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ASurvey of Second Grade Professional Certificate Graduates in the Teachers Colleges of North Dakota Pertaining to Aptitude for Teaching Physical Education

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A SURVEY OF SECOND GRADE PROFESSIONAL
CERTIFICATE GRADUATES IN THE TEACHERS COLLEGES OF
NORTH DAKOTA PERTAINING TO APTITUDE FOR
TEACHING PHYSICAL EDUCATION

A PAPER SUBMITTED TO THE PHYSICAL EDUCATION
DEPARTMENT OF THE UNIVERSITY OF NORTH DAKOTA

BY

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//

IN FULFILLMENT OF
REQUIRED WORK IN INDIVIDUAL RESEARCH 513

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Report of the Study

The purpose of the study was to develop and compare information received from a

PREFACE

The Problem

A survey of second grade professional certificate graduates in the teachers colleges of North Dakota pertaining to aptitude for teaching physical education.

Nature of the Problem

There were 538 men and women who graduated from North Dakota Teachers Colleges in 1959-1960 with second grade professional certificate degrees. These are the individuals assigned the responsibility of teaching physical education in the elementary schools of North Dakota. Although free and spontaneous play is approved, criticism is being directed at schools which offer little or no physical education on the elementary level. The factor of growing public concern toward the need for physical education on the elementary level influenced the writer to conduct a research study on preparation and teaching aptitudes of the second grade professional certificate graduates from North Dakota Teachers Colleges.

Scope and Limitations of the Problem

This study will be concerned with the four North Dakota Teachers Colleges--Dickinson, Mayville, Minot, and Valley City. Individuals receiving their degrees during the school year of 1960 and 1961 will be the defined population of this study.

Purpose of the Study

The purpose of the study was to develop and compute information received from a questionnaire on aptitudes of second grade professional certificate graduates for teaching physical education. An effort was made to determine the nature of preparation, interest and attitudes concerning the teaching of elementary physical education by second grade professional certificate graduates.

Type and Method of Study

This was a complete or problem-solving type of study and the method employed was documentary in nature. An intensive study was made of the theory and the opinions of the authorities in the field.

Sources of Information

The University of North Dakota Library was the chief source of documentary information. The results of an opinionated questionnaire, conducted at the four North Dakota Teachers Colleges, were utilized.

CHAPTER I

INTRODUCTION

The elementary grades are extremely important in the educational life of the child; perhaps the most important of any educational level. It has already been shown that this is the only educational level through which the majority of students can be reached with formal instruction. There are other reasons, however, why the elementary grades are important in the lives of children. These are the formative years of life. Patterns are established during these early years which determine future traits of character and personality as well as habits of study, industry, and social conduct. These years are also important in establishing a sound foundation of health habits and attitudes in relation to food, exercise, rest, and relaxation. The foundations that are laid in the elementary school form the basis of all future education and conduct; hence this particular level of education demands the best instruction, facilities, and educational opportunities for the children.¹

During these formative years, the importance of mental and physical growth can not be over-emphasized. The teaching of physical education in the elementary grades has generally been assigned to the already overburdened classroom teacher. The elementary school teacher, who in most cases is a woman, has very little, if any training in physical education.

It is unfortunate but true, that in her efforts to prepare herself for the multiple tasks she must perform, the prospective elementary school teacher frequently neglects preparation in physical education. Hence, this area of education, which is acknowledged

¹Harry Alexander Scott, Competitive Sports in Schools and Colleges (New York: Harper and Brothers, 1951), p. 467.

to be one of the most important in the early years of life, tends to be poorly presented and thus makes little impression on the educational development of the child. Also pertinent in this connection is the fact that many teachers in the elementary school are women who are past the age when vigorous activities appeal to them. To many of these teachers believe silence is as golden on the playfields as in the classroom. Hence, poorly equipped teachers plus the lack of adequate facilities and equipment, tend to relegate physical education to an inferior position in the instructional program of the school at the time when it is crucial to the life of the child.²

School administrators are recognizing the vast potentialities of physical education in the hands of good teachers. State Departments are constantly evaluating the methods and techniques of education, and by this process of evaluation have become conscious of the importance of physical education. The best criterium for the insurance of a maximum physical education program would be that of securing properly trained instructors. Changing conditions have brought new emphasis, pressures, and interests on the physical education program. New facilities and equipment, important as they may be, remain of little value unless effective teaching transforms them into agencies of real accomplishment.

The consensus among physical educators is that elementary physical education should be taught by the specialist teacher who has majored in physical education.³ Such policy is based on sound reasoning, but regardless of reason, elementary physical education

²Ibid., p. 472.

³Charles E. Forsythe, and Ray O. Duncan, Administration of Physical Education (New York: Prentice-Hall, Inc., 1951), p. 290.

is being taught by the classroom teacher. In a majority of cases the teaching of physical education in the elementary school is limited to isolated instances during the recess and noon periods.

The financial factor involved in the hiring of qualified physical education instructors for the elementary level is often used as a "crutch" by administrators in non-acceptance of the program. This would be like "throwing the baby out with the bathwater" to eliminate the job of drying the child. To put a price tag on any students' physical, mental, or social growth would be contrary to democratic policy. Until this and other obstacles are overcome by the profession, better preparation of the classroom teacher is of major importance.

If the maximum contribution to the growth and development of American youth is to be realized, physical education must be a part of the curriculum in all grades of all schools. In the state of Illinois, an attempt has been made to schedule physical education in all of the elementary grades. In order to do this, it is often necessary to have regular classroom teachers handle physical education.⁴

One of the controversial issues is the use of a specialist instead of the classroom teacher. There are advantages and disadvantages in both plans. The specialist is trained in physical education, understands the philosophies necessary to conduct a broad program. The classroom teacher has established rapport enabling her to be

⁴Ibid.

cognizant of the needs and interests of each student. Classroom teachers have a greater opportunity to incorporate the physical education program into the daily schedule of activities.

The main disadvantage of the classroom teacher handling physical education is that they usually lack in preparation. The main disadvantage of the specialist is that they frequently do not understand the total educational program and are not sufficiently prepared in child growth and development.⁵

To have specialists teach physical education in North Dakota schools is the exception, rather than the rule. The responsibility for teaching elementary physical education is usually assigned to second grade professional certificate graduates who lack special training in this field. The preparation and aptitude of these graduates to teach physical education is of major concern to this writer and was covered in a survey to reveal the strengths and weaknesses of a group of graduates with second grade professional certificate degrees for teaching physical education.

⁵Ibid.

CHAPTER II

REVIEW OF LITERATURE

Baumann⁶ made a study on "The Elementary School Physical Education Program in Selected South Dakota Schools" in 1955. The purpose of this study was to determine the aptitudes and preparations of elementary teachers in select South Dakota Schools. One of the summations has alarming implications which should alert the professional people for planning in the preparation of elementary physical education teachers. It was found that:

A big percentage of the one-year rural teachers expressed a frank desire to just let the children play during recess period. The feeling was that most children get enough physical activity at home. There seemed to be more concern that the child learn to read and write so he could advance to the consolidated school or city school with as little reflection as possible on the school from which he had come. It was felt by rural teachers, quite generally, that a graded program of physical education was for, and should belong to, the larger school.⁷

This study is indicative of the problems that must be met in the establishing of professional training standards in our teacher training institutions. The stigma of a rejection of, or a passive attitude toward, physical education must be eradicated by the professional training of elementary teachers.

⁶Mathew C. Baumann, "A Survey of the Elementary School Physical Education Program in Selected South Dakota Schools" (unpublished Master's thesis, Department of Physical Education, University of North Dakota, 1955), p. 11.

⁷Ibid.

Brown, Cassidy, and Wiles⁸ state that many elementary school teachers who are asked to teach physical education periods for their classroom group are very unhappy. They may themselves not like or understand such activity. They do not know what to teach and feel very incompetent in the handling of the program.

Teachers want to feel a sense of achievement in their work. They are frustrated when they are unable to see the results of their efforts. Teachers want to feel that they are growing. They fight clear of dead-end jobs, or jobs that have them going through monotonous routine, without any opportunity to learn new procedures, skills, or engage in creative activities not offered in other areas of general education.

The teacher is the most important factor in determining the quality of teaching. It is often necessary for the teacher to interpret the needs of the girls and boys to the administrators. The teacher's philosophies, beliefs, and attitudes toward the physical education are most important, and are the real evidence of good professional preparation. Indications are that all teachers must be versatile in many areas.

Davis and Lawther⁹ state that versatility does not eliminate the importance of the prospective teacher's possessing special

⁸Kimball Wiles, Camille Brown, and Rosalind Cassidy, Supervision of Physical Education (New Jersey: Prentice-Hall, Inc., 1956), p. 266.

⁹Elwood C. Davis and John D. Lawther, Successful Teaching in Physical Education (New York: Prentice-Hall Inc., 1948), p. 12.

abilities in physical education activities and a "knack" for teaching them. Activities are the medium through which the physical educator educates the pupil. The teacher of physical education who lacks abilities in activities can expect to attain no more teaching success than the teacher of English who does not know how to speak or write correctly.

The prospective teacher should also demonstrate some aptitude in teaching. Merely wanting to be a teacher is not an index to one's fitness for the profession. There are many vocational misfits in the world today. Some of the unhappy persons insisted upon entering a vocation in spite of being advised that their aptitudes pointed toward another type of work.¹⁰

Teaching physical education is more than merely "telling" the pupils how to perform skills. It is more than "showing" them how. Unfortunately, the prospective teacher is usually a poor judge of his ability as a teacher. The judgements of one's major professors, supplemented by tests, provide more accurate indices of one's "knack" for teaching. Such information should be desired by the student in-training. It provides an answer to the question of one's fitness for the profession.¹¹

All this indicates that a great deal of professional training is essential to be competent in the teaching of physical education. Closer scrutiny of individuals entering the field as physical education teachers must be practiced.

Every child should have experience in the following types of activities: exercises related to body mechanics, tag games and

¹⁰Ibid.

¹¹Ibid.

relays, physical activity in small, informal groups, individual games and sports (after the primary grades), team games and sports (with simple team games used before and during intermediate grades), group games, social games, rhythms, folk dancing, social dancing, (after primary grades), stunts, tumbling, apparatus play, and swimming (if facilities are available).¹²

To the trained person this list may seem rather simple and essential. To the individual who has little or no training in physical education, this seems unrealistic and unnecessary. Again it emphasizes the importance of teacher preparation and an awareness on the part of administrators that physical education should be a part of the total elementary program.

In the teacher training program the curriculum or required course of study is very important. Dr. Leslie Irwin¹³ states that the physical education curriculum in the individual school and community will be determined by the training of the teachers. In a majority of the elementary schools the teaching of physical education is done by the classroom teachers. The classroom teachers do the actual teaching with supervision and assistance from specialists and physical educators if possible. In large numbers of schools, however, there are no specialists available to render this needed assistance. Where

¹²Winifred Van Hagen and others, Physical Education in the Elementary School (Sacramento: California State Department of Education, 1951), p. 45.

¹³Leslie W. Irwin, Ph.D., The Curriculum in Health and Physical Education (St. Louis: The C. V. Mosby Co., 1944), p. 61.

supervision of classroom teachers by physical education specialists is provided, a much broader curriculum of activities can be used. At present, more and more classroom teachers are obtaining some training in physical education work in colleges and universities and are thereby better prepared to conduct a broader program. In this connection there has been a recent trend for teacher-training institutions to offer or require courses in physical education in the training of classroom teachers.

The great growth in the number of teacher education programs throughout the United States might well raise a question as to the quality of preparation that is being provided. In 1948 there were 390 institutions offering professional education in health education, physical education, and recreation--an increase of forty-eight institutions over the previous year.¹⁴

Along with the growth of teacher education institutions in physical education, there has been a developing concern as to the type of preparation necessary for training potential physical education personnel. In 1947 more than 300 leaders in the fields of physical education, health education, and recreation listed the education of well-trained leaders as being the most crucial problem which these professions faced.¹⁵

¹⁴National Conference on Undergraduate Professional Preparation in Physical Education, Health Education, and Recreation, Chicago: Athletic Institute, 1948, p. 18.

¹⁵Charles A. Bucher, Foundation of Physical Education, 3rd. ed.; (St. Louis: C. V. Mosby Company, 1960), p. 349.

A great deal has been discussed thus far on teacher education programs and how important these are to the whole physical education program. At the 1952 convention of the AAHPER, the need for a study of teacher education programs was discussed and this group developed the following criteria in their discussion:

(a) The practice of poorly prepared teachers entering the profession in various capacities in the public schools tends to produce poor programs and accompanying loss of respect for the profession. (b) Inequitable salary competition by poorly qualified people creates a problem of employment for qualified, well-prepared professional people. (c) Periodically a re-evaluation of an institution's teacher education program is desirable. (d) Standards and instruments with sufficient specificity to make such an evaluation appear to be inadequate. (e) A set of standards for teacher education programs in physical education is needed to interpret to administrators what should be included.¹⁸

Carl F. Fischer¹⁹ made a local survey of sixty-five elementary-school teachers representing schools in a thirty mile radius of metropolitan Springfield, Massachusetts. He found that the activities suggested in the nations conference report, *Physical Education for Children of Elementary Age*, the lead-up skills, and tumbling activities were used less frequently than the other activities mentioned in the survey. This fact is explained when the amount of preparation necessary to teach these skills is considered and it is noticed that more than half of the teachers surveyed reported that their undergraduate training in physical education was inadequate.

¹⁸Vernon S. Sprague, "Operation Bootstrap in Teacher Education Programs" Journal of Health, Physical Education and Recreation, XXX (September, 1959), p. 21.

¹⁹Carl F. Fischer, "Trends in Physical Education in the Elementary School," Elementary School Journal (October, 1953), p. 93.

The following facts seem to be favorable for the future of physical education programs in the elementary schools: (1) The public educators are becoming increasingly conscious of the needs of youth during this period of growth. (2) An increased building program is in progress, which is providing for playing fields and gymnasiums and larger amounts of equipment. (3) More men are entering the teaching field at the elementary level.²⁰

In 1954, Kolba²¹ made a study of elementary physical education teachers in 42 elementary schools in eleven larger North Dakota school systems. Mr. Kolba originally planned to get detailed information on elementary physical education from all towns and cities having fully accredited high schools, graded and consolidated schools, and private and parochial schools, and Federal Government Indian Schools. Because of the poor returns on the information sought, the study had to be limited to the elementary schools in the larger cities. Kolba stated that the reason for the small and very incomplete returns from smaller schools may be indications of lack of interest in physical education.

It was found in this study that over two-thirds of the elementary physical education teachers in the eleven larger cities of North Dakota have either a B. S. or B. A. degree. Approximately twenty-eight per cent have master's degrees, and the remainder of

²⁰Ibid.

²¹Joe Kolba, "Physical Education Leadership in the Larger North Dakota Elementary Schools," (unpublished Master's thesis, Department of Physical Education, University of North Dakota, 1955), pp. 17-18.

the answers did not indicate the type of degree held. One school system had just approved a full time supervisor who could devote all of his time to the supervision of physical education in the schools of the system.

There is a trend toward better leadership in North Dakota schools on the elementary level, but as was previously stated the most improvement is taking place in the larger school systems. The employment of full-time elementary physical education teachers in the smaller schools in North Dakota is not progressing very rapidly, possibly due to the lack of understanding of the importance of physical education.

In 1931 a law was passed by the North Dakota Legislature which provided for a teaching certificate in North Dakota schools after the completion of a two-year course or sixteen semester hours of professional preparation for teaching. This law provided the background for the writer making this survey and the study.

The law states:

15-3604. Second grade professional certificate; Diploma from the state schools and from schools outside the state. A second grade professional certificate shall be issued:

1. To a graduate of the standard course of a North Dakota normal school or teacher's college who is eighteen years of age or over and who holds the diploma granted to graduates of such course. Such certificates shall be valid for three years from the date of issue of the diploma;

2. To graduates eighteen years of age or over who holds a diploma from an institution the curriculum of which is the equivalent of the standard curriculum of the normal school or teacher's college. The diploma held must evidence the completion of at least a two year course or sixteen semester hours of professional preparation for teaching. Such certificate shall be valid for three years after the date of issue.

The holder of a second grad professional certificate shall be entitled to a second grad certificate valid for life, upon the completion of eighteen months of successful teaching experience in this state after receiving the certificate and the filing of evidence thereof in the office of the superintendent of public instruction on blanks furnished for that purpose. A second grade professional certificate shall qualify the holder to teach in any of the elementary grades of the public schools of the state and also to teach such subjects as generally are taught in the ninth and tenth grades.²²

A substantial number of the personnel teaching in the elementary field in North Dakota are certified under the aforementioned law. The course of study these people must follow in obtaining the sixteen hours of credit is left to the individual college and is discussed in Chapter III.

This writer is convinced that because of the present critical imbalance in preparation of elementary teachers, due to the prevailing low standards of preparation and certification for elementary teachers in North Dakota, many of the benefits derived from physical education are not a reality in a large number of schools. At the present time, these standards range all the way from 12 hours to 90, and very few schools require the bachelor's degree

²²M. F. Peterson, "A Compilation of North Dakota School Laws," (Bismarck: Office of the Superintendent of Public Instruction, 1957), p. 58.

for elementary teaching. What the future holds for the physical education departments depends a great deal on the standards which are set for teacher preparation.

PROCEDURE

The central problem in this study as defined in the Preface on page iv, was to seek information concerning the nature of the preparation, interests, and attitudes of selected second grade professional certificate graduates toward teaching physical education in the elementary schools. Individuals receiving two-year degrees from Dickinson, Mayville, Minot, and Valley City State Teachers Colleges during the year of 1960-1961 were the defined population of this study. This was a complete or problem-solving type of study and the method employed was documentary in nature. The results of a submitted questionnaire, conducted at the four North Dakota State Teachers Colleges, were utilized.

A survey type of investigation was chosen for collection of the data because it would have been extremely difficult to obtain an adequate sampling of the geographical area included in the study through interviewing. Also, the expense involved in securing a suitable response from the personal interview type of research would have been enormous. The questionnaire was decided upon as the most feasible device for collecting the data needed for the proposed study.

The questionnaire was divided into two sections (see APPENDIX II through V). The first part deals with the professional

CHAPTER III PROCEDURE

The central problem in this study as defined in the Preface on page iv, was to seek information concerning the nature of the preparation, interest, and attitudes of selected second grade professional certificate graduates toward teaching physical education in the elementary schools. Individuals receiving two-year degrees from Dickinson, Mayville, Minot, and Valley City State Teachers Colleges during the year of 1960-1961 were the defined population of this study. This was a complete or problem-solving type of study and the method employed was documentary in nature. The results of a submitted questionnaire, conducted at the four North Dakota State Teachers Colleges, were utilized.

A survey type of investigation was chosen for collection of the data because it would have been extremely difficult to obtain an adequate sampling of the geographical area included in the study through interviewing. Also, the expense involved in securing a suitable response from the personal interview type of research would have been enormous. The questionnaire was decided upon as the most feasible device for collecting the data needed for the proposed study.

"Certification" (see Appendix I), and Attitudes, which are shown on

The questionnaire was divided into two sections (see APPENDIX II through V). The first part deals with the professional training of each individual in regard to the number of quarter hours taken in physical education, how many advanced courses each person took, and if the courses specified as required were taken by the queried. The second section, consisting of items two and three, dealt with the positive or negative attitudes of the queried students regarding their enthusiasm for teaching physical education to elementary students. The respondents were also questioned on their attitudes toward the necessity of a physical education program on the elementary level. The questionnaire was made detailed enough so that a careful sample could be obtained, but short enough so that a representative return could be expected.

The writer developed and computed statistics of the survey to ascertain or determine the aptitudes of second grade professional certificated graduates for teaching physical education. The computation of statistical data and the formulation of factual information were developed through an intensive study of the literature in the field and the data taken from the questionnaires.

To gather other information used in this study, personal contacts were made with experts in the field of education and physical education. The writer first visited the offices of M. F. Peterson, Superintendent of the Public Instruction, and obtained valuable aid and assistance in this study. Documents labeled "Certification" (see Appendix I), and figures, which are shown on

page vi, on the number of second grade professional graduates for 1959-1960 were obtained from the Department of Public Instruction. (see Appendix I, column 2 under Accredited).

Consultations were held at the Minot State Teachers College with Dr. Theodore Keck, head of the Physical Education Department, and Dr. Frank Baumann, Director of Student Teaching. Discussions were held regarding the problems involved in this study and changes were recommended in the questionnaire clarifying the statements regarding information needed in the study.

Letters were sent to the Registrars of the Minot, Mayville, Dickinson, and Valley City Teachers Colleges requesting a list of names and addresses of graduates or prospective graduates with second grade professional certificates. Requests were also made for bulletins or catalogues from each of the surveyed schools.

After checking the catalogue listings for courses offered, the writer found that the lack of continuity in course numberings, and the difference in the number of courses offered made it impossible to conduct a survey without utilizing individual questionnaires for each of the institutions involved in the study.

Questionnaires were numerically filed and separated according to the college from which the respondent graduated. The answers to part one were registered on a master control sheet shown in Figures I through IV. Answers to parts two and three were controlled by placing the total number of courses taken in the designated file number as shown in Figures V through VIII. Figure IX shows how a recording was made on the total number of quarter hours taken in physical education by each student.

FIGURE I
 MASTER CONTROL SHEET FOR MINOT
 PART 1 OF QUESTIONNAIRE

#1	#2	#3	#4	#5	#6
1	X		X		X
2	X		X		X
3	X		X		X
4	X		X		X
5		X		X	X
6	X		X		X
7	X		X		X
8	X		X		X
9	X		X		X
10	X		X		X
11	X		X		X
12	X			X	X
13	X			X	
14	X		X		X
15	X			X	X
16	X			X	
17	X			X	
18	X		X		X
19	X		X		X
20	X		X		X
21	X		X		X
22	X		X		X
23	X		X		X
24	X			X	X
25	X			X	
26	X		X		X
27	X		X		X
28	X			X	X
29	X			X	
30	X		X		X
31	X			X	
32	X		X		X
33	X			X	
34	X		X		X
35	X		X		X
36		X		X	
37	X		X		X
38	X		X		X
39	X			X	
40	X		X		X
41	X		X		X
42	X			X	X
43	X			X	
44	X		X		X
45		X		X	X
Totals	42	3	28	17	35
Per Cent	93	7	62	38	78

(#1) Case Number (#2) Took six or more hours in phy.ed. (#3) Did Not take six hours in phy.ed. (#4) Took all the courses listed as required (#5) Did Not take all the courses listed as required (#6) Took advanced courses in phy.ed.

FIGURE II

 MASTER CONTROL SHEET FOR DICKINSON
 PART 1 OF QUESTIONNAIRE

#1	#2	#3	#4	#5	#6
1		X		X	
2		X		X	X
3	X		X		
4	X		X		X
5	X		X		X
6		X		X	
7	X		X		X
8		X		X	
9		X		X	
10	X			X	X
11	X		X		
12		X		X	
13	X		X		
14	X		X		X
15	X		X		
16		X		X	
17	X		X		
18		X		X	X
19	X			X	X
20	X			X	X
21	X			X	X
22	X		X		X
23	X		X		X
24	X		X		
25	X		X		X
26	X		X		X
27	X			X	X
28		X		X	X
29	X		X		X
30	X		X		X
Totals	21	9	16	14	18
Per Cent	70	30	53	47	60

(#1) Case Number (#2) Took six or more hours in phy.ed. (#3) Did Not take six hours in phy.ed. (#4) Took all the courses listed as required (#6) Took advanced courses in phy.ed.

FIGURE III

MASTER CONTROL SHEET FOR VALLEY CITY
PART 1 OF QUESTIONNAIRE

#1	#2	#3	#4	#5	#6
1	X		X		X
2		X		X	
3	X		X		X
4		X		X	
5	X			X	X
6		X		X	X
7	X		X		
8		X		X	X
9	X		X		X
10		X		X	
11	X		X		X
12	X			X	X
13		X		X	
14	X			X	X
15	X		X		X
16	X		X		X
17		X		X	X
18	X		X		X
19		X		X	X
20		X		X	
21	X		X		
22	X		X		
23	X		X		X
24		X		X	
25	X		X		X
26		X		X	X
27	X		X		X
28	X			X	X
29	X		X		X
30	X		X		X
31		X		X	
32	X			X	X
33	X			X	X
Totals	21	12	15	18	23
Per Cent	64	36	45	55	70

(#1) Case Number (#2) Took six or more hours in phy.ed. (#3) Did Not take six hours in phy.ed. (#4) Took all the courses listed as required (#5) Did Not take all the courses listed as required (#6) Took advanced courses in phy.ed.

FIGURE IV

MASTER CONTROL SHEET FOR MAYVILLE
PART 1 OF QUESTIONNAIRE

#1	#2	#3	#4	#5	#6
1	X			X	X
2	X			X	X
3	X		X		
4	X		X		
5	X			X	X
6	X		X		
7	X			X	X
8	X		X		
9	X		X		X
10	X		X		X
11	X		X		
12	X		X		X
13	X		X		
14	X		X		
15	X		X		
16	X			X	X
17		X		X	
18	X		X		X
19	X		X		
20	X		X		X
21	X			X	X
22	X			X	X
23	X			X	X
24	X		X		X
25	X		X		
26	X		X		X
27	X		X		
28	X		X		
29	X		X		
30	X		X		X
31	X			X	X
32	X		X		X
33	X		X		
34	X		X		X
35	X		X		
36	X		X		X
Totals	35	1	26	10	20
Per Cent	97	3	72	28	56

(#1) Case Number (#2) Took six or more hours in phy.ed. (#3) Did Not take six hours in phy.ed. (#4) Took all the courses listed as required (#5) Did Not take all the courses listed as required (#6) Took advanced courses in phy.ed.

FIGURE V

MASTER CONTROL SHEET FOR MINOT
PARTS 2 AND 3 QUESTIONNAIRE

I am very interested in teaching physical education to elementary pupils.																								
6	7	6			10		9		7	7		6		5	6	6	7			7		8	7	
	5	7	6	6	6	6	7	6	7			11	6	6			6			6				
TOTAL NUMBER OF ANSWERS											29	PER CENT				64								
TOTAL NUMBER OF COURSES TAKEN											188	AVERAGE				6.5								

I would <u>not</u> be interested in teaching physical education to elementary pupils.																							
			6	4		9		7			3		4				7	7		6			
6										6	3				7	5	6		3				
TOTAL NUMBER OF ANSWERS											16	PER CENT				36							
TOTAL NUMBER OF COURSES TAKEN											89	AVERAGE				5.6							

I feel that physical education is a very important part of elementary education.																							
6	7		6		10	9	9		7	7		6	4	5	6	6	7	7	7	7	6	8	7
6	5	7	6	6	6	6	7	6	7	6	3	11	6	6	7		6		6	3			
TOTAL NUMBER OF ANSWERS											39	PER CENT				89							
TOTAL NUMBER OF COURSES TAKEN											253	AVERAGE				6.5							

I feel that physical education is important only for high school students.																							
TOTAL NUMBER OF ANSWERS											0	PER CENT				0							
TOTAL NUMBER OF COURSES TAKEN											0	AVERAGE				0							

Physical education is less important than other courses offered on the elementary level and should not take valuable time needed for other subjects in the curriculum.																							
		6		4				7			3												
																5	6						
TOTAL NUMBER OF ANSWERS											6	PER CENT				11							
TOTAL NUMBER OF COURSES TAKEN											31	AVERAGE				5.2							

Note: The Arabic number indicates number of courses taken.
The position in the block is the case number.

FIGURE VI
MASTER CONTROL SHEET FOR DICKINSON
PARTS 2 AND 3 QUESTIONNAIRE

I am very interested in teaching physical education to elementary pupils.																								
0	2	6		4		7	3	3	4			6	7	6			4	8	4	3	12	7	6	
7		5	1	7																				
TOTAL NUMBER OF ANSWERS											22	PER CENT					73							
TOTAL NUMBER OF COURSES TAKEN											112	AVERAGE					5.0							

I would not be interested in teaching physical education to elementary pupils.																								
		4		3					6	3				3	6									
7				7																				
TOTAL NUMBER OF ANSWERS											8	PER CENT					27							
TOTAL NUMBER OF COURSES TAKEN											39	AVERAGE					4.9							

I feel that physical education is a very important part of elementary education.																								
0	2	6	4	4		7	3	3	4	6		6	7	6			4	8	4	3	12	7	6	
7	7	5	1	7	7																			
TOTAL NUMBER OF ANSWERS											26	PER CENT					87							
TOTAL NUMBER OF COURSES TAKEN											136	AVERAGE					5.2							

I feel that physical education is important only for high school students.																								
TOTAL NUMBER OF ANSWERS											0	PER CENT					0							
TOTAL NUMBER OF COURSES TAKEN											0	AVERAGE					0							

Physical education is less important than other courses offered on the elementary level and should not take valuable time needed for other subjects in the curriculum.																								
				3						3				3	6									
TOTAL NUMBER OF ANSWERS											4	PER CENT					13							
TOTAL NUMBER OF COURSES TAKEN											15	AVERAGE					3.8							

FIGURE VII

MASTER CONTROL SHEET FOR VALLEY CITY
PARTS 2 AND 3 QUESTIONNAIRE

I am very interested in teaching physical education to elementary pupils.																	
8	9	4	6	4	19	7	3	3	4	12	7	2	13	2			10
6	12	5	14	7	0	2	2										
TOTAL NUMBER OF ANSWERS										24	PER CENT				73		
TOTAL NUMBER OF COURSES TAKEN										161	AVERAGE				6.7		

I would <u>not</u> be interested in teaching physical education to elementary pupils.																			
4	0	1				3										3	4	4	0
1																			
TOTAL NUMBER OF ANSWERS										9	PER CENT				27				
TOTAL NUMBER OF COURSES TAKEN										20	AVERAGE				2.2				

I feel that physical education is a very important part of elementary education.																				
8	4	9	4	1	6	4	15	3	7	3	4	12	7	2	13	2		4	10	0
6	1	12	5	14	7	0	2	2												
TOTAL NUMBER OF ANSWERS										29	PER CENT				88					
TOTAL NUMBER OF COURSES TAKEN										167	AVERAGE				5.8					

I feel that physical education is important only for high school students.																				
TOTAL NUMBER OF ANSWERS										0	PER CENT				0					
TOTAL NUMBER OF COURSES TAKEN										0	AVERAGE				0					

Physical education is less important than other courses offered on the elementary level and should not take valuable time needed for other subjects in the curriculum.																				
		0																3	4	
TOTAL NUMBER OF ANSWERS										4	PER CENT				12					
TOTAL NUMBER OF COURSES TAKEN										10	AVERAGE				2.5					

FIGURE VIII

MASTER CONTROL SHEET FOR MAYVILLE
PARTS 2 AND 3 QUESTIONNAIRE

I am very interested in teaching physical education to elementary pupils.																							
6	8	6	6	6		7	6	7	9	6	7	6	6		6	5	10		7	6	7	7	8
6			6	6		6	8	6	8	6													
TOTAL NUMBER OF ANSWERS										29	PER CENT					81							
TOTAL NUMBER OF COURSES TAKEN										194	AVERAGE					6.7							

I would <u>not</u> be interested in teaching physical education to elementary pupils.																							
				6											6				6				
	7	6			7							8											
TOTAL NUMBER OF ANSWERS										7	PER CENT					19							
TOTAL NUMBER OF COURSES TAKEN										46	AVERAGE					6.6							

I feel that physical education is a very important part of elementary education.																							
6	8	6	6	6	6	7	6	7	9	6	7	6	6		6	5	10	6	7	6	7	7	8
6	7	6	6	6	7	6	8	6	8	6	8												
TOTAL NUMBER OF ANSWERS										35	PER CENT					97							
TOTAL NUMBER OF COURSES TAKEN										234	AVERAGE					6.7							

I feel that physical education is important only for high school students.																							
TOTAL NUMBER OF ANSWERS										0	PER CENT					0							
TOTAL NUMBER OF COURSES TAKEN										0	AVERAGE					0							

Physical education is less important than other courses offered on the elementary level and should not take valuable time needed for other subjects in the curriculum.																							
															6								
TOTAL NUMBER OF ANSWERS										1	PER CENT					3							
TOTAL NUMBER OF COURSES TAKEN										6	AVERAGE					6.0							

FIGURE IX

COMPILATION OF QUARTER HOURS
TAKEN IN PHYSICAL EDUCATION

Case Number	Minot	Dickinson	Valley City	Mayville
1	9	0	11	6
2	10	5	4	9
3	9	6	13	6
4	9	10	0	6
5	4	8	6	6
6	14	3	2	6
7	13	6	6	7
8	14	3	5	6
9	12	3	39	6
10	12	6	5	11
11	10	6	8	6
12	6	3	8	7
13	6	6	3	6
14	7	10	6	6
15	7	6	26	6
16	6	3	8	6
17	6	6	4	5
18	10	5	23	11
19	10	16	5	6
20	12	7	3	8
21	10	10	8	6
22	9	26	8	7
23	12	10	14	7
24	8	6	0	8
25	6	10	6	6
26	10	8	3	8
27	10	8	21	6
28	7	4	7	6
29	6	10	25	6
30	10	8	9	7
31	6		0	6
32	10		6	9
33	6		6	6
34	10			9
35	9			6
36	3			8
37	15			
38	9			
39	6			
40	10			
41	8			
42	8			
43	6			
44	10			
45	4			
Total hours	404	218	305	247
Average	9.0	7.3	9.2	6.9

After compiling the statistical data on master control sheets, a computation was made on the total number of general and advanced physical education courses taken, quarter hours of credit obtained in physical education, and specified requirements in physical education, met before graduation. The data compiled from the master control sheets is presented in tables in Chapter IV.

Tables, in most cases, were so compiled as to facilitate subdivisions into categories representing the students from the four colleges surveyed. No distinction between men and women graduates was attempted.

The data received from the questionnaires was treated in a manner that would facilitate handling materials on an individual basis. Provisions were made so that the individual numerical facts could be transposed into a composite statistical analysis.

In the 1959-1961 second grade professional graduates (207 of which were students from Valley City, fifty-five from Dickinson, seventy-six from Mayville, and ninety-seven from Minot), a total of 146 questionnaires or forty-four per cent were returned in whole form.

Table I lists the number of questionnaires sent, and the number returned, and the percentage returned by the students from each of the four colleges included in the study.

It is significant to note that the questionnaires sent to the Dickinson students went to their college addresses while those to the Minot, Mayville, and Valley City students were sent to home

CHAPTER IV

ANALYSIS OF THE DATA

An analysis of the vital data obtained from the study has been prepared. The material which follows is sufficiently detailed to present the reader with a concise account of the aptitudes of second grade professional certificate graduates toward elementary physical education. The statistical data determined if certain basic requirements had been completed. Also analyzed, was how much advanced training had been taken by these students. A measure was taken on the desires for teaching physical education and the attitudes of these persons toward a program of this nature.

An Analysis of Replies to the Questionnaire

In response to the 330 questionnaires which were mailed to the 1960-1961 second grade professional graduates (102 of which were students from Valley City, fifty-five from Dickinson, seventy-six from Mayville, and ninety-seven from Minot), a total of 144 questionnaires or forty-four per cent were returned in usable form.

Table I lists the number of questionnaires sent, and the number returned, and the percentage returned by the students from each of the four colleges included in the study.

It is significant to note that the questionnaires sent to the Dickinson students went to their college addresses while those to the Minot, Mayville, and Valley City students were sent to home

addresses. The fifty-five per cent return from Dickinson seems to indicate that a greater percentage of students receiving questionnaires on the campus will take a more positive attitude toward the survey. It seems less likely that they will not respond to the survey to the same extent as the students at the other schools after school had been dismissed. Most students were involved with final examinations when the survey was made and probably did not wish to take valuable study time to answer the questionnaires.

TABLE I
NUMBER OF QUESTIONNAIRES SENT OUT, NUMBER RETURNED,
AND PERCENTAGE OF RETURNS

Sent to students from	Number Sent	Number Returned	Per Cent Returned
MINOT	97	45	46
DICKINSON	55	30	55
MAYVILLE	76	36	49
VALLEY CITY	102	33	32
GRAND TOTAL	330	144	44

Table II, indicates the number of second grade professional graduates who completed the six semester hours of required technical education. One-hundred-ninety of the 204 students (93 per cent) who completed the questionnaires, stated that they had completed their work in this area. The highest percentage of students (97 per cent) who had met the minimum requirements for graduation (6 semester hours) were from Mayville.

addresses. The fifty-five per cent return from Dickinson seems to indicate that a greater percentage of students receiving questionnaires on the campus will take a more positive attitude toward the survey. It seems less likely that they will set it aside as may be the case upon receiving a survey sheet at the home address after school had been dismissed. Most students were involved with final examinations when the survey was made and possibly did not wish to take valuable study time to answer the questions.

Despite problems involved, the survey provided the statistical data needed and also for the formulation of factual materials sought by the writer for this study.

An Analysis of Part One of the Questionnaire

It was the purpose of this phase of the study to ascertain the extent of preparation of the defined population for teaching physical education to elementary pupils. Part one of the questionnaire imparts the number of quarter hours taken in physical education by each student, and whether or not all courses listed as required had been taken. The number of advanced courses taken by each student could also be determined from this section of the questionnaire.

Table II, indicates the number of second grade professional graduates who completed the six quarter hours of required physical education. One-hundred-nineteen of the 144 students (83 per cent) who completed the questionnaire, stated that they had completed their work in this area. The highest percentage of students (97 per cent) who had met the minimum requirements for graduation (6 quarter hours) were from Mayville.

TABLE II

A COMPOSITE OF PROFESSIONAL PREPARATION IN PHYSICAL EDUCATION
OF SECOND GRADE PROFESSIONAL CERTIFICATE GRADUATES

SCHOOL	Took Six Quarter Hours or More	Per Cent	<u>Did Not Complete</u> Six Quarter Hours of Work in Physical Education	Per Cent	Took All Courses Listed as Required	Per Cent	Did Not Take All Courses Listed as Required	Per Cent	Took Advanced Courses	Per Cent
MINOT	42	93	3	7	28	62	17	38	35	78
VALLEY CITY	21	64	12	36	15	45	18	55	23	70
MAYVILLE	35	97	1	3	26	72	10	28	20	56
DICKINSON	21	70	9	30	16	53	14	47	18	60
GRAND TOTAL	119		25		85		59		96	
PERCENTAGES	83		17		59		41		67	

This segment of the study also reveals that twenty-five individuals, or 17 per cent of the queried, had failed to meet a requirement which was listed as necessary for graduation from any of the four colleges surveyed. This seems to indicate that a significant number of individuals were allowed to be graduated under circumstances which showed some laxity in enforcing certain basic graduation requirements. Underlying circumstances which could have contributed to the exoneration of certain persons from taking six quarter hours of physical education are not known by the writer and further study on this problem might reveal some logical explanation.

Each of the schools involved in this study listed courses which had to be taken in the physical education field before graduation could be realized. Table II reveals that 62 per cent from Minot, 45 per cent from Valley City, 72 per cent from Mayville, and 53 per cent from Dickinson had taken courses which were prescribed as required. A composite of all schools shows that 59 per cent of the students took all the required courses. This would indicate that 41 per cent of the respondents did not complete the specified required course work in physical education. It must be clarified that if the individual did not complete the required courses in physical education, he might still have completed six hours of work by substituting other courses. The colleges involved could perhaps vindicate themselves by giving some very acceptable reasons for allowing substitutions in course work. This writer

feels, however, that the courses which have been specified as required were given this distinction after much thought and deliberation on the part of the college staff. Since certain subjects are listed as required, one assumes that they are considered a prerequisite for the background needed in effective teaching of physical education. The justification for exemptions from foundation courses could be given some strong support, but a certain amount of doubt would remain concerning the ramifications that could result from this practice.

Table II imparts that advanced courses were taken by 78 per cent of the students from Minot, 70 per cent from Valley City, 56 per cent from Mayville, and 60 per cent from Dickinson. It must be remembered that these figures could be deceiving because advanced courses were sometimes substituted for the required subjects. Also, it is probably noticeable that certain schools had a high percentage of individuals who completed the required six quarter hours of course study. This could appreciably contribute to the small number of persons taking advanced subjects. This part of the study did not reveal any significant material for evaluation, but it must be indicated that proficiency in teaching usually can be attributed to the amount of professional training obtained. This composite of advanced work showed that 84 per cent had taken just one or two courses, 9 per cent had taken from three to five, and 6 per cent completed six or more advanced subjects in the field of physical education.

An Analysis of Parts Two and Three of the Questionnaire

Second grade professional graduates were requested to determine if they desired to teach physical education on the elementary level. In addition, they were to appraise the value of a physical education program for elementary pupils. Parts two and three of the questionnaire were developed into five questions to facilitate obtaining the information desired. The questions were: (1) I am very interested in teaching physical education to elementary pupils; (2) I would not be interested in teaching physical education to elementary pupils; (3) I feel that physical education is a very important part of elementary education; (4) I feel that physical education is important only for high school students; and (5) Physical education is less important than other courses offered and should not take valuable time needed for other subjects in the curriculum. For the sake of eliminating unnecessary repetition of these questions, they will be referred to as questions one, two, three, four, and five for the remainder of this study.

Tables III through VI present a composite of the answers for each school involved in the study. To moderate lengthy discussion concerning each college, a composite of the four schools was made and the figures revealed in the following paragraphs are taken from Table VII. If the figures for a specific school are desired, the reader may turn to Tables III through VI for the prescribed data.

TABLE III

ANSWERS TO PARTS 2 AND 3 OF THE QUESTIONNAIRE;
AND A COMPOSITE OF PROFESSIONAL TRAINING IN PHYSICAL EDUCATION BY MINOT STUDENTS

QUESTION	Number of Answers	Per Cent	Total Number of Courses Taken	Average Number of Courses Taken	Total Number of Q. H. Taken	Average Number of Q. H. Taken
1. I am very interested in teaching physical education to elementary pupils.	29	64	188	6.5	266	9.2
2. I would <u>not</u> be interested in teaching physical education to elementary pupils.	16	36	89	5.6	128	8.0
3. I feel that physical education is a very important part of elementary education.	39	89	253	6.5	362	9.4
4. I feel that physical education is important only for high school students.	0	0	0	0	0	0
5. Physical education is less important than other courses offered on the elementary level and should not take valuable time needed for other subjects in the curriculum.	6	11	31	5.2	42	7.0

TABLE IV
ANSWERS TO PARTS 2 AND 3 OF THE QUESTIONNAIRE;
AND A COMPOSITE OF
PROFESSIONAL TRAINING IN PHYSICAL EDUCATION BY VALLEY CITY STUDENTS

QUESTION	Number of Answers	Per Cent	Total Number of Courses Taken	Average Number of Courses Taken	Total Number of Q. H. Taken	Average Number of Q. H. Taken
1. I am very interested in teaching physical education to elementary pupils.	24	73	161	6.7	272	11.3
2. I would <u>not</u> be interested in teaching physical education to elementary pupils.	9	27	20	2.2	33	3.7
3. I feel that physical education is a very important part of elementary education.	29	88	167	5.8	291	10.0
4. I feel that physical education is important only for high school students.	0	0	0	0	0	0
5. Physical education is less important than other courses offered on the elementary level and should <u>not</u> take valuable time needed for other subjects in the curriculum.	4	12	10	2.5	14	3.5

TABLE V

ANSWERS TO PARTS 2 AND 3 OF THE QUESTIONNAIRE;
AND A COMPOSITE OF
PROFESSIONAL TRAINING IN PHYSICAL EDUCATION BY MAYVILLE STUDENTS

QUESTION	Number of Answers	Per Cent	Total Number of Courses Taken	Average Number of Courses Taken	Total Number of Q. H. Taken	Average Number of Q. H. Taken
1. I am very interested in teaching physical education to elementary pupils.	29	81	194	6.7	200	6.9
2. I would <u>not</u> be interested in teaching physical education to elementary pupils.	7	19	46	6.6	47	6.7
3. I feel that physical education is a very important part of elementary education.	35	97	234	6.7	241	6.9
4. I feel that physical education is important only for high school students.	0	0	0	0	0	0
5. Physical education is less important than other courses offered on the elementary level and should not take valuable time needed for other subjects in the curriculum.	1	3	6	6.0	6	6.0

TABLE VI

ANSWERS TO PARTS 2 AND 3 OF THE QUESTIONNAIRE;
AND A COMPOSITE OF PROFESSIONAL TRAINING IN PHYSICAL EDUCATION BY DICKINSON STUDENTS

QUESTION	Number of Answers	Per Cent	Total Number of Courses Taken	Average Number of Courses Taken	Total Number of Q. H. Taken	Average Number of Q. H. Taken
1. I am very interested in teaching physical education to elementary pupils.	22	73	112	5.1	171	7.8
2. I would <u>not</u> be interested in teaching physical education to elementary pupils.	8	27	39	4.9	47	5.9
3. I feel that physical education is a very important part of elementary education.	26	87	136	5.2	203	7.8
4. I feel that physical education is important only for high school students.	0	0	0	0	0	0
5. Physical education is less important than other courses offered on the elementary level and should not take valuable time needed for other subjects in the curriculum.	4	13	15	3.8	15	3.8

Table VII shows that question (1) was answered by 72 per cent of the defined population, indicating that these individuals would be interested in teaching physical education to elementary students. The forty negative answers (question 2) can be best analyzed by revealing that these individuals had taken an average of 6.2 quarter hours of training in physical education, compared to the 8.8 quarter hours taken by individuals who answered in a positive manner. Also, the average number of courses taken were 4.7 by negative respondents compared to 6.4 by the positive group. This seems to indicate that the individuals who had the most training in physical education, had a more positive attitude in their desire for teaching in this field. A number of persons indicated on their questionnaires that they took a negative attitude toward teaching physical education because of inadequate preparation. This should reveal that it is extremely important to develop positive attitudes through a better acquaintance with physical education by stabilization of the required training program.

Relative to the value of physical education on the elementary level, (questions 3 and 5), ninety per cent indicated that this course is important. The fifteen persons who felt physical education was a waste of time had taken an average of 4.1 courses and 5.1 quarter hours of training. A comparison shows that those who favored the program had taken an average of 5.7 courses and 8.4 quarter hours of preparation.

TABLE VII

A COMPOSITE OF PARTS 2 AND 3 OF THE QUESTIONNAIRE

QUESTION	Number of Answers	Per Cent	Total Number of Courses Taken	Average Number of Courses Taken	Total Number of Q. H. Taken	Average Number of Q. H. Taken
1. I am very interested in teaching physical education to elementary pupils.	104	72	663	6.4	919	8.8
2. I would <u>not</u> be interested in teaching physical education to elementary pupils.	40	28	186	4.7	247	6.2
3. I feel that physical education is important only for high school students.	129	90	733	5.7	1084	8.4
4. I feel that physical education is important only for high school students.	0	0	0	0	0	0
5. Physical education is less important than other courses offered on the elementary level and should not take valuable time needed for other subjects in the curriculum.	15	10	62	4.1	77	5.1

It is significant to note that those who took more preparatory courses (1.6 more courses) in physical education, felt that physical education was important in the over-all training of elementary school children. Any conclusions drawn would have to be that general acquaintance with any particular field seems to increase the probability of positive attitudes toward the aims and objectives prescribed by that segment of the education program. Perhaps, with a revision of programming for required physical education, attitudes can be diminished which are detrimental to establishing a sound physical education program in the elementary grades.

There were no answers to question (4) from the 144 who responded. A number of interpretations could result, but it perhaps can best be explained that either all the students felt that physical education has values for elementary as well as high school pupils, or they may have given their answers by marking question (5) to show a complete negative attitude.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The Study Summarized

The purpose of this study was to develop an instrument designed to present the aptitudes of second grade professional certificate graduates from the teachers colleges of North Dakota for teaching physical education on the elementary level. The material which follows is sufficiently detailed to present the reader with a concise account of the preceding chapters and contains in essence the core of the investigation.

After reviewing the literature in physical education and related fields, it was found that even though free and spontaneous play is approved, criticism is being directed at schools which offer little or no physical education on the elementary level. The writer felt there was a need for determining the nature of preparation, interests, and attitudes of the defined population of this study for teaching physical education.

To supplement the literature, a survey type of investigation was chosen for collection of the data. Because it would have been extremely difficult to obtain an adequate sampling of the geographical area included in the study through interviewing, the questionnaire was decided upon as the most feasible device for collecting the data needed.

The questionnaire was divided into two sections for the purpose of determining the professional training of each individual in regard to the number of quarter hours taken in physical education, how many advanced courses each respondent took, and if the courses specified as required were taken by the queried. The respondents were also questioned on their attitudes toward the necessity of a physical education program on the elementary level and their enthusiasm for teaching in this field.

Letters were sent to the Registrars of the four North Dakota Teachers Colleges requesting a list of names and addresses of graduates or prospective graduates with second grade professional certificates. Requests were also made for bulletins or catalogues from each of the surveyed schools. A final analysis was derived from the questionnaires and provisions were made so that the individual numerical facts could be transposed into a composite statistical analysis.

Limitations of the study have been discussed and suggestions for possible uses of the compiled information in determining teacher preparation programs and for future research have been given.

Conclusions

It is believed that the most purposeful interpretations which could be derived from this study are that inadequacies exist in certain teacher training programs. These inadequacies could possibly have detrimental effects on the future of the elementary physical education program. The attitudes of the respondents

further clarifies how professional preparation contributes to positive or negative interpretations of values derived from a physical education program for elementary students. It would be unfair to state that there are no explanations for certain discrepancies discovered in teacher training programs. Perhaps the personal bias of the writer could be challenged or underlying circumstances could reveal much exonerating evidence. However, the material has been interpreted only as it was revealed by the survey and personal interpretations of the writer need not necessarily be agreed upon as being final or absolute.

The fact that twenty-five (17 per cent) of the 144 respondents (Table II) did not complete six quarter hours of required training in physical education should be considered adequate grounds for stating that laxities in enforcing graduation requirements are existent to a large extent in some colleges.

One might conclude that if this is permitted to continue, persons with inadequate preparation are entering into the teaching profession. It must be clarified that this writer does not believe that six quarter hours of training is sufficient to insure good teaching in physical education, but must agree with the old adage "one bird in the hand is worth two in the bush" and that some training is better than none at all. The fact that two schools had high percentages (97 and 93 per cent) who had completed six quarter hours of training shows that a conscious effort is being made to have students fulfill graduation requirements.

The area where there seemed to be the greatest number of exemptions from graduation requirements was in the course work specified as required. The number exempted (41 per cent) would warrant the conclusion that the required program has weaknesses which subsequently allow many substitutions or that required courses have not been substantially proven sufficiently effective to strengthen adherence to the listed course requirements.

In the professional preparation of second grade professional graduates, only one school (Minot) required an advanced course (Health) in physical education. The number (67 per cent) who took advanced courses is deceiving because in most cases the advanced courses were substituted for a required subject. The fact that a great number (84 per cent) only took one or two advanced courses further clarifies that sufficient training in the field of physical education is lacking.

The number (72 per cent) of respondents who indicated that they would like to teach physical education on the elementary level would lead one to conclude that this is a rather encouraging number. However, when 28 per cent of the 144 respondents do not desire to teach in this field it must be concluded that quite a large number of individuals enter the elementary field of teaching each year who have negative attitudes towards instruction of physical education. This study revealed that if an individual took a positive attitude toward teaching physical education, he had taken more

training (an average of 2.6 more quarter hours) in this field than those with negative attitudes. One would conclude that the desirable situation would be for a requirement which would expose each graduate to as many courses in physical education as possible during his two years of training.

The statement, "elementary school children are much more active outside of school than secondary students and therefore do not need the extra physical education" was made by one respondent (see Figure IX, case 12 from Dickinson). This example may be used to clarify that inadequate exposure to a particular field may bring about misunderstandings and misgivings in attitudes toward elementary physical education. The afore mentioned individual and others who indicated that physical education was a waste of valuable time had less training (an average of 3.3 quarter hours less) than those who felt a program of physical education would be important for elementary students. Again, one must conclude that the amount of training in a particular field often determines the positive or negative attitudes developed by that individual.

It must be concluded that teacher preparatory institutions, in order to provide the preparation necessary for a teacher to perform his responsibilities adequately, should devote a greater portion of their curriculums to developing this degree of proficiency which the modern elementary school is increasingly demanding.

Recommendations

The percentage of teachers who are assuming the responsibilities for guiding and directing physical education in today's elementary schools is constantly being revised upward.

In view of the 90 per cent of second grade professional certificate graduates who signified that they felt physical education for elementary students was important, it is clear that all teachers preparing to enter the elementary field should be better qualified to direct activities where they show an interest. Their successes in teaching physical education could easily influence their future attitudes towards this field.

Teacher-preparation institutions should design constants to provide students with a broad foundation for the direction of physical education in much the same manner that they now prepare students to teach in other fields.

Requirements for preparation of teachers to teach elementary physical education with a second grade professional certificate should include the following:

1. To encourage the student to complete at least the required six quarter hours of training and be encouraged to take as many advanced courses in physical education as possible.
2. To provide for taking advanced courses, but not at the expense of by-passing the required courses.
3. To develop positive attitudes through a better acquaintance with physical education by stabilization of the required training program.

4. To establish a more uniform code of requirements and of course offerings by the teacher training institutions defined in this study.
5. To eliminate negative attitudes towards elementary physical education by better training and orientation.
6. To develop a philosophy which recognizes the values of physical education as a necessary component of every teacher's education. A teacher must possess the qualities of enthusiasm in leadership if he is to inculcate these qualities in his students.
7. To have students participate in a well-rounded activity program while attending college, so that the prospective teachers improve their abilities as student organization counselors and as teachers. In addition, they may secure an advantage when applying for a teaching position.

Further research should be conducted by installing in several institutions of higher learning, a planned program designed to produce well prepared sponsors of physical education for elementary pupils. From these experiments additional data could be accumulated and a program could eventually evolve, which would contribute materially to an improved solution of the problem.

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