

AN INVESTIGATION OF CARRY-OVER VALUE  
OF PHYSICAL EDUCATION ACTIVITY COURSES  
FOR WOMEN GRADUATES OF KANSAS STATE TEACHERS COLLEGE

A Thesis

Presented to

the Faculty of the Department of Women's Physical Education  
Kansas State Teachers College, Emporia, (Kansas)

Approved for the Major Department  
In Partial Fulfillment

of the Requirements for the Degree

Master of Science for the Graduate Council

by

Mary Helen Cox

May 1960

## Acknowledgments

The author wishes to acknowledge her indebtedness to Miss Edna McCullough, Head of the Women's Physical Education Department at Kansas State Teachers College of Emporia, for the printing of the introductory letter and the questionnaire used in this study.

The author wishes to express her grateful appreciation particularly to Miss Jeanne C. Galley of Kansas State Teachers College for her continued guidance, encouragement and criticism, also for her untiring patience and understanding as an advisor to the author throughout graduate school.

For expert advice on special problems the author is indebted to Mrs. Alice Sunday Gist, Thomas Butcher Childs' School at Emporia; and Miss Iva Helms, Robinson Intermediate School, Wichita, Kansas.

Approved for the Major Department

The author also wishes to express her appreciation to Mrs. Core Cox for her reading, also for her encouragement and assistance.

Edna McCullough

Approved for the Graduate Council

Jessie L. Boyler



Acknowledgements

CHAPTER The author wishes to acknowledge her indebtedness to Miss Edna McCullough, Head of the Women's Physical Education Department at Kansas State Teachers College of Emporia, for the printing of the introductory letter and the questionnaire used in this study. . . . . 2

The author wishes to express her grateful appreciation particularly to Miss Jeanne C. Galley of Kansas State Teachers College for her continued guidance, encouragement and criticism, also for her untiring patience and understanding as an advisor to the author throughout graduate school. . . . . 5

For expert advice on special problems the author is indebted to Mrs. Alice Sunday Gist, Thomas Butcher Children's School at Emporia; and Miss Iva Malone, Robinson Intermediate School, Wichita, Kansas. . . . . 13

The author also wishes to express her grateful appreciation to Mrs. Cora Cox for the many hours of proof-reading, also for her encouragement throughout this study. . . . . 17

Physical Education . . . . .	25
M.H.C.	
Literature on Curriculum Trends in Physical Education . . . . .	32
III. DISCUSSION OF DATA . . . . .	47
Method of Selecting Recipients for the Questionnaire. . . . .	47
Validity of the Questionnaire. . . . .	48

CHAPTER	TABLE OF CONTENTS	PAGE
	Results of the Questionnaire . . . . .	48
CHAPTER		PAGE
	IV. SUMMARY AND CONCLUSIONS . . . . .	56
	I. THE PROBLEM AND DEFINITIONS OF TERMS USED. . . . .	1
	The Problem . . . . .	1
	Definitions of Terms Used. . . . .	2
	Participation. . . . .	2
	Transfer. . . . .	2
	Activity Courses . . . . .	2
	Trend. . . . .	3
	Procedure for Gathering Data . . . . .	3
	II. REVIEW OF RELATED LITERATURE . . . . .	5
	Literature on the Psychological Aspect of	
	Physical Education . . . . .	5
	Literature on the Sociological Aspect of	
	Physical Education . . . . .	13
	Literature on the Recreational Aspect of	
	Physical Education . . . . .	17
	Literature on the Health Aspect of	
	Physical Education . . . . .	25
	Literature on Curriculum Trends in	
	Physical Education . . . . .	32
	III. DISCUSSION OF DATA . . . . .	47
	Method of Selecting Recipients for	
	the Questionnaire. . . . .	47
	Validity of the Questionnaire. . . . .	48



CHAPTER	LIST OF TABLES	PAGE
	Results of the Questionnaire . . . . .	48
IV.	SUMMARY AND CONCLUSIONS . . . . .	56
BIBLIOGRAPHY	I. Number of Graduates who Received Instruction in Activity Courses During College, Received Instruction Elsewhere, and the Number of Graduates Presently Participating in Activi- ties which they Learned in College. . . . .	59 69
APPENDIX	II. Number of Graduates Participating in Physical Activities Other than the Kind of Activity Offered in College. . . . .	70
III.	Responses for Enjoyment or Non-Enjoyment of the Physical Education Activities Courses . . . .	71
IV.	Suggestions Given for the Improvement of the Physical Education Activity Program . . . . .	72

## LIST OF TABLES

TABLE	TITLE	PAGE
I.	Number of Graduates who Received Instruction in Activity Courses During College, Received Instruction Elsewhere, and the Number of Graduates Presently Participating in Activities which they Learned in College. . . . .	69
II.	Number of Graduates Participating in Physical Activities Other than the Kind of Activity Offered in College. . . . .	70
III.	Responses for Enjoyment or Non-Enjoyment of the Physical Education Activities Courses . . . . .	71
IV.	Suggestions Given for the Improvement of the Physical Education Activity Program . . . . .	72

### I. THE PROBLEM

Statement of the problem. It was the purpose of this study (1) to determine the number of women graduates participating in physical education activities which they learned in college following graduation; (2) to evaluate the carry-over value of activity courses offered in college;



## CHAPTER I

### THE PROBLEM AND DEFINITIONS OF TERMS USED

Institutions of higher education meet their obligations to society through programs of resident instruction, research, and community service. In addition to professional and general education, institutions should provide services and facilities to meet other needs of its students. To gain support and confidence in meeting their obligations, colleges and universities must give evidence of stability, integrity, and transfer values. The author believes that the success or failure of a physical education program can be measured in part by how much has been transferred to the everyday lives of students following graduation. Through continual evaluation of the physical education program the college is provided with data that will possibly support curriculum revision or expansion.

#### I. THE PROBLEM

Statement of the problem. It was the purpose of this study (1) to determine the number of women graduates participating in physical education activities which they learned in college following graduation; (2) to evaluate the carry-over value of activity courses offered in college;

(3) to determine the type of activities preferred by women graduates following graduation; and, (4) to submit the findings of this study to the Department of Physical Education for Women with the purpose of possible curriculum expansion or revision.

## II. DEFINITIONS OF TERMS USED

Participation. According to Webster, participation refers to an act or state of partaking, or sharing in common with others. In the event that an individual engages in an activity that individual becomes a participant.

Transfer. Anything that can be applicable to a situation other than the immediate environment is transfer. Transfer means to convey from one place, person, or thing, to another. It is a process of forwarding something from one situation to another.

Activity Courses. Activity courses refer to the non-theory aspect of the physical education curriculum at Kansas State Teachers College. These courses are designed for the non-major student for the primary purposes of participation for skill development, leisure time pursuits, fitness development, knowledges and appreciations, and understandings of activities. These activities include the following: soccer, hockey, volleyball, basketball, tennis, archery, golf,



bowling, badminton, tumbling, indoor sports (shuffleboard, banball, cageball, tamburelli, table tennis, deck tennis, fencing), ballroom dancing, modern dancing, tap dancing, folk dancing, and swimming.

Trend. According to Webster, a trend is an underlying or prevailing tendency with proneness to a certain course of thought or action.

### III. PROCEDURE FOR GATHERING DATA

Research was done in the literature of recreation, psychology, physical education, health, and curriculum to determine interests, needs, physical abilities, and trends as may be related to physical education activity courses. The reading materials included literature that had been published in the last fifty years, whenever possible, to compare trends and philosophies of the past with those of the present.

A questionnaire was formulated and mailed to five hundred fifteen women graduates of Kansas State Teachers College, Emporia, Kansas. Physical education majors and minors were not included in this survey. Graduates were selected from those women who had graduated between the years 1949 and 1959. The author selected fifty graduates from each class between the years 1949 and 1959.

The data received from the questionnaire was tallied and compiled into tables which may be found in the appendices of this study.

REVIEW OF RELATED LITERATURE

all physically sound women students at Kansas State Teachers College have been required to take four hours of physical education sometime during the undergraduate years. The requirement of such courses was based on the assumption that there were certain important physical education experiences from which all students could benefit, and that these materials could be more effectively presented when organized as a separate course or courses and directed toward certain specific objectives. These courses were designed to contribute to certain aspects of the physical, psychological, sociological and recreational well being of women students.

Many studies have been completed in regard to the improvement of physical education curricula throughout the country; but greater emphasis should be directed toward the study of transfer of such curricula.

## I. LITERATURE ON THE PSYCHOLOGICAL

### ASPECT OF PHYSICAL EDUCATION

Psychology has been called the study of the mind; today it is usually considered the study of behavior. If, however, mind is that which determines the complex behavior



## CHAPTER II

6

### REVIEW OF RELATED LITERATURE

For many years, all physically sound women students at Kansas State Teachers College have been required to take four hours of physical education sometime during the undergraduate years. The requirement of such courses was based on the assumption that there were certain important physical education experiences from which all students could benefit, and that those materials could be more effectively presented when organized as a separate course or courses and directed toward certain specific objectives. These courses were designed to contribute to certain aspects of the physical, psychological, sociological and recreational well being of women students. Many studies have been completed in regard to the improvement of physical education curricula throughout the country; but greater emphasis should be directed toward the study of transfer of such curricula.

G. B. Gage, *Methods and Theory in Experimental Psychology*, I. (LITERATURE ON THE PSYCHOLOGICAL ASPECT OF PHYSICAL EDUCATION) 1933, p. 62.

E. G. ASPECT OF PHYSICAL EDUCATION *Psychology* (New York: Appleton-Century-Crofts, 1950), p. 13-24.

Psychology has been called the study of the mind; today it is usually considered the study of behavior. If, however, mind is that which determines the complex behavior

of higher animals, both definitions are approximately correct.<sup>1</sup> Learning in the mature animal is based on prior learning, and particularly the learning that occurs during the early growth period. It broadens the earlier learning, modifies it, or inhibits it; learning in a new situation at maturity is largely a matter of combining old learning in a new pattern. What can be learned at maturity, then, depends to a great extent on the learning that has gone on before.<sup>2</sup> Transfer of training refers to this carry-over from previous experience: positive transfer when it aids new learning, negative transfer when it hinders.<sup>3</sup> Transfer of training from early experience is of great importance. The learning that normally occurs during infancy is a prerequisite to the learning capacity which is familiar in the adult; that is, adult learning essentially consists of transfer from the learning of infancy and childhood. For example, the same arm and wrist movements

<sup>1</sup>C. E. Osgood, Method and Theory in Experimental Psychology (Boston: Oxford University Press, 1953), p. 62.

<sup>2</sup>E. G. Boring, History of Experimental Psychology (New York: Appleton-Century-Crofts, 1950), pp. 13-14.

<sup>3</sup>D. C. Hebb, A Textbook of Psychology (Philadelphia: W. B. Saunders Company, 1958), p. 49. of Learning (New York: Henry Holt Company, 1954), p. 134.

<sup>4</sup>Granville B. Johnson, The New Physical Education (Minneapolis: The Burgess Publishing Company, 1942), p. 92.



One . . . If this is so, adult learning is not the procurement of wholly new connections in the brain, whether from sensory to motor system or in the development of new assemblies, but largely a recombination of connections established earlier.<sup>4</sup> One does not have to face every new situation with a fresh start. The accumulation of experience is used. One recognizes relationships, and where success was met in a previous situation by the use of a particular technique one may try it out again to see if it works.<sup>5</sup> The question of how to transfer something learned in one act of circumstances to a situation similar but not the same has puzzled psychologists and educators for many years. Physical education teachers are concerned not only with the transfer of learning in the social or intellectual fields but also with the problem of transfer of motor skills.<sup>6</sup> Apparently transfer takes place on two levels. The simplest form is on a simple level from one skill directly to another. For example, the same arm and wrist movement is made in throwing a softball as in hitting a handball.

---

<sup>4</sup>E. R. Hilgard, Theories of Learning (New York:Appleton-Century-Crofts, 1956), pp. 51-53.

<sup>5</sup>B. R. Bugelski, The Psychology of Learning (New York: Henry Holt Company, 1956), p. 136.

<sup>6</sup>Granville B. Johnson, The New Physical Education (Minneapolis: The Burgess Publishing Company, 1942), p. 92.



One can learn to hit a handball better if one will transfer his skill to handball. A direct, simple transfer of skill.<sup>7</sup>

There is, however, a more complex form of transfer in which the original specific act or ideas lead to and become part of a general or "gestalt." It contributes something new to the general whole, and then the application of transfer is made to a new situation from the general idea.<sup>8</sup> To illustrate, one learns to give the guest opponent his choice of courts. This is related to and becomes a part of the general idea or "gestalt" that guests should be treated well and have the first of everything. Later, when one is arranging for bridge, of course the opponent gets the chair with the best light. The transfer may be from tennis to courtesy, from tennis to bridge, from bridge to courtesy, or from courtesy to tennis. These generalized ideas or behavior patterns become as huge railroad stations into which ideas or skills are fed and out of which other behaviors come which are made possible because the original ones went in.<sup>9</sup>

It would be exceedingly important to physical educa-

---

<sup>7</sup>Bernice Baxter, et al., Group Experiences--The Democratic Way (New York: Harper and Brothers, 1943), p. 36.

<sup>8</sup>Ibid., p. 37.

<sup>9</sup>Ibid., pp. 37-38.



tors, as well as all other areas of education, to know how to control, prepare for, and secure such transferred learning. About all that is known about the problem to date might be expressed by recounting the four principle conditions under which transfer on any level is most likely to occur: (1) the more nearly equivalent two situations are, the greater the possibility for transfer; (2) the act, skill, or idea should be identified, named, described, and its relationships or applications pointed out; (3) the necessity of teaching these precisely as one teaches a skill; and, (4) the higher the intelligence the more likely the transfer, particularly on the upper level where an act is related to an idea and carried over to another act.<sup>10</sup>

There is evidence that attitudes begin to formulate at a young age. For this reason it is vitally important that physical educators strive to improve methods and organization on not only the high school and college level, but the elementary level as well. Pressey<sup>11</sup> says: "Attitudes are subjective counterparts of objective values." The different

<sup>10</sup> Bruce Bennett, "Physical Education and Social Learning In the Secondary Schools," Journal of Health, Physical Education and Recreation. 30:9, September, 1949.

<sup>11</sup> E. Sidney Pressey et al., Psychology and the New Education (New York: Harper and Brothers, 1944), p. 16.



forms of recreation represent values toward which attitudes are formed. If the attitude is favorable toward a recreational activity, and it is approved by the individual and the group, he is likely to engage in it; but if he thinks that it is wrong, undesirable, or if he does not like it, he will probably not indulge in it.<sup>12</sup>

Attitudes must be elevated into ideals and given emotional tone in order for transfer to be effective.<sup>13</sup> Strong attitudes and emotionalized responses not only transfer as such but become the basis for transfer of associated factors. Attention to attitudes and to emotionalized aspects of education thus represents the backbone of teaching for transfer. Social and emotional sets may transfer according to the "gestalt" theory of insights and cues which bring forth previously formed patterns.<sup>14</sup> Attitudes and habits are important factors in the choices of leisure pursuits and the continuity of interest in them.<sup>15</sup>

<sup>12</sup> Esther Neumeyer, Leisure and Recreation (New York: The Ronald Press Company, 1958), pp. 253-282.

<sup>13</sup> \_\_\_\_\_, "The Function of Mental Practice in the Acquisition of Motor Skills," The Journal of General Psychology, 29:243-50, October, 1943.

<sup>14</sup> E. Sidney Pressey et al., op cit., p. 32.

<sup>15</sup> Elmer D. Mitchell, Bernard Mason, The Theory of Play (New York: The Ronald Press Company, 1948), pp. 11-14.  
Oregon Toward Physical Education," The Research Quarterly, 16:176-91, 1950.



Moore,<sup>16</sup> taking a 10 percent sampling of junior and senior women from each major department of a large college, used Form A of the Bues-Remmer scale (which is based on Thurstone's technique of rating a series of items) and followed this with an interview. She determined that there was a highly favorable general attitude toward physical education activity as a means of recreation among college women. She also points out that such physical education activity is used for recreational purposes in life following graduation.

Bullock and Alden<sup>17</sup> used a questionnaire with freshmen college women which explored (1) early home life; (2) all phases of high school experience in physical education, including instructors, facilities, and programs, and (3) the same phases in relation to physical education work at the University of Oregon. Their conclusions were that in the case of required physical education, all factors causing distaste or a poor attitude are of a nature that can be lessened, and in most cases entirely eliminated by improved methods and organizations in high schools and colleges.

---

<sup>16</sup>Beverly Moore, "The Attitudes of College Women Toward Physical Education as a Means of Recreation," The Research Quarterly, 12:720-5. December, 1941.

<sup>17</sup>M. Bullock, F. Alden, "Some of the Factors Determining the Attitudes of Freshmen Women at the University of Oregon Toward Physical Education," The Research Quarterly, 16:176-91, 1950.



They also concluded that a desirable attitude on the part of the learner can be an important factor in a successful transfer of physical education activity.

Baker<sup>18</sup> surveyed by questionnaire 1,150 girls and women between the ages of 15-25 and concluded from her data that psycho-physical factors (factors pertaining directly to the mind and body) seemed to exert very slight influence on participation in physical education. She further concluded that attitudes in relation to physical activities were a reflection of the influence of outside factors such as: (1) preconceived ideas concerning physical education; (2) insufficient experiences in physical education and, (3) the inability to recognize values in physical education.

The preceding studies indicate that physical education activities do transfer with college students in later life, in situations which are similar, in situations where there is an attitude and effort on the part of the learner to effect transfer, and in situations where transfer is taught.

---

<sup>18</sup> Mary C. Baker, "Factors Which May Influence the Participation in Physical Education of Girls and Women 15-25 Years of Age," The Research Quarterly, June, 11: 126-31, 1940.

Herbert A. Carroll, Mental Hygiene, The Dynamics of Adjustment (New York: Prentice-Hall Inc., 1951), pp. 26-29.



## II. LITERATURE ON THE SOCIOLOGICAL

### ASPECT OF PHYSICAL EDUCATION

Physical education activities provide the participant with many different opportunities which may better prepare him for democratic and cooperative living as a citizen in our society. It is practical, it is functional, it helps in preparing for living, and it helps one to live a more vigorous and more interesting life. It also aids in adjusting to the group.

Society is concerned with a study of people, of groups of persons, and of human activities in terms of the group and institutions in society. It is a science which is interested in developing a better social order characterized by good, happiness, tolerance, and racial equality.

It is a science which is interested in such institutions of society as religion, family, government, education, and recreation.<sup>19</sup>

Sociology depends upon education to help in developing happiness, tolerance, and good will in society. Education plays an important part in the improvement of the democratic way of life. Education plays another part by solving social problems.<sup>20</sup>

Charles A. Bucher, Foundations of Physical Education (St. Louis: The C. V. Mosby Company, 1950), pp. 279-280.

<sup>19</sup>Charles L. Auspach, Problems In Educational Sociology (Boston: American Book Company, 1953), pp. 1-3.

<sup>20</sup>Herbert A. Carroll, Mental Hygiene, The Dynamics of Adjustment (New York: Prentice-Hall Inc., 1951), pp. 26-29.

<sup>21</sup>Dorothy LaBalle, Guidance of Children Through Physical Education (New York: A. S. Barnes and Company, 1946), p. 105.



Physical education as an integral part of education can play an important part in the improvement of the democratic way of life. It is applicable to day-to-day living, it is practical, it is functional, it helps in preparing for living, and it helps one to live a more vigorous and a more interesting life. It also aids in adjusting to the group. Physical education teaches relationships in accordance with set rules. Participants put forth their best efforts to defeat opponents but in a socially acceptable manner.<sup>21</sup> Through physical activities great strides can be made in achieving social progress and more satisfying living.<sup>22</sup> Lumley<sup>23</sup> states that through physical recreation juvenile delinquency, race prejudice, intolerance, and discrimination can be alleviated and progress made toward their elimination from our democratic society. Almost all play is carried on with Democracy maintains that the individual's fullest development is achieved through the active, cooperative participation of its members for the common welfare.<sup>24</sup>

---

<sup>21</sup> Charles A. Bucher, Foundations of Physical Education (St. Louis: The C. V. Mosby Company, 1950), pp. 279-280.

<sup>22</sup> Charles Wannemaker, "The Meaning and Significance of Social Adjustment," Journal of Health, Physical Education and Recreation, 10:12, January, 1949.

<sup>23</sup> Frederick E. Lumley, Principles of Sociology (New York: McGraw-Hill Book Company, 1955), pp. 143-144.

<sup>24</sup> Dorothy LaSalle, Guidance of Children Through Physical Education (New York: A. S. Barnes and Company, 1946), p. 105.



Consequently, one of the basic needs of individuals in our culture is to learn to work cooperatively with others. To live cooperatively means planning and working together for the realization of common goals, defined in terms of the common good.<sup>25</sup>

Lehman and Witty<sup>26</sup> state that physical education activities provide a most fertile field for social development. They point out that cooperation and competition, both involving real and close relationships with other people, are important factors in physical education programs. Recognition of worth is based upon performance, effort, and sportsmanship; physical education is a splendid medium for social amalgamation.<sup>27</sup>

Physical education is replete with opportunities for vital, cooperative endeavors. Almost all play is carried on with others.<sup>28</sup> In practically all games, things are done with others; rules are followed, turns are taken; problems arise for discussion and solution, and decisions are made.

---

<sup>25</sup> Dorothy LaSalle, op cit., p. 107.

<sup>26</sup> H. C. Lehman, P. A. Witty, The Psychology of Play Activities (New York: A. S. Barnes and Company, 1947), p. 40.

<sup>27</sup> Susan Isaacs, Social Development in the Young Child, A Study of Beginnings (New York: Harcourt Brace and Company, 1945), p. 210.

<sup>28</sup> Ibid., p. 36.

In these natural situations, physical education provides opportunities for acting with cooperation and friendliness for the common good.<sup>29</sup> The degree to which students learn to do this is determined by the sensitivity of the teacher to help to guide the student to use his leisure time wisely, and the skill of her guidance.<sup>30</sup>

---

<sup>29</sup>Lehman and Witty, op cit., p. 108.

<sup>30</sup>American Council on Education, Helping Teachers Understand Children (Washington: The Council, 1947), p. 106.

participating in the proper recreational activities including physiological and psychological gains.<sup>31</sup> From a physiological point of view, when one is partially fatigued, he can relax and even recuperate by doing things different from what he has been doing. Most people participate in the physical activities as a recreational pursuit. They provide a change from the usual routine of work. Therefore, changing from a regular routine to participation in physical education activities at regular times helps people to relax from the tensions and worries of work, thus refreshing the mind and body. Recreation, to be helpful, need not be done on an elaborate and expensive scale. To think so, is a misconception, for the many simple forms of recreation available

---

<sup>31</sup>Samuel R. Slayson, Recreation and the Total Personality (New York: Associated Press, 1948), pp. 12-16.



### III. LITERATURE ON THE RECREATIONAL ASPECT OF PHYSICAL EDUCATION

One of the aims of the physical education program is to help to guide the student to use his leisure time wisely. The student should know the vital place that wholesome recreation can play in the full enjoyment of life, especially the role of physical education activities in this respect.

There are many different benefits to be derived from participating in the proper recreational activities including physiological and psychological gains.<sup>31</sup> From a physiological point of view, when one is partially fatigued, he can relax and even recuperate by doing things different from what he has been doing. Most people participate in the physical activities as a recreational pursuit. They provide a change from the usual routine of work. Therefore, changing from a regular routine to participation in physical education activities at regular times helps people to relax from the tensions and worries of work, thus refreshing the mind and body. Recreation, to be helpful, need not be done on an elaborate and expensive scale. To think so, is a misconception, for the many simple forms of recreation available

---

<sup>31</sup> Samuel R. Slavson, Recreation and the Total Personality (New York: Associated Press, 1948), pp. 12-16.



to all in maintaining physical, mental, and emotional health.<sup>32</sup> increasingly important role played by recreation is due One of the strongest characteristics of early pioneer history in this country was the strength of the family ties. The reason for this strength was undoubtedly partly economic and partly social. Families were generally without adequate funds for all but the barest essentials for living, had little or no equipment and hence there was a tendency in everyday living to work together and to play together as a unit. The present drive for recreation, both in its ways and means of satisfying leisure requirements, stands in striking contrast to earlier attitudes toward leisure and its use.<sup>33</sup> on the number of hours which minors and women

The efforts to determine what education should accomplish in the light of the needs of the modern family constitutes a most significant responsibility of educators, social workers, and clergy. As conditions and demands of family life change, so too should the education of the family. Conspicuous among the changes so apparent today is the problem of the wise use of leisure time. Education must accept this challenge or fail in its fundamental re-Community

---

<sup>32</sup> Harry A. Overstreet, The Mature Mind (New York: W. W. Norton and Company, 1949), pp. 30-31.

<sup>33</sup> Jesse Frederick, Americans At Play (New York: McGraw-Hill Book Company, 1943), p. 11.



sponsibility to mankind.<sup>34</sup>

The increasingly important role played by recreation is due to a variety of causes beginning with those which gave rise to the industrial revolution.<sup>35</sup> The age of discovery brought the age of invention; the age of invention brought the age of power; the age of power brought the age of leisure.<sup>36</sup> In the age of power mechanical processes became so improved that it was practicable to reduce the hours of labor materially. Accordingly, within the past century the hours of factory labor have been reduced in some industries from seventy-two to forty-eight hours per week, and in many industries to forty.<sup>37</sup> Federal legislation has imposed restrictions upon the number of hours which minors and women might be employed. Legislation which would establish a universal thirty-hour week has been seriously considered by more than one congress of the United States.<sup>38</sup>

<sup>34</sup>George E. Lundberg, A Suburban Study (New York: Columbia Press, 1934), pp. 19-26.

<sup>35</sup>Clarence E. Rainwater, The Play Movement in the United States (Chicago: University Press, 1922), pp. 13-22.

<sup>36</sup>Howard G. Danford, Recreation in the American Community (New York: Harper and Brothers, 1953), p. 9.

<sup>37</sup>National Recreation Association, Proceedings of the International Recreation Congress (Washington: NRA, 1956), pp. 206-210.

<sup>38</sup>Stuart Chase, Men and Machines (New York: MacMillan Company, 1955), p. 20.



In the pre-industrial era a worker found an outlet for a wide range of his skills in his vocation. Work was not highly competitive but leisurely done. It gave opportunity for creative experiences and invention and for the individual to place the stamp of his own genius upon the character of the product. It provided opportunity for social engagement in the process.<sup>39</sup> Today work in the vocations and professions alike is restrictive in its employment of the worker's skills. His success is almost in direct proportion to the degree of his specialization. In the factory he often uses the accessory and not the large skeletal muscles.<sup>40</sup> This does violence to his physiological and emotional balance and so he must find relief in big muscle exercise during leisure. In his play he finds opportunity also to live creatively and to give expression to the wise assortment of human capabilities with which he is endowed, but which atrophy through disuse if not released and cultivated in leisure.<sup>41</sup>

<sup>39</sup> George D. Butler, Introduction to Community Recreation (New York: McGraw-Hill Book Company, 1940), pp. 17-18.

<sup>40</sup> E. C. Lindeman, Leisure, A National Issue (New York: Associated Press, 1939), p. 29.

<sup>41</sup> G. L., "Recreation and the Aging Process," The Research Quarterly, XXVII (March 1955), pp. 36-43.

American Association for Health, Physical Education, and Recreation, Administrative Problems (Washington, D.C., 1953), p. 161.



The individual citizen's lack of financial means to purchase recreation is in some degree compensated for by the public and other community facilities, the enjoyment of which is open to all. These include not only those available through agencies specifically established for recreation such as parks, playgrounds, and beaches, but those which are offered by public schools, group work agencies, churches and other community enterprises. These facilities are not uniformly distributed nor are they by any means adequate to existing needs.<sup>42</sup>

Leisure has not only given rise to a number of movements and institutions but has also profoundly affected established institutions. None has been more vitally affected than the institution of public education. Since the beginning of the present century progressive educators have been aware of the fact that the rapidly growing leisure would place new demands upon the public school.<sup>43</sup> In 1917 the National Education Association published a monograph on the Cardinal Principles of Secondary Education in which seven objectives of education were set forth. One of these was stated as, "the preparation for the worthy use of leisure

---

<sup>42</sup>E. C. Lindeman, op cit., p. 160.

<sup>43</sup>American Association for Health, Physical Education, and Recreation, Administrative Problems (Washington: NEA, 1953), p. 161.



time."<sup>44</sup> Complete preparation for citizenship was expressed as the single goal of education. A vocational preparation was recognized as an important part of the training for citizenship which schools were called upon to give. This pronouncement gained wide acceptance everywhere and hardly any statement of aims of education is made without including preparation for leisure among them.<sup>45</sup> The acceptance of leisure time arts in the curricula of universal public education from kindergarten to institutions of higher learning is another factor which contributes to the growing importance of recreation.<sup>46</sup> In preparing students for citizenship educators now realize that they must prepare individuals for satisfying, wholesome leisure.<sup>47</sup> The gradual removal of incompetence and ineptitude on the

<sup>44</sup> NEA, Cardinal Principles of Secondary Education (Washington: United States Government Printers, 1918), p. 36.

<sup>45</sup> Charles W. Davis, "The Community School," Journal of Health, Physical Education and Recreation, XXIV (February to 1943), p. 7.

<sup>46</sup> John Jenney, Introduction to Recreational Education (Philadelphia: W. B. Saunders Company, 1955), pp. 26-38.

<sup>47</sup> Gilbert C. Wrenn, Time on Their Hands (Washington: Education Council, 1941), p. 3.

<sup>50</sup> Jay B. Nash, Philosophy of Recreation and Leisure (St. Louis: The C. V. Mosby Company, 1953), p. 69.



part of the American people in choosing leisure time activities and participation in them in ways conducive to progressive development of knowledges, appreciations and skills, will be an inevitable outcome of the emphasis which the universal educational system will more and more grant to recreation.<sup>48</sup>

The schools have a responsibility to train students for fruitful use of leisure which is equal to their responsibility to train them for useful work.<sup>49</sup> If the future generations are to participate actively in a wide variety of games and recreational activities, it will be necessary to help them while in school to acquire skills in a variety of games and physical education activities that can be followed throughout their lifetime. The school programs must, therefore, be planned not merely for the present enjoyment but in the light of carry-over values.<sup>50</sup>

Schools that provide a well-rounded program of physical education and recreation which will help all students to

---

<sup>48</sup>Eleanor T. Glueck, The Common Use of Schools (Baltimore: William and Wilkins Company, 1957), pp. 111-113.

<sup>49</sup>Eugene T. Lies, The New Leisure Challenges The Schools (Washington: NEA, 1943), p. 43.

<sup>50</sup>Jay B. Nash, Philosophy of Recreation and Leisure (St. Louis: The C. V. Mosby Company, 1953), p. 69.

to develop skills in a variety of sports and games, rather than an intensive training program for a few in order to develop winning teams, not only provide enjoyment and enrichment of life during the school years but also give the experience which may enable students to carry on some of the activities after their formal education has been completed. This program should provide equal opportunities for girls to participate in physical education activities.<sup>51</sup>

Much of the carry-over value that will be derived from physical education activities will be of a recreational nature. For this reason it should be reiterated that recreation is only one part of physical education but an important one.

<sup>51</sup> Esther Neumeyer, Leisure and Recreation (New York: The Ronald Press Company, 1958), pp. 390-391.

Through this development of organic vigor and functional efficiency, exercise contributes to physical health.<sup>54</sup>

<sup>52</sup> G. E. Turner, et al., School Health and Health Education (St. Louis: The C. V. Mosby Company, 1957), p. 18.

<sup>53</sup> Delbert Charteaufer, Physical Education (New York: Harper and Brothers, 1951), p. 20.

<sup>54</sup> George F. Stafford, Preventive and Corrective Physical Education (New York: A. S. Barnes and Company, 1950), pp. 13-24.



#### IV. LITERATURE ON THE HEALTH ASPECT

##### OF PHYSICAL EDUCATION

"As society looks ahead, it can conceive the hope that some day almost every human being will be well, intelligent, physically vigorous, mentally alert, emotionally stable, socially reasonable, and ethically sound. At least society must concern itself with progress toward that goal."<sup>52</sup>

Physical activity stimulates the circulation of blood, increases the appetite, and improves the functional capacity of muscles, including the heart. Through activity, physical endurance may be developed and neuromuscular skills learned.<sup>53</sup> From the health point of view the physiological effects of exercise are an increase in functional efficiency and organic power. The body becomes more efficient in performing physical activity and withstanding strain and exertion. Through this development of organic vigor and functional efficiency, exercise contributes to physical health.<sup>54</sup>

<sup>52</sup>C. E. Turner, et al., School Health and Health Education (St. Louis: The C. V. Mosby Company, 1957), p. 18.

<sup>53</sup>Delbert Oberteuffer, Physical Education (New York: Harper and Brothers, 1951), p. 20.

<sup>54</sup>George T. Stafford, Preventive and Corrective Physical Education (New York: A. S. Barnes and Company, 1950), pp. 23-24.



Physical education contributes to mental health through the personal satisfaction, joy, and pleasure which accompany participation in a variety of activities.<sup>55</sup> When an individual participates in play, his body, mind, and emotions are working together. He is functioning as an integrated personality and it is this integration of functioning which is the foundation of mental health.<sup>56</sup>

The mentally well person is one who finds a happy outlet for his impulses and emotions and whose thoughts and actions are free from abnormalities.<sup>57</sup> Recreation of the right sort may provide such an outlet and may discipline one's thoughts and actions in the channels of normality. Persons who manifestly are recreationally educated are generally healthy personalities and, contrawise, mentally maladjusted personalities are most frequently personalities who play abnormally or whose recreational capacities are underdeveloped.<sup>58</sup>

While recognizing the mental hygiene value of recrea-

---

<sup>55</sup> Delbert Oberteuffer, op cit., p. 21.

<sup>56</sup> Harold Rugg, Foundations of American Education (New York: World Book Company, 1947), p. 68.

<sup>57</sup> Ida S. Brown, "Training in Group Development with University Students--An Experiment," (Unpublished dissertation), University of California, Los Angeles: 1950, pp. 26-29.

<sup>58</sup> Clifford Brownell, Physical Education--Foundations and Principles (New York: McGraw-Hill Book Co., 1951), p. 183.



tion and the value of exercise in developing strength, sight must not be lost of the fact that, as far as is known, physical strength produces no immunity to disease. A strong body may be an asset in recuperating from sickness, but well-nourished, well-developed, muscular individuals are as likely to have rheumatic heart disease, tuberculosis, cancer, appendicitis, and other certain afflictions as are the weak and underdeveloped. It should be recognized that a physical education program cannot take the place of a health program, nor can health education take the place of physical education.

The terms fitness and physical fitness are widely used in the field of physical education today. These terms have been elusive ones to define objectively. Karpovich<sup>59</sup> defines physical fitness as "a fitness to perform some specific task requiring muscular effort." In order to ascertain how the leading authorities in medicine as well as physical education defined physical fitness, a number of definitions made during a period of sixteen years were analyzed. This analysis revealed that the term physical fitness was most generally interpreted in its broader concept, that of total fitness.<sup>60</sup>

<sup>60</sup>Malind Cassidy, et al., Physical Fitness for Girls (New York: McGraw-Hill Book Company, 1951), pp. 148-149.

<sup>59</sup>Donald A. Mathews, Measurement in Physical Education (Philadelphia: W. B. Saunders Company, 1953), p. 28.

<sup>60</sup>Clifford Brownell, Physical Education--Foundations and Principles (New York: McGraw-Hill Book Co., 1951), p. 183.



The term physical fitness as used in this study refers to total fitness and from the definitions studied it may be concluded that total fitness has the following four components: (1) Psychologic fitness (the emotional stability necessary to meet the everyday problems characteristic of one's environment, and sufficient psychologic reserve to handle a sudden emotional trauma); (2) Health, or normal physiologic function; (3) Body mechanics, or efficient performance in skills, from the common everyday skills of standing, walking, and sitting to the most complex, such as the performance of an intricate pattern of movement by a dancer; and, (4) Physical anthropometry, a type of fitness perhaps reflected in body contour as a result of good muscular tonus as well as proper body weight.<sup>61</sup>

Fitness is truly complex, incorporating all aspects of the total being. As the definition implies, a student who is physically fit enjoys robust health, a fine-looking physique, satisfactory level of social and emotional adjustment and proficiency in the basic skills of movement.<sup>62</sup>

or compensate for some health deficiency.<sup>65</sup> This

<sup>61</sup> Rosalind Cassidy, et al., Physical Fitness for Girls (New York: McGraw-Hill Book Company, 1951), pp. 182-184.

<sup>62</sup> Donald K. Mathews, Measurement In Physical Education (Philadelphia: W. B. Saunders Co., 1958), pp. 4-6.

<sup>63</sup> Leslie Irwin, op cit., pp. 54-55.

<sup>65</sup> Arthur S. Daniels, Adapted Physical Education (New York: Harper and Brothers, 1954), pp. 16-17.



include Recreational fitness implies that a student is recreationally fit if he possesses sufficient skill in a variety of activities to enjoy participating in them.<sup>63</sup> Here the emphasis may be placed upon such fitness skills as badminton, tennis, bowling, canoeing, camping, and swimming; for it is in these activities that carry-over into adult life will take place. The skills must be carefully taught and used to motivate continued participation in physical education activities.

Health instruction and physical education, although separate fields, are closely related in many ways. One of the ways to improve health is through vigorous physical activity.<sup>64</sup> Thus, in physical education, the student is afforded a laboratory through which the values of such health matters as diet, exercise, rest, and mental and emotional health may be revealed. Also to be included in this area is the field of rehabilitation in physical education, where health knowledge and understanding are interpreted with the student into a way of life designed to remedy or compensate for some health deficiency.<sup>65</sup> This

<sup>60</sup>Valerie Hunt, Recreation for the Handicapped (New York: Harper and Brothers, 1955), p. 30.

<sup>63</sup>Karl W. Bookwalter, Fitness for Secondary School Youth (Washington: American Association for Health, Physical Education and Recreation, 1956), p. 28.

<sup>64</sup>Leslie Irwin, op cit., pp. 54-55.

<sup>65</sup>Arthur S. Daniels, Adapted Physical Education (New York: Harper and Brothers, 1954), pp. 16-17.



includes the students who are classified in the health examination as having handicapping health defects.

Handicapped students are encouraged not only to meet physical education goals that are appropriate for them but also to satisfy as many of the goals of normal students as are within their range of accomplishment.<sup>66</sup> Physical education helps the normal student to accept handicapped students and to feel some responsibility for helping them meet their goals.

Physical education assumes not only part of the responsibility for the health status of the student but also for the safety of the student. Many forms of vigorous physical activity are potentially dangerous. Many of the dangers inherent in physical activity may be counteracted or nullified through the instructional program in physical education.<sup>67</sup>

Accidents happen much less frequently to students who are taught how to fall, to roll, to maintain balance, to be agile, to lift, to anticipate danger and react quickly to avoid injury, to judge distance, and to time their movements in relation to moving, shifting objects.<sup>68</sup>

---

<sup>66</sup>Valerie Hunt, Recreation for the Handicapped (New York: Prentice-Hall, 1955), p. 30.

<sup>67</sup>A. E. Floria, Safety Education (New York: McGraw-Hill Book Company, 1956), pp. 42-43.

<sup>68</sup>George T. Stafford, op cit., p. 50.



The college physical education program contributes further to the safety welfare of its participants through complete programs in first aid and water safety instruction. The participants of such programs are more safety-conscious, have fewer accidents, and in many instances, transfer their knowledge and skill of safety to others in everyday life.<sup>69</sup>

Physical education makes a definite contribution to the present and future health of students. Many recreational pursuits are of an active nature and provide the participant with healthful physical exercise. All wholesome recreational activities, whether quiet or active, have contributions to make to personality integration and satisfaction in living. The colleges have accepted this responsibility for education in recreational skills and interests and are increasingly providing a variety of recreational experience that may be applicable to life following graduation.

---

<sup>69</sup>Raymond A. Snyder, Harry Scott, Professional Preparation in Health, Physical Education, and Recreation (New York: McGraw-Hill Book Company, 1954), p. 127.

---

<sup>70</sup>Rosalind Cassidy, Curriculum Development in Physical Education (New York: Harper and Brothers, 1952), p. 187.

<sup>71</sup>Laurentine Collins, Rosalind Cassidy, et al., Physical Education in the Secondary School (New York: A. S. Barnes and Company, 1948), p. 40.



## V. LITERATURE ON CURRICULUM TRENDS

### IN PHYSICAL EDUCATION

The task of the school today in any society and at any period of time is to prepare the individuals of that society for successful living. Our time is one of rapid change, fabulous invention, and application of scientific research in every respect of our daily lives.<sup>70</sup>

The schools' task in keeping up with these rapidly changing facts and happenings has been an impossible one, both in class instruction and in the preparation and in-service education of teachers. The facts of the world we are now in have profound implications for our educational philosophy, the method and materials of instruction, the design of school buildings, the preparation of teachers and administrators, the relations of schools and community, of parents and teachers, of teachers and students.<sup>71</sup>

As we look ahead at the task today and ask what must be the purpose of the elementary school, and higher education in the United States in these next years of the twentieth century, we at once realize two distinct trends. First, that our time is, and will continue to be full of uncertainty and rapid change. Second, that valid factual data upon which to build our programs in education are difficult to secure and too complicated to make operative quickly in school practice. These two facts make it evident to educators that wherever schools are to function adequately in preparing our citizens to live effectively in their day and time, it

<sup>70</sup> Rosalind Cassidy, Curriculum Development in Physical Education (New York: Harper and Brothers, 1958), p. 167.

<sup>71</sup> Laurentine Collins, Rosalind Cassidy, et al., Physical Education in the Secondary School (New York: A. S. Barnes and Company, 1940), p. 46.



is essential that machinery be set up for constant study, planning, and re-planning in education and that this process of study, plan, tryout, restudy, replan be premised on a steadfast belief in a fluid, functional educational program for Americans of all ages.<sup>72</sup>

Krug<sup>73</sup> shows the four stages of the curriculum development movement in American education as: (1) that of following and adopting the curriculum of our European heritage; (2) that of defining curriculum through national curriculum experts; (3) the scientific measurement movement; and, (4) our present-day stage, which is related to these previous stages in a continuous, historical process. He calls it the society-centered, democratic "curriculum development" movement. Today's educators, full realizing the demands of our present-day society for the kinds of understanding needed by our youth and the skills required for living in today's world, have developed various patterns of cooperative curriculum planning as the most effective means for meeting such needs.

As in general education, the developing program of physical education in this country shows the same kind of trends in methods and emphasis. A review of the various

---

<sup>72</sup>Rosalind Cassidy, op cit., p. 169.

<sup>73</sup>Edward A. Krug, Curriculum Planning (New York: Harper and Brothers, 1950), pp. 213-218.

<sup>75</sup>M. P. Ravenel (ed.), A Half Century of Public Health (New York: Public Health Association, 1921), pp. 166-174.

<sup>76</sup>Charles Bucher, op cit., chapter XIX.



ways in which these programs have been developed will serve both as background and orientation.

The group of American physicians who in 1885 organized the Association for the Advancement of Physical Education were deeply concerned with the health of school students.<sup>74</sup> The curriculum in physical education which they advocated was one of drill and exercises designed to alleviate the depleting effects of school-room study.

The muscle training and "discipline" of foreign patterns of exercise taken from Sweden, Germany, and Denmark all flourished in an earlier day when the objectives of education for "mental discipline" were paralleled by the idea of "physical discipline" through "physical training" programs designed for an individual conceived as having a mind quite separate from his body.<sup>75</sup>

A later trend was the play content which came from searching for ways in which physical education could contribute, along with other areas of education, to individual adjustment to preparation for democratic citizenship, and to growth in self-discipline instead of an authoritarian superimposed discipline.<sup>76</sup> The emphasis on recreation came from

<sup>74</sup>Walter Dill Scott, The Administration of Public Recreation (New York: The Macmillan Company, 1940), pp. 148-152.

<sup>74</sup>J. T. Rogers, State-Wide Trends in School Hygiene, and Physical Education (Washington: United States Office of Education, 1930), p. 5.

<sup>75</sup>M. P. Ravenel (ed.), A Half Century of Public Health (New York: Public Health Association, 1921), pp. 168-174.

<sup>76</sup>Charles Bucher, op cit., chapter XIX.



the demands of a changing culture in our country and was influenced by the growing field of social work and the awareness of the needs and purposes of youth. The emphasis on intramurals and the adopted and varied content of program, "a game for every child and every child in a game," came from the democratic concept of the consideration of all individuals as opposed to the exclusive attention to the highly gifted and the highly skilled.<sup>77</sup>

The growing knowledges from psychology and the child-study programs profoundly modified all educational practice in directing attention to the differences in the needs of developing individuals and the ways in which they learn and their behavior is changed.<sup>78</sup>

New directions in program planning in the physical education program came from university staff groups such as the experienced teachers gathered at the turn of the century by Thomas Dennison Wood at Teachers College, Columbia University, where the philosophy, principles, and methods of democratic physical education were formulated and applied to dance, sports, health teaching, and teacher education.

---

<sup>77</sup>George Hjelte, The Administration of Public Recreation (New York: The MacMillan Company, 1940), pp. 146-152.

<sup>78</sup>William Ralph LaPorte, The Physical Education Curriculum (New York: The Carlson Printing Company, 1947), p. 92.

This resulted in a series of publications clearly defining a new physical education trend, a physical education aligned with the current educational thinking, directed toward preparing citizens to think, act, and live responsibly and democratically.<sup>79</sup>

One of the earliest city programs to gain distinction for its method with teachers and students in curriculum planning in physical education was the Health and Physical Education Program in the Detroit Public Schools.<sup>80</sup> That program has continued to be a model for cooperative curriculum planning and has made important contributions to the literature in physical education curriculum development. One of the earliest statements in Detroit published in 1929<sup>81</sup> and the program statement for girls which followed in 1937,<sup>82</sup> still give direction today for the modern trend in physical education program planning.

---

<sup>79</sup> Harold Rugg, American Life and the School Curriculum (New York: Ginn and Company, 1936), pp. 58-62.

<sup>80</sup> Vaughn S. Blanchard, et al., An Activity Program in Physical Education for Intermediate Grades (Detroit: Public Schools, 1937), pp. 106-107.

<sup>81</sup> Esther Sherman, Health Education--A Program for Girls in Secondary Schools (Detroit: Board of Education, 1929), pp. 84-85.

<sup>82</sup> Ibid., p. 86.



The four-year study of the National Association for Physical Education of College Women<sup>83</sup> represents a process study by a nation-wide group. Its members defined through their national Committee on Professional Leadership the meanings of democratic process and then described program activities in physical education for the college student, for the major student, and for the in-service experience of staff that were believed to be most promising in achieving democratic learnings. The first general cooperative step in this study by the National Association members resulted in a workshop session. It, in turn, was followed by a further intensive study of one aspect of the original survey, namely, democratic practices in the education of teachers of physical education. This final study resulted in a check list to be used by member institutions in self-survey, appraisal, and replanning. This type of cooperative curriculum development is one of the most promising for growth in a given situation and is effective on a broad front when under-

Check-List for Self-Survey, *Journal of Physical Education* (May, 1949).

<sup>83</sup>National Association for College Women, Practice of Promise in the Understanding and Use of the Democratic Process (Washington: The American Association for Health, Physical Education and Recreation, 1949), pp. 317-324.

<sup>86</sup>Ibid., p. 86.



taken by a group representing the entire nation.<sup>84</sup> State-wide planning for program evaluation and revision is undertaken by wise state administrators in cooperation with professional groups concerned. One of the most effective early programs of this kind, which involved practically every physical education teacher in the state in an active participation process, was that initiated in 1939 and 1940 by N. P. Neilson when he was State Director of Physical Education in California.<sup>85</sup> The current California study promises to involve large numbers of the profession in studying and recommending needed program revisions as groups examine their practices in relation to the standards formulated in "A Framework for Public Education in California." The research studies and the yearly work conferences of the California Recreation Commission are similar examples of this state-wide cooperative method.<sup>86</sup> State-wide involvement

<sup>84</sup> Barbara Mack, "Recommended Democratic Practices in the Preparation of Women Teachers of Physical Education: A Check-List for Self-Study," Research Quarterly (May, 1951), p. 622.

<sup>85</sup> Louis E. Means, et al., "Framework Objectives are Realized in Sound Programs of Health Education, Physical Education, and Recreation," (Sacramento California: Public Schools, 1952), pp. 14-15.

<sup>86</sup> Ibid., p. 86.



of physical education teachers in program study currently deserving attention and careful study as to method of evaluation, are the New York State Physical Education Standards Project,<sup>87</sup> and the Illinois Secondary School Curriculum Program Study.<sup>88</sup>

An example of a national education group outside of physical education helping to develop materials for the improvement of physical education programs was that of the Progressive Education Association through its 1938 and 1939 workshop grants. These workshops, along with the subsequent evaluation conferences held across the country, resulted in the publication of *Physical Education in The Secondary School*.<sup>89</sup> This publication was proposed as a guide to planning programs in physical education to meet students needs and was rated with the best curricula practice in program planning in other subject fields. This study illustrates a trend in which support to the physical education field was

<sup>87</sup> New York State Physical Education Standards Project Bulletins, A Guide for the Development of Standards and the Curriculum in Physical Education and Safety (New York: University of New York, 1950), p. 31.

<sup>88</sup> Clyde C. Knapp, et al., Practices and Opinions in Physical Education, Health and Safety (Illinois: Public Instruction Office, 1951), p. 19.

<sup>89</sup> New York State Physical Education Program, op cit., Number 51. American Association for Health, Physical Education, Recreation, Mobilization of Health Education, Physical Education and Recreation (Washington: AEA, 1951), pp. 13-14.

<sup>91</sup> Rosalind Cassady, op cit., III. <sup>92</sup> Ibid., 12.



given by a group of educators outside of the particular professional area concerned. It was a joint effort of educators within and without the physical education field cooperating to improve physical education programs. The United States office of Education's call to physical education experts in 1942 to develop wartime programs in physical education and the National Conference for Mobilization of Education<sup>90</sup> in March, 1951, are further trends of sponsorship from an organization not primarily concerned with physical education. Another trend, to a limited degree, is the participation of physical education personnel in the American Council on Education's studies in General Education and in Teacher Education. A staff of teachers with their students or a teacher with a student group presents another trend in cooperative program planning. The pilot program in the preparation of women physical education teachers at the University of California, Los Angeles, is one of the outstanding examples of the process of developing philosophy, program materials, methods, and evaluative techniques with teachers and students working together toward the present-day goals of teacher education.<sup>91</sup>

---

<sup>90</sup> American Association for Health, Physical Education, Recreation, Mobilization of Health Education, Physical Education and Recreation (Washington:NEA, 1951), pp. 13-14.

<sup>91</sup> Rosalind Cassidy, op cit., III. <sup>92</sup> Ibid., II.



When present-day trends are studied in the changing secondary school curriculum a wide range of programs is seen including subject-centered patterns, the broad fields, the correlated, the experience-centered, the core curriculum, and the common learnings.<sup>92</sup> Large numbers of subject-centered programs in physical education have existed and now exist in both secondary school and college. The student embarking on a required program in physical education takes a series of activities. These activities may be entirely selected without a study of the student's needs and are often set up according to what the director happens to know, what the staff can teach, what facilities are available in the school, or a combination of all three. The dominant concept is to see that the student gets exercise; how she gets it and how she feels about it is of little consequence. This program may be carried out in a rotation of activities during the week. It is often called the "Take It and Like It" program.<sup>93</sup> Related to the idea of the broad fields curriculum is

<sup>92</sup> Rosalind Cassidy, op cit., Chapter II.

<sup>93</sup> Ibid., Chapter II.

the seasonal plan in operation in many of our physical education programs. This plan is developed with a view to areas of experience in physical education activities and proceeds upon a seasonal rotation required and considered important and good for the participant. This program is usually organized on the block plan. The student is required to take a series of activities. These are offered in four-, six-, or eight-week blocks. This has the value of concentrated efforts and usually more expert instruction. In some colleges there is a general time requirement, but the activities taken within that requirement are left up to the student. This is sometimes called the "Take Anything You Like Program."<sup>94</sup> of stock-taking and replanning. It could be The "Balanced Program" is nearest to the core idea in general education. There is a central core of requirements with specific achievement demands. Along with and beyond this required core of experience the student may select, in fact is encouraged to select, according to her greatest interests. Along with this core, usually introducing it, is an orientation course interpreting the program to the student; (3) The Core Program; and, (4) The Problem-Centered Program. The <sup>94</sup>Laurentine Collins, et al., op cit., pp. 166-167.

<sup>95</sup> Rosalind Cassidy, op cit., p. 109.



and helping her understand the scope and unity of the experiences she may enjoy while participating in physical education.

The "Experience Curriculum" or a problem-centered program is much less frequent in contemporary physical education. In such a program the staff or a staff-student group defines the problems which students in that school, or in that particular class, have in the area of body education. Their physical education course then consists of the students and instructor working out the answers to these problems. Such a program would be introduced with an orientation, self-survey, and planning experienced and would allow for frequent periods of stock-taking and replanning. It could be quite free and fluid or might be structured to give a sequential emphasis through the years from freshman to senior.<sup>95</sup>

Many programs are not as sharply drawn as these types and may include the aspects of several. At present the programs in physical education fall into the following four groups: (1) Take It and Like It; (2) Take Anything You Like; (3) The Core Program; and, (4) The Problem-Centered Program. The curriculum trend in modern physical education today

---

<sup>95</sup>Rosalind Cassidy, op cit., p. 109.



parallel's the "Balanced Program." Physical education programs have spread horizontally to include a wider variety of activities that aim at satisfying the interests and needs of its participants. Physical education programs have been re-organized on the basis of determining core experiences all students should have in the complete program.<sup>96</sup>

A more prominent trend in the physical education curriculum is the wider and more intensive application of measurement and evaluation. The application of measurement and evaluation to the program and pupil forms the scientific basis for the practice of physical education.<sup>97</sup> "Measurement truly diminishes error in programming, thus assuring the most direct route between pupil status and the proposed educational objective."<sup>98</sup> The teacher uses measurement to aid her in understanding the needs of students.<sup>99</sup> In this

---

<sup>96</sup> Laurentine Collins, et al., op cit., pp. 166-167.

<sup>97</sup> Jay B. Nash, Physical Education: Interpretations and Objectives (New York: A. S. Barnes and Company, 1948), p. 68.

<sup>98</sup> Peter V. Karpovich, op cit., pp. 133-134.

<sup>99</sup> Charles Harold McCloy, Tests and Measurements in Health and Physical Education (New York: F. S. Crofts Co., 1952), p. 97.



manner the most efficient program may be initiated to aid the student at arriving at the teacher's stated objective.

In 1954 a conference on physical education for college men and women was held in Washington.<sup>100</sup> As a result of this conference fourteen principles basic to the formulation of the physical education curriculum for college men and women were set forth. They are:

- (1) provide activity for every student, with due consideration for each individual's capacities, interests, and needs;
- (2) teach men and women to play together for continuing enjoyment and understanding;
- (3) raise the level of performance of the individual above the novice class in order to motivate participation, both during and beyond college life;
- (4) prepare the individual, through the adjustment of tensions and emotional strains, to fit into the environments in which he will find himself;
- (5) conform to constantly advancing scientific knowledge in all areas of human behavior such as biological, psychological, and sociological;
- (6) provide harmonious and cooperative experiences in group problem solving;
- (7) offer opportunities for creative expression and for development of personal resources;
- (8) develop through progressive learning experiences life-long interests in satisfying leisure-time activities;
- (9) develop healthful functioning of the organs and systems through participation in vigorous activity. (the activity should be adapted to the present physical condition of the individual and should develop an appreciation for his need for some physical activity);
- (10) help the student provide for counseling and guidance (planned and incidental, group, and individual) on a very definite pattern in order that referrals to the health center, counseling bureau, or an appropriate campus or community agency may be made promptly;
- (11) include competition in sports;
- (12) provide for development of efficient body movement;
- (13) provide progressive learning achievement; and, (14) provide understanding of the need for relaxation skills

---

<sup>100</sup> Washington Conference Report, Physical Education for College Men and Women (Washington: NEA, 1954), p. 11.



on the part of all students as well as to provide opportunities for relaxation and rest where such is needed.<sup>101</sup>

The above principles lay the foundation for the development of present-day physical education curriculum trends for college students. It should be recognized that "determination of the type and content of curriculum depends upon the expected contribution of physical education to the complete education of students, and reflects the breadth and depth of understanding of those responsible for planning the curriculum."<sup>102</sup>

---

FOR THE QUESTIONNAIRES

<sup>101</sup> Washington Conference Report, op cit., pp. 11-12.

<sup>102</sup> Jesse Feiring Williams, Clifford Brownell, The Administration of Health Education and Physical Education (Philadelphia: W. B. Saunders Company, Inc., 1955), p. 95.

recipients of the questionnaire included the following: (1) each graduate selected was not a major or a minor in the field of physical education; (2) each graduate selected must have taken part in the physical education activity program; and, (3) each graduate selected must have been graduated from Kansas State Teachers College between the years 1947 and 1959. The author used the commencement program for the years 1947 through 1959 and selected fifty names from each year in an alphabetical sequence. All graduates were then selected from the permanent files of the Placement Bureau at Kansas State Teachers College. The author would like to note



that in some instances information was not up to date, consequently, some of the information deviated from the established criteria.

CHAPTER III  
DISCUSSION OF DATA

The questionnaire used in this study was constructed with the purpose of receiving data to support the purposes of the study. The questionnaire was accompanied by an introductory letter. Both the questionnaire and the introductory letter may be found in the appendices.

II. VALIDITY OF THE QUESTIONNAIRE  
I. METHOD OF SELECTING RECIPIENTS

FOR THE QUESTIONNAIRE

The questionnaire was mailed to 515 women graduates of Kansas State Teachers College. Selected criteria for the recipients of the questionnaire included the following: (1) each graduate selected was not a major or a minor in the field of physical education; (2) each graduate selected must have taken part in the physical education activity program; and, (3) each graduate selected must have been graduated from Kansas State Teachers College between the years 1949 and 1959. The author used the commencement programs for the years 1949 through 1959 and selected fifty names from each one in an alphabetical sequence. All graduates were then selected from the permanent files of the Placement Bureau at Kansas State Teachers College. The author would like to note

that in some instances student information was not up to date, consequently, some of the information deviated from the established criteria.

## II. VALIDITY OF THE QUESTIONNAIRE

The questionnaire was valid enough to substantiate the purposes of this study. Ten pilot questionnaires were mailed out and nine were answered and returned. A follow-up by telephone correspondence proved the questionnaire to be valid. The same kind of information received from the pilot questionnaire by mail was received from the follow-up by telephone. The information received from the pilot questionnaire indicated to the author that the questionnaire would measure what it purported to measure.

## III. RESULTS OF THE QUESTIONNAIRE

From the 515 questionnaires sent out 403 were answered and returned, 71 were returned unclaimed, and 41 were not returned. These figures indicate that 76 per cent of the total number sent out were returned answered.

Table I (in the appendices) shows the activities offered in college, the number of graduates presently participating in physical education activities they learned in college, and the number of graduates who received instruction,



in the various physical activities, other than college instruction. Table I indicates that activities with the greatest per cent of carry-over are: (1) camping with 100 per cent presently participating; (2) swimming with 98.4 per cent presently participating; (3) bowling with 96.8 per cent presently participating; (4) golf with 79 per cent presently participating; (5) table tennis with 67.9 per cent presently participating; and, (6) social or ballroom dancing with 65.7 per cent presently participating. The activities that have had the least amount of carry-over are: (1) shuffleboard with 8.4 per cent presently participating; (2) tap dancing with 3.7 per cent presently participating; (3) archery with 3.2 per cent presently participating; (4) volleyball with 2.6 per cent presently participating; and, (5) softball with 1.8 per cent presently participating.

From the foregoing it seems evident that individual and dual activities have had the most significant carry-over from the physical education activity program to life following graduation. The author would like to note that two-thirds of the activity courses offered in the physical education program are individual and dual activities. This is certainly in keeping with the present preferred activities of graduates.

included from the program because they provide the participant with the opportunities for vigorous physical



Of the 403 graduates who responded 96.4 per cent are presently participating in an activity they learned in college while 3.6 per cent are not. This indicates that 388 graduates from the 403 responding are presently participating in an activity they learned in college as opposed to 15 graduates who are not presently participating in an activity they learned in college. The average number of hours per week being spent participating in physical activities which were learned in college was three.

The activities, as shown in Table I, which have had no carry-over value are: banball, basketball, cageball, deck tennis, fencing, hockey, modern dance, soccer, speedball, speed-a-way, and tumbling. It is important to note that banball, cageball, speedball and speed-a-way have been in the physical education curriculum only the last two years; consequently, most of the graduates responding did not have the opportunity to participate in these courses. The author also wishes to note that the activities such as basketball, fencing, hockey, soccer, and tumbling are of such a nature that they require a larger number of people to play them and that expensive equipment is imperative for some. These activities have a greater amount of significance and value within the physical education program during college years. They are not excluded from the program because they provide the participant with the opportunities for vigorous physical



exercise, experience for development of spectatorship, teamwork, and an appreciation for a variance in physical activity. These courses also serve as experience units for majors and minors who must have adequate knowledge and skill to teach them in the typical public school physical education program. It is related to the tasks the person must perform.

Table II (in the appendices) indicates that there are a greater number of participants engaging in "reducing exercises" than any other recreational activity not offered by the college. A course such as this is not offered in the physical education activity program because it is recognized that an attractive, well-proportioned body could accrue as a result of participating in the physical education activities now offered. A certain degree of physical exercise is present with each activity course. Modern dancing and tumbling offer a great deal of exercise for college women. However, most college women do not need "reducing exercises" as a specific course during college years. The physical education department recognizes the increased need for physical activity ("reducing exercises") for women after age forty. For this reason physical exercise is emphasized in the physical education program for the purpose of transfer value in later life.

been required and that 21 per cent would not have taken



physical Table II indicates a direct relationship between a majority concern for "reducing exercises" and fitness. It was pointed out in the review of related literature on health that physical education makes a great contribution to fitness for living. Physical fitness is one aspect of total fitness. It is related to the tasks the person must perform, his potential for physical effort, and the relationship of his physical fitness to his total self. The expressed concern for "reducing exercises" is in direct proportion with physical fitness.

Table III (in the appendices) indicates the responses for enjoyment or non-enjoyment of the physical education activity courses. The total number of graduates who enjoyed physical education activities they took was 375 as compared with 28 who did not enjoy the physical education activities. These figures indicate that 93 per cent of the graduates enjoyed the physical education activity courses they took while 7 per cent did not. When asked if they would have taken physical education had it not been required 318 graduates replied that they would have; 85 replied that they would not have taken physical education had it not been required. This indicates that 79 per cent of the 403 graduates responding would have taken physical education had they not been required and that 21 per cent would not have taken



physical education had they not been required. The most frequently stated reason for enjoyment of the physical education activities courses was "friendships gained." This is shown in Table III and indicates a frequency of 315 graduates responding. In the review of related literature the psychological aspect of physical education was included for the purpose of discussing the conditions for transfer and attitudes affecting transfer. The data found in Table III indicates that the majority of college women participating in the physical education activities program enjoyed their experiences and would have taken physical education without having been required. Their experiences were pleasant and they had developed a favorable attitude toward physical education. Their physical education instruction in college is very similar to many of their physical recreational pursuits in life following graduation. In the college physical education program knowledges, skills, appreciation for physical activity, enjoyment, physical fitness, creativity, and leisure are all taught with transfer values pointed out. It appears that the experiences encountered through participating in physical education activities have transferred to the everyday lives of women graduates following graduation.



suits. It has been pointed out in the sociological review of related literature that physical education is a social experience. This is a further exemplification of the data found in Table III. This data shows that friendships gained, enjoyment, keeping fit, and preparation for leisure are all directly related to the sociological aspect of physical education. The contributions of physical activity to the sociological aspect of physical education is in the development of the social phases of personality, attitudes, and values by means of games, sports and related activities.

The most frequently stated reason for non-enjoyment of the physical education activity courses was "changing clothes for activity." Due to the personal hygiene and freedom of movement of the student it is deemed necessary to participate in a specific costume for physical education rather than in street clothes that are worn all day.

Table IV (in the appendices) indicates the suggestions given for the improvement of the physical education activity program. The author wishes to point out that 65 per cent of the 403 graduates responding to the questionnaire (or 263 graduates responding) made no suggestions for improvement of the physical education program.

The most frequent suggestions for improvement of the physical education program were: change the design of gym



suits, change the design of swim suits, make the program an elective one, take the emphasis off grades, and, provide a less active program for older students. It seems worthy to note that the design in swim wear has been changed considerably within the last ten years to cope with just such criticism. It appears that changing the design of gym suits would help in alleviating undesirable attitudes of participants toward physical education activity courses.

About all that may be said concerning required or elective physical education is that by law in many states, and by board of education in others, some physical education is required of college students prior to graduation. In physical education the requirement seeks to assure normal growth and development. The requirement gives an opportunity that might otherwise not exist. During the years of college life well selected activities stimulate the neuromuscular mechanisms and serve the functional demands of the vital organs. For these reasons, as well as others already given, the physical education department advocates the required program.

ing with 52.5 per cent, golf with 77 per cent, table tennis with 57.9 per cent, and social-dance with 65.7 per cent; (5) the activities which had the least amount of carry-over value were: softball with 1.8 per cent, archery with 3.2 per cent, top-down with 3.7 per cent, volleyball with 2.8 per cent, and basketball with 5.4 per cent.

### SUMMARY AND CONCLUSIONS

(7) 93 This study was conducted in order to investigate the carry-over value of physical education activity courses for women graduates of Kansas State Teachers College of Emporia between the years 1949 and 1959. There were 515 women graduates selected for the study.

On the basis of this particular study, the following conclusions appear warranted: (1) 96.4 per cent of the women graduates of Kansas State Teachers College are presently participating in a variety of the physical education activity courses they learned in college while 3.6 per cent are not; (2) women graduates prefer individual and dual activities to team activities; (3) the type of physical recreation being participated in the most, other than those activities offered by the college, are reducing exercises; (4) the activities which had the greatest amount of carry-over value were: camping with 100 per cent, swimming with 98.4 per cent, bowling with 96.8 per cent, golf with 79 per cent, table tennis with 67.9 per cent, and social dance with 65.7 per cent; (5) the activities which had the least amount of carry-over value were: softball with 1.8 per cent, archery with 3.2 per cent, tap dancing with 3.7 per cent, volleyball with 2.8 per cent, and shuffleboard with 8.4 per cent.



(6) the activities which had no carry-over value were baseball, basketball, cageball, deck tennis, fencing, hockey, modern dance, soccer, speedball, speed-a-way, and tumbling; (7) 93 per cent of the 403 graduates responding enjoyed the physical education activities they took as compared with 7 per cent who did not; (8) the most enjoyable aspect derived from the physical education activity courses was the number of friendships gained; (9) the least enjoyable aspect derived from the physical education activity courses was the changing of clothing for classes; (10) the most frequently mentioned suggestions for improving the physical education program were: changing the design of gym suits and swim suits, making the physical education program an elective one, and taking the emphasis off grades, and providing a less active program for older students.

As a result of this study the author wishes to recommend the following: (1) the greatest amount of emphasis should continue to be placed on the individual and dual activities with reservation to the availability of staff, equipment, and facilities; (2) a program of special activities may be considered for the older and handicapped students; (3) the present physical education program might include a greater emphasis on the transfer of fitness as regards exercises for reducing; (4) the present physical edu-

cation program might be expanded to include activities such as boating, horseback riding, bicycling, community recreational projects, hunting and hiking; (5) a joint proposal between the men's and women's physical education departments for offering more co-educational activity courses might be considered; (6) due to the increased number of married students on campus it seems worthy to suggest a program for family recreation; and (7) due to the large number of participants in aquatics it seems warranted to require all physical education students to learn how to swim.

It appears that the Women's Physical Education Department of Kansas State Teachers College is fulfilling its obligation to students by providing physical activities that will transfer to the everyday lives of students following their participation in the physical education activity courses they took in college.



... I. L. ROOKE ...

American Association for Health, Physical Education and Recreation. Administrative Problems. Washington: NRE, 1951.

American Association for Health, Physical Education and Recreation. Mobilization of Health Education, Physical Education and Recreation. Washington: NRE, 1951.

American Association for Health, Physical Education and Recreation. Physical Education for College Men and Women. Washington: NRE, 1951.

American Council On Education. Helping Teachers Understand Children. Washington: The Council, 1947.

Augsch, Charles L., Wray H. Congdon. Problems In Educational Sociology. Boston: American Book Co., 1931.

Baxter, Bernice, et al. From Experience--The Educational Way. New York: Harper and Brothers, 1933.

**BIBLIOGRAPHY**

Blanchard, Vaughn S., Collins, An. Activity Program in Physical Education for Intermediate Grades. Carroll: Public Schools, 1937.

Bushalter, Earl W., Carolyn Bushalter. Physical for Secondary School Youth. Washington: NRE, 1950.

Spring, H. G. History of Experimental Psychology. New York: Appleton-Century-Crofts, 1930.

Brewell, Clifford, Marjorie Wagner. Physical Education--Fundamentals and Principles. New York: McGraw-Hill Book Company, 1951.

Bushby, Charles A. Fundamentals of Physical Education. St. Louis: The V. G. Mosby Company, 1960.

Dugolski, S. S. The Psychology of Learning. New York: Henry Holt Company, 1954.

Butler, George D. Introduction to Community Recreation. New York: McGraw-Hill Book Company, 1940.

Carroll, Herbert. How A. BOOKS

American Association for Health, Physical Education and Recreation. Administrative Problems. Washington: NEA, 1953.

American Association for Health, Physical Education and Recreation. Mobilization of Health Education, Physical Education and Recreation. Washington: NEA, 1951.

American Association for Health, Physical Education and Recreation. Physical Education for College Men and Women. Washington: NEA, 1954.

American Council On Education, Helping Teachers Understand Children. Washington: The Council, 1947.

Auspach, Charles L., Wray H. Congdon, Problems In Educational Sociology. Boston: American Book Co., 1953.

Baxter, Bernice, et al. Group Experience--The Democratic Way. New York: Harper and Brothers, 1943.

Blanchard, Vaughn S., Laurentine Collins. An Activity Program in Physical Education for Intermediate Grades. Detroit: Public Schools, 1937.

Bookwalter, Karl W., Carolyn Bookwalter. Fitness for Secondary School Youth. Washington: NEA, 1956.

Boring, E. G. History of Experimental Psychology. New York: Appleton-Century-Crofts, 1950.

Brownell, Clifford, Patricia Hagman. Physical Education--Foundations and Principles. New York: McGraw-Hill Book Company, 1951.

Bucher, Charles A. Foundations of Physical Education. St. Louis: The V. C. Mosby Company, 1960.

Bugelski, B. R. The Psychology of Learning. New York: Henry Holt Company, 1956.

Butler, George D. Introduction to Community Recreation. New York: McGraw-Hill Book Company, 1940.



- Carroll, Herbert. Mental Hygiene, The Dynamics of Adjustment. New York: Prentice-Hall, 1951.
- Cassidy, Rosalind. Curriculum Development in Physical Education. New York: Harper and Brothers, 1954.
- Cassidy, Rosalind, Hilda Clute Kozman. Physical Fitness for Girls. New York: A. S. Barnes and Company, 1943.
- Chase, Stuart. Men and Machines. New York: MacMillan Company, 1955.
- Collins, Laurentine, Rosalind Cassidy, et al. Physical Education in the Secondary School. New York: A. S. Barnes Company, 1946.
- Danford, Howard G. Recreation in the American Community. New York: Harper and Brothers, 1953.
- Daniels, Arthur S. Adapted Physical Education. New York: Harper and Brothers, 1954.
- Frederick, Jesse. Americans At Play. New York: McGraw-Hill Book Company, 1943.
- Floria, A. E., G. T. Stafford. Safety Education. New York: McGraw-Hill Book Company, 1956.
- Glueck, Eleanor T. The Common Use of Schools. Baltimore: William and Wilkins Company, 1937.
- Hebb, D. O. A Textbook of Psychology. Philadelphia: W. B. Saunders Company, 1958.
- Hilgard, E. R. Theories of Learning. New York: Appleton-Century-Crofts, 1956.
- Hjelte, George. The Administration of Public Recreation. New York: The MacMillan Company, 1940.
- Hunt, Valerie. Recreation for the Handicapped. New York: Prentice-Hall, 1955.
- Irwin, Leslie. The Curriculum in Health and Physical Education. New York: C. V. Mosby Company, 1955.



- Isaacs, Susan. Social Development in the Young Child, A Study of Beginnings. New York: Harcourt Brace Co., 1945.
- Jenney, John. Introduction to Recreational Education. Philadelphia: W. B. Saunders Company, 1955.
- Johnson, Granville B. The New Physical Education. Minneapolis: Burgess Publishing Company, 1942.
- Karpovich, Peter V. Physiology of Muscular Activity. Philadelphia: W. B. Saunders Company, 1953.
- Knapp, Clyde C., et al. Practices and Opinions in Physical Education, Health and Safety. Illinois: Public Instruction Office, 1951.
- Krug, Edward A. Curriculum Planning. New York: Harper and Brothers, 1950.
- LaPorte, William Ralph. The Physical Education Curriculum. New York: Carlson Printing Company, 1947.
- LaSalle, Dorothy. Guidance of Children Through Physical Education. New York: A. S. Barnes and Co., 1946.
- Lehman, H. C., P. A. Witty. The Psychology of Play Activities. New York: Associated Press, 1948.
- Lies, Eugene T. The New Leisure Challenges the Schools. Washington: NEA, 1933.
- Lindeman, E. C. Leisure, A National Issue. New York: Associated Press, 1939.
- Lunley, Frederick, Principles of Sociology. New York: McGraw-Hill Book Company, 1955.
- Lunberg, E. George. A Suburban Study. New York: Columbia Press, 1934.
- Mathews, Donald K. Measurement in Physical Education. Philadelphia: W. B. Saunders Company, 1958.
- McCloy, Harold Charles. Tests and Measurements in Health and Physical Education. New York: F. S. Crofts Co., 1952.
- Mitchell, Elmer D. et al. The Theory of Play. New York: Ronald Press Company, 1958.



- Nash, Jay B. Philosophy of Recreation and Leisure. St. Louis: C. V. Mosby Company, 1953.
- Nash, Jay B. Physical Education: Interpretations and Objectives. New York: A. S. Barnes Company, 1948.
- National Education Association. Cardinal Principles of Secondary Education. Washington: United States Government Printing Office, 1947.
- National Recreation Association. Proceedings of the International Recreation Congress. Washington: NEA, 1956.
- Neumeier, Martin, Esther S. Neumeier. Leisure and Recreation. New York: Ronald Press Company, 1958.
- Oberteuffer, Delbert. Physical Education. New York: Harper and Brothers, 1951.
- Osgood, C. E. Method and Theory in Experimental Psychology. New York: Oxford University Press, 1953.
- Overstreet, Harry A. The Mature Mind. New York: W. W. Norton Company, 1940.
- Pressey, Sidney, Francis P. Robinson. Psychology and the New Education. New York: Harper and Brothers, 1944.
- Rainwater, Clarence E. The Play Movement in the United States. Chicago: University of Chicago Press, 1922.
- Ravenel, M. P. (ed.). A Half Century of Public Education. St. Louis: The C. V. Mosby Company, 1956.
- Robbins, Florence G. The Sociology of Play, Recreation and Leisure. Iowa: William C. Brown Company, 1956.
- Rogers, J. T. State-Wide Trends in School Hygiene, and Physical Education. Washington: Office of Education, 1930.
- Rugg, Harold. American Life and the School Curriculum. New York: Ginn and Company, 1936.
- Salisbury, Frank S. Human Development and Learning. New York: McGraw-Hill Book Company, 1949.
- Sherman, Esther. Health Education--A Program for Girls in Secondary Schools. Detroit: Board of Education, 1929.



- Slavson, Samuel R. Recreation and the Total Personality. New York: Associated Press, 1948.
- Snyder, Raymond A., Harry Scott. Professional Preparation in Health, Physical Education, and Recreation. New York: McGraw-Hill Book Company, 1954.
- Stafford, George T. Preventive and Corrective Physical Education. New York: A. S. Barnes and Company, 1950.
- Turner, C. E., et al. School Health and Health Education. St. Louis: The C. V. Mosby Company, 1957.
- Williams, Jesse Peiring, Clifford Brownell. The Administration of Health Education and Physical Education. Philadelphia: W. B. Saunders Company, 1955.
- Wrenn, Gilbert C. Time On Their Hands. Washington: Educational Council, 1941.

#### B. PERIODICALS

- Baker, Mary C. "Factors Which May Influence the Participation of Motor Skills," Journal of General Psychology, XXIX (October, 1943), 243-250.
- Bennett, Bruce. "Physical Education and Social Learning in the Secondary Schools," Journal of Health, Physical Education and Recreation, XX (September, 1949), 27-29.
- Davis, Charles W. "The Community School," Journal of Health, Physical Education and Recreation, XXIV (September, 1953), 7.
- Mack, Barbara. "Recommended Democratic Practices in the Preparation of Women Teachers of Physical Education: A Check-List for Self Study," The Research Quarterly, XXII (June, 1951), 37.
- Moore, Beverly. "The Attitudes of College Women Toward Physical Education Activity As a Means of Recreation," The Research Quarterly, XII (December, 1941), 720-725.
- Nordly, Carl L. "Our Number One Challenge Today," The Research Quarterly, XIV (June, 1952), 356-358.



\_\_\_\_\_. "The Aging Process and Recreation," The Research Quarterly, XXVII (March, 1955), 139.

\_\_\_\_\_. "The Function of Mental Practice in the Acquisition of Motor Skills," Journal of General Psychology, XXIX (October, 1943), 243-250.

Wannemaker, Charles. "The Meaning and Significance of Social Adjustment," Journal of Health, Physical Education and Recreation, X (December, 1949), 12.

February 1, 1960

Dear Graduate:

The following questionnaire is part of a graduate study being done under the direction of the Department of Physical Education for Women at Kansas State Teachers College, Emporia, to determine the role of activity courses in physical education in everyday life following graduation.

The purposes of this study are: (1) to determine the amount of carry-over value of activity courses; (2) to determine the type of activities desired during leisure time following graduation; (3) to submit the findings to the Women's Physical Education Department for possible curricular expansion or revision.

APPENDIX

Enclosed you will find a brief questionnaire. It will take about ten minutes to check it. Then will you please slip it into the enclosed envelope and return it by mail at your earliest convenience. It will give you the opportunity to express your viewpoint. At the same time, your answers to some of the questions will help us make the physical education department what we want it to be for our present and future students.

Sincerely yours,

Edna Cox



February 1, 1960

Dear Graduate:

The following questionnaire is part of a graduate study being done under the direction of the Department of Physical Education for Women at Kansas State Teachers College, Emporia, to determine the role of activity courses in physical education in everyday life following graduation.

The purposes of this study are: (1) to determine the amount of carry-over value of activity courses; (2) to determine the type of activities desired during leisure time following graduation; (3) to submit the findings to the Women's Physical Education Department for possible curriculum expansion or revision.

Enclosed you will find a brief questionnaire. It will take about ten minutes to check it. Then will you please slip it into the enclosed envelope and return it by mail at your earliest convenience? It will give you the opportunity to express your viewpoints. At the same time, your answers to some of the questions will help us make the physical education department what we want it to be for our present and future students.

Sincerely yours,

Helen Cox

Please check (X) the following activities which you learned in an activity course during college. Place a second (XX) check if you are now participating in these activities.

<input type="checkbox"/> archery	<input type="checkbox"/> folk dance	<input type="checkbox"/> table tennis
<input type="checkbox"/> badminton	<input type="checkbox"/> golf	<input type="checkbox"/> tap dance
<input type="checkbox"/> ballroom	<input type="checkbox"/> hockey	<input type="checkbox"/> tennis
<input type="checkbox"/> basketball	<input type="checkbox"/> modern dance	<input type="checkbox"/> tumbling
<input type="checkbox"/> bowling	<input type="checkbox"/> shuffleboard	<input type="checkbox"/> volleyball
<input type="checkbox"/> cageball	<input type="checkbox"/> soccer	<input type="checkbox"/> other (list)
<input type="checkbox"/> camping	<input type="checkbox"/> softball	
<input type="checkbox"/> deck tennis	<input type="checkbox"/> speedball	
<input type="checkbox"/> fencing	<input type="checkbox"/> speed-a-way	
<input type="checkbox"/> banball	<input type="checkbox"/> swimming	

Approximately how many hours per week do you now spend participating in the above activities? \_\_\_\_\_ hours.

If you do not participate in any of the above activities, in what type of physical recreation do you engage? \_\_\_\_\_.

Please list the activities you feel should be included in a college physical education program which are not listed above. \_\_\_\_\_.

Did you enjoy the physical education activity courses you took in college? YES \_\_\_ No \_\_\_. If no, why? \_\_\_\_\_.

If physical education were not required would you have enrolled in any of the activities courses? YES \_\_\_ No \_\_\_.

What did you enjoy most about the physical education activities you took? \_\_\_\_\_.

What did you enjoy least about the physical education activities you took? \_\_\_\_\_.

What would be your suggestions for making the physical education program a better one? \_\_\_\_\_.

Softball	1	1.8	19
Speed-a-Way	1	0.9	1
Swimming	1	0.9	1
Table Tennis	1	0.9	1
Tap Dance	1	0.9	1
Tennis	1	0.9	1
Tumbling	1	0.9	1
Volleyball	1	0.9	1



TABLE I

NUMBER OF GRADUATES WHO RECEIVED INSTRUCTION IN ACTIVITY COURSES DURING COLLEGE, RECEIVED INSTRUCTION ELSEWHERE, AND THE NUMBER OF GRADUATES PRESENTLY PARTICIPATING IN ACTIVITIES WHICH THEY LEARNED IN COLLEGE

Activities offered	Presently participating	Received instruction in college	Percent presently participating	Received instruction elsewhere
Archery	10	312	3.2	4
Badminton	118	302	39.1	0
Ballroom	215	327	65.7	12
Barball	0	0	0.0	0
Basketball	0	293	0.0	0
Bowling	152	157	96.8	112
Cageball	0	0	0.0	0
Camping	14	14	100.0	28
Deck Tennis	0	70	0.0	0
Fencing	0	18	0.0	0
Folk Dance	106	308	34.4	108
Golf	169	214	79.0	3
Hockey	0	129	0.0	0
Modern Dance	0	283	0.0	0
Shuffleboard	17	203	8.4	0
Soccer	0	107	0.0	0
Softball	4	221	1.8	19
Speedball	0	3	0.0	0
Speed-A-Way	0	0	0.0	0
Swimming	37	382	98.4	0
Table Tennis	14	218	67.9	14
Tap Dance	3	82	3.7	0
Tennis	68	307	22.1	16
Tumbling	0	38	0.0	13
Volleyball	6	216	2.8	21

TABLE II  
 NUMBER OF GRADUATES PARTICIPATING  
 IN PHYSICAL ACTIVITY OTHER  
 THAN THE KIND OF  
 ACTIVITY OFFERED  
 IN COLLEGE

Kinds of activities	Number of participants
Reducing exercises . . . . .	322
House Cleaning . . . . .	216
Boating. . . . .	166
Childcare. . . . .	141
Sewing . . . . .	128
Horse back riding. . . . .	62
Bicycling. . . . .	60
Working in the yard. . . . .	53
Community recreation . . . . .	40
Hunting. . . . .	38
Playing musical instruments. . . . .	27
Hiking . . . . .	16
Painting . . . . .	7
Traveling and touring. . . . .	6
Sledding and skiing. . . . .	6
Wood carving and ceramics. . . . .	4



TABLE III

SUGGESTIONS GIVEN FOR THE  
 IMPROVEMENT OF THE  
 NON-ENJOYMENT OF THE  
 PHYSICAL EDUCATION  
 PHYSICAL EDUCATION  
 ACTIVITY PROGRAM  
 ACTIVITIES COURSES

What did you enjoy most about the physical education courses you took?	<u>Frequency</u>	What did you enjoy least about the physical education courses you took?	<u>Frequency</u>
Friendships gained . . . . .	315	Changing clothing . . . . .	223
Knowledge and skill gained . . . . .	288	Design of gym suit . . . . .	171
Appreciation for activity . . . . .	236	Design of swim suit . . . . .	171
Enjoyment . . . . .	182	Wet hair following swimming . . . . .	162
Keeping the body fit . . . . .	164	Daily routine interrupted . . . . .	95
Relief from tension . . . . .	113	Time could have been spent elsewhere . . . . .	86
Opportunity for creativity . . . . .	61	Too much emphasis on grades . . . . .	67
Preparation for leisure . . . . .	59	Excessive fatigue . . . . .	59
		Program designed for majors . . . . .	4
		Teachers were partial . . . . .	4
		Program was not feminine . . . . .	2

TABLE IV  
 SUGGESTIONS GIVEN FOR THE  
 IMPROVEMENT OF THE  
 PHYSICAL EDUCATION  
 ACTIVITY PROGRAM

Suggestions for improving the program	Frequency
Change the design of gym suits . . . . .	138
Change the design of swim suits. . . . .	138
Make the program an elective one . . . . .	132
Take the emphasis off grades. . . . .	127
Provide a less active program for older students . . . . .	106
Have a course for "weight reducing". . . . .	52
Have a more intensive co-recreational program. . . . .	26