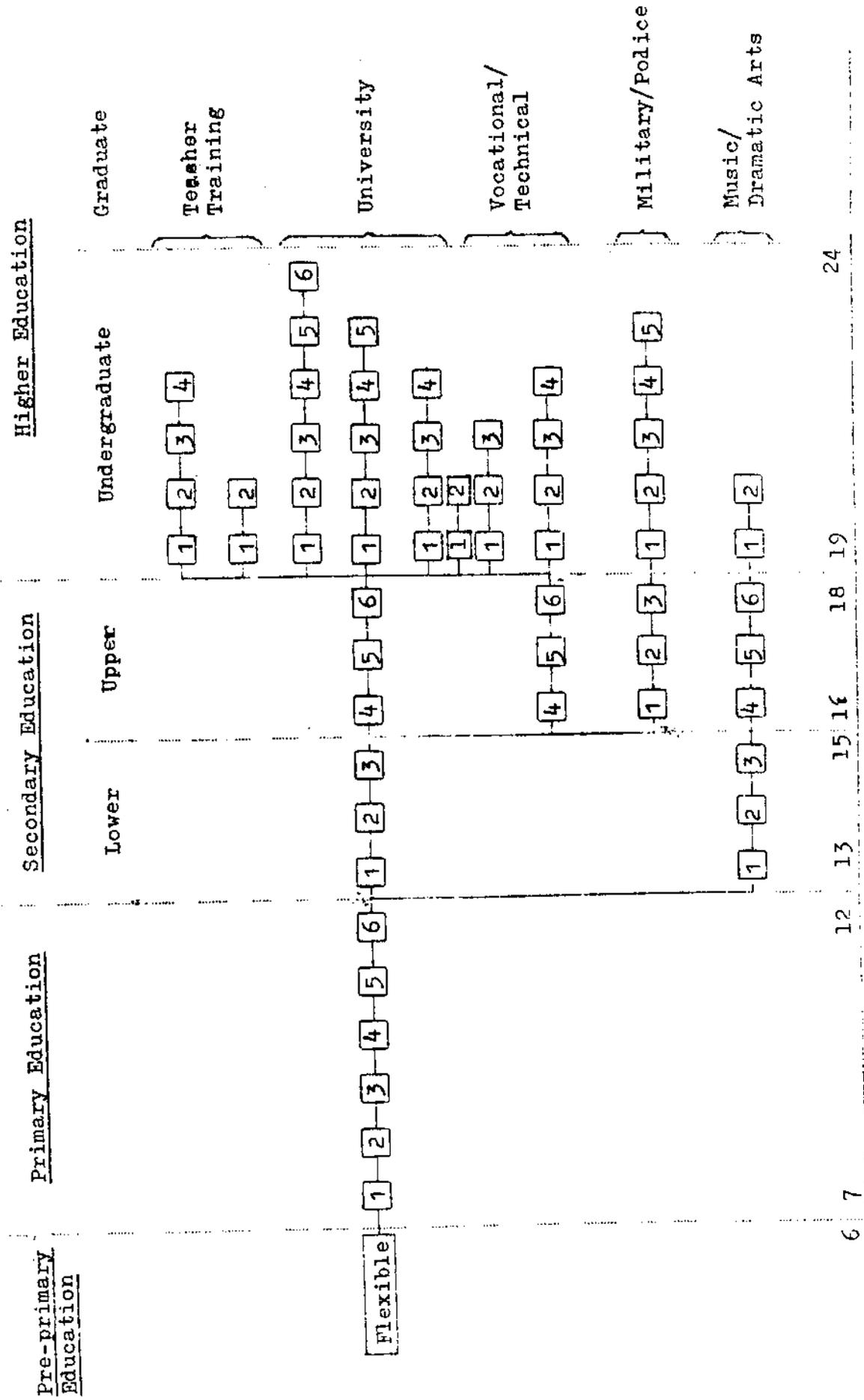


Fig. 3--Structure of the present Thai educational system.\*  
 \*Source: Ekavidya Nathalang, editor, Education in Thailand: A Century of Experience (Bangkok, Karnsana Press, 1970), p. 6.

Upon completion of secondary school, students may continue their studies in colleges, universities, or other institutions of higher education. Universities are generally engaged in training, research, and extension work programs. As a rule, four years are required to complete the bachelor's degree, two years for the master's degree, and two additional years or more for the doctorate.

Education provided by the private sector in Thailand has traditionally been only on the primary and secondary levels. Not until 1969, when the Private College Act was passed by the National Assembly, were six private colleges registered with the Ministry of Education (85, p. 4).

At present Thailand has 14 government universities. The country's higher education institutions also include 10 private colleges, 28 colleges of technology and vocational education, 32 vocational and technical colleges, 3 commercial colleges, 13 agricultural colleges, 36 teacher training colleges, 7 physical education colleges, 1 dramatic arts college, 1 fine arts college, 7 nursing colleges, 17 government specialized institutions, and 4 private specialized institutions (80, p. 113).

The universities are located throughout the nation--two of them--Ramkamhaeng University (1972) and Sukotai Thamathirat (1980)--are open institutions offering only undergraduate programs. These two universities were founded

to meet the needs of increasing numbers of students seeking higher education and utilize the open concept in which lecture attendance is not mandatory.

Despite the fact that education is compulsory, illiteracy still abounds in Thailand. To relieve this problem, several ministries sponsor extended school programs of skill and technical training for the general public. Moreover, the Division of Adult Education offers curricula which, although consisting of different and more functional courses, lead to equivalent certificates to those obtained from the formal educational system.

Recently, considerable advances have been made in Thai educational curricula. For example, agricultural programs are provided for upper elementary students, and the secondary school curriculum has been diversified.

#### Development of Modern Physical Education in Thailand

##### Early History of Physical Education

Physical education was unknown in Thailand until 1898, when the first National Scheme of Education was announced in an effort to modernize the country's educational system. Prior to this educational proclamation, a very significant event took place in 1897 that might have helped to establish the concept of physical education in schools--a track and field meet for students and teachers was held at the

Pramane Ground to celebrate King Chulalongkorn's return to Thailand from a tour of Europe (79, p. 304). The meet was a success, and it has been held annually ever since.

Accordingly, in the first National Scheme of Education of 1898, instruction in physical education was included for the first time for both elementary and secondary school students. This was evidence of European influence as well as the king's eagerness to modernize Thailand's traditional education system. Chulalongkorn had taken to Europe with him persons who held important posts in the government service in order to increase the opportunities for learning from the west and instituting western practices to modernize the country when they returned home (17, p. 255). During King Chulalongkorn's reign sports and physical education were recognized as important elements of the child's total school experience (79, pp. 118-119). When physical education was first instituted, individual schools were responsible for their own programs. At that time, exercise programs consisted of calisthenics and marching. In addition to his academic concern, King Chulalongkorn wished to improve the army, which he felt to be necessary for Thailand's internal security (17, p. 224). As a result, activities in the early days of physical education were designed to enhance physical fitness. Classroom teachers were held responsible for giving this instruction as well as academic lessons

because few trained physical education specialists were available. Classroom teachers were also responsible for recreation and for organizing programs in their schools, but, because of the king's militaristic interests, physical education was incorporated in curricula more as a means of promoting national security than as an educational pursuit.

The westernization of Thailand then began to lead physical education in the direction of sports rather than combat. During King Chulalongkorn's reign, many foreigners began to pour into the country; some were diplomats, some were businessmen, and some were teachers who had been hired by the king to instruct the royal children. These individuals brought with them some of their national sports and pastimes, which they played among themselves whenever opportunities arose (46, p. 46). Some of these activities, such as soccer and tennis, were made accessible to the general public through the foreigners who engaged in them. Sports in Thailand in the early days also gained impetus from the aristocrats and the courtiers who previously had been sent abroad by the king to study. With their return came some western sports. At first, only the aristocrats and courtiers themselves played these sports on the royal palace grounds, but later other segments of the Thai population were exposed to them by watching foreigners play on the Pramane Ground.

The first pedagogical book published by the Ministry of Public Instruction in 1911 indicated that three cardinal aims of instruction were intellectual, moral, and physical development. The word Pala-Suaksa (physical education) was born with this book. Few knew, however, what physical education meant other than physical exercise, playing games, and building strength and health. Missionaries and foreign teachers had introduced western games to Thailand in 1895. The game spirit developed quickly, and in 1897 the Ministry of Public Instruction set up a committee to organize inter-school sports among the high schools in Bangkok (74, p. 3). The Department of General Education was in charge of this function until 1939; in the following year, it was taken over by the newly created Department of Physical Education.

In 1921, Momchoa Vibul, a student from England, organized an evening school for physical education teachers at Suan Kularb High School. Few teachers enrolled in the school, and none passed all subjects until 1930. In order to stimulate teachers to study physical education, the Ministry of Public Instruction allowed credit toward a secondary school diploma to those who passed physical education skills courses. Track and field sports and athletic games began to have a place in the school curriculum in 1900. Because of the lack of physical education instructors, many schools substituted Boy Scout drills for

physical education, and in girls' schools physical education was not taught at all before 1930. Yet, in spite of this slow progress, many sports and games were introduced between 1900 and 1932. In government schools soccer, track and field sports, boxing, judo, and fencing were popular. Other games such as squash, rugby, basketball, and boating were conducted by a few private schools that had foreign teachers. Camping and Boy Scout drills were popular from 1911 until 1926 and were taught at all boys' schools (63, p. 33).

#### Physical Education and Thai National Education Schemes

During the past fifty years four National Education Schemes have been formulated in Thailand, in 1932, 1936, 1951, and 1960. After the People's Party came to power in 1932 and the monarchy's constitution was promulgated, one of the Party's first acts was to reform education to meet the needs of the country and the individual. At that time, it was essential that Thai youth become productively involved in the economy as early as possible. In the academic area this was achieved by a six-year primary education program that taught students to read and write--the primary objective at this level--and thus enabled them to terminate their education and go to work.

National Education Act of 1932.--One of the most important aspects of the National Education Act of 1932 was

the inclusion of physical education as a major area of study. The new government declared its policy to be the fostering of three aspects of education: intellectual, moral, and physical (79, p. 314). The incorporation of physical education into the syllabus meant that the subject was to be studied on a compulsory basis. It was generally believed that physical well-being could be gained through participation in sports and physical education and, further, that mental well-being and sportsmanship could also be developed through physical activities (79, p. 594). Physical education in Thailand during this period was concerned with both physical and mental well-being. The government wished to emphasize sports in educational programs based upon the firm belief that sports are instructive, that games can teach desirable character traits, and that the boy who has learned his character lessons in games would be a fair and careful participant in politics and business (51, p. 173). The government had realized that physical education was just as important as the intellectual and moral education of the individual (79, p. 594).

The Ministry of Education assisted in prescribing the number of hours to be spent on physical education in schools. At least three hours a week were required of students at the primary level and two hours a week for students at the secondary level (except for those in the

last two years of general education, who were not required to participate in physical education so that they would have more time to pursue their academic studies in preparation for higher education). The Ministry of Education felt that it could not closely supervise physical education in the schools due to its numerous other responsibilities; therefore, the Department of Physical Education was established in 1933 to be responsible for school physical education and public sports (76, p. 870).

The curriculum prescribing physical education for both primary and secondary school students was published in 1932 (77, p. 24). At the primary level, students were required to perform activities such as calisthenics and marching drills. Games for primary students were simply organized, and most gymnastic activities were agility and non-apparatus exercise, such as forward and backward rolls. Students were encouraged to follow physical education classes in an open-air atmosphere.

The variety of activities prescribed for secondary physical education classes was considerably broader. Apparatus gymnastics, Thai and international boxing, jiu-jitsu (judo), and soccer were added to the required calisthenic drills (77, p. 26), and track and field training was also included in the curriculum. This was a reflection of the success of track and field sports, which, as

mentioned above, had been staged in an annual national athletic event since 1897.

During this period, girls were not to be outdone by boys in physical education. In 1932, although no special physical education curriculum was prescribed for girls at the primary or secondary level, they frequently participated with boys in activities that were appropriate to them. Notable among these activities were track and field sports. In point of fact, females had been involved in annual track and field meets since 1897, but government officials believed that girls must begin to take a more active part in outdoor sports. Other activities in which youngsters of both sexes were actively engaged outside school hours were swimming and bicycle riding. No schools in Thailand had swimming pools at this time, but there were numerous canals and rivers in the country and thus children were encouraged to learn how to swim in them (77, p. 27).

Although the physical education curriculum prescribed for all schools in Thailand by the National Education Act of 1932 was ambitious, only a few schools in the Bangkok area were able to follow it. The inclusion of physical education, along with intellectual and moral training, as one of the three major areas of study demonstrated the recognition given to this field by the Thai government (51, p. 100).

One of the most important aspects of the development of physical education in Thailand during this period was the attitude of the public toward it. In general, physical education was not viewed favorably by the public. It was part of a new trend in the country, and, as such, not many people comprehended it or were interested in its educational value (88, p. 32). Furthermore, the predominant occupation of the Thai citizenry during this period was agriculture, which ordinarily kept them physically active for long hours every day, thereby further limiting the development of a positive view of physical education. The new trend in education was introduced to people who were very traditional and ultraconservative, thus necessitating a lengthy period of adjustment and understanding. Despite these problems, however, the government seemed determined to retain physical education as a major area of study. This was clearly demonstrated when the 1936 Education Act became effective.

National Education Act of 1936.--The National Education Act of 1936 called for the reorganization of education in Thailand by reducing the number of years of primary education from six to four. The areas of study set forth by the National Education Act of 1932 remained intact--intellectual, moral, and physical education. Similarly, no changes were made in the curriculum prescribed for physical

education since it had been existence for only four years (78, p. 20).

One of the most important events in the development of physical education in Thailand in this period was a legislative bill passed by the Representative Assembly granting a budget for the year 1935-36 to the Ministry of Education for the purpose of constructing a building at the National Stadium site for a new physical education teachers' training college (79, p. 597). The government concluded that the best possible way to develop physical education in the country was to have enough trained physical education teachers to do the job. The move to develop the new training institution arose from the fact that, between 1932 and 1936, 161 physical education teachers graduated from the previously established Physical Education College.\* During the 1934-35 academic year, Thailand had a total of approximately 9,000 schools; of these, 7,702 were local or primary schools, 244 were public schools (both primary and secondary), and 1,055 were private schools which were responsible for both primary and secondary education.° It was readily

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\*Educational statistics have been drawn from an unpublished College of Physical Education report, Bangkok, 1937-38.

°Educational statistics have been drawn from an unpublished Ministry of Education report, Bangkok, 1934-35.

evident that, even when comparing the number of physical education graduates between 1932 and 1936 with the number of schools in the country up to 1935, a great disparity existed between the supply of and the demand for physical education specialists. In short, the government was moving in the right direction in promoting a training college for physical educators.

National Education Act of 1951.--Another educational revision was promulgated in 1951, when the third National Education Scheme was announced to the nation. The new bill included manual education and its development as the fourth objective of Thai education. The first three objectives were the same as those enumerated in the Acts of 1932 and 1936; thus, physical education continued to be a major area of study. Time allotments at all levels for the study of physical education also remained as they were stipulated in the 1932 and 1936 curricula.

Although many features of the 1936 curriculum were retained, one encouraging new step which began to take shape was the government's concern for the education of children at the nursery or kindergarten level. In 1952, the Ministry of Education initiated a policy of opening at least one nursery school in each of the 71 provinces and one infant class in each of the 491 districts. This was indeed an ambitious move, but during 1952 the Ministry was

able to establish only 10 new nursery schools and 17 infant classes.

The new physical education curriculum devised in 1951 did not prescribe specific activities for children at the kindergarten level; it only prescribed that daily exercises should be given to all children in kindergartens according to their individual developmental levels (79, p. 14). In general, the activities in which the children at this age became involved included singing games, folk games, and simple relay races that emphasized fun and enjoyment.

The Elementary School Physical Education Curriculum for 1951 continued to stress physical education activities for both physical and mental well-being. Insofar as activities were concerned, the focus continued to be on swimming and gymnastics. Again, no Thai schools possessed swimming pools or gymnasiums, but students were required to know how to swim for one of their Scout subjects. As a result, the Department of Physical Education was requested to compile a handbook with a teaching method for the skill of swimming so that the students concerned could master it and thereby pass their swimming tests. Such being the case, the individual would be considered to have fulfilled the basic Scout requirement (60, p. 47).

The general curriculum for elementary schools showed little change, but the physical education curriculum in

secondary schools was becoming progressively more diverse and was gaining more attention from the educational circle. The program of studies published by the Ministry of Education for secondary schools in 1951 stated that the aim of physical training and sports was to develop skills, fitness, and sportsmanship among the student population of the country. The same activities were prescribed for the curriculum, such as swimming, gymnastics, boxing, and judo, but more emphasis was given to interschool sports such as soccer, basketball, and track and field, owing to the interrelationship of sports and educational values expressed by many educators of the time (48, p. 34). Secondary students, however, faced the same problem as elementary students; they were not able to participate in all of the activities prescribed, owing to lack of facilities.

During the time that the 1951 Act remained in effect, physical education received steady assistance from the government in the form of appropriations granted to the Ministry of Education, yet, among all aspects of education supported by the state, physical education received the least governmental aid. For instance, in 1954, the appropriations for various phases of education totaled approximately 800 million baht (\$40 million), or one-fifth of the national budget. Of this amount, physical education received 8,506,136 baht (approximately \$425,000), or

1.05 per cent of the total budget for education (79, p. 20). During the same period, according to Ministry of Education statistics, monies for physical education programs were divided among 19,331 primary schools and 267 secondary schools.\* This limited financial aid added to the difficulties that many school administrators faced in trying to follow the physical education curriculum authorized by the Ministry of Education.

Nevertheless, the Thai government gave every indication of making a major effort to try to develop physical education for the whole country. In 1950, the Ministry of Education, which was concerned with the effectiveness of teaching in physical education, invited two Fulbright scholars from the United States to assist in the formulation of in-service training for teachers. The main purpose of this undertaking was to train Thai physical education instructors to be more effective in their teaching and to develop qualities of leadership among the personnel in the field of education (56, pp. 196-197). During their stay in Thailand, the U.S. Fulbright professors set up workshops and gave advice to physical education specialists in many regions and provinces (25, p. 72). The idea of sending personnel to assist these specialists was quickly

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\*Educational statistics have been drawn from an unpublished Ministry of Education report, Bangkok, 1953-54.

adopted by the Department of Physical Education in Bangkok, and since that time specialists in the provinces have been able to acquire more assistance from the Department's representatives from time to time. Today in-service training programs are held in the summer months and attract teachers from all over the country. These specialized training sessions are arranged and financed by the Ministry of Education.

During 1953, three new sections--the School Sports Section, the Public Sports Promotion Section, and the Tests and Measurement Section--were added to the Department of Physical Education (79, p. 621). The rationale behind this reorganization of the Department was to make government officials directly responsible for the promotion of these aspects of sports and physical education in Thailand. In 1953, the government also granted six million baht for the construction of an indoor gymnasium at the National Stadium for the purpose of interschool and public sports competitions (79, p. 24). During this period the government came to fully realize that, despite all of its efforts to produce as many physical education teachers as possible, many schools still lacked these specialized teachers. Accordingly, the Ministry of Education proposed that the Teacher Training Department should include physical education in all teachers' training curricula so that every

instructor would be able to teach some activities in physical education (52, p. 66).

The importance of school physical education could not be overemphasized among the education administrators in Thailand. Many methods were devised to upgrade the profession and to produce a sufficient number of teachers in this field to serve all of the schools. The Department of Physical Education agreed to cooperate with the faculty of education of Chulalongkorn University to develop a physical education degree program in 1959 in order to assist the government in producing more trained personnel. Dr. Boonsom Martin was appointed as the first head of this program, serving in a dual capacity in that he was also the Director of the College of Physical Education (46, p. 55).

National Education Act of 1960.--After the 1958 coup d'état in Thailand, a committee was established to modify the national educational scheme, but this committee was later replaced by the National Education Council. A new educational scheme--the fourth since the 1932 revolution--was then issued and implemented in 1960.

Insofar as physical education was concerned, the scheme called for curricular changes for all schools at all levels, except kindergarten, and greater emphasis was placed on the physical, social, and emotional development of students. The objectives of the curriculum for physical education were as follows:

1. To develop in every child a fine degree of physical and mental health;

2. To play and work cooperatively with one another, to follow all the rules and regulations, and to know the other person's rights and to respect them;

3. To learn to use leisure time properly for the greater benefit of the child's mind and body; and

4. To become a worthy member of the community and to learn responsibilities in the prevention and cure of diseases and accidents.

At the kindergarten level, no systematic programs of physical education were prescribed, but simple activities were given to the students during the school day. These activities were for the most part designed for relaxation and fun for the children and included singing games, folk games, and some relay races. However, new activities such as imitating animal life and some basic skills of running, throwing, walking, and jumping were added in the new curriculum of 1960 (25, p. 72).

At the lower elementary school level, which comprised the first four years of primary education, three hours a week were allotted to health and physical education (31, p. 7)--the same amount of time as that required for mathematics, elementary sciences, and art education. Only the Thai language and social studies were allotted more lesson

time (79, p. 66). The schools were given the freedom to make their own arrangements and compose schedules of instruction, and they could teach one hour of health education and two hours of physical education per week or vice versa. They were also empowered to further subdivide the hours into half-hour periods. The initiative was left to school administrators and physical education teachers to select the format that they deemed most suitable.

In contrast, in the upper elementary school, which is a continuation of the lower elementary school, only two hours were allotted for physical education (82, p. 4). At this level of study, more emphasis was placed on mathematics, Thai language, and social studies. English language received three to five hours, and six or eight hours were given to handicraft education--that is, eight hours of handicraft education were scheduled if three hours were devoted to English, or six hours were spent in handicraft education if five hours of instruction were scheduled in English (79, p. 66).

The physical education curriculum for upper elementary students comprised pursuits such as lead-up games, rhythmic activities, and calisthenics. Some of the track and field activities taught at this level included sprints, relays, broad jump, high jump, low hurdles, javelin throw, and shot put.

Children were also introduced for the first time to such sports as basketball, netball, deck tennis, table tennis, badminton, and the national game of takraw, a rattan basketball game that can be played in a small area. Soccer was also being played in many schools by upper elementary level students. Included in the curriculum were some simple self-testing activities such as a variety of gymnastic rolls, handsprings, headsprings, rope climbing, ladder climbing, and swimming. In the earlier Education Acts fewer activities were included in the curriculum, and many of those that were included were of a traditional nature, such as bicycling, low organized group games, tree climbing, and athletics (45, p. 90).

At the lower secondary level, which under the provisions of the National Education Act of 1960 lasts for three years, students must choose to follow either the general subjects channel or a channel that includes vocational courses. General subjects students are required to study two hours of health and physical education per week, but vocational students are required to study these subjects for only one hour per week.

Health and physical education were not required beyond the tenth grade or the upper secondary school, the rationale for this being that it allowed students to concentrate on their academic studies in preparation for

higher education at the college or university level. Many students, however, still pursued their physical activities outside school hours, one aspect of which was organized interscholastic competitions. This was especially true at the college and university levels.

School sports.--School sports in Thailand arose from physical education programs, which, in turn, were introduced to the country by King Chulalongkorn in 1898. During this era, popular sports such as soccer, boxing, tennis, and rugby football were introduced to students of the Royal School. As time passed, these sporting activities were made accessible to the general public and were played on the Pramane Ground (66, p. 7). Later, some of the sports were introduced into secondary schools such as Suan Kularb, Ban-Somdech, Wat Kaeo Fah Lang, and Wat Benchamaborpitr, which had been set up by King Vajiravudh for the sons of government officials. These schools also instituted a nominal charge for the maintenance of their sports programs (83, p. 23).

In order to promote sports among the student bodies of schools, physical education teachers' programs were expanded in 1919, thereby ensuring that sports would be taught in the rural areas as well as in the cities. New activities courses were added to the training programs.

Physical education programs received substantial support from educational leaders, but the main impetus seemed

to come from the king personally, members of the royal family, and the aristocracy. The government began playing a significant role as early as 1933, a year after the country's first revolution, when it established a Department of Physical Education within the Ministry of Education (79, p. 604).

Since most schools had neither their own gymnasium nor a suitable playing field, the Department assisted them by providing playing facilities at the National Stadium. Interscholastic programs, which began in 1934, provided opportunities for year-round competitions in many different types of sports. For example, every November a track and field day is held for all schools in Bangkok and Thonburi at the National Stadium. It has become the biggest sports event of the year for students and one at which the king of Thailand has traditionally presided on opening day (69, p. 322).

School sports have developed extensively in Thailand since 1898, and several factors contributed to this success. Steady encouragement from the government, in the form of both funds and facilities, inspired a gradual increase in the quantity and quality of performance. Greater assistance from the government is still being sought in order to bring the general standard of school sport to higher responsibility. The genuine interest in sports

demonstrated by past and present Thai rulers is another influential factor in the development of school sports--the mechanization of sports in Thailand began with the royal family and the aristocracy and was passed down to the general public. Finally, the coverage afforded to school sports by the many newspapers in Bangkok helped to raise the popularity of sports among the student populations of various schools.

The rise in the military following the 1957 bloodless revolution staged by General Sarit Dhanarat and the political development in Thailand in the 1950s to mid-1960s saw a great deal of promotion of physical education in the country by the military government (17, p. 334). For instance, in 1951, the Thai team participated in an international competition for the first time at the First Asian Games held in New Delhi. The following year a team was sent to the Olympic Games in Helsinki, and in 1959 Thailand was host of the First Southeast Asian Peninsular Games held in Bangkok. During this period, many new amateur sports associations came into existence. Furthermore, the government-controlled Sports Promotion Organization of Thailand was established to promote sports throughout the country. Finally, the westernization of the country also increased the degree of sports involvement among the students of Bangkok in both primary and secondary schools (42).

University sports.--Although little emphasis has been placed on physical education at the college and university level, sports were promoted widely. Consequently, a sports club structure existed in all institutions of higher learning. The sports club was under the direction of the students' union association, whose executive members were all students. They had the power to direct funds to all of the sporting units--soccer, rugby football, badminton, and takraw. The monies necessary for the operating of sports programs were derived from the annual fees charged to students.

University sports have developed rapidly since 1943. New sports have been added to the original activities, and friendly rivalries have developed, especially between Chulalongkorn and Thammasat Universities. One major feature of university sports is that it has never failed to produce outstanding athletes for the national teams in various sports such as soccer, rugby football, basketball, volleyball, and table tennis (69, p. 322).

Department of Physical Education.--With the inclusion of physical education in the National Education Act of 1932, the Department of Physical Education was established under the Ministry of Education in 1933 (76, p. 870). At a very early stage the Department was responsible for drafting a physical education syllabus for students in all

elementary and secondary schools. In addition, it was to translate, interpret, and publish the rules of sports and games along with instructions on how to play them.

Another important function of the Department of Physical Education was to promote sports that could be played by the general public. This marked the first occasion that a government agency was set up to be responsible for public sports (69, p. 319).

In 1934, Navy Captain Luang Suphachalasai was appointed as the first Director General of the Department of Physical Education. During his administration he played one of the most significant roles in the development of sports and physical education in Thailand and came to be known as the father of modern physical education in the country (69, p. 318). Suphachalasai's main tasks were to improve physical education at all levels and to plan for the development of physical education training schools. Teachers trained in these schools could then be sent throughout the nation to take responsibility for developing programs in the schools as well as in the Thai armed forces.

Plans to develop and expand new physical education training and to acquire a new building for the Department of Physical Education were well supported by the government in 1936. The Representative Assembly allocated a government

fund to the Ministry of Education for construction (79, p. 597); the building was completed in 1938, and the Department was housed for the first time at the National Stadium, also known as Suphachalasai Stadium. The annual school track and field competition was also held in this national arena in 1938 (79, p. 598). Since that time, all school sports competitions have taken place at the National Stadium, which has become the center for interscholastic competitions.

As well as being responsible for curriculum construction, schools, and public sports, the Department began to operate sporting facilities as they were completed by the government. In 1966, the Department was in charge of facilities such as the National Stadium and two smaller stadiums, three gymnasiums, an olympic swimming pool and diving pool, a shooting range, and a velodrome for bicycle racing (86, pp. 22-26). Furthermore, the Department also supervised, controlled, and gave advice and direction to all schools in matters relating to Boy Scouting and the Junior Red Cross.

#### Preparation of Physical Education Teachers in Thailand

Owing to the great support and promotion given to sports and physical education by King Chulalongkorn, the Ministry of Education (then the Ministry of Public

Instruction) established an institution in 1909 called the Physical Training Association whose purpose was to advise teachers concerning physical education. The first physical education teachers' training school in the country, known as the Central School of Physical Education, was set up in 1913 (79, p. 606). The school was located in a temple, Wat Raj Burana, and its founder and first director was Luang Chatepolsin (79, p. 607). The main objective of the institution was to train teachers in physical education who, in turn, would be responsible for the physical and mental development of their students. It was generally believed that mental well-being and sportsmanship could also be acquired through physical education programs (79, p. 594).

In the early days of the Central School of Physical Education, only two activity courses, gymnastics and Thai boxing, were required for trainees, and there were no academic courses at all. Later two more activities, judo and international boxing, were added to the program. In the early stages of its development, the training program was continually changing with the additional new activity courses. As any particular sport in the country became popular, it was added to the training program at the School. This was done in order to assist in the popularization of sports in Thailand (75, p. 11).

Most physical education trainees during the early period were general education teachers whose main objective

was to improve their teaching qualifications and, thus, increase their salaries. The National Teachers' Association also encouraged both teachers and students to take advantage of the opportunity for additional education, but only a few did so. Since physical education was not popular among the general public, its objectives were not understood. Many looked upon it as being a course of study that would not necessarily increase teachers' salaries or enhance their job opportunities (25, p. 72). However, although progress in acceptance of physical education by the general public was slow, among educational administrators it was held in high esteem.

In order to make the general public aware of the place of physical education in general education, the Ministry of Education Organizing Committee of Annual School Sports was set up (46, p. 49). The objectives of this body were to promote and be responsible for sports competitions among Thai teachers and students, to demonstrate the importance of physical education in the educational atmosphere to the general public, to win their approval, and thus to hasten its development.

With the implementation of the National Education Scheme of 1932 and the appointment of Captain Suphachalasai as the Director General of the Department of Physical Education in 1934, the Central School of Physical Education

was transferred from the Ministry of Education's jurisdiction to that of the Department. This change was made so that concentrated efforts to produce more physical education teachers would be the direct responsibility of the Department. The country was in need of these specialized teachers because, according to College of Physical Education statistics, in 1934 only 57 teachers were graduated from the Central School of Physical Education.\* The development of physical education in Thailand was to be promoted through the educational system, as stated in the revolutionary government's mandate that education would be the best preparation for a full democracy for the people.

With the country in need of more physical education teachers, in 1936 the government, through the Representative Assembly, allocated funds for the construction of a new physical education training school. Its first principal was Naga Thephasadin Na Ayudthya, who was renowned for his skills in sword and pole fighting. He served the Department of Physical Education in various capacities for 24 years (73, p. 219). Under Ayudthya's direction, revisions and additions of courses were made to the training curriculum to include more material in both theory and

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\*Educational statistics have been drawn from the College of Physical Education registration file, Bangkok, 1934-35.

practical areas. The curriculum consisted of two main streams of courses, compulsory and non-compulsory. The compulsory units consisted of moral instruction, method of teaching, scouting, hygiene, first aid, calisthenics, games, and track and field. The games section was further subdivided into two groups of activities for men and women. The women's games were netball and volleyball; the men's games were basketball, soccer, and takraw. The non-compulsory units consisted of four activities: Thai boxing and international style boxing, sword and pole fights, gymnastics, and judo. Students who passed all of the compulsory subjects were awarded third-class diplomas in physical education. Any students who passed two of the four non-compulsory activities or all four non-compulsory activities were awarded second- and first-class diplomas, respectively (46, p. 51).

In 1950, the administrators of the Central School of Physical Education and personnel from the Department of Physical Education agreed to modify the training program in order to modernize the general education curricula. The duration of the training was extended to five years, and only men were to be accepted in the program (no explanation was given for the latter proviso). It was decided that the school would be operated on a boarding dormitory basis in order to facilitate the new policy of

accepting at least two high school graduates from each province into the training program (46, p. 52). Government officials realized that, in order to develop sports and physical education throughout the country, it was necessary to have specialized teachers in every province. As a result, two students from each province were chosen by the provincial offices, and their expenses were subsidized by the government, contingent upon their returning to their provinces to teach after their training was completed. The new training school was called the Physical Education Teachers' Training School.

The School's curriculum, which was formulated in 1950, included the following courses.

1. Education and social science
2. English language
3. Thai language
4. Supplementary subjects
  - a. Health education
  - b. Personal hygiene
  - c. Anatomy
  - d. Physiology
  - e. Kinesiology
  - f. Biology
  - g. Psychology
5. Physical education subjects; Thai and modern sports
  - a. Rugby
  - b. Soccer
  - c. Basketball
  - d. Volleyball
  - e. Swimming
  - f. Fencing
  - g. Boxing
  - h. Judo
  - i. Tennis
  - j. Takraw
  - k. Table tennis
  - l. Sword and pole fighting

The training curriculum proved to be a stumbling block for many students as they failed to meet the standards previously set by the school. This was due to the fact that every province had its own methods of instructing students, and in some cases superior students were not required to enroll for needed physical education training (46, p. 53). Accordingly, new regulations for admission were established in 1954 in an effort to assemble a better qualified group of trainees. One of the new regulations required all prospective students to take written and practical examinations administered by the Department of Physical Education. Based upon the results of these examinations, only the top students were selected for admission. The same bond still applied to all provincial students: they had to return to teach in their provinces after graduation. The 1954 school year also marked the first time that girls were accepted into a special training program at the Physical Education Teachers' Training School; a special one-year program was offered whereby girls were granted third-class diplomas upon completion of training.

In 1954, the Ministry of Education was determined to extend teacher training programs. Consequently, a teacher training department was established to be solely responsible for this aspect of education in Thailand (79, p. 27). Previously, the training of teachers had been carried out

by the Department of Secondary Education, the Department of Vocational Education, and the Department of Physical Education. Coordination among those three departments had been lacking, and the new department was established to relieve this problem. Thus, the Physical Education Teachers' Training School came under the responsibility of the New Department of Teacher Training.

With the cessation of the training programs at the Physical Education Teachers' Training School in 1954, the Department of Physical Education requested a new teachers' training program. The Ministry of Education approved the request, and on January 1, 1955, the College of Physical Education was established under the direction of Dr. Boonsom Martin, a practicing physician. The new curriculum called for two types of programs (46, p. 54). The first program required four years of training for all admitted students who had graduated from grade 10, and the second required two years of training for all admitted pre-university graduates (grade 12). At the end of the training program, a high diploma in physical education was awarded.

In the meantime, the Department of Teacher Training was not prepared for the responsibility of specialized training and requested that the Department of Physical Education again take charge of such training, which it did.

By 1958, the lack of physical education teachers was still evident. Many graduates taught in secondary schools, which resulted in a shortage of physical education teachers in elementary schools.

Accordingly, the Department of Physical Education decided that a physical education school was needed to train elementary school physical education and health teachers. Prior to this time, physical education trainees were basically prepared to teach at the upper elementary and secondary levels. As a result of this need, the Palanamia School (Health and Physical Education Teachers' Training School) was created (46, p. 55). Students who had graduated from grade 10 were admitted to this program. Consequently, with the creation of the Palanamia School, the first program at the College of Physical Education was abolished. Together the two schools--Palanamia and the College of Physical Education--offered a four-year course of study, two years at each institution, aimed at educating students in modern physical education theory and practice. The curriculum included associated or cognate subjects as well as courses in physical education in order to give students a well-rounded educational background. Upon completion of the requirements for graduation, the students of the Palanamia School received a teaching certificate in physical education. Those who completed the work at the College

of Physical Education received a certificate in advanced physical education.

After these two institutions began their joint operation, the numbers of physical education graduates began to rise rapidly. The first group of graduates from the Palanamia School in 1959 numbered 268, 195 men and 73 women, and 139 students graduated from the College of Physical Education, 117 men and 22 women. These totals represented an increase of more than 400 per cent compared to the 85 graduates of the College of Physical Education in the previous year.\*

The increase, however, was short-lived. The number of graduates from the two institutions began to decline in 1960 because fewer students were enrolling in their programs. This may have been due to the fact that, in 1959, Chulalongkorn University began to offer a four-year program leading to the degree of Bachelor of Education with a major in physical education. The recognition awarded at the end of this baccalaureate training might have influenced students to try for a place at Chulalongkorn University, drawing them away from both the College of Physical Education and the Palanamia School. Furthermore,

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\*Educational statistics have been drawn from the College of Physical Education registration file, Bangkok, 1959-1960.

a university graduate was likely to acquire a job more quickly than a college graduate, who, in turn, would be regarded as having received merely "vocational" training and not much in the way of academic education. The people's values with regard to education had not changed, and general and academic education was still preferred to other types of training (71, p. 113). All in all, the primary issue was one of status and prestige, and the university seemed to be on a higher level in this regard.

The decline in enrollment at the College of Physical Education and the Palanamia School caused their administrators to revise their programs once more because the type of training offered at both institutions was the same with the exception of a few academic courses. Plans were made to upgrade the College of Physical Education to a four-year training institution that would grant the degree of Bachelor of Physical Education. In order to clear the way for this eventuality, the Palanamia School was abolished in 1967. All new students at the College of Physical Education had to complete their secondary education (grade 12) and successfully pass the written and skill examinations administered by the Department of Physical Education, the same procedure as in the past. However, students could choose one or two levels of training: that for elementary or secondary teachers. At the end of the

second year, students who wished to teach in elementary schools would terminate their training; otherwise, they continued to the end of the four years and were qualified as secondary teachers.

The College of Physical Education is affiliated with Srinakharintaravirot University. In addition to the instruction described above, it provides in-service training in physical education, health education, and recreation for personnel of various government departments, including the armed forces (80, p. 137).

Physical education training schools have been responsible for many contributions to the total welfare of all Thai students. With ongoing support from both the government and the general public and with greater interest from the schools and the administrators of higher education institutions, the development of physical education and sports will continue to prosper.

#### Graduate Education in Thailand

Chulalongkorn University had offered graduate courses in various disciplines long before the idea of establishing a graduate school was discussed and accepted at a meeting of the Dean's Council in December of 1956. The graduate programs were then under the authority of various faculties, and no general procedure and regulations had yet been established. After these were formulated by a special

committee, the Graduate School began operating on an interim basis in 1961, and was officially founded by royal decree in July of 1962.

The Graduate School holds faculty status at the university. It is responsible for graduate teaching and research in various disciplines and functions among academic departments offering graduate studies as well as in the capacity of an administrative center to promote the standards of graduate programs and activities.

The administration of the Graduate School is under the control of two committees: the Graduate School Board and the Committee for Graduate School Administration. The former is in charge of formulating general policies concerning administration and teaching. The members of the Board, under the chairmanship of the dean of the Graduate School, are the chairpersons of the four Graduate Faculty Boards (for the academic branches of physical science, biological science, social science, and humanities) and the vice-rector for academic affairs. Members of the Committee for Graduate School Administration, also presided over by the dean of the Graduate School, are representatives elected from each of the four academic branches listed above. The Graduate School Board and the Committee for Graduate School Administration are also authorized to appoint special committees and subcommittees to carry out specific tasks. The

staff of the Graduate School is drawn from the staffs of the university faculties and independent of departments offering graduate courses (50, p. 36).

The objectives of the Graduate School of Chulalongkorn University are

1. To coordinate and organize departmental graduate programs through an efficient administration in order to maintain high academic standards;
2. To fulfill the aims of the university by producing scholars, researchers, administrators, and professionally trained individuals to meet the needs of the country;
3. To improve and expand graduate studies in various fields and to establish interdisciplinary programs;
4. To encourage graduate students to conduct independent research in various fields for the benefit of the academic community and the nation (20, p. 3).

The master's degree program in physical education at Chulalongkorn University currently comprises the following course offerings:

- 415.601--Philosophical Foundation in Physical Education;
- 415.602--Measurement and Evaluating in Physical Education;
- 415.603--Physical Education Curriculum;
- 415.604--Administration in Physical Education;
- 415.605--Advanced Physiology of Exercise;
- 415.651--Scientific Foundations of Health Education;
- 415.781--Experimental Design in Physical Education;
- 415.797--Master's Thesis;
- 415.606--Adapted Physical Education;
- 415.607--Supervision in Physical Education;
- 415.652--Organization of Safety Education;
- 415.653--Health Education Curriculum;
- 415.654--Principles of Health Education;
- 415.782--Practicum in Physical Education;
- 415.783--Seminar in Physical Education;
- 415.784--Individual Study in Physical Education;

- 415.631--Principles of Teaching and Coaching Track and Field;
- 415.632--Principles of Teaching and Coaching Basketball;
- 415.634--Principles of Teaching and Coaching Badminton;
- 415.635--Principles of Teaching and Coaching Volleyball;
- 415.636--Principles of Teaching and Coaching Swimming;
- 415.637--Principles of Teaching and Coaching Golf;
- 415.638--Principles of Teaching and Coaching Tennis;
- 415.639--Principles of Teaching and Coaching Gymnastics;
- 415.640--Principles of Teaching and Coaching Soccer (20, pp. 324-328).

#### Graduate Education in the United States

##### History

Graduate education is not a new idea. According to Beaty, it has been part and parcel of American education for more than a century (10, pp. 298-302). Graduate education in the United States began when a faculty committee at Yale investigated the possibility of study beyond the bachelor's degree. Yale offered its first Ph.D. program in 1860 (65, p. 34).

Harvard College offered the first master's degree program in 1642, six years after the institution was established in 1636. The requirements were to pay fees, study for one year beyond the bachelor's degree, and write a thesis. By the turn of the century, about fifty American colleges and universities were offering doctoral degrees.

Graduate education expanded rather rapidly in the United States. Sharp increases in graduate enrollments have occurred throughout the twentieth century--in fact, since the turn of the century, the growth of graduate education has been considerably greater than that of undergraduate institutions. Table I shows changes in undergraduate and graduate enrollments in the United States from 1900 to 1970 (33, p. 19). The American Council on

TABLE I  
GROWTH OF UNDERGRADUATE AND GRADUATE STUDENT  
ENROLLMENTS IN THE UNITED STATES,  
1900-1970\*

Year	Enrollment (in Thousands)	
	Undergraduate	Graduate
1900	231.8	5.8
1910	346.1	9.2
1920	582.3	15.6
1930	1,053.5	47.3
1940	1,388.5	105.7
1950	2,421.8	237.2
1960	3,227.0	356.0
1970	6,173.3	902.8

\*Source: Todd Furniss, editor, American Universities and Colleges, 11th ed. (Washington, American Council on Education, 1973), p. 19.

Education reported that graduate school enrollments were 47,255 in 1929, compared to a projected figure of 1,358,000 in 1988 (7, p. 20).

Berelson says of graduate education in the future,

The system of graduate education is growing and will continue to grow in the next years . . . in students, degrees, faculty, departments, institutions, support. The body of knowledge to be handled by the graduate school is growing and will continue to grow, thus adding problems of complexity and specialization (11, p. 219).

#### Master's Degree Pattern and Organization

The master's degree program is an extension of the bachelor's degree program, usually in the same field. In some instances, an undergraduate degree in a related discipline may be accepted for entry into a master's program.

The Council of Graduate Schools in the United States described the master's degree as follows.

The master's degree is customarily awarded by a college or university to an aspirant who achieves a substantial level of academic accomplishments during a one- or two-year period of graduate study beyond the bachelor's degree. The master's program usually consists of a coherent pattern of courses topped off by a comprehensive examination and a thesis, or by equivalent experience. Ideally, all master's programs should also provide for some supervised teaching experience . . . (39, p. 1).

Two basic types of master's degrees are conferred in the United States, the Master of Arts (M.A.) and the Master of Science (M.S.). Master of Arts programs provide an introduction to scholarly activities and research and

sometimes serve as preparation of teachers for college or secondary schools, and Master of Science programs constitute an introduction to professional practice (39, p. 1).

In his proposal for reform in American higher education programs following a three-year baccalaureate program, Woodring contends,

The completion of each level or kind of learning should be symbolized by an appropriate degree with a clearly understood meaning. . . . The program for high school teachers, leading to the Master of Arts in Teaching degree, probably should require two years, half the time to be spent in graduate-level courses in the disciplines to be taught and half in professional work that would include an internship in the schools. . . . The academic master's degree . . . would always represent two full years of specialized work with appropriate comprehensive examinations and either a thesis or a scholarly paper (92, p. 217).

Eells pointed out that degrees have little or no inherent significance but, rather, represent convenient symbols of academic achievement. Degrees are recognized and utilized not only by the academic world but also by government and industrial agencies. Many problems are associated with master's degrees in the United States, but they have been identified as matters of curricula, not of degrees conferred in particular fields of study with basic philosophical backgrounds. Therefore, students are required to take certain courses in fields other than their major subjects in order to earn a specific degree (29, pp. 1-10).

### Purposes of Graduate Education

Graduate work in all areas of education is receiving increased emphasis in American colleges and universities. Some research stresses that graduate students should be carefully selected on the basis of their previous education, degree of motivation, intellectual competence, and maturity.

Graduate education has been faced with problems since its inception. One issue that has not yet been resolved concerns the concept of research as opposed to teacher preparation as the basic mission of graduate schools (26, pp. 198-202).

There is a "wide diversity of standards relating to entrance and degree requirements in the nature or scope of the educational curriculum" (68, p. 205). Because of this diversity, the Council of Graduate Schools in the United States has made clear that a master's degree program should be established only by a college or university when the "resources and special traditions . . . available" would seem to make such a degree program desirable" (24, p. 4).

Hillway asserted in his Introduction to Research that the fundamental aim of graduate education may be regarded as the advancement of learning and training of research scholars or the training of effective teachers. Graduate

education does not mean merely the addition of more courses to the program but the placing of more emphasis upon the program of concentration by following a systematic search for truth. Hillway summarized the common purposes of graduate education in the United States as follows:

1. The advancement of human knowledge;
2. The training of scholars for research work;
3. The preparation of students for a profession;
4. The offering of one or more years of advanced instruction along the lines of the students' interests or special needs (41, p. 48).

The National Conference on Graduate Education in Physical Education enumerates the purposes of graduate education in the United States as

1. The accumulating of human knowledge through scholarly research;
2. The preparation of scientific research workers and humanistic scholars;
3. The provision of advanced study for teachers, specialists, and administrators in the schools (34, p. 15).

Important in professional preparation programs from 1920 until the present has been the initiation of more stringent admission requirements by teacher training institutions (37, pp. 68-69). Best states that graduate courses normally cover material in greater depth than undergraduate work and are concerned with experience, principles, history, philosophy, and research rather than skills and techniques (12). A feature that should be common to all graduate courses is emphasis on mature thinking, extensive reading, and original work. Bucher and Mayhew suggest

that graduate courses should be research oriented and that they should examine the research in various fields of study and critically evaluate its worth to the program (14, 54).

## Development of Graduate Study in Physical Education in the United States

### Historical Development

The first graduate work in physical education was offered at Springfield College in Springfield, Massachusetts, in 1891. The graduate program consisted of courses in physiological psychology, history and philosophy of physical education, anthropometry, and literature in physical education, plus a 3,000-word thesis. The Master of Physical Education degree was initiated at the college in 1905 (27, pp. 104-129).

In 1901, Columbia University in New York offered the first graduate degree with a major in physical education, followed by Oberlin College in Oberlin, Ohio, which conferred its first master's degree in 1904 (58, p. 332). As a result of the slow growth of undergraduate professional programs in physical education, the years between 1901 and 1920 witnessed little development of programs at the graduate level. The Normal College of the American Gymnastic Union in Durham, North Carolina (later Duke University) entered the field of graduate education in

physical education in 1907, Wellesley in 1917, the University of Southern California in 1918, and the University of Oregon in 1920 (93, pp. 175-176). In 1924, Columbia University and New York University initiated graduate programs leading to Doctor of Philosophy degrees with areas of concentration in physical education.

According to a list compiled by the Professional Preparation Panel of the American Association for Health, Physical Education, and Recreation during the spring and summer of 1973, a total of 204 colleges and universities in the United States offered graduate programs in the three areas of health, physical education, and recreation, or combinations thereof (5, pp. 35-36).

The American Association of Teachers Colleges, the Association of American Universities, and other national and regional accrediting agencies have been regulating powers for the improvement and maintenance of standards in graduate education. During the first half of this century, much graduate physical education was still substandard, and in the late 1930s and early 1940s various studies were conducted to analyze graduate training in the field.

In 1934, a National Study Committee was charged with the responsibility of developing standards with which to evaluate the ability of institutions to prepare professional workers in the field of health and physical education.

Standards of professional courses recommended by the Committee were divided into four phases: 1) academic courses required by individual institutions, 2) foundation sciences, 3) courses in general professional education, and 4) courses in health and physical education. The Committee not only recommended a standard four-year curriculum for undergraduate studies but also listed a complete seven-year program of courses for graduate study (59, pp. 48-68).

According to Morris and Sweet, "The basic differences between undergraduate and graduate programs revolved around greater emphasis on problem courses, the concept of seminar, the addition of thesis based on research, and the inclusion of a method of research course" (57, p. 7). Lloyd stated that "There did not seem to be enough emphasis on research," and he stressed the need for more effort in the research component of the graduate degree (50, p. 37).

Hewitt cited some specific shortcomings of graduate programs in physical education (38, pp. 252-256). He reviewed the question of whether physical education at the graduate level was becoming more closely related to schools of education because it "belonged there," the question of whether it had to be combined with education because it was not able to stand on its own merits and confer its own degrees, and the question of whether this relationship would hinder the future growth of the profession. Later, in 1945,

Hewitt said that a sharp division of opinions was apparent in the views expressed about the advisability of a thesis requirement. According to his findings, the main purpose of the master's degree was that of testing the student's ability to use the tools of research and it should not necessarily be expected that the thesis itself would be a contribution to knowledge (39, pp. 410-413). Clayton and Clayton suggested that the perceived options for college students in health, physical education, recreation, and dance programs have led to declining enrollments (22, p. 44).

Another of Hewitt's findings was that the standards for graduate faculty at most of the institutions studied fell below those recommended by various accrediting agencies (40, pp. 231-240). Massengale identified documentation of research, scholarship, and publication as three methods of assessing the quality of physical education graduate faculty (53, p. 57). Models to improve faculty development have been described by Oliver (62, pp. 78-82).

In 1947, at the Teacher Education Section Meeting of the College of Physical Education Association, Meredith described the five-year program which began there in 1933 for the professional preparation of physical education teachers. The eight characteristics of graduate instruction recommended at the meeting were

1. Development of the ability to do critical thinking;
2. A broader field of preparation emphasizing expansion of one's knowledge both horizontally and vertically;
3. Development of research tools for independent investigation;
4. Ability to do independent thinking;
5. Specialization;
6. Opportunity to sense and apply relationships between various areas of knowledge and human experience;
7. More individualized instruction;
8. Extension of program of study at least one year beyond the bachelor's degree (47, pp. 58-61).

Welsh suggested that professionals must continually ask the question, "What does it mean to be physically educated?" Appropriate aims and objectives emerge in the attempt to answer this question (89, p. 14).

Conferences Related to Professional Preparation in  
Health Education, Physical Education, and  
Recreation

The first national conference on health, physical education, and recreation for college students was held in 1885 at Adelphi Academy in Brooklyn, New York. Later, several more conferences were held; a majority of the members at these meetings of the Society for the Improvement of Health, Physical Education, and Recreation were college faculty, and they were concerned primarily with health, physical education, and recreation analysis. Not until 1952, at the College of Physical Education Association meeting, did the Required Service Program Committee discuss the need for a national meeting to formulate principles

and guidelines for physical education programs (1, pp. 23-24).

In the late 1940s, a series of graduate education conferences in physical education was held. In 1946, 27 delegates from 20 midwestern colleges and universities gathered at Turkey Run State Park, Indiana, for the first graduate conference in physical education. Meeting a year later at Spring Mill State Park, Indiana, and again in 1948 at Père Marquette State Park, Illinois, these graduate conferences grew to include 44 delegates from 34 institutions of higher learning (93, p. 289). Although many topics were covered at these meetings, the delegates were unable to deal with the problems in graduate education on a national scale. At the conference held in 1948, it was decided to establish an Organization of Professional Training Institutions to determine standards for accrediting graduate work in physical education. These plans, however, never materialized, although serious attempts were made to develop standards. At the 1948 meeting, the foundation was also laid for the first national conference on graduate physical education in 1950.

Conferences on professional preparation have been held in an effort to improve graduate preparation in health education, physical education, and recreation. A National Conference on Undergraduate Professional Preparation in

Health Education, Physical Education, and Recreation was held in 1948 at Jackson's Mill, Weston, West Virginia. The conference was on the undergraduate level, but many implications for graduate programs resulted from it. The Jackson's Mill Conference stressed that competency in achieving the objectives of the curriculum should be the criterion for graduation rather than a definite number of years of study or a certain number of specific courses. It encouraged teacher preparation institutions to develop teachers who were masters of many skills and areas of knowledge. With regard to graduate study in physical education, the conference participants' report stated that leadership in all types of health education, physical education, and recreation positions cannot be supplied by persons having completed only the undergraduate program but that undergraduate preparation of the nature described at the conference could serve as the foundation for advanced study (8, p. 10).

In January, 1950, 36 delegates, eight consultants, and two Canadian observers met at the Père Marquette State Park lodge in Grafton, Illinois, for the purpose of working together on current and pressing problems related to graduate study in the fields of health education, physical education, and recreation. This conference emerged from the need expressed in previous conferences and from a

movement in the midwest instigated by Dr. Edward C. Staley, Professor of Physical Education at the University of Illinois. In 1946, Staley was instrumental in calling a meeting of representatives of a group of midwestern universities to discuss methods of upgrading graduate study in physical education. In 1947, and again in 1948, larger and more representative groups met to review the issues. Interest developed to such a point that committees were appointed which met in December of 1948 and January of 1949. The purpose of these meetings was to secure an organizing committee which would consider the problems of graduate study and the feasibility of staging a national conference to deal with such problems. The primary concern of the delegates to the committee meetings was initially with the field of physical education, but they recognized that its interrelationship with health education and recreation was such that those areas, too, should be included in any further plans.

Organizations immediately concerned with the three fields and other selected bodies concerned with the problems of graduate study were asked to name representatives to an organizing committee. This committee met in Boston in April, 1949. It was the consensus of the group that the marked increase in the number of institutions offering graduate programs gave added impetus to the immediate

need for a careful study of graduate preparation in these fields and, further, that a national conference should be held. In 1950, a National Conference on Graduate Study in Health Education, Physical Education, and Recreation was held at Père Marquette, Illinois. The objectives of the conference were 1) to develop principles or criteria for evaluating graduate offerings in health education, physical education, and recreation; 2) to develop plans for implementation of these principles and criteria; and 3) to make recommendations regarding the accreditation of institutions offering graduate preparation in these fields. Participants in the conference suggested that graduate programs in physical education should include the broad areas of concentration and the organization of major courses for graduate students. Furthermore, such programs should be balanced between offerings in the supporting fields. The broad areas of concentration in the master's degree curriculum supported by the conference participants were as follows:

1. That area which is chiefly concerned with the fundamental philosophy on which the profession of physical education is based;
2. That area which deals with the methods and tools of research;
3. That area in which attention is focused on the human organism and how it functions;
4. That area which is primarily concerned with the planning and operation of the total physical education program--this would include study of problems relating to organization, administration, supervision, and instruction;
5. That area which is primarily concerned with the aesthetic phase of physical education (34, pp. 17-18).

The Père Marquette Conference also stated very precisely the general objectives of graduate studies in physical education in the United States:

1. To produce better teachers, leaders, administrators, and creative scholars;
2. To stimulate and improve the quality of research and its consumption;
3. To develop specialists who have preparation in particular lines of endeavor beyond the bachelor's degree (34, pp. 7-8).

In 1962, a conference devoted to the topic of improving professional preparation was held by the American Association for Health, Physical Education, and Recreation. Specific concerns of this conference were

1. Developing suggested principles and standards in accordance with the philosophy of and trends in teacher education in a changing world, to serve as guides for institutions preparing personnel in these educational fields, covering the following seven areas:
  - philosophy and objectives of professional preparation,
  - organization and administration,
  - student personnel,
  - faculty,
  - curriculum,
  - professional laboratory experiences,
  - facilities and instructional materials;
2. Defining the professional competencies in these areas;
3. Determining ways of improving the professional consciousness and professional stature of personnel in these areas;
4. Identifying the kinds of experiences through which prospective professional personnel can develop the necessary knowledge and skill to enable them to provide leadership in these areas;
5. Developing guidelines for the implementation of the conference report (3, p. 2).

In 1967, a national conference on graduate education was held in Washington, D.C. The conference report,

entitled "Graduate Education in Health Education, Physical Education, Recreation Education, Safety Education, and Dance," stated,

The aim of the AAHPER Conference on Graduate Education was to establish guidelines and standards at the master's and doctorate levels in the areas of health education, safety education, and dance. Recommendations were focused on institutional graduate patterns and organization, faculty and staff, the graduate student, instructional methodology, instructional and research resources, and programs of study in the five areas (2, p. 8).

The purpose of the conference report published by the American Association for Health, Physical Education, and Recreation was

. . . to improve graduate programs of study for the people these programs serve, especially the students and the consequent consumer of their services, the public. These guidelines and standards should be used to improve general understanding of the nature of graduate education and to assist in the self-study and institutional evaluation of all graduate programs in health education, physical education, recreation, safety education, and dance (2, p. 10).

Although many issues were discussed at the meeting, the report surveyed programs of study in the various subject areas related to physical education and outlined some of the suggested requirements for the master's and doctoral degrees in those areas. A recommended body of knowledge was listed for each area. Graduate faculty, students, and instructional methodology were also included in the report.

In 1969, the American Association for Health, Physical Education, and Recreation published a Self-Evaluation

Checklist for Graduate Programs in Health Education, Physical Education, Recreation Education, Safety Education, and Dance. The purpose of this self-evaluation checklist was to provide the college or university with a means of appraising graduate professional preparation programs in the five areas of study. All checklist items were drawn from the report of the AAHPER Conference on Graduate Education in Health Education, Safety Education, and Dance held January 8-13, 1967, in Washington, D.C. (4, p. iii).

In 1978, a task force was selected by the Council of the National Association for Sport and Physical Education (NASPE) to formulate standards for the accreditation of graduate programs in physical education. The purpose of the standards was to develop and maintain an academic environment of high quality. In addition, all graduate programs were to use these standards to evaluate and update their existing offerings, and institutions that utilized the standards would participate in the accreditation process. The Delegate Assembly of NASPE adopted the standards by a unanimous vote at the American Association of Health, Physical Education, Recreation, and Dance (AAHPERD) convention in Houston, Texas, in 1982. The NASPE accreditation and interpretation of standards were presented in the Journal of Physical Education, Recreation, and Dance (JOPERD) in 1984 (70, pp. 54-62). In a report by Forker

and Fraleigh, the accreditation process and standards were viewed as constituting positive guidance for the development and improvement of quality graduate study (32, p. 45).

Studies Related to Graduate Education in  
Physical Education

Evans described McClellan's 1963 evaluation of the effectiveness of the undergraduate professional preparation program in physical education at Utah State University. The questionnaire-interview method was used to gather the opinions of graduates as to the quantity, quality, and utility of their professional undergraduate preparation; the opinions of principals relative to the quantity, quality, and utility of their professional undergraduate preparation; the opinions of principals relative to the quality and utility of graduate preparation; and the relationship between grades earned in professional courses and the quality ratings expressed by the graduates. Professional preparation was evaluated with regard to competencies in nine areas: 1) professional education, 2) principles and practices, 3) understanding the human body, 4) methods, 5) administration, 6) health education, 7) recreation, 8) evaluation, and 9) student teaching. McClellan concluded that the graduates rated their undergraduate preparation as average. Principals also rated the graduates' preparation as average but rated it higher than did

the graduates themselves. The graduates' ratings of their professional preparation were not significantly affected by the grades they received in professional courses (31, p. 43).

Evans conducted a follow-up study of graduates from the University of Utah in order to evaluate their graduate professional preparation program in health, physical education, and recreation. Data from all graduates who received a master's or doctoral degree in health, physical education, or recreation during the years 1949-1963 and 1964-1968 were analyzed. One hundred forty-eight graduates evaluated their preparation on a five-point scale. The results were as follows.

1. Quantity of graduate preparation was rated as average in all areas except one.
2. 1964-1968 graduates rated health education as insufficient in quantity and lowest in utility.
3. Quality of graduate preparation was rated as average.
4. Utility of graduate preparation was rated as average or higher.
5. Overall graduate program was rated as good.
6. Area of history, principles, and philosophy was rated highest in quality and quantity.
7. 1949-1963 graduates rated the area of history, principles, and philosophy as highest in utility.
8. 1964-1968 graduates rated the area of administration, supervision, and leadership as highest in utility.
9. Lowest rated area for quality, quantity, and utility by the 1949-1963 graduates was the area of contemporary problems and issues.
10. Lowest rated area for quality by the 1964-1968 graduates was the area of recreation.
11. Highest ranked suggestion for improving the program was more practical training and less theory (31, p. 251).

In his conclusion, Evans emphasized that the criticisms and suggestions made by the graduates should lead to the examination of certain areas and aspects of the program. The relationship between most graduates and their advisors, other faculty members, and other students was close and friendly.

Simons, again as reported by Evans, established criteria to judge graduate preparation in physical education, based upon the assumption that certain core knowledge or competencies are mandatory to the professional preparation of graduate students in physical education. All data were synthesized into criteria by which to judge institutions in terms of their ability to produce competent physical educators, and a checklist was developed that included staff, curricula, library, facilities, student admission practices, and general institutional practices (31, p. 39).

After conducting a catalogue survey of schools offering graduate work in physical education, Leighton concluded that 65 per cent of graduate courses appeared to be undergraduate courses adjusted to graduate study. He further pointed out that most of the graduate schools selected for his study seemed to adhere to the following four general areas of course offerings: 1) basic professional courses involving literature in the field, 2) science courses such as anatomy and physiology, 3) research techniques, and 4)

history courses dealing with theories and interpretation (47, pp. 214-242).

Snyder and Scott pointed out that there were two schools of thought regarding the curriculum.

1. Graduate schools should offer a program which amplifies a student's previous undergraduate preparation. Students who seek admission to this graduate program should, at entrance, be qualified to teach in a chosen area of specialization.
2. This is a professional training course. A student, if permitted to enter this program, regardless of previous background, should be provided with courses which would make him competent in his profession (68, pp. 188-190).

In the article "Current Trends in Graduate Study," McCloy pointed out that most master's degree programs in physical education represent only thirty additional semester hours of good undergraduate study. He contended that it is necessary to raise standards in the field of physical education to a point where students in the field would be assured that they have the intellectual equipment to gain respect from their colleagues and professionals in other areas. The raising of an institution's standards depends very much upon the quality of its graduate faculty. Their ability and competence as demonstrated by their knowledge and research often reflect their quality as well as the standards of the institution (55, pp. 33-35).

Graduate physical education has had its share of criticism in the past. In 1963, Conant criticized graduate study in physical education:

I am far from impressed by what I have heard and read about graduate work in physical education. If I wished to portray the education of teachers in the worst terms, I should quote from the description of some graduate courses in physical education. To my mind, a university should cancel graduate work in this area (23, p. 201).

The Professional Preparation Panel of the American Association of Health, Physical Education, and Recreation, which was organized in 1963, one year after the Professional Preparation Conference in Washington, D.C., was charged to examine Conant's statement. The panel provided evidence of far-reaching graduate work in physical education and suggested that Conant's opinion was founded on superficial evaluation (6, p. 69).

In the 1960s, several articles were published which questioned Conant's statement and the direction of graduate study in physical education. A national survey by Resick failed to support Staley's earlier conclusion that the advancement of knowledge in physical education was lagging because the curriculum was geared toward the production of technicians rather than scientists or scholars, but Resick found great variability among the number of graduate courses offered and commented that, in many instances, skill courses appeared in graduate programs (64, pp. 51-52). These findings supported Esslinger's complaint that in too many institutions graduate study was no more than an extension of undergraduate study (30, pp. 63-64).

Lewiski conducted an evaluation of the doctoral programs in health, physical education, and recreation at the University of Alabama from 1964 through 1972. The purpose of this study was threefold: 1) by means of the opinions of the graduates, to evaluate the quality, quantity, and utility of the professional programs leading to the Doctor of Education degree in Health, Physical Education, and Recreation at the University of Alabama; 2) to obtain biographical information about recipients of the Doctor of Education degree; and 3) to obtain information about conditions at the University of Alabama under which doctoral candidates function in pursuit of the degree. Data were collected by the use of a questionnaire sent to 52 graduates, and a response rate of 100 per cent was achieved. The results were as follows.

1. The graduates indicated that they received an average or above average quality and use of the professional preparations in all areas except athletics and intramurals; in this area the rating was below average.
2. The graduates indicated that they received an average amount sufficient or above average quantity of professional preparation in all areas except scientific foundations and the area of athletics and intramurals; in these the quantity was below average (49, p. 252).

In his conclusion Lewiski emphasized that 1) the graduate faculty of health, physical education, and recreation at the University of Alabama should examine the findings of his study and implement procedures to improve the

doctoral program, giving special attention to the improvement of those competencies and areas related below average by graduates; 2) the doctoral program should be strengthened by the addition of graduate faculty members in areas where there is evidence of the need; 3) the teaching loads and responsibilities of the graduate faculty should be arranged so that more time is available for consultation with graduate students; and 4) more opportunity for specialization within health education, physical education, and recreation should be made available to graduate students (49).

Oladunjoye conducted a follow-up study investigating various factors related to master's degree graduates in physical education at North Texas State University from 1965 through 1976 in order to gain information about the master's degree program's relevance to the graduates' subsequent careers (61). The purposes of the study were to determine the extent to which master's degree graduates in physical education at North Texas State University were carrying out the personal and professional obligations for which they were prepared and to determine the effectiveness of selected aspects of the master's degree program. It was also the purpose of the study to solicit the opinions of the graduates concerning the strengths and weaknesses of the master's degree program in physical education.

The data for the study were obtained by use of a questionnaire. The instrument consisted of 24 items designed

to obtain general background information from the respondents, their degree of satisfaction with certain characteristics related to the master's degree program, the extent to which they felt that their professional education prepared them for their positions, and their rating of specific professional courses. Findings in the study included the following.

1. Approximately two-thirds of the graduates thought the program had satisfactorily prepared them for their current positions.
2. Seventy per cent of the graduates suggested that there should be a core of courses required in the master's degree program in physical education. The courses most often included in the responses regarding core courses were Research Perspectives in Physical Education, Thesis, Mechanical Analysis of Motor Skills, Professional Preparation in Physical Education, Administrative Problems in Physical Education, and Testing in Physical Education.
3. The greatest strengths of the master's degree program in physical education at North Texas State University as reported by the graduates were faculty, research work for students, teaching resources, and courses available.
4. The greatest weakness of the master's degree program in physical education at North Texas State University as indicated by the graduates was availability of facilities.
5. The majority of the graduates suggested the following: candidates should be free to select a variety of courses, have the opportunity to select a specialized track, and be involved in the procedures for preparation of degree plan, and the department should increase physical education facilities and equipment and supplement the library in the department in order to facilitate research of relevant periodicals and journals (61, pp. 1-3).

Baker and King attempted to determine common characteristics of high quality physical education doctoral

programs. A list of criteria was developed to identify high quality institutions. In addition, the authors conducted personal interviews to evaluate characteristics common to five of the leading programs. Each department required 60 semester hours beyond the master's degree, and a minimum of 15 per cent of the required courses had to be taken outside the department. A minimum grade point average of 3.00 in all course work was required. A comprehensive examination was given near or after the completion of all course work and preceded approval to begin the research project. All programs provided opportunities for teaching, research, and administrative tasks, depending on students' interests (9, pp. 51-54).

Cipriano identified skills or tasks which students at both the master's and doctoral levels should be able to perform upon completion of their degrees. Included in the list of skills and tasks for doctoral students were teaching recreation education, research, and high-level administrative functions (21, pp. 50-51).

In 1969, Zeigler and Penny suggested a series of ten generalizations for colleges and universities involved in planning for the inauguration of further development of physical education curricula at the master's degree level. In these ten generalizations, the authors described the differences between the Master of Science degree and the

Master of Science in Teaching degree programs. The latter's emphasis in the direction of a scholar-teacher is more "professional" in nature, whereas in the former the scholar-researcher is more "academic." Zeigler and Penny stated that a number of options have been recognized within the Master of Science degree program in physical education and related fields, including

1. Physical fitness (exercise physiology),
2. Biomechanics (kinesiology of movement analysis),
3. History,
4. Philosophy,
5. Psychology of sport (including motor learning and social aspects),
6. Exercise therapy,
7. Sociology of sport and physical activity,
8. Administration theory and research,
9. Comparative and international physical education and sport, and
10. Others (economics, political science, anthropology, etc.) (95, pp. 169-170).

In summary, the authors pointed out,

In the immediate future, it would seem that those contemplating the development of graduate programs should consider the local or regional need for a two-track program, should plan to touch all bases in regard to the various sub-areas in which there are developing "bodies of knowledge," and should plan to specialize in only several of the sub-areas mentioned above. . . . The field is faced with both a "professional" and a "disciplinary" approach at this time. Neither emphasis should be slighted, and each program should be of high quality (95, pp. 169-170).

Recently, Zeigler and Paton proposed a plan for consolidation and innovation in graduate study in physical education and sport.

. . . whether one or more types of program patterns are implemented, it seems highly desirable to preserve a common core experience of physical education knowledge that all must have prior to elective course experience. . . . This common core should include from twelve to fifteen semester hours of course work involving a) research methods (including statistics), b) the history of philosophy of physical education (from a persistent problems standpoint), c) human motor behavior, and d) a thesis or project seminar (credit or no credit) (94, pp. 103-104).

Dubois described an innovative model for graduate work that encourages self-direction, self-pacing, and organized learning experiences in conjunction with real-life situations. The model program focuses on a substantial work-related problem that is conceived, developed, implemented, and evaluated by the student under the direction of an advising staff. The project is the core of the curriculum around which all instruction revolves, and the thesis topic is derived from it. Important components of the model program are its relevance and personalization to the students' needs (28, pp. 80-83).

Wilson and Hall commented that master's degree programs train personnel in the areas of adult fitness, industrial fitness, prevention, and cardiac rehabilitation. As the number of wellness programs in the United States increases, additional courses in the master's program will be required. Business and personnel management in industrial fitness, health spa management, ECG reading, and advanced cardiovascular physiology are a few of the specialized courses

suggested to train individuals for working with wellness programs (91, pp. 40-44).

Bucher stated that physical educators must plan for the future now. The importance of motor activity in relation to behavior, including higher thought processes, is common knowledge. Ninety million people regularly participate in some form of physical activity, and more emphasis will be placed on physical activity as new ways to maintain health and fitness are developed (15, pp. 12-14).

In addition to assessing current trends in physical activity, physical educators must ascertain the needs of a wider variety of potential student groups. These groups include non-degree-seeking students and experienced teachers returning for advanced degrees. A determination of the factors that interest and motivate these prospective students will aid in program development and university planning (90, p. 48).

Bucher succinctly outlined the responsibilities of future physical educators:

1. Provide themselves with the proper credentials in order to establish jurisdiction over their domain;
2. Help people to become responsible for their own health and fitness;
3. Recognize that people will live longer and be more fit and active in the years to come;
4. Provide for all persons regardless of age, skill, or disabling conditions;
5. Utilize technological advances, such as cable TV;
6. Prepare for space and underwater living (15, p. 14).

## CHAPTER BIBLIOGRAPHY

1. American Association for Health, Physical Education, and Recreation, "Evaluation Standards and Guides in Health Education, Physical Education, and Recreation," Professional Preparation in Dance, Physical Education, Recreation, Safety Education, and School Health Education, Washington, AAHPER Publications, 1959.
2. American Association for Health, Physical Education, and Recreation, Graduate Education in Health Education, Physical Education, Recreation, Safety Education, and Dance: A Report of a National Conference, Washington, American Association for Health, Physical Education, and Recreation, 1967.
3. American Association for Health, Physical Education, and Recreation, Professional Preparation in Health Education, Physical Education, and Recreation Education: A Report of the Professional Preparation Conference of the AAHPER, Washington, American Association for Health, Physical Education, and Recreation, 1962.
4. American Association for Health, Physical Education, and Recreation, Self-Evaluation Checklist for Graduate Programs in Health Education, Physical Education, Recreation Education, Safety Education, and Dance, Washington, American Association for Health, Physical Education, and Recreation, 1969.
5. American Association for Health, Physical Education, and Recreation, Professional Preparation Panel, "HPER Directory of Professional Preparation Institutions," JOHPER, XLV (January, 1974), 35-36.
6. American Association for Health, Physical Education, and Recreation, Professional Preparation Panel, "Why Graduate Study?" JOHPER, XXXV (October, 1964), 69.

7. American Council on Education, American Universities and Colleges, 12th ed., Hawthorne, New York, Walter de Gruyter, Inc., 1983.
8. The Athletic Institute, The National Conference on Undergraduate Professional Preparation in Health Education, Physical Education, and Recreation (Jackson's Mill, Weston, West Virginia, 1948), Chicago, The Athletic Institute, 1948.
9. Baker, John A. W. and Harry A. King, "Leading Physical Education Doctoral Programs: What Characteristics Do They Have in Common?" JOPERD, LIV (February, 1983), 51-54.
10. Beaty, Edgar, "Follow-Up of Teacher Education Graduates as a Basis for Institutional Improvement," Peabody Journal of Education, XLVI (March, 1969), 298-302.
11. Berelson, Bernard, Graduate Education in the United States, New York, McGraw-Hill Book Company, 1960.
12. Best, John W., Research in Education, Englewood Cliffs, New Jersey, Prentice-Hall, Inc., 1959.
13. Blanchard, Wendell, Thailand: Its People, Its Society, Its Culture, New Haven, Connecticut, Human Relations Area Files, Inc., 1957.
14. Bucher, Charles A., Foundations of Physical Education, 7th ed., St. Louis, C. V. Mosby Company, 1975.
15. Bucher, Charles A., "The Future of Physical Education and Sport," JOPERD, LIII (October, 1982), 12-14.
16. Cady, John F., Southeast Asia: Its Historical Development, Toronto, McGraw-Hill Book Company, 1964.
17. Chakrabongse, Prince Chula, Lord of Life, London, Alvin Redman Ltd., 1967.
18. Choa Phya, Damasakmontri, The Mahavydhyalai, Vol. V, Bangkok, Bangkok Press, 1915.
19. Chulalongkorn University, Bulletin of the Graduate School, Bangkok, Chulalongkorn University, 1976.

20. Chulalongkorn University, Bulletin of the Graduate School, Bangkok, Chulalongkorn University, 1983-1984.
21. Cipriano, Robert E., "Curriculum Development: A Task Analysis Approach," JOPERD, LV (September, 1984), 50-51.
22. Clayton, Robert D. and Joyce A. Clayton, "Careers and Professional Preparation Programs," JOPERD, LV (May-June, 1984), 44-45.
23. Conant, James B., The Education of American Teachers, New York, C.C.M. Corporation, 1972.
24. Council of Graduate Schools in the United States, The Master's Degree, Washington, Council of Graduate Schools in the United States, February, 1968.
25. Dailey, Charles, "Physical Education in Thailand," Physical Education Around the World, edited by William Johnson, Monograph No. 2, Indianapolis, Phi Epsilon Kappa Fraternity, 1968.
26. Dale, Edgar, "Training of Ph.D.s," Journal of Higher Education, I (April, 1930), 198-202.
27. Doggett, Lawrence L., Man and a School, New York, Associated Press, 1943.
28. Dubois, Paul E., "Innovative Model for Graduate Degree Programs: Developing the Lifelong Learner," JOPER, L (June, 1979), 80-83.
29. Eells, Walter C., Degrees in Higher Education, Washington, The Center for Applied Research in Education, Inc., 1963.
30. Esslinger, Arthur A., "Undergraduate versus Graduate Study," JOHPER, XXXVII (November, 1966), 63-64.
31. Evans, Gary F., "An Evaluation of the Graduate Professional Preparation Program in Health, Physical Education, and Recreation at the University of Utah, Based on a Follow-Up Study of Its Graduates," unpublished doctoral dissertation, University of Utah, Salt Lake City, Utah, 1968.

32. Forker, Barbara and Warren Fraleigh, "Graduate Study and Professional Accreditation: Applications to Physical Education," JOPER, LI (March, 1980), 45.
33. Furniss, Todd, editor, American Universities and Colleges, 11th ed., Washington, American Council on Education, 1973.
34. Graduate Study in Health Education, Physical Education, and Recreation, National Conference Report of Père Marquette State Park, Illinois, January, 1950, Chicago, Chicago Athletic Institute, 1962.
35. Graham, W. A., Siam, London, Alexander Morning Ltd., 1924.
36. Hall, D. G. E., A History of South-East Asia, London, Macmillan/St. Martin's Press, 1970.
37. Henschen, K., "Needed Revisions in Professional Preparation Curriculums," JOHPER, XLIII (May, 1972), 69-72.
38. Hewitt, J. F., "The Graduate Major in Physical Education," Research Quarterly, XIII (May, 1942), 252-265.
39. Hewitt, J. F., "Requirements for the Master's Degree in Physical Education," JOHPER, XVI (September, 1945), 410-413.
40. Hewitt, J. F., "Status of the Graduate Faculty in Physical Education," Research Quarterly, XVI (October, 1945), 231-240.
41. Hillway, Tyrus, Introduction to Research, 2nd ed., Boston, Houghton Mifflin Company, 1964.
42. Indrapana, Nat, "Effects of Westernization on the Degree of Sports Involvement among the Student Population of Bangkok," unpublished master's thesis, California State University, Hayward, California, 1969.
43. International Association of Universities, International Handbook of Universities, 9th ed., London, Macmillan Press Ltd., 1983.

44. International Association of Universities, World List of Universities, 15th ed., London, Macmillan Press Ltd., 1982.
45. Jumsai, Manich, Compulsory Education in Thailand, Paris, UNESCO, 1951.
46. Kaeomukda, Pipitporn, "History of Physical Education Teachers' Preparation in Thailand," Journal of Health, Physical Education, and Recreation (Thonburi, Thailand), I (January, 1965), 46-55.
47. Leighton, Ralph, "Study of Institutions Offering Graduate Work," American Association for Health, Physical Education, and Recreation Proceedings, Boston, April 18-22, 1949, pp. 58-61.
48. Lekayanond, Swasdi, Physical Education, Report to the Minister of Education of Thailand during the Seminar on Physical Education, Bangkok, February 18, 1956, Bangkok, Krungdhep Karn Pim Press, 1956.
49. Lewiski, James Lawrence, "An Evaluation of the Doctoral Program in Health, Physical Education, and Recreation at the University of Alabama," unpublished doctoral dissertation, University of Alabama, University, Alabama, 1975.
50. Lloyd, F., "The Research Specialists," Research Quarterly, IX (December, 1938), 33-37.
51. London, Kenneth P., Siam in Transition, New York, Greenwood Press, 1958.
52. Malakul, Pin, Physical Education, Report to the Minister of Education of Thailand during the Seminar on Physical Education, Bangkok, February 18, 1956, Bangkok, Krungdhep Karn Pim Press, 1956.
53. Massengale, John D., "AAHPERD's Role in the Perceived Quality of Physical Education Graduate Faculty," JOPERD, LIV (September, 1983), 57-58, 64.
54. Mayhew, Lewis B., Reform in Graduate Education, Atlanta, Regional Education Board, 1972.
55. McCloy, Charles H., "Current Trends in Graduate Study," JOHPER, XXVIII (November, 1957), 33-35.

56. Merrill, Charles D. and Ralph H. Johnson, "Health and Physical Education Program for the Teachers' Colleges in Thailand," Journal of Teacher Education, VI (September, 1955), 196-197.
57. Morris, J. A. and D. C. Sweet, "A Survey to Determine the Status of Graduate Work in Physical Education," Research Quarterly, VIII (December, 1937), 3-10.
58. Nash, J. B., editor, Interpretations of Physical Education, Vol. V, Professional Preparation, New York, A. S. Barnes and Company, 1935.
59. National Committee Report on Standards, "National Study of Professional Education in Health and Physical Education," Research Quarterly, VI (December, 1935), 48-68.
60. Nimitbutr, Prachern, Physical Education, Report to the Minister of Education of Thailand during the Seminar on Physical Education, Bangkok, February 18, 1956, Bangkok, Krungdhep Karn Pim Press, 1956.
61. Oladunjoye, Matthew O., "A Follow-Up Study of Master's Degree Graduates in Physical Education at North Texas State University, 1965-1976," unpublished doctoral dissertation, North Texas State University, Denton, Texas, 1976.
62. Oliver, Bernard, "Models of Faculty Development and the Skills Needed by Faculty Development Personnel," The Physical Educator, XL (May, 1983), 78-80.
63. Patroomratha, Viziz Z., A Physical Education Curriculum for the Teachers' Colleges of Thailand, Ann Arbor, Michigan, University Microfilms, 1944.
64. Resick, Matthew, "Graduate Education Patterns," JOHPER, XXXVIII (April, 1967), 51-55.
65. Rosenberg, Ralph P., "The First American Doctor of Philosophy Degree," Ventures, VI (Spring, 1968), 31-37.
66. The Royal Bangkok Sport Club, Diamond Jubilee: September 6, 1901-1961, Bangkok, P. Phisanaka Press, 1962.

67. Shaw, Archibald B. and Thamrong Buasri, Teachers in Thailand's University: An Analysis and Forecast, Bangkok, Thai Watana Panich Press, 1968.
68. Snyder, Raymond A. and Harry A. Scott, Professional Preparation in Health, Physical Education, and Recreation, New York, McGraw-Hill Book Company, 1954.
69. Somboonsilp, Punya, "Health, Physical Education, and Recreation," The World Today in Health, Physical Education, and Recreation, edited by C. Lynn Vendien and John E. Nixon, Englewood Cliffs, New Jersey, Prentice-Hall, Inc., 1968.
70. "Standards for Graduate Programs in Physical Education," JOPERD, LV (February, 1984), 54-62.
71. Sunhachawee, Aree, "Evaluation in Curriculum and Teaching," Education in Thailand: A Century of Experience, edited by Ekavidya Nathalang, Bangkok, Karnsasana Press, 1970.
72. Syamananda, Rong, An Outline of Thai History, Bangkok, Siva Phon Limited Partnership, 1963.
73. Teachers' Institute of Thailand, Teachers' Lives, Bangkok, Teachers' Institute of Thailand, January, 1971.
74. Thailand, Department of Physical Education, Rules and Administration of Intramural Sport, 1939, Bangkok, Department of Physical Education, 1939.
75. Thailand, Government of, "Enactments Governing Boy Scouts," Rajkitjanubeksa (Royal Government Gazette), XXXV, Bangkok, Government of Thailand, July 1, 1918, 11.
76. Thailand, Government of, "Royal Enactment Governing the Establishment of the Department of Physical Education," Rajkitjanubeksa (Royal Government Gazette), L, Bangkok, Government House Printing Office, January 30, 1933, 870.
77. Thailand, Ministry of Education, Education in Thailand, 1932, Bangkok, Chang Pim Wat Sangwaj Press, 1933.

78. Thailand, Ministry of Education, Education in Thailand, 1936, Bangkok, Chang Pim Wat Sangwaj Press, 1937.
79. Thailand, Ministry of Education, Educational Developments in Thailand, 1949-1963, Reports to the International Conference on Public Education Organized by UNESCO and the International Bureau of Education, Bangkok, Thammasat University Press, 1964.
80. Thailand, Ministry of Education, A History of Thai Education, Bangkok, Thai Watana Panich Press, 1976.
81. Thailand, Ministry of Education, Lower Elementary Education Curriculum, Bangkok, Ministry of Education, 1960.
82. Thailand, Ministry of Education, Upper Elementary Education Curriculum, Bangkok, Ministry of Education, 1960.
83. Thailand, Ministry of Public Instruction, Report on the Work of the Education Department, Bangkok, The Education Department, 1917.
84. Thailand, Office of the National Education Commission, Education in Thailand, Bangkok, Agricultural Cooperative Club of Thailand, 1971.
85. Thailand, Office of the National Education Commission, Report on Education in Thailand, Bangkok, Kuru-sabha Press, 1970.
86. Thammasat University, Institute of Public Administration, Thailand Government Organization Manual Series, Part 10, Ministry of Education, Bangkok, Prachandra Printing Press, 1962.
87. Thomson, Virginia, Thailand: The New Siam, New York, Paragon Book Printing Corporation, 1967.
88. Visudharomn, Kong, "Physical Education," unpublished paper submitted to the National Defence Council, Bangkok, 1962.
89. Welsh, Raymond, "Sharpening Our Professional Focus," JOPERD, LIV (November-December, 1983), 13-15.

90. Wendt, Janice C., Barry C. Pelton, and Kathleen R. Stevens, "The University's Role: Assessing the Professional Education Needs of Health and Physical Educators and Athletic Coaches," JOPERD, LIV (February, 1983), 48-50.
91. Wilson, Philip K. and Linda K. Hall, "Industrial Fitness, Adult Fitness, and Cardiac Rehabilitation: Graduate Programs Specific to Training Exercise Specialists," JOPERD, LV (March, 1984), 40-44.
92. Woodring, Paul, Higher Learning in America: A Re-assessment, New York, McGraw-Hill Book Company, 1968.
93. Zeigler, Earl F., "A History of Professional Preparation for Physical Education in the United States, 1861-1948," unpublished doctoral dissertation, Yale University, New Haven, Connecticut, 1951.
94. Zeigler, Earl F. and Grath A. Paton, "Consolidation and Innovation in Graduate Study in Physical Education and Sport," National College Physical Education Association for Men Proceedings, [n.c.], 1974, pp. 103-104.
95. Zeigler, Earl F. and William J. Penny, "Generalizations about Development of Graduate Programs in Physical Education," The Physical Educator, XXVI (December, 1969), 169-170.

## CHAPTER III

### THE DESIGN OF THE STUDY

This chapter offers a description of the study, defines the population sample, and describes the research instrument, the procedures for collecting the data, the methods of analyzing the data, and the validation of the guidelines for the model graduate program for physical education in Thailand.

#### Description of the Study

The purpose of this study was to describe the development of a model for a master's degree program in physical education, one which could provide suitable guidelines for colleges and universities in Thailand attempting to establish such a program. The main purposes of the study were 1) to determine the major curricular concepts of the master's degree program, 2) to determine courses which might best be offered as a core requirement, and 3) to determine courses in physical education that are appropriate for scholarly study and those that would be of high priority relative to the resources necessary and available for the operation of such programs. In addition, the study was concerned with the development of a systematic

approach for student admission and a retention plan which would be compatible with the current trends in education and administration of higher education in Thailand.

#### The Population Sample

For the purposes of this study, 156 institutions of higher learning in the United States were selected on the basis of several criteria. 1) Each institution as well as its master's degree program was among those accredited by the National Council for Accreditation of Teacher Education (NCATE); NCATE's 20th Annual List (3, pp. 467-470) served as the source to determine the status of institutions and their degree programs with regard to accreditation. 2) Each institution offered graduate degree programs in physical education; the College Blue Book list of Degrees Offered by Colleges and Subjects (2, pp. 630-632) served as the source to identify all institutions with graduate programs in physical education. 3) The institutions were all reported as having well-established and recognized graduate programs in physical education. 4) The institutions were representative of different geographical areas of the United States.

The population of this study consisted of the chairperson of the department of physical education in each of the institutions surveyed, selected on the basis of professional leadership ability and expertise in the area of

professional and graduate education. All accredited colleges and universities which offered master's degree programs were used on the recommendation of the graduate committee. A total of 156 chairpersons was used for the study.

#### The Research Instrument

The research instrument, a questionnaire, was constructed by the investigator following extensive reading and study of questionnaire survey research techniques, the professional preparation field, institutional graduate catalogue regulations governing master's degree programs in selected colleges and universities, related professional literature, and other information deemed appropriate. The questionnaire was designed to elicit responses from chairpersons of departments of physical education in the United States about four aspects of master's degree programs: Part I--Patterns and Organization, Part II--Curricular Concepts of Master's Degree Programs, Part III--Admission and Retention Requirements, and Part IV--Core Course Requirements.

The investigator utilized the North Texas State University graduate catalogue as a guideline in developing the instrument. Special emphasis was placed on the specific requirements of the graduate program in physical education. These included the following:

1. A minimum of 36 hours of graduate credit with at least 24 hours in 500 level courses;
2. Initiation of the program under the direction of a major professor and approved by the department chairperson and the dean of the graduate school;
3. Completion of nine hours of core courses, including research Perspectives in Health, Physical Education, and Recreation, Thesis, or Special Problems in Lieu of Thesis;
4. Election and completion of 12 semester hours in one area of specialization;
5. Completion of at least three semester hours of research towards the thesis;
6. A minor of six to twelve hours in a related field;
7. A maximum of six hours of workshops counted toward the degree;
8. A comprehensive examination (oral, written, or both) including the thesis defense, if required (4, pp. 233-237).

In 1984, similar requirements for the Master of Science degree in physical education at NTSU were identified. In contrast to the 1978 requirements, the areas of specialization or tracks were more clearly defined, and courses to be included in each area were specified (5, pp. 155-157).

Part I (items 1 to 7) of the instrument utilized seven competencies which were obtained from the Self-Evaluation

Checklist for Graduate Programs (1) published by the American Association for Health, Physical Education, and Recreation and focused on the patterns and organizations of graduate schools. The chairpersons were requested to select the completion for each item that they believed to be most appropriate by placing the number of that completion in front of the item.

Part II (items 8 to 20) of the instrument was concerned with curricular concepts of the master's degree program. The chairpersons were requested to indicate their opinions concerning the goals and content of a master's degree program by ranking each criterion on a five-point scale (items 8 to 16) and to choose the most appropriate competencies (items 17 to 20).

Part III (items 21 to 38) of the instrument concerned admission and retention of students in master's degree programs. The chairpersons were requested to circle the responses that best described their opinions (items 21 to 30) and then to check the competencies they felt to be most appropriate (items 31 to 38). The chairpersons were also asked to list additional criteria that they thought were important and could be used in the process of retaining master's degree candidates.

Part IV (items 39 to 60) of the instrument focused on typical graduate courses in physical education as found in selected graduate bulletins. The chairpersons were requested to circle the number on the rating scale which best represented their opinion, indicating the desirability of each course that could be offered as a common core course

requirement of all master's-level students in physical education, irrespective of areas of subspecialization. This section of the instrument concluded with an open-ended questionnaire that solicited recommendations for courses which the chairpersons thought should be included in core requirements.

In order to refine the instrument as well as gain familiarity of use and data interpretation, a pilot study involving four doctoral candidates in the area of health, physical education, and recreation was conducted. The four students were asked to complete the questionnaire, and interviews were then held with each of them, during which inquiries about the instrument and suggestions for improving it were recorded and evaluated. The respondents' recommendations were analyzed, and appropriate changes were then made in the questionnaire.

A panel of experts was retained to examine the content of the items in the questionnaire; it was submitted to the four members of the investigator's doctoral committee at North Texas State University. The elimination or substitution of questions and appropriate modifications and adjustments were recommended by the majority of the committee (three of the four members). The final copy of the questionnaire (Appendix A) was then constructed and prepared for distribution.

A cover letter was written on stationery from NTSU's Department of Health, Physical Education, and Recreation and signed by the chairman of the doctoral committee, the minor professor on the committee, and the investigator. One hundred fifty-six copies of the letter were made, and a copy was addressed personally to each of the 156 chairpersons to be surveyed (Appendix B). The cover letter assured each participant that all questionnaire responses would remain anonymous.

#### Procedures for Collection of Data

All questionnaires were coded to provide the investigator with a means of determining who had not responded. An explanatory letter from the investigator and a stamped, self-addressed envelope accompanied each questionnaire.

The first mailing was made on January 4, 1978. At the end of 30 days, a return rate of 70 per cent had been achieved. A follow-up letter was sent on February 10, 1978, to the chairpersons who had not yet responded to the questionnaire (Appendix C). Included with the letter was another stamped, self-addressed envelope. Twenty-seven more questionnaires were returned within the next 28 days. The return rate among the respondents was exceptionally high in that 85 per cent of the professionals returned the questionnaires on time; six additional responses which were received after the final date set for data collection

(March 30, 1978) were not included in the tabulations. A return rate of 70 per cent was expected for the purpose of this study.

#### Procedures for Analysis of Data

As the questionnaires were received by the investigator, the data were recorded on separate checklists, each question being isolated and responses compiled on a frequency chart. A computer programmer from the North Texas State University Computer Science Department developed a program designed to provide tabulations of the percentages and mean scores for each item.

The respondents in this survey were requested to answer the instrument in relation to curricular concepts and admission and retention by indicating their extent of agreement--strongly agree, agree, undecided, disagree, or strongly disagree--by checking the appropriate space or placing a number in the space provided. A value of five was assigned to "strongly agree," four to "agree," three to "undecided," two to "disagree," and one to "strongly disagree." Two different methods were used to treat data from the open-ended questions. For those questions which elicited specific answers such as specified courses, data were placed in tables with frequencies indicated; questions for which general suggestive responses were sought were discussed in narrative form.

Items for which more than 70 per cent of the respondents chose "strongly agree" or "agree" or which received a mean score of 3.00 or higher on a five-point scale were used as guidelines for the construction of a model graduate program in physical education in Thailand.

#### Modification of Guidelines

In order to secure definite opinions and recommendations about the applicability of the guidelines derived from the study's findings to the educational philosophy and administration of higher education in Thailand, a professional panel consisting of Thai physical educators, all holding earned doctorates and considered to be authorities in curriculum development and familiar with the components of undergraduate professional preparation and with the needs of professional personnel in the field of physical education in Thailand, were requested to answer a questionnaire. Copies of the same instrument were sent to Suwat Jeangviwatanaporn in Bangkok, who distributed them to the panel members. The instruments were retrieved by Mr. Jeangviwatanaporn within two weeks. All of the completed instruments were then returned to the investigator by March 28, 1978. Completed surveys from the respondents formed the basis for modification of the guidelines to be used in the construction of the model program.

## CHAPTER BIBLIOGRAPHY

1. American Association for Health, Physical Education, and Recreation, Self-Evaluation Checklist for Graduate Programs in Health Education, Physical Education, Recreation Education, Safety Education, and Dance, Washington, American Association for Health, Physical Education, and Recreation, 1969.
2. College Blue Book, Degrees Offered by Colleges and Subjects, New York, C.C.M. Corporation, 1972.
3. National Council for Accreditation of Teacher Education, 20th Annual List of NCATE, Washington, National Council for Accreditation of Teacher Education, 1973-74.
4. North Texas State University, Bulletin of the Graduate School, Denton, North Texas State University, 1977-1978.
5. North Texas State University, Bulletin of the Graduate School, Denton, North Texas State University, 1984-1985.

## CHAPTER IV

### ANALYSIS AND INTERPRETATION OF DATA

This chapter presents descriptive data gathered by an inventory from a group of professional physical educators in the United States and from a professional panel in Thailand. The data are primarily factual information which will provide a foundation for the conclusions presented in Chapter V.

Questionnaires were mailed to 156 professional physical educators in the United States who were considered to be experts in professional preparation and graduate education in physical education. Eighty-five per cent of the questionnaires were returned on time and were analyzed in this study. The professional educators in the United States and the professional panel in Thailand were asked to provide their opinions in response to questions and statements regarding master's degree programs in their field of physical education. The questionnaire consisted of four parts: I--Patterns and Organizations, II--Curricular Concepts of Master's Degree Programs, III--Admission and Retention Requirements, and IV--Core Course Requirements. The respondents were asked to evaluate the questions

and statements in the instrument by placing a number in the space provided or circling the most appropriate answer.

The research data presented in this chapter are organized into two categories: 1) data gathered in the United States and 2) data gathered in Thailand.

### Survey of Master's Degree Programs in the United States

#### Patterns and Organizations

The results of the responses from American professionals to questionnaire items concerning patterns and organizations are analyzed in the following paragraphs. The responses of the professionals to each individual item are presented in Table II.

The majority (72.5 per cent) of professionals indicated that the graduate faculty should be distinctly identified (item 1), and 85.7 per cent agreed that each graduate faculty member should be granted a sabbatical leave every seven years (item 2). There was also a consensus (60.8 per cent) that teaching competence should be recognized first in terms of salary increases (item 3). Most of the professionals (90.2 per cent) indicated that research and teaching fellowships and assistantships should be granted readily (item 4), and more than half (59.2 per cent) agreed that off-campus resources for field experiences should be provided continuously (item 5).

TABLE II

RESPONSES OF THE PROFESSIONALS IN THE UNITED STATES TO PATTERNS AND ORGANIZATIONS OF INSTITUTIONS OF THE MASTER'S DEGREE PROGRAMS

Item	Patterns and Organizations	N	%	Rank
1	The graduate faculty should be			
	1. distinctly identified	95	72.5	1
	2. partially identified	36	27.5	2
2	Each graduate faculty member should be granted sabbatical leave in each seven-year period of service for the purpose of self-improvement and professional service.			
	1. Yes	108	85.7	1
	2. No	18	16.3	2
3	Teaching competence should be recognized first in terms of			
	1. salary increases	79	60.8	1
	2. reward	5	3.8	3
	3. promotions in rank	46	25.4	2
4	Research and teaching fellowships and assistantships should be granted			
	1. readily	119	90.2	1
	2. rarely	13	9.8	2
	3. never	0	0.0	3

(table continues)

TABLE JI--Continued

Item	Patterns and Organizations	N	%	Rank
5	Off campus resources for field experiences should be provided	77	59.2	1
	1. continuously	52	40.8	2
	2. occasionally	0	0.0	3
6	3. never			
	A graduate center with social and study facilities should be provided for all university graduate students	82	65.1	1
	1. continuously	41	32.2	2
7	2. occasionally	3	2.4	3
	3. never			
	The graduate program administration should exist under the following pattern:	107	82.9	1
7	1. The graduate school administers all graduate degree programs and grants the degrees for all disciplines.	1	0.8	3
	2. Some other academic college or school administers and recommends all degrees.			
	3. An interdepartmental or intercollegiate program, planned on an individual basis and administered by an interdisciplinary council or other structure, links graduate study in physical education.	21	16.3	2

Nearly two-thirds (65.1 per cent) of the respondents felt that a graduate center with social and study facilities should be provided on a continuous basis (item 6). Almost 83 per cent of the professionals indicated that the graduate program should be administered by the graduate school (item 7).

#### Curricular Concepts of Master's Degree Programs

The results of the responses from American professionals to questionnaire items concerning curricular concepts are analyzed in the following paragraphs. The responses of the professionals to each individual item are presented in Table III.

Most of the professionals (96.2 per cent) agreed that some course offerings for the master's degree should be open to graduate students only (item 8). The majority (83.3 per cent) of the respondents felt that a research experience or field experience should be part of the requirement for a master's degree (item 9), and 88.6 per cent agreed that the acquisition of comprehensive knowledge with a major area of concentration was required (item 10).

More than half of the respondents (62.3 per cent) indicated that a minimum of one semester, quarter, or summer session in residence should be required (item 11).

TABLE III

RESPONSES OF THE PROFESSIONALS IN THE UNITED STATES TO CURRICULAR  
CONCEPTS OF THE MASTER'S DEGREE PROGRAM

Item	Curricular Concepts	N	% of responses					Mean
			SA	A	U	D	SD	
8	Some course offerings for the Master's degree are open to graduate students only.	132	84.1	12.1	0.8	0.8	2.3	4.75
9	A research experience or production is part of the requirement for a Master's Degree.	132	59.8	23.5	8.3	3.8	4.5	4.30
10	The acquisition of comprehensive knowledge with a major area of concentration is required.	132	56.8	31.8	7.6	3.0	0.8	4.00
11	A minimum of one semester, quarter, or summer session in residence in full-time graduate study of research is required.	132	44.7	17.6	12.9	15.9	9.1	3.72
12	Half of the Master's program is devoted to a prescribed core of courses and the remaining half is devoted to student's areas of interest.	132	24.2	31.8	18.9	19.2	5.3	3.50

(table continues)

TABLE IIF--Continued

Item	Curricular Concepts	N	% of responses					Mean
			SA	A	U	D	SD	
13	Master's program is an extension of the bachelor's degree program in the same field. Comprehensive knowledge should be acquired within the major field of study prior to proceeding with graduate work.	130	37.7	37.7	12.3	7.7	4.6	3.96
14	Master's programs support the need for socially active broad-thinking generalists.	132	9.8	36.4	29.5	18.2	6.1	3.25
15	Provision is made at the Master's level to fulfill the needs of students interested in either "teaching" or "research."	132	40.2	43.2	5.3	9.1	2.3	4.05
16	A thesis is optional at the Master's level.	131	31.3	46.6	4.6	9.2	8.4	3.83

(table continues)

TABLE III--Continued

Item	Curricular Concepts	N	%	Rank
17	If the Master's student writes a thesis, he should receive:			
	1. no credit	2	1.5	5
	2. 1-3 semester hours of credit	15	11.5	3
	3. 4-6 semester hours of credit	86	66.2	1
	4. 7-9 semester hours of credit	23	17.7	2
5. other	4	3.1	4	
18	If the Master's student does one or more research projects rather than the theses, he should receive:			
	1. no credit	10	7.8	3
	2. 1-3 semester hours of credit	85	65.9	1
	3. 4-6 semester hours of credit	26	20.2	2
4. other	8	6.2	4	
19	Master's students should earn at least			
	1. 15-17 semester hours of credit in the major	16	12.2	3
	2. 18-20 semester hours of credit in the major	84	64.1	1
3. other	31	23.7	2	
20	Minor or support fields at the Master's level should consist of:			
	1. 6-9 semester hours of credit	56	62.7	2
	2. 10-12 semester hours of credit	57	63.5	1
3. other	18	13.7	3	

Only 56 percent of respondents felt that half of the master's program should be devoted to a prescribed core of courses and the remaining half devoted to students' areas of interest (item 12).

Three-fourths (75.4 per cent) of the respondents agreed that the master's program is an extension of the bachelor's program in the same field and that comprehensive knowledge should be acquired within the major field of study prior to proceeding with graduate work (item 13). However, a lack of agreement among the professionals was apparent regarding the master's program's support of the need for socially active, broad-thinking generalists (item 14). Eighty-three per cent of the professionals felt that provisions should be made at the master's level to fulfill the needs of students interested in either teaching or research (item 15), but over 77 per cent of the respondents preferred an optional thesis at the master's level (item 16). Nearly two-thirds of the respondents agreed that the student should receive four to six semester hours of credit for a thesis (item 17) and one to three hours of credit for one or more research projects in lieu of a thesis (item 18). The majority of the professionals (64.1 per cent) believed that the master's student should earn at least eighteen to twenty hours of credit in the major (item 19), but an apparent lack of agreement

existed among the professionals regarding the number of semester hours of credit required for the minor or supporting fields (item 20).

#### Admission Requirements

The results of the responses from American professionals to questionnaire items concerning admission to the master's degree program are analyzed in the following paragraphs. The responses of the professionals to each individual item are presented in Table IV.

Virtually all of the professionals (99.2 per cent) agreed that students seeking admission to master's degree programs in physical education should hold a bachelor's degree from an accredited institution (item 21), and three-fourths of the respondents felt that the student should have completed a major in physical education or its equivalent in comparable course work (item 22). More than half (52.3 per cent) agreed that a student should be required to take the aptitude portion of the Graduate Record Examination (item 23), but 73.8 per cent of the respondents disagreed about the necessity for requiring the Miller Analogies Test (item 24). Seventy-four per cent of the respondents indicated that it was desirable for an appropriate administrator and/or faculty member to interview the student for the purpose of admission (item 25).

TABLE IV  
 RESPONSES OF THE PROFESSIONALS IN THE UNITED STATES  
 TO ADMISSION REQUIREMENTS

Item	Admission Requirements	N	% of responses	
			Yes	No
21	Hold a Bachelor's degree from an accredited institution	132	99.2	0.8
22	Have completed a major in physical education or its equivalent in comparable course work	131	75.6	24.4
23	Be required to take the aptitude portion of the Graduate Record Examination	130	52.3	47.7
24	Be required to take the Miller Analogies Test	130	26.2	73.8
25	Be interviewed by the appropriate administrator and/or faculty member of the department	131	74.0	26.0
26	Demonstrate competency in both verbal and written communication skills	130	96.9	3.1
27	Meet the overall grade point average set by the Graduate School and/or the Department of Physical Education	132	97.7	2.3

(table continues)

TABLE IV--Continued

Item	Admission Requirements	N	% of responses		Rank
			Yes	No	
28	Submit letter(s) of recommendation concerning his academic program and scholastic ability	132	82.6	17.4	
Item	Admission Requirement	N	%		Rank
29	Which of following undergraduate grade point averages (on the basis of A = 4.0) should be required as a minimum for students seeking admission to the Master's program?				
	1. 2.00 - 2.49	8	6.2		4
	2. 2.50 - 2.74	53	40.3		1
	3. 2.75 - 2.99	44	33.8		2
	4. 3.00 and above	25	19.2		3
30	To consider a student for admission on probationary status, his undergraduate grade point average (on the basis of A = 4.0) should not be lower than:				
	1. 2.0 - 2.2	27	20.9		3
	2. 2.3 - 2.5	58	45.0		1
	3. 2.6 - 2.8	44	36.1		2

Data for items 26, 27, and 28 show that most of the professionals (96.9 per cent, 97.7 per cent, and 82.6 per cent, respectively) agreed that students should demonstrate competency in both verbal and written communications skills, meet the overall grade point average set by the graduate school and/or the department of physical education, and submit letters of recommendation concerning their academic programs and scholastic ability.

Regarding the grade point average for undergraduate students (on the basis of A = 4.00), there was lack of agreement among the professionals about the minimum grade point average for students seeking admission to the master's program (item 29). There was also a lack of agreement among the respondents in relation to considering a student for admission on probationary status based on his or her undergraduate grade point average (item 30).

#### Retention Requirements

The results of the responses from American professionals to questionnaire items concerning retention in the master's degree program are analyzed in the following paragraph. The responses of the professionals to each individual item are presented in Table V.

A large majority (84.7 per cent) of the professionals indicated that a cumulative grade point average of 3.00 (on the basis of A = 4.00) should be maintained as a

TABLE V  
 RESPONSES OF THE PROFESSIONALS IN THE UNITED STATES  
 TO THE RETENTION REQUIREMENTS

Item	Retention Requirement	N	%	Rank
31	Which of the following graduate cumulative GPA (on the basis of A = 4.0) should be maintained as a minimum for the Master's Degree:			
	1. 2.00 - 2.59	0	0.0	4
	2. 2.60 - 2.74	5	3.8	3
	3. 2.75 - 2.99	15	11.5	2
	4. 3.00 and above	111	84.7	1
32	All the requirements for the Master's Degree should be completed within:			
	1. 2 years from the date of first enrollment	4	3.1	5
	2. 3 years from the date of first enrollment	16	12.2	3
	3. 4 years from the date of first enrollment	11	8.4	4
	4. 5 years from the date of first enrollment	67	51.1	1
	5. _____ years from the date of first enrollment	33	25.2	2

minimum for the master's degree (item 31). Just over half (51.1 per cent) of the respondents agreed that a master's program should be completed within five years from the initial enrollment date (item 32).

The following paragraphs describe the opinions of the professionals with regard to six questions concerning various problems related to retention. The responses of the professionals to each individual item are presented in Table VI.

Most of the professionals (94.0 per cent) strongly agreed or agreed that, if the student's cumulative grade point average fell below 3.00 (as indicated in item 31), he or she should be placed on probation and notified officially of that fact (item 33). Over 97 per cent of the respondents believed that the student admitted to graduate school on a probationary basis should achieve at least the minimum grade point average (3.00, according to item 31) in order to apply for a change to regular status (item 34). In addition, 72.7 per cent of the participants agreed that, if a student's cumulative grade point average falls below 3.00 (according to item 31) after being on probation for one academic term, he or she should be dropped from the master's degree program (item 35).

The majority of the professionals (87.1 per cent) indicated that there should be periodic departmental review

TABLE VI

THE OPINIONS OF THE PROFESSIONALS IN THE UNITED STATES TO  
PROBLEMS SURROUNDING RETENTION REQUIREMENTS

Item	Retention	% of responses						Mean
		N	SA	A	U	D	SD	
33	Students who have been accepted in the Master's Degree program and whose cumulative GPA falls below the minimum GPA you have designated above (31) should be placed on probation and notified officially.	132	72.0	22.0	2.3	1.5	2.3	4.59
34	Students admitted to graduate school on a probationary basis should achieve at least the minimum GPA you have designated above (31) in order to apply for a change to regular status.	132	73.5	24.2	1.5	0.0	0.8	4.69
35	Students whose cumulative GPA is below your minimum designation (31) after being on probation for one academic term should be dropped from the Master's Degree program.	132	43.2	29.5	17.4	9.8	0.0	4.01

(table continues)

TABLE VI--Continued

Item	Retention	N	SA	A	U	D	SD	Mean
36	There should be periodic departmental reviews of each student's work for the purpose of determining his progress in the program.	132	43.2	43.9	6.8	5.3	0.8	4.23
37	Student GPA should be computed at the end of each academic term and should serve in part as the basis for determining whether a student is clear to register for the following academic term.	132	43.2	40.9	9.1	5.3	1.5	4.18
38	A comprehensive examination should be required for all Master's students approximately midway through the program and should serve as a basis for determining the student's potential for continuation in the program.	132	15.2	12.1	25.0	32.6	15.2	2.99

of each student's work for the purpose of assessing his or her progress in the program (item 36), and 84.1 per cent also favored calculating the student's grade point average at the end of each academic term and agreed that the grade point average should serve in part as the basis for determining whether a student is cleared to register for the following academic term (item 37). The professionals did not agree, however, on the need for a comprehensive examination required for all master's students approximately midway through the program that would serve as a basis for determining each student's potential for continuation in the program (item 38).

#### Core Course Requirements

The opinions of the American professionals concerning the twenty-two courses suggested in the questionnaire for the identification of a common core in the master's degree program in physical education are shown in Table VII. This table also reflects the rank order of the courses as indicated by the mean scores.

The respondents agreed and strongly agreed on only four courses for inclusion in the common core requirement: Research Perspectives in Physical Education (93.0 per cent), Introductory Statistical Methods (78.5 per cent), Physiology of Exercise (57.7 per cent), and Seminar: Research

TABLE VII  
 RESPONSES OF THE PROFESSIONALS IN THE UNITED STATES TO THE  
 COMMON CORE REQUIREMENTS

Rank	Core Course	N	% of responses							Mean
			SA	A	U	D	SD			
1	Research Perspectives in Physical Education	128	80.5	12.5	3.9	0.8	2.3	4.68		
2	Introductory Statis- tical Methods	126	57.1	21.4	11.1	6.3	4.0	4.21		
3	Physiology of Exercise	118	31.4	26.3	15.3	16.9	10.2	3.51		
4	Seminar: Research Problem	116	31.0	20.7	24.1	16.4	7.8	3.50		
5	Issues in Physical Education	113	21.2	29.2	25.7	15.0	8.0	3.38		
6	Mechanical Analysis of Motor Skills	118	22.7	27.1	22.0	20.3	7.6	3.37		
7	Psychology of Motor Learning	113	21.2	23.0	26.5	22.1	7.1	3.29		

(table continues)

TABLE VII--Continued

Rank	Core Course	N	% of responses						Mean
			SA	A	U	D	SD		
8	Historical and Philo- sophical Bases of Physical Education	116	23.3	21.6	25.9	18.1	11.2	3.27	
9	Curriculum Development in Physical Education	115	10.1	27.8	22.6	21.7	8.7	3.27	
10	Perceptual Motor Learning	113	18.6	27.4	21.2	23.9	8.8	3.23	
11	Administrative Prob- lems in Physical Education in Schools and Colleges	111	21.6	18.9	21.6	23.4	14.4	3.05	
12	Cardiovascular Physi- ology of Exercise	113	15.0	18.6	24.8	31.0	10.6	2.96	
13	Advance Kinesiology	113	12.4	12.4	33.6	34.5	7.1	2.88	
14	Special Problem	108	12.0	17.6	32.4	20.4	17.6	2.86	

(table continues)

TABLE VII--Continued

Rank	Core Course	N	% of responses					SD	Mean
			SA	A	U	D	SD		
15	Physical Education for the Atypical	110	7.3	25.5	26.4	24.5	16.4	2.82	
16	Professional Preparation in Physical Education	110	10.0	21.8	21.8	30.9	15.5	2.80	
17	Adopted Physical Education	108	8.3	20.4	25.9	28.7	16.7	2.75	
18	Neuromuscular Physiological Exercise	109	11.0	15.6	22.9	36.7	13.8	2.73	
19	Sport in the American Culture	112	8.9	12.5	32.1	33.0	13.4	2.70	
20	Supervision in Physical Education	109	5.5	19.3	28.4	29.4	17.4	2.66	
22	Sport: A Philosophical Inquiry	109	5.5	13.8	27.5	39.4	13.8	2.57	
22	Sports in Contemporary Society	109	3.7	15.6	31.2	32.1	17.4	2.56	

Problems (51.7 per cent). On the other hand, the professionals disagreed and strongly disagreed concerning the inclusion of three courses in the common core requirement: Sport: A Philosophical Inquiry (53.2 per cent), Physical Education for the Atypical (50.9 per cent), and Neuromuscular Physiological Exercise (50.5 per cent). The responses concerning the rest of the courses suggested for inclusion in the common core requirement indicated a lack of agreement among the professionals.

#### Survey of Master's Degree Programs in Thailand

##### Patterns and Organizations

The results of the responses from the panel of Thai professionals to questionnaire items concerning patterns and organizations are analyzed in the following paragraphs. Responses of the panel to each individual item are presented in Table VIII.

All members of the panel agreed that each graduate faculty member should be granted a sabbatical leave in each seven-year period of service for the purpose of self-improvement and professional service (item 2), that research and teaching fellowships and assistantships should be granted readily (item 4), and that a graduate center with social and study facilities should be provided continuously for all university graduate students (item 6).

TABLE VIII

RESPONSES OF THE PANEL IN THAILAND TO PATTERNS AND ORGANIZATIONS  
OF INSTITUTIONS OF THE MASTER'S DEGREE PROGRAMS

Item	Patterns and Organizations	N	%	Rank
1	The graduate faculty should be 1. distinctly identified 2. partially identified	3 2	60 40	1 2
2	Each graduate faculty member should be granted sabbatical leave in each seven-year period of service for the purpose of self-improvement and professional service. 1. Yes 2. No	5 0	100 0	1 0
3	Teaching competence should be recognized first in terms of 1. salary increases 2. reward 3. promotions in rank	1 3 1	20 60 20	2 1 2
4	Research and teaching fellowships and assistant- ships should be granted 1. readily 2. rarely 3. never	5 0 0	100 0 0	1 0 0

(table continues)

TABLE VIII--Continued

Item	Patterns and Organizations	N	%	Rank
5	Off campus resources for field experiences should be provided 1. continuously 2. occasionally 3. never	4 1 0	80 20 0	1 2 0
6	A graduate center with social and study facilities should be provided for all university graduate students 1. continuously 2. occasionally 3. never	5 0 0	100 0 0	1 0 0
7	The graduate program administration should exist under the following pattern: 1. The graduate school administers all graduate degree programs and grants the degrees for all disciplines. 2. Some other academic college or school administers and recommends all degrees. 3. An interdepartmental or intercollegiate program, planned on an individual basis and administered by an interdisciplinary council or other structure, links graduate study in physical education.	4 0	80 0	1 0
		1	20	2

Eighty per cent of the panel believed that off-campus resources for field experiences should be provided continuously (item 5) and that the graduate program administration should exist under the pattern that the graduate school administers all graduate degree programs and grants degrees for all disciplines, including health education, recreation education, and/or dance education (item 7). Sixty per cent of the panel agreed that the graduate faculty should be distinctly identified (item 1) and that teaching competence should be recognized first in terms of awards (item 3).

#### Curricular Concepts of Master's Degree Programs

The results of the responses from the panel of Thai professionals to questionnaire items concerning curricular concepts are analyzed in the following paragraphs. The responses of the panel to each individual item are presented in Table IX.

All members of the panel agreed that a research or field experience should be part of the requirement for a master's degree (item 9), that the acquisition of comprehensive knowledge with a major area of concentration should be required (item 10), and that provision should be made at the master's level to fulfill the needs of students interested in either teaching or research (item 15). Eighty per cent of the panel agreed that some course

TABLE IX

RESPONSES OF THE PANEL IN THAILAND TO CURRICULAR  
CONCEPTS OF THE MASTER'S DEGREE PROGRAMS

Item	Curricular Concepts	N	% of responses					Mean
			SA	A	U	D	SD	
8	Some course offerings for the Master's degree are open to graduate students only.	5	20	60	0	0	20	3.6
9	A research experience or production is part of the requirement for a Master's Degree.	5	100	0	0	0	0	5.0
10	The acquisition of comprehensive knowledge with a major area of concentration is required.	5	60	40	0	0	0	4.6
11	A minimum of one semester, quarter, or summer session in residence in full-time graduate study of research is required.	5	60	0	40	0	0	4.2
12	Half of the Master's program is devoted to a prescribed core of courses and the remaining half is devoted to student's areas of interest.	5	40	0	20	0	40	3.0

(table continues)

TABLE IX--Continued

Item	Curricular Concepts	N	% of responses					Mean
			SA	A	U	D	SD	
13	Master's program is an extension of the bachelor's degree program in the same field. Comprehensive knowledge should be acquired within the major field of study prior to proceeding with graduate work.	5	20	20	20	20	20	3.0
14	Master's programs support the need for socially active broad-thinking generalists.	5	20	60	20	0	0	4.0
15	Provision is made at the Master's level to fulfill the needs of students interested in either "teaching" or "research."	5	0	100	0	0	0	4.0
16	A thesis is optional at the Master's level.	5	0	20	0	80	0	1.6

(table continues)

TABLE IX -- Continued

Item	Curricular Concepts	N	%	Rank
17	If the Master's student writes a thesis, he should receive:			
	1. no credit	0	0	0
	2. 1-3 semester hours of credit	1	20	2
	3. 4-6 semester hours of credit	3	60	1
	4. 7-9 semester hours of credit	1	20	2
5. other	0	0	0	
18	If the Master's student does one or more research projects rather than the theses, he should receive:			
	1. no credit	1	20	2
	2. 1-3 semester hours of credit	3	60	1
	3. 4-6 semester hours of credit	1	20	2
4. other	0	0	0	
19	Master's students should earn at least			
	1. 15-17 semester hours of credit in the major	0	0	0
	2. 18-20 semester hours of credit in the major	3	60	1
3. other	2	40	2	
20	Minor or support fields at the Master's level should consist of:			
	1. 6-9 semester hours of credit	0	0	0
	2. 10-12 semester hours of credit	5	100	1
3. other	0	0	0	

offerings for the master's degree should be open to graduate students only (item 8) and that the master's program should support the need for socially active, broad-thinking generalists (item 14). More than half of the panel (60 per cent) indicated that a minimum of one semester, quarter, or summer session in residence in full-time graduate study should be required (item 11).

A lack of agreement among the panel members was apparent with regard to devoting half of the master's program to a prescribed core of courses and the remaining half to the students' areas of interest (item 12) and considering the master's program as an extension of the bachelor's program for which comprehensive knowledge should be required within the major field of study prior to the beginning of graduate work (item 13). In addition, the Thai panel did not agree on whether the thesis should be optional at the master's level (item 16).

Responses to items 17, 18, and 19 illustrated that 60 per cent of the panel believed that, if a student writes a thesis, he or she should receive four to six hours of credit for it; that, if the student does one or more research projects rather than a thesis, he or she should receive one to three semester hours of credit for them; and that master's students should earn at least eighteen to twenty semester hours of credit in the major. All panel

members agreed that minor or supporting fields should consist of ten to twelve semester hours of credit (item 20).

#### Admission Requirements

The results of the responses from the panel of Thai professionals to questionnaire items concerning admission to the master's program are analyzed in the following paragraphs. The responses of the panel to each individual item are presented in Table X.

All members of the panel agreed that students seeking admission to master's degree programs in physical education should hold a bachelor's degree from an accredited institution (item 21), have completed a major in physical education or its equivalent in comparable course work (item 22), be required to take the aptitude portion of the Graduate Record Examination (item 23), not be required to take the Miller Analogies Test (item 24), be interviewed by the appropriate administrator and/or faculty members of the department (item 25), demonstrate competence in both verbal and written communication skills (item 26), and submit letters of recommendation concerning their academic and scholastic ability (item 28).

Seventy-five per cent of the panel agreed that students seeking admission to master's degree programs in physical education should meet the overall grade point average set by the graduate school and/or the department

TABLE X

RESPONSES OF THE PANEL IN THAILAND  
TO ADMISSION REQUIREMENTS

Item	Admission Requirements	N	% of responses	
			Yes	No
21	Hold a Bachelor's degree from an accredited institution	5	100.0	0.0
22	Have completed a major in physical education or its equivalent in comparable course work	5	100.0	0.0
23	Be required to take the aptitude portion of the Graduate Record Examination	5	100.0	0.0
24	Be required to take the Miller Analogies Test	3	0.0	100.0
25	Be interviewed by the appropriate administrator and/or faculty member of the department	5	100.0	0.0
26	Demonstrate competency in both verbal and written communication skills	5	100.0	0.0
27	Meet the overall grade point average set by the Graduate School and/or the Department of Physical Education	4	75.0	25.0

(table continues)

TABLE X --Continued

Item	Admission Requirements	N	% of responses		Rank
			Yes	No	
28	Submit letter(s) of recommendation concerning his academic program and scholastic ability	4	100.0	0.0	
Item	Admission Requirement	N	%		Rank
29	Which of following undergraduate grade point averages (on the basis of A = 4.0) should be required as a minimum for students seeking admission to the Master's program?				
	1. 2.00 - 2.49	2	40.0		1
	2. 2.50 - 2.74	2	40.0		1
	3. 2.45 - 2.99	1	20.0		2
	4. 3.00 and above	0	0.0		0
30	To consider a student for admission on probationary status, his undergraduate grade point average (on the basis of A = 4.0) should not be lower than:				
	1. 2.0 - 2.2	2	40.0		2
	2. 2.3 - 2.5	3	60.0		1
	3. 2.6 - 2.8	0	0.0		0

of physical education (item 27). A lack of agreement among the panel members was apparent in regard to the minimum undergraduate grade point average (on the basis of A = 4.00) for students seeking admission to the master's program (item 29), but 60 per cent of the respondents indicated that for a student to be considered for probationary admission his or her undergraduate point average (on the basis of A = 4.00) should not be lower than 2.50 (item 30).

#### Retention Requirements

The results of the responses from the panel of Thai professionals to questionnaire items concerning retention in the master's degree program are analyzed in the following paragraph. The responses of the panel to each individual item are presented in Table XI.

The majority of the panel (80 per cent) indicated that a cumulative grade point average of 3.00 (on the basis of A = 4.00) should be maintained as a minimum for the master's degree (item 31). The same percentage concluded that the master's program should be completed within five years from the date of initial enrollment (item 32).

The following paragraph describes the opinions of the Thai professionals with regard to six questions concerning various problems related to retention. The

TABLE XI  
 RESPONSES OF THE PANEL IN THAILAND TO THE  
 RETENTION REQUIREMENTS

Item	Retention Requirement	N	%	Rank
31	Which of the following graduate cumulative GPA (on the basis of A = 4.0) should be maintained as a minimum for the Master's Degree:			
	1. 2.00 - 2.59	0	0.0	0
	2. 2.60 - 2.74	0	0.0	0
	3. 2.75 - 2.99	1	20.0	2
	4. 3.00 and above	4	80.0	1
32	All the requirements for the Master's Degree should be completed within:			
	1. 2 years from the date of first enrollment	0	0.0	0
	2. 3 years from the date of first enrollment	0	0.0	0
	3. 4 years from the date of first enrollment	1	20.0	2
	4. 5 years from the date of first enrollment	4	80.0	1
	5. ___ years from the date of first enrollment	0	0.0	0

responses of the panel to each individual item are presented in Table XII.

All members of the panel strongly agreed or agreed that, if a student's cumulative grade point average falls below 3.00 (according to item 31), he or she should be placed on probation and notified officially of that fact (item 33); that a student admitted to graduate school on a probationary basis should achieve at least the minimum grade point average (3.00, according to item 31) in order to apply for change to regular status (item 34); that there should be periodic departmental review of each student's work for the purpose of determining his or her progress in the program (item 36); that the student's grade point average should be computed at the end of each academic term and should serve in part as the basis for determining whether he or she is cleared to register for the following academic term (item 37); and that a comprehensive examination should be required for all master's students approximately midway through the program which would serve as a basis for determining his or her potential for continuation in the program (item 38). However, a lack of agreement among the panel members was apparent concerning whether students whose cumulative grade point average fell below 3.00 (according item 31) after being on probation for one academic term should be dropped from the master's degree program (item 35).

TABLE XII  
RESPONSES OF THE PANEL IN THAILAND TO RETENTION REQUIREMENTS

Item	Retention	N	% of responses					Mean
			SA	A	U	D	SD	
33	Students who have been accepted in the Master's Degree program and whose cumulative GPA falls below the minimum GPA you have designated above (31) should be placed on probation and notified officially.	5	60	40	0	0	0	4.60
34	Students admitted to graduate school on a probationary basis should achieve at least the minimum GPA you have designated above (31) in order to apply for a change to regular status.	4	75	25	0	0	0	4.75
35	Students whose cumulative GPA is below your minimum designation (31) after being on probation for one academic term should be dropped from the Master's Degree program.	4	0	25	25	25	25	2.50

(table continues)

TABLE XII--Continued

Item	Retention	N	SA	A	U	D	SD	Mean
36	There should be periodic departmental reviews of each student's work for the purpose of determining his progress in the program.	4	75	25	0	0	0	4.75
37	Student GPA should be computed at the end of each academic term and should serve in part as the basis for determining whether a student is clear to register for the following academic term.	4	25	75	0	0	0	4.25
38	A comprehensive examination should be required for all Master's students approximately midway through the program and should serve as a basis for determining the student's potential for continuation in the program.	4	0	100	0	0	0	4.00

### Core Course Requirements

The opinions of the panel of Thai professionals concerning the twenty-two courses suggested in the questionnaire for the identification of a common core in the master's degree program in physical education are shown in Table XIII. This table also reflects the rank order of the courses as indicated by the mean scores.

All of the members of the panel agreed and strongly agreed on seven courses for inclusion in the common core requirement: Mechanical Analysis of Motor Skills, Seminar: Research Problems, Research Perspectives in Physical Education, Introductory Statistical Methods, Psychology of Motor Learning, Curriculum Development in Physical Education, and Physiology of Exercise. Eighty per cent of the respondents agreed that Supervision in Physical Education and Perceptual Motor Learning should be included in the common core requirement, and 75 per cent of the panel members agreed that the common core requirement should consist of the following courses: Sport in Contemporary Society, Sport: A Philosophical Inquiry, Physical Education for the Atypical, Adapted Physical Education, and Special Problems. Only 60 per cent of the respondents agreed to include Cardiovascular Physiology of Exercise in the common core requirement.

All of the respondents disagreed and strongly disagreed concerning the inclusion of Sport in American Culture

TABLE XIII

RESPONSES OF THE PANEL IN THAILAND TO THE  
COMMON CORE COURSE REQUIREMENTS

Rank	Core Course	N	% of responses							Mean
			SA	A	U	D	SD	Mean		
1	Mechanical Analysis of Motor Skills	5	100.0	0.0	0.0	0.0	0.0	0.0	5.00	
2	Seminar: Research Problem	5	80.0	20.0	0.0	0.0	0.0	0.0	4.80	
3	Research Perspectives in Physical Education	5	60.0	40.0	0.0	0.0	0.0	0.0	4.60	
3	Introductory Statistical Methods	5	60.0	40.0	0.0	0.0	0.0	0.0	4.60	
3	Psychology of Motor Learning	5	60.0	40.0	0.0	0.0	0.0	0.0	4.60	
3	Curriculum Development in Physical Education	5	60.0	40.0	0.0	0.0	0.0	0.0	4.60	
3	Physiology of Exercise	5	60.0	40.0	0.0	0.0	0.0	0.0	4.60	

(table continues)

TABLE XIII--Continued

Rank	Core Course	N	% of responses							Mean
			SA	A	U	D	SD			
8	Sport in Contemporary Society	4	50.0	25.0	25.0	0.0	0.0	0.0	4.25	
9	Supervision in Physical Education	5	40.0	40.0	0.0	20.0	0.0	0.0	4.00	
9	Perceptual Motor Learning	5	40.0	40.0	0.0	20.0	0.0	0.0	4.00	
9	Sports: A Philosophical Inquiry	4	25.0	50.0	25.0	0.0	0.0	0.0	4.00	
12	Cardiovascular Physiology of Exercise	5	40.0	20.0	20.0	20.0	0.0	0.0	3.80	
13	Physical Education for the Atypical	4	0.0	75.0	0.0	25.0	0.0	0.0	3.50	
13	Adopted Physical Education	4	0.0	75.0	0.0	25.0	0.0	0.0	3.50	
16	Historical and Philosophical Bases of Physical Education	4	25.0	0.0	50.0	25.0	0.0	0.0	3.25	

(table continues)

TABLE XIII--Continued

Rank	Core Course	N	% of responses							Mean
			SA	A	U	D	SD			
17	Advanced Kinesiology	5	40.0	0.0	20.0	20.0	20.0	20.0	3.20	
17	Neuromuscular Physiological Exercises	5	40.0	0.0	20.0	20.0	20.0	20.0	3.20	
17	Administrative Problem in P.E. in Schools and Colleges	5	40.0	0.0	20.0	20.0	20.0	20.0	3.20	
20	Issues in Physical Education	4	0.0	0.0	75.0	25.0	0.0	0.0	2.75	
20	Professional Preparation in Physical Education	4	0.0	25.0	50.0	25.0	0.0	0.0	2.75	
22	Sports in American Culture	4	0.0	0.0	25.0	50.0	25.0	25.0	2.00	

in the common core requirement. The responses concerning the rest of the courses suggested for inclusion in the common core requirement indicated a lack of agreement among the panel members.

## CHAPTER V

### SUMMARY, FINDINGS, AND RECOMMENDATIONS

#### Summary

The main purpose of this study was to yield a description of the development of a model for the master's degree program in physical education that would provide appropriate guidelines for colleges and universities in Thailand with the intention of establishing a graduate program leading to that degree. The study sought to determine 1) the major curricular concepts of the master's degree program, 2) courses that might best be offered as a core requirement, and 3) the areas in physical education that are appropriate for scholarly study and would be of high priority, with due attention to the need for and availability of resources required for the operation of such programs. The study also sought to develop a systematic approach for student admission and a retention plan that would be compatible with the current trends and administration of the Department of Physical Education in Thailand.

The subjects selected for the study were 156 professionals from institutions of higher education in the United States. The members of a professional panel of physical educators in Thailand were also surveyed. A

questionnaire, the "Survey of Master's Degree Programs in Physical Education," was administered to both of these groups. The participants were asked to respond to each concept in the questionnaire with what appeared to be the most appropriate model for graduate study in physical education for the master's degree. Means, percentages, and rank orders were computed for each respondent group based on the perceived and preferred models.

The study was reported in five parts. The first part investigated the patterns and organizations of graduate programs in physical education, the second investigated the major curricular concepts of master's degree programs, the third reported the criteria for admission to the graduate program in physical education, the fourth reported the retention requirements of the program, and the fifth reported on the core of course requirements for the graduate program in physical education.

#### Findings

Based on the responses received from the professionals in the United States and the panel in Thailand, a consensus was apparent between the two groups with regard to a number of the questions and statements in the questionnaire. Thus, the following conclusions appear to constitute an appropriate model for graduate programs in physical education in both the United States and Thailand.

### Patterns and Organizations

Seven patterns and organizations concepts were incorporated in this study. The majority agreement concerning each of them was used as an appropriate model for patterns and organizations of master's degree programs in physical education.

1. Sixty per cent of the professionals in Thailand and 72 per cent of those in the United States agreed that the graduate faculty should be distinctly identified.

2. Of the professionals in Thailand and the United States, 100 per cent and 86 per cent, respectively, indicated that each graduate faculty member should be granted a sabbatical leave in each seven-year period of service for the purpose of self-improvement and professional service.

3. There was a lack of agreement between the professionals in Thailand and the United States regarding recognition of teaching competence. Sixty per cent of Thai professionals felt that teaching competence should be recognized first in terms of rewards, whereas 61 per cent of the professionals in the United States felt that teaching competence should be recognized first in terms of salary increases.

4. One hundred per cent of the professionals in Thailand and 90 per cent of those in the United States agreed that research and teaching fellowships and assistantships should be granted readily.

5. Eighty per cent of the Thai professionals and 59 per cent of those in the United States indicated that off-campus resources for field experiences should be provided continuously.

6. One hundred percent of the professionals in Thailand and 65 per cent of those in the United States pointed out that a graduate center with social and study facilities should be provided continuously for all university graduate students.

7. Eighty per cent of the professionals in Thailand and 83 per cent of those in the United States believed that the graduate program administration should exist under the graduate school and administer all graduate degree programs and grants.

#### Curricular Concepts of Master's Degree Programs

Thirteen curricular concepts were employed in this study. The majority agreement concerning each of them was used as an appropriate model for curricular concepts of master's degree programs in physical education.

1. Eighty per cent of the professionals in Thailand and 96 per cent of those in the United States agreed that some course offerings for the master's degree should be open to graduate students only.

2. One hundred percent of the professionals in Thailand and 83 per cent of those in the United States indicated

that a research experience or field experience should be part of the requirement for the master's degree.

3. One hundred per cent of the professionals in Thailand and 87 per cent of those in the United States agreed that the acquisition of comprehensive knowledge with a major area of concentration is required.

4. Sixty per cent of the Thai professionals and 62 per cent of those in the United States agreed that a minimum of one semester, quarter, or summer session in residence in full-time graduate study should be required.

5. Of the U.S. respondents, 56 per cent agreed that half of the master's program is devoted to a prescribed core of courses and the remaining half is devoted to students' areas of interest. A lack of agreement appeared among the professionals in Thailand regarding this concept.

6. Seventy-five per cent of the professionals in the United States agreed that the master's program is an extension of the bachelor's program in the same field and that comprehensive knowledge should be acquired within the major field of study prior to proceeding with graduate work. In contrast, Thai professionals did not agree on this concept.

7. Eighty per cent of the Thai professionals agreed that the master's degree program should support the need for socially active, broad-thinking generalists. Data from the professionals in the United States, however, indicated that they did not agree on this concept.

8. One hundred per cent of the professionals in Thailand and 83 per cent of those in the United States agreed that provision should be made at the master's level to fulfill the needs of students interested in either teaching or research.

9. Of the professionals in the United States, 78 per cent indicated that a thesis should be optional at the master's level. In contrast, 80 per cent of the professionals in Thailand disagreed with this concept.

10. Sixty per cent of the professionals in Thailand and 66 per cent of those in the United States stated that a student who writes a thesis should receive four to six semester hours of credit for it.

11. The professionals in both Thailand (60 per cent) and the United States (66 per cent) indicated that a student who does one or more research projects instead of a thesis should receive one to three semester hours of credit for them.

12. Of the professionals in Thailand and the United States, 60 and 64 per cent, respectively, agreed that master's students should earn at least eighteen to twenty semester hours of credit in their major field.

13. One hundred per cent of the Thai professionals indicated that minor or supporting fields at the master's level should consist of ten to twelve semester hours of

credit. A lack of agreement on this issue was apparent among the professionals in the United States.

#### Admission Requirements

Ten criteria for admission requirements were suggested by the investigator in this study. The majority agreement concerning each of them was used as an appropriate requirement for admission to the master's degree program in physical education.

Of the professionals in Thailand and the United States, 75 per cent or more agreed that students seeking admission to master's degree programs in physical education should

1. Hold a bachelor's degree from an accredited institution,
2. Have completed a major in physical education or its equivalent in comparable course work,
3. Be interviewed by the appropriate administrator and/or faculty members of the department;
4. Demonstrate competency in both verbal and written communication skills,
5. Meet the overall grade point average established by the graduate school and/or the department of physical education, and
6. Submit letters of recommendation concerning their academic program and scholastic ability.

One hundred per cent of the professionals in Thailand and 52 per cent of those in the United States agreed that students seeking admission to master's degree programs in physical education should be required to take the aptitude portion of the Graduate Record Examination. However, both professionals in Thailand (100 per cent) and the United States (74 per cent) disagreed that students should be required to complete the Miller Analogies Test.

Regarding the grade point average for undergraduate students (on the basis of A = 4.00), there was a lack of agreement among the professionals in the United States about the minimum grade point average for students seeking admission to the master's program with both regular status and probationary status. There was also a lack of agreement among the professionals in Thailand about the minimum grade point average for students seeking admission to the master's program, although 60 per cent agreed that, for a student to be considered for probationary admission, his or her undergraduate grade point average should not be lower than 2.30 to 2.50. In the NASPE admission standards for the master's degree program in physical education, overall grade point average, performance on relevant testing devices, recommendations, and interviews were listed as indicators for admission to graduate study (3, p. 56).

### Retention Requirements

Ten criteria for retention requirements were suggested by the investigator in this study. The majority agreement concerning each of them was used as an appropriate requirement for retention in the master's degree program in physical education.

Eighty per cent or more of the professionals in Thailand and 51 per cent or more of those in the United States suggested that the following retention requirements should be used for the graduate program in physical education.

1. A cumulative grade point average of 3.00 or higher (on the basis of A = 4.00) must be maintained as a minimum throughout the master's degree program.

2. All of the requirements of the master's program should be completed within five years from the date of first enrollment.

3. Master's students whose cumulative grade point average falls below 3.00 should be placed on probation and notified officially of that fact.

4. Students admitted to graduate programs on a probationary basis should achieve at least a minimum grade point average of 3.00 in order to apply for a change to regular status.

5. There should be a periodic departmental review of each student's status for the purpose of determining acceptable progress in the program.

6. Students' grade point averages should be computed at the end of each academic term and should serve in part as the basis for determining whether they are cleared to register for the following academic term.

Forty-three per cent of the professionals in the United States agreed that students whose cumulative grade point average is below 3.00 after being on probation for one academic term should be dropped from the master's degree program. A lack of agreement appeared among Thai professionals concerning this concept. One hundred per cent of the Thai professionals agreed that a comprehensive examination should be required for all master's students approximately midway through the program and should serve as the basis for determining their potential for continuation in it. The NASPE evaluation and retention standards suggested grade point average, qualifying examinations, and written and oral comprehensive examinations as methods for periodic evaluation for retention (3, p. 56).

#### Core Course Requirements

On the basis of the consensus among the professionals in the United States and Thailand, the following courses should be offered as a common core for master's degree programs in physical education in the United States:

1. Research Perspectives in Physical Education,
2. Introductory Statistical Methods,

3. Physiology of Exercise,
4. Seminar: Research Problems,
5. Issues in Physical Education, and
6. Mechanical Analysis of Motor Skills.

The core courses offered in the Physical Education Department at NTSU included courses similar to those recommended by the U.S. and Thai professionals. Core course requirements in 1978 included Research Perspectives in Health, Physical Education, and Recreation; Thesis; or Special Problems in Lieu of Thesis (1, pp. 233-237). These same courses comprise the core requirement for the thesis route to the Master of Science degree in physical education today. The non-thesis route to the Master of Science degree requires the Research Perspectives course along with Applications of Quantitative Procedures to Physical Education and a Special Problems course (2, p. 137). The standards established by the NASPE for curriculum included courses in research methodology and analytic methods as two of the required courses leading to a master's degree in physical education (3, p. 59).

#### Recommendations for the Master's Degree Program in Physical Education in Thailand

The following recommendations are made concerning curricular concepts, admission requirements, retention requirements, and core course requirements for the model

program in physical education at the master's degree level in Thailand.

Curricular Concepts of Master's Degree Programs

The master's program should

1. Ensure that students have a broad philosophical, educational, and scientific background on which to base their work as professionals;
2. Acquaint students with current thinking, practices, trends, and problems related to physical education;
3. Provide students with the evaluative, statistical, and research methodologies that will enable them to contribute to the advancement of the field;
4. Offer sequences of course work leading to specialization in a particular subdiscipline of physical education;
5. Be an extension of the bachelor's program in physical education and be designed so that it can equally serve as a terminal degree or as a broad base for more specialized work at the doctoral level;
6. Require that the thesis be optional at the master's level and give six semester hours of credit for completing the thesis;
7. Provide for experiences outside the field of physical education for all students; and

8. Comprise a minimum of thirty-six semester hours of credit and provide for a minimum of eighteen semester hours of course experience in the field of physical education and a minimum of twelve hours outside the major field.

#### Admission Requirements

Students seeking admission to the master's degree program in physical education should

1. Hold a bachelor's degree from a recognized institution,
2. Have completed a major in physical education or its equivalent in comparable course work,
3. Be required to take the aptitude portion of the Graduate Record Examination,
4. Be interviewed by the appropriate administrator and/or faculty members of the department,
5. Demonstrate competency in both verbal and written communication skills,
6. Demonstrate knowledge in the area of physical education and in general education,
7. Be required to have a cumulative undergraduate grade point average of 2.50 or higher (on the basis of A = 4.00), and
8. Submit letters of recommendation concerning their academic program and scholastic ability.

### Retention Requirements

The following requirements should be enforced for the retention of students in the master's degree program in physical education.

1. A graduate cumulative grade point average of 3.00 or higher (on the basis of A = 4.00) must be maintained as a minimum throughout the master's degree program.

2. All the requirements for the master's degree should be completed within five years from the date of first enrollment.

3. Students whose cumulative grade point average falls below 3.00 should be placed on probation and notified officially of that fact; they may apply for a change to regular status if their cumulative grade point average rises to 3.00 or higher.

4. Periodic departmental reviews of each student's work should be conducted for the purpose of determining his or her progress in the program. Students' grade point averages should be computed at the end of each academic term and should serve in part as the basis for determining whether they are cleared to register for the following academic term.

5. A comprehensive examination should be required for all master's students approximately midway through the program and should serve as a basis for determining their potential for continuation in it.

### Core Course Requirements

The following courses are potential graduate courses that would be offered as part of the core requirement for all master's students in physical education (it will be incumbent upon the persons responsible for making final programmatic decisions to determine what courses are most important in the core offering):

1. Mechanical Analysis of Motor Skills,
2. Seminar: Research Problems,
3. Research Perspectives in Physical Education,
4. Introductory Statistical Methods,
5. Physiology of Exercise, and
6. Issues in Physical Education.

The NASPE standards for graduate programs in physical education were similar to findings of this study with regard to admission requirements, retention requirements, curricular concepts, and objectives of the program. The standards also included provisions for personnel, library and library services, facilities, financial resources, education innovation, and technology for graduate education in physical education programs (3, pp. 54-62).

### Recommendations for Further Research

The model presented by the investigator is intended to provide guidelines for colleges and universities in Thailand that are interested in establishing a graduate

program leading to the master's degree in physical education. It should be kept in mind, however, that policies and requirements vary from one institution to another; therefore, programs and degrees should follow the mission and objectives of their respective colleges and universities, and the model should be adjusted as necessary by the institutions that are implementing it.

This study is based on responses gathered from physical education professionals in the United States and Thailand. It would be of interest to conduct further research on master's degrees in physical education, such as 1) a review of master's programs in physical education in other countries which could provide valuable information for further modification of the model and 2) implementation of the master's program in physical education (e.g., systematic evaluation of the model or the resources within a university setting).

## CHAPTER BIBLIOGRAPHY

1. North Texas State University, Bulletin of the Graduate School, Denton, North Texas State University, 1977-1978.
2. North Texas State University, Bulletin of the Graduate School, Denton, North Texas State University, 1984-1985.
3. "Standards for Graduate Programs in Physical Education," JOPERD, LV (February, 1984), 54-62.

APPENDIX A

SURVEY INSTRUMENT

## I. PATTERNS AND ORGANIZATIONS

Please select the number on each item where most appropriate by placing the number in the space.

194

- \_\_\_\_\_ 1. The graduate faculty should be (1) distinctly identified, or (2) partially identified.
- \_\_\_\_\_ 2. Each graduate faculty member should be granted a sabbatical leave in each seven-year period of service for the purpose of self-improvement and professional service.  
(1) yes, (2) no
- \_\_\_\_\_ 3. Teaching competence should be recognized first in terms of (1) salary increases, (2) awards, or (3) promotions in rank.
- \_\_\_\_\_ 4. Research and teaching fellowships and assistantships should be granted (1) readily, (2) rarely, or (3) never.
- \_\_\_\_\_ 5. Off-campus resources for field experiences should be provided (1) continuously, (2) occasionally, or (3) never.
- \_\_\_\_\_ 6. A graduate center with social and study facilities should be provided for all university graduate students (1) continuously, (2) occasionally, or (3) never.
- \_\_\_\_\_ 7. The graduate program administration should exist under the following pattern:  
(1) The graduate school administers all graduate degree programs and grants the degrees for all disciplines, including health education, recreation education and/or dance education.  
(2) Some other academic college or school administers and recommends all degrees.  
(3) An interdepartmental or intercollegiate program, planned on an individual basis and administered by an interdisciplinary council or other structure, links graduate study in health education, physical education, recreation, and/or dance education with other disciplines.

## II. CURRICULAR CONCEPTS OF THE MASTER'S DEGREE PROGRAMS

Listed below are a number of concepts concerning the goals and content of a Master's Degree program. Circle the number on the rating scale which best describes your opinion.

5 - Strongly Agree, 4 - Agree, 3 - Uncertain, 2 - Disagree,  
1 - Strongly Disagree

- 5 4 3 2 1 8) Some course offerings for the master's degree are open to graduate students only.
- 5 4 3 2 1 9) A research experience or production is part of the requirement for a master's degree.
- 5 4 3 2 1 10) The acquisition of comprehensive knowledge with a major area of concentration is required.
- 5 4 3 2 1 11) A minimum of one semester, quarter, or summer session in residence in full-time graduate study of research is required.
- 5 4 3 2 1 12) Half of the Master's program is devoted to a prescribed core of courses and the remaining half is devoted to student's areas of interest.
- 5 4 3 2 1 13) Master's program is an extension of the Bachelor's program in the same field. Comprehensive knowledge should be acquired within the major field of study prior to proceeding with graduate work.
- 5 4 3 2 1 14) Master's programs support the need for socially active, broad-thinking generalists.
- 5 4 3 2 1 15) Provision is made at the Master's level to fulfill the needs of students interested in either "teaching" or "research".
- 5 4 3 2 1 16) A thesis is optional at the Master's level.

Please check (✓) where most appropriate:

17. If the Master's student writes a thesis, he should receive:

( ) 1. no credit  
( ) 2. 1-3 semester hours of credit  
( ) 3. 4-6 semester hours of credit  
( ) 4. 7-9 semester hours of credit  
( ) 5. \_\_\_ semester hours of credit

18. If the Master's student does one or more research project rather than the thesis, he should receive:

( ) 1. no credit  
( ) 2. 1-3 semester hours of credit  
( ) 3. 4-6 credit  
( ) 4. \_\_\_ credit

19. Master's students should earn at least:
- 1. 15-17 semester hours of credit in the major
  - 2. 18-20 semester hours of credit in the major
  - 3. \_\_\_\_\_ semester hours of credit in the major
20. Minor or supporting fields at the Master's level should consist of:
- 1. 6-9 semester hours of credit
  - 2. 10-12 semester hours of credit
  - 3. \_\_\_\_\_ semester hours of credit

### III. ADMISSION AND RETENTION REQUIREMENTS

Listed below are a number of criteria regarding admission and retention of students in the Master's Degree programs. Circle the number on the rating scale which best describes your opinion.

#### Admission:

Students seeking admission to master's degree programs in physical education should:

- |  |     |    |
|--|-----|----|
| 21. Hold a Bachelor's Degree from an accredited institution.   | Yes | No |
| 22. Have completed a major in physical education or its equivalent in comparable course work.                    | Yes | No |
| 23. Be required to take the aptitude portion of the Graduate Record Examination.                                 | Yes | No |
| 24. Be required to take the Miller Analogies Test.   | Yes | No |
| 25. Be interviewed by the appropriate administrator and/or faculty members of the department.                    | Yes | No |
| 26. Demonstrate competency in both verbal and written communication skills.                                      | Yes | No |
| 27. Meet the overall grade point average set by the Graduate School and/or the Department of Physical Education. | Yes | No |
| 28. Submit letter(s) of recommendation concerning his academic program and scholastic ability.                   | Yes | No |

Check (✓) where most appropriate.

29. Which of following undergraduate grade point averages (on the basis of A=4.0) should be required as a minimum for students seeking admission to the Master's Program.
- 1. 2.00 - 2.49
  - 2. 2.50 - 2.74
  - 3. 2.75 - 2.99
  - 4. 3.00 and above
30. To consider a student for admission on probationary status, his undergraduate grade point average (on the basis of A=4.0) should not be lower than:
- 1. 2.0 - 2.2
  - 2. 2.3 - 2.5
  - 3. 2.6 - 2.8

#### Retention:

Check (✓) where most appropriate.

31. Which of the following graduate cumulative GPA (on the basis of A=4.0) should be maintained as a minimum for the Master's Degree:
- 1. 2.00 - 2.50
  - 2. 2.60 - 2.74
  - 3. 2.75 - 2.99
  - 4. 3.00 and above
32. All the requirements for the Master's Degree should be completed within:
- 1. 2 years from the date of first enrollment
  - 2. 3 years from the date of first enrollment
  - 3. 4 years from the date of first enrollment
  - 4. 5 years from the date of first enrollment
  - 5. \_\_\_ years from the date of first enrollment

Listed below are a number of concepts concerning student retention in a Master's Degree program. Circle the number on the rating scale which best describes your opinion.

5 - Strongly Agree, 4 - Agree, 3 - Uncertain, 2 - Disagree, 1 - Strongly Disagree

- 5 4 3 2 1 33) Students who have been accepted in the Master's Degree program and whose cumulative GPA falls below the minimum GPA you have designated above (31) should be placed on probation and notified officially. 196
- 5 4 3 2 1 34) Students admitted to graduate school on a probationary basis should achieve at least the minimum GPA you have designated above (31) in order to apply for a change to regular status.
- 5 4 3 2 1 35) Students whose cumulative GPA is below your minimum designation (31) after being on probation for one academic term should be dropped from the Master's Degree program.
- 5 4 3 2 1 36) There should be periodic departmental reviews of each student's work for the purpose of determining his progress in the program.
- 5 4 3 2 1 37) Student GPA should be computed at the end of each academic term and should serve in part as the basis for determining whether a student is clear to register for the following academic term.
- 5 4 3 2 1 38) A comprehensive examination should be required for all Master's students approximately midway through the program and should serve as a basis for determining the student's potential for continuation in the program.

List additional criteria which you think are important and could be used in the process of retention of the Master's Degree candidate:

- 1.
- 2.
- 3.
- 4.
- 5.

#### IV. CORE OF COURSE REQUIREMENTS

Listed below are typical graduate courses in physical education as found in selected Graduate Bulletins. By circling the number on the rating scale which best describes your opinion, indicate the desirability of each course which could be offered as a common core, required of all Master's students in physical education, irrespective of areas of subspecialization.

5 - Strongly Agree, 4 - Agree, 3 - Uncertain, 2 - Disagree, 1 - Strongly Disagree

- 5 4 3 2 1 39) Research Perspectives in Physical Education
- 5 4 3 2 1 40) Introductory Statistical Methods
- 5 4 3 2 1 41) Mechanical Analysis of Motor Skills
- 5 4 3 2 1 42) Seminar: Research Problems
- 5 4 3 2 1 43) Advanced Kinesiology
- 5 4 3 2 1 44) Neuromuscular Physiological Exercise
- 5 4 3 2 1 45) Cardiovascular Physiology of Exercise
- 5 4 3 2 1 46) Perceptual Motor Learning
- 5 4 3 2 1 47) Psychology of Motor Learning
- 5 4 3 2 1 48) Sports in the American Culture
- 5 4 3 2 1 49) Sports: A Philosophical Inquiry
- 5 4 3 2 1 50) Professional Preparation in Physical Education
- 5 4 3 2 1 51) Historical and Philosophical Bases of Physical Education
- 5 4 3 2 1 52) Issues in Physical Education
- 5 4 3 2 1 53) Supervision in Physical Education
- 5 4 3 2 1 54) Physical Education for the Atypical
- 5 4 3 2 1 55) Curriculum Development in Physical Education
- 5 4 3 2 1 56) Sports in Contemporary Society
- 5 4 3 2 1 57) Administrative Problems in Physical Education in Schools and Colleges
- 5 4 3 2 1 58) Adopted Physical Education
- 5 4 3 2 1 59) Physiology of Exercise
- 5 4 3 2 1 60) Special Problems

Please add the courses which you think should be included as a core requirement.

- 1.
- 2.
- 3.
- 4.
- 5.

APPENDIX B

COVER LETTER

424 Fry Street  
Denton, Texas 76201

Dear Chairman:

The purpose of the enclosed questionnaire is to obtain your opinion and comments concerning the development of a model which may be used for establishing a graduate program leading to the Master's Degree in physical education in Thailand. Within this process I must gather as much information as possible about programs, courses (required and elective), subject matter of each course, and the curricular concepts of the Master's Degree Program.

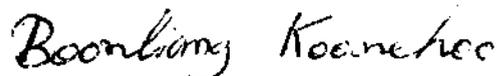
Since this movement is in its early stages, as research and literatures are limited, your experience is the most valuable and most reliable source of information for this study. Your assistance is indispensable in establishing the basis for developing a model for a graduate program.

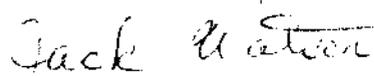
I believe that the results of this study can be a real contribution to Physical Education in terms of graduate level professional preparation in Thailand.

This study is a part of a doctoral dissertation at North Texas State University, Denton, Texas. Your cooperation and assistance will be very much appreciated. A self-addressed, stamped envelope is enclosed for your convenience.

Sincerely,

  
Professor John Plunkett  
Chairman, Doctoral Committee

  
Boonliang Koomchoo  
Doctoral Candidate

  
Professor Jack Watson  
Minor Professor

APPENDIX C

FOLLOW-UP LETTER



North Texas  
State  
University

Denton, Texas  
76203

College  
of  
Education

424 Fry Street  
Denton, Texas 76201  
February 10, 1978

Dear Chairperson:

On January 4, 1978 we mailed the enclosed questionnaire to you seeking your professional opinion on some questions pertaining to graduate education in physical education leading to the Master's Degree. I realize that this request will take some of your time, nonetheless, I feel that because of the nature of this study it is important enough to call upon you a second time.

The responses to date have been most gratifying. Over 70% of your colleagues have returned the questionnaire. I would like this study to reflect the views of all the professional members, so I again request your cooperation.

Sincerely yours,

Boonliang Koomchoo

## BIBLIOGRAPHY

### Books

- Berelson, Bernard, Graduate Education in the United States, New York, McGraw-Hill Book Company, 1960.
- Best, John W., Research in Education, Englewood Cliffs, New Jersey, Prentice-Hall, Inc., 1959.
- Blanchard, Wendell, Thailand: Its People, Its Society, Its Culture, New Haven, Connecticut, Human Relations Area Files, Inc., 1957.
- Bucher, Charles A., Foundations of Physical Education, 7th ed., St. Louis, C. V. Mosby Company, 1975.
- Bunnag, Tej, Education in Thailand, a Century of Experience: A Revised Version of the Third Academic Conference Report, 1969, Bangkok, Karsasorna Press, 1970.
- Cady, John F., Southeast Asia: Its Historical Development, Toronto, McGraw-Hill Book Company, 1964.
- Chakrabongse, Prince Chula, Lord of Life, London, Alvin Redman Ltd., 1967.
- Choa Phya, Damasakmontri, The Mahavydhyalai, Vol. V, Bangkok, Bangkok Press, 1915.
- Chulalongkorn University, Bulletin of the Graduate School, Bangkok, Chulalongkorn University, 1976.
- Chulalongkorn University, Bulletin of the Graduate School Bangkok, Chulalongkorn University, 1983-1984.
- Chulalongkorn University, Bulletin of Physical Education Department, Bangkok, Chulalongkorn University, 1976.
- Combs, Arthur W. and others, The Professional Education of Teachers, Boston, Allyn and Bacon, Inc., 1974.
- Conant, James B., Conceptual Foundation in Physical Education, Health, and Recreation, Dubuque, Iowa, William C. Brown Company, 1973.

- Conant, James B., The Education of American Teachers, New York, C.C.M. Corporation, 1972.
- Dailey, Charles, "Physical Education in Thailand," Physical Education Around the World, edited by William Johnson, Monograph No. 2, Indianapolis, Phi Epsilon Kappa Fraternity Press, 1968.
- Doggett, Lawrence L., Man and a School, New York, Associated Press, 1943.
- Eells, Walter C., Degrees in Higher Education, Washington, The Center for Applied Research in Education, Inc., 1963.
- Furniss, Todd, editor, American Universities and Colleges, 11th ed., Washington, American Council on Education, 1973.
- Graham, W. A., Siam, London, Alexander Morning Ltd., 1924.
- Hall, D. G. E., A History of South-East Asia, London, Macmillan/St. Martin's Press, 1970.
- Hillway, Tyrus, Introduction to Research, 2nd ed., Boston, Houghton Mifflin Company, 1964.
- Livesey, Herbert B. and Gene A. Robbins, Guide to American Graduate Schools, New York, Viking Press, 1967.
- London, Kenneth P., Siam in Transition, New York, Greenwood Press, 1958.
- Mayhew, Lewis B., Reform in Graduate Education, Atlanta, Regional Education Board, 1972.
- Nash, J. B., editor, Interpretations of Physical Education, Vol. V, Professional Preparation, New York, A. S. Barnes and Company, 1935.
- North Texas State University, Bulletin of the Graduate School, Denton, North Texas State University, 1977-1978.
- North Texas State University, Bulletin of the Graduate School, Denton, North Texas State University, 1984-1985.
- Pratoomratha, Viziz Z., A Physical Education Curriculum for the Teachers' College of Thailand, Ann Arbor, Michigan, University Microfilms, 1944.
- The Royal Bangkok Sport Club, Diamond Jubilee: September 6, 1901-1961, Bangkok, P. Phisanaka Press, 1962.

- Sax, Gilbert, Empirical Foundations of Educational Research, Englewood Cliffs, New Jersey, Prentice-Hall, Inc., 1968.
- Shaw, Archibald B. and Thamrong Buasri, Teachers in Thailand's University: An Analysis and Forecast, Bangkok, Thai Watana Panich Press, 1968.
- Snyder, Raymond A. and Harry A. Scott, Professional Preparation in Health, Physical Education, and Recreation, New York, McGraw-Hill Book Company, 1954.
- Somboonsilp, Punya, "Health, Physical Education, and Recreation," The World Today in Health, Physical Education, and Recreation, edited by C. Lynn Vendien and John E. Nixon, Englewood Cliffs, New Jersey, Prentice-Hall, Inc., 1968.
- Sunhachawee, Aree, "Evaluation in Curriculum and Teaching," Education in Thailand: A Century of Experience, edited by Ekavidya Nathalang, Bangkok, Karnsasana Press, 1970.
- Syamananda, Rong, An Outline of Thai History, Bangkok, Siva Phon Limited Partnership, 1963.
- Thammasat University, Institute of Public Administration, Thailand Government Organizational Manual Series, Part 10, Ministry of Education, Bangkok, Prachandra Printing Press, 1962.
- Thomson, Virginia, Thailand: The New Siam, New York, Paragon Book Printing Corporation, 1967.
- Woodring, Paul, Higher Learning in America: A Reassessment, New York, McGraw-Hill Book Company, 1968.

#### Articles

- Baker, John A. W. and Harry A. King, "Leading Physical Education Programs: What Characteristics Do They Have in Common?" JOPERD, LIV (February, 1983), 51-54.
- Beaty, Edgar, "Follow-Up of Teacher Education Graduates as a Basis for Institutional Improvement," Peabody Journal of Education, XLVI (March, 1969), 298-302.
- Briggs, Paul W., "The Opportunity to be Relevant," JOHPER, XLI (May, 1970), 41-43.
- Bucher, Charles A., "The Future of Physical Education and Sport," JOPERD, LIII (October, 1982), 12-14.

- Cipriano, Robert E., "Curriculum Development: A Task Analysis Approach," JOPERD, LV (September, 1984), 50-51.
- Clayton, Robert D. and Joyce A. Clayton, "Careers and Professional Preparation Programs," JOPERD, LV (May-June, 1984), 44-45.
- Dale, Edgar, "Training of Ph.D.'s," Journal of Higher Education, I (April, 1930), 198-202.
- Dougherty, N., "An Experience-Based Teacher Program," JOHPER, XLIV (February, 1973), 57-59.
- Dowell, Linus J., "Action Analysis," The Physical Educator, XXVI (May, 1969), 63-64.
- Dubois, Paul E., "Innovative Model for Graduate Degree Programs: Developing the Lifelong Learner," JOPER, L (June, 1979), 80-83.
- Esslinger, Arthur A., "Undergraduate versus Graduate Study," JOHPER, XXXVII (November, 1966), 63-64.
- Forker, Barbara and Warren Fraleigh, "Graduate Study and Professional Accreditation: Applications to Physical Education," JOPER, LI (March, 1980), 45.
- Gutin, B., "A Graduate School Seminar to Train Quality Research," JOHPER, XLIII (May, 1972), 66-67.
- Heisler, B. and R. Park, "Total Involvement," JOHPER, XLII (October, 1971), 24-27.
- Henschen, K., "Needed Revisions in Professional Preparation Curriculums," JOHPER, XLIII (May, 1972), 69-72.
- Hetherington, Clark W., "Professional Education in Physical Education," JOHPER, V (November, 1934), 3-6.
- Hewitt, J. F., "The Graduate Major in Physical Education," Research Quarterly, XIII (May, 1942), 252-256.
- Hewitt, J. F., "Requirements for the Master's Degree in Physical Education," JOHPER, XVI (September, 1945), 410-413.
- Hewitt, J. F., "Status of the Graduate Faculty in Physical Education," Research Quarterly, XVI (October, 1945), 231-240.

- Kaeomukda, Pipitporn, "History of Physical Education Teachers' Training in Thailand," Journal of Health, Physical Education, and Recreation (Thonburi, Thailand), I (January, 1965), 46-55.
- Kinder, Thomas M., "Justification of Physical Education Programs," The Physical Educator, XXX (October, 1973), 132-133.
- Lloyd, F., "The Research Specialist," Research Quarterly, IX (December, 1938), 33-37.
- Love, A. and P. Barry, "The Teacher Education Center in Physical Education," JOHPER, XLII (April, 1971), 33-35.
- Massengale, John D., "AAHPERD's Role in the Perceived Quality of Physical Education Graduate Faculty," JOPERD, LIV (September, 1983), 57-58, 64.
- McCloy, Charles H., "Current Trends in Graduate Study," JOHPER, XXVIII (November, 1957), 33-35.
- Merrill, Charles D. and Ralph H. Johnson, "Health and Physical Education Program for the Teachers' Colleges in Thailand," Journal of Teacher Education, VI (September, 1955), 196-197.
- Morris, J. A. and D. C. Sweet, "A Survey to Determine the Status of Graduate Work in Physical Education," Research Quarterly, VIII (December, 1937), 3-10.
- National Committee Report on Standards, "National Study of Professional Education in Health and Physical Education," Research Quarterly, VI (December, 1935), 48-68.
- Oliver, Bernard, "Models of Faculty Development and the Skills Needed by Faculty Development Personnel," The Physical Educator, XL (May, 1983), 78-80.
- Park, Roberta J., "The Philosophy of John Dewey and Physical Education," The Physical Educator, XXVI (March, 1969), 55-57.
- Razor, Jack E., "Merging Departments of Physical Education: Rationale, Implications, and Generalizations," The Physical Educator, XXXIII (October, 1976), 122-125.

- Resick, Matthew, "Graduate Education Patterns," JOHPER, XXXVIII (April, 1967), 51-55.
- Rosenberg, Ralph P., "The First American Doctor of Philosophy Degree," Ventures, VI (Spring, 1968), 31-37.
- "Standards for Graduate Programs in Physical Education," JOPERD, LV (February, 1984), 54-62.
- Welsh, Raymond, "Futurism in Physical Education," JOHPER, XLIV (October, 1973), 28-30.
- Welsh, Raymond, "Sharpening Our Professional Focus," JOPERD, LIV (November-December, 1983), 13-15.
- Wendt, Janice C., Barry E. Pelton, and Kathleen R. Stevens, "The University's Role: Assessing the Professional Education Needs of Health and Physical Educators and Athletic Coaches," JOPERD, LIV (February, 1983), 48-50.
- Whaley, W. Gordon, "In Place of Slogans," The Graduate Journal, VII (Spring, 1967), 281-300.
- Williams, C. Inge, "The Professional Process," The Physical Educator, XXIV (March, 1967), 23-24.
- Wilson, Philip K. and Linda K. Hall, "Industrial Fitness, Adult Fitness, and Cardiac Rehabilitation: Graduate Programs Specific to Training Exercise Specialists," JOPERD, LV (March, 1984), 40-44.
- Zeigler, Earl F. and William J. Penny, "Generalizations about Development of Graduate Programs in Physical Education," The Physical Educator, XXVI (December, 1969), 169-170.

#### Reports

- The Athletic Institute, The National Conference on Undergraduate Professional Preparation in Health Education, Physical Education, and Recreation, Jackson's Mill, Weston, West Virginia, 1948), Chicago, The Athletic Institute, 1948.
- Graduate Study in Health Education, Physical Education, and Recreation, National Conference Report of Père Marquette State Park, Illinois, January, 1950, Chicago, Chicago Athletic Institute, 1962.

## Publications of Learned Organizations

- American Association for Health, Physical Education, and Recreation, "Evaluation Standards and Guides in Health Education, Physical Education, and Recreation," Professional Preparation in Dance, Physical Education, Recreation, Safety Education, and School Health Education, Washington, AAHPER Publications, 1959.
- American Association for Health, Physical Education, and Recreation, Graduate Education in Health Education, Physical Education, Recreation, Safety Education, and Dance: A Report of a National Conference, Washington, American Association for Health, Physical Education, and Recreation, 1967.
- American Association for Health, Physical Education, and Recreation, Professional Preparation in Health Education, Physical Education, and Recreation Education: A Report of the Professional Preparation Conference of the AAHPER, Washington, American Association for Health, Physical Education, and Recreation, 1962.
- American Association for Health, Physical Education, and Recreation, Self-Evaluation Checklist for Graduate Programs in Health Education, Physical Education, Recreation Education, Safety Education, and Dance, Washington, American Association for Health, Physical Education, and Recreation, 1969.
- American Association for Health, Physical Education, and Recreation, Professional Preparation Panel, "HPER Directory of Professional Preparation Institutions," JOHPER, XLV (January, 1974), 35-36.
- American Association for Health, Physical Education, and Recreation, Professional Preparation Panel, "Why Graduate Studies?" JOHPER, XXXV (October, 1964), 69.
- American Council on Education, American Universities and Colleges, 12th ed., Hawthorne, New York, Walter de Gruyter, Inc., 1983.
- College Blue Book, Degrees Offered by Colleges and Subjects, New York, C.C.M. Corporation, 1972.
- Council of Graduate Schools in the United States, The Master's Degree, Washington, Council of Graduate Schools in the United States, February, 1968.

- Graduate Record Examinations Board and the Council of Graduate Schools in the United States, Directory of Graduate Programs: 1984 and 1985, Princeton, New Jersey, Educational Testing Service, 1983.
- International Association of Universities, International Handbook of Universities, 9th ed., London, Macmillan Press Ltd., 1983.
- International Association of Universities, World List of Universities, 15th ed., London, Macmillan Press Ltd., 1982.
- Leighton, Ralph, "Study of Institutions Offering Graduate Work," American Association for Health, Physical Education, and Recreation Proceedings, Boston, April 18-22, 1949, pp. 58-61.
- National Council for Accreditation of Teacher Education, 20th Annual List of NCATE, Washington, National Council for Accreditation of Teacher Education, 1973-74.
- Zeigler, Earl F. and Grath A. Paton, "Consolidation and Innovation in Graduate Study in Physical Education and Sport," National College Physical Education Association for Men, [n.c.], 1974, pp. 103-104.

#### Public Documents

- Jumsai, Manich, Compulsory Education in Thailand, Paris, UNESCO, 1951.
- Lekayanond, Swasdi, Physical Education, Report to the Minister of Education of Thailand during the Seminar on Physical Education, Bangkok, February 18, 1956, Bangkok, Krungdhep Karn Pim Press, 1956.
- Malakul, Pin, Physical Education, Report to the Minister of Education of Thailand during the Seminar on Physical Education, Bangkok, February 18, 1956, Bangkok, Krungdhep Karn Pim Press, 1956.
- Nimitbutr, Prachern, Physical Education, Report to the Minister of Education of Thailand during the Seminar on Physical Education, Bangkok, February 18, 1956. Bangkok, Krungdhep Karn Pim Press, 1956.
- Teachers' Institute of Thailand, Teachers' Lives, Bangkok, Teachers' Institute of Thailand, January, 1971.
- Thailand, Department of Physical Education, Rules and Administration of Intramural Sport, 1939, Bangkok, Department of Physical Education, 1939.
- Thailand, Government of, "Enactments Governing Boy Scouts," Rajkitjanubeksa (Royal Government Gazette), Bangkok, Government of Thailand, July 1, 1918.

- Thailand, Government of, "Royal Enactment Governing the Establishment of the Department of Physical Education," Rajkitjanubeksa (Royal Government Gazette), L, Bangkok, Government House Printing Office, January 30, 1933.
- Thailand, Ministry of Education, Education in Thailand, 1932, Bangkok, Chang Pim Wat Sangwaj Press, 1933.
- Thailand, Ministry of Education, Education in Thailand, 1936, Bangkok, Chang Pim Wat Sangwaj Press, 1937.
- Thailand, Ministry of Education, Educational Developments in Thailand, 1949-1963, Report to the International Conference on Public Education Organized by UNESCO and the International Bureau of Education, Bangkok, Thammasat University Press, 1964.
- Thailand, Ministry of Education, A History of Thai Education, Bangkok, Thai Watana Panich Press, 1976.
- Thailand, Ministry of Education, Lower Elementary Education Curriculum, Bangkok, Ministry of Education, 1960.
- Thailand, Ministry of Education, Upper Elementary Education Curriculum, Bangkok, Ministry of Education, 1960.
- Thailand, Ministry of Education, Department of Educational Techniques, "Statistics, Academic Years 1967-1973 (Annual)," Bangkok, Ministry of Education, 1974.
- Thailand, Ministry of Education, Department of Educational Techniques, "Universities Census," Bangkok, Ministry of Education, 1977.
- Thailand, Ministry of Public Instruction, Report on the Work of the Education Department, Bangkok, The Education Department, 1917.
- Thailand, National Statistical Office, School and Teacher Census, "Number of Graduates by Department and Institution," Bangkok, National Statistical Office, 1976.
- Thailand, Office of the National Education Commission, Education in Thailand, Bangkok, Agricultural Cooperative Club of Thailand, 1971.
- Thailand, Office of the National Education Commission, Report on Education in Thailand, Bangkok, Kurusabha Press, 1970.

Thailand, Office of National Education Council, "Report of Universities Census, 1973-1976," Bangkok, Office of National Education Council, 1977.

UNESCO Regional Advisory Team, The Numbers of Actual Enrollment and Planned Projection Compared with "Long-Term Projection for Education in Thailand," Bangkok, Division of Research, Educational Sub-Ministry of the University of Thailand, 1977.

#### Unpublished Materials

- Evans, Gary F., "An Evaluation of the Graduate Professional Preparation Program in Health, Physical Education, and Recreation at the University of Utah, Based on a Follow-Up Study of Its Graduates," unpublished doctoral dissertation, University of Utah, Salt Lake City, Utah, 1968.
- Indrapana, Nat, "Effects of Westernization on the Degree of Sports Involvement among the Student Population of Bangkok," unpublished master's thesis, California State University, Hayward, California, 1969.
- Lewiski, James Lawrence, "An Evaluation of the Doctoral Program in Health, Physical Education, and Recreation at the University of Alabama," unpublished doctoral dissertation, University of Alabama, University, Alabama, 1975.
- Oladunjoye, Matthew O., "A Follow-Up Study of Master's Degree Graduates in Physical Education at North Texas State University, 1965-1976," unpublished doctoral dissertation, North Texas State University, Denton, Texas, 1976.
- Visudharomn, Kong, "Physical Education," unpublished paper submitted to the National Defence Council, Bangkok, 1962.
- Zeigler, Earl F., "A History of Professional Preparation for Physical Education in the United States, 1861-1948," unpublished doctoral dissertation, Yale University, New Haven, Connecticut, 1951.