

MARKING STANDARDS AND PRACTICES IN BOYS' PHYSICAL
EDUCATION CLASSES IN SECONDARY SCHOOLS
IN SOUTHERN CALIFORNIA

BY

JOHN E. ANCELL

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CHAPTER I

INTRODUCTION

During the past seven years of teaching boys' physical education in the State of California, the writer has been confronted with the problem of marking, or grading, student achievement in a class of boys' physical education.

The marking system in use was the basic five letter method. Symbols of A, B, C, D, and F were used to denote the degree of achievement of the student as well as mark his citizenship. In addition, the students were marked by encircling the percentage group in which the letter mark fell, thus showing the student's standing in relation to the class. The marks were defined as:

- A outstanding achievement
- B good achievement
- C average
- D below average, barely passing
- F failure

The adoption of the marking system used was the result of three factors--the ease of maintenance of student records, the demand of school patrons for a simple means of determining their childrens' progress, and the ease with which the system dovetails with the methods used by many colleges and universities in determining the admission of new students.

As the State of California requires four years of physical education for graduation from high school, the identification with the

strictly academic subjects is much closer than in the majority of other states and its marking has attained greater importance. If the classes must be marked in accordance with standards used for marking academic courses, it seems essential to formulate criteria for marking, or grading, in physical education classes.

Statement of the Problem

The determination of criteria that measure the important achievements in physical education classes for marking was of essence in the problem of this study.

The solution to the problem of marking in physical education classes seemed to lie in the answers to these basic questions:

1. Are there established criteria for marking physical education classes?
2. Are these criteria followed in practice by physical education instructors in California?
3. Can a simplified procedure for judging and assigning marks in physical education classes be established in agreement with the criteria?

Procedures

A review of literature was made to determine the criteria for marking of physical education classes. The determination of practices in the marking of boys' physical education classes in the schools of the Anaheim Union High School District was made by personal interview with physical education teachers at the ten junior and senior high schools, and by the responses to eighty questionnaires which were sent to physical education directors of various high schools in the counties of Orange, Los Angeles, Riverside, San Bernardino, San Diego, and Imperial. A representative class in boys' physical education at Imperial Valley Union High School was used as an experimental class in determining the value of a simplified procedure used as a basis for marking of students. This class was also used in determining reactions to the marking criteria by parents and students.

Limitations

This study of criteria for the marking of boys' physical education was made at the Montana State College Library, Bozeman, Montana, and the Public Library, Fullerton, California. Practices were ascertained by interviews with physical education directors in the Anaheim Union High School District, Anaheim, California, and by a questionnaire mailed to eighty high schools of various size throughout the six counties comprising Southern California.

A review of the literature on the marking in boys' physical education classes is presented in Chapter 2.

CHAPTER II

REVIEW OF LITERATURE

A review of literature to determine the criteria for marking in boys' physical education classes indicated that the problem of marking has been somewhat neglected. All of the authorities reviewed mentioned the problem, but most did not cover it very thoroughly. Nixon and Cozens stated that "marking is important to the child and adult even though some teachers and administrators do not consider them so."¹

Mathews supported the importance of marking in the statement:

Regardless of the pedagogical value placed on the report card, parents and child attach great significance on Johnny's or Mary's marks . . . In most cases the present practice leaves much to be desired.²

In a review of recent literature, the current bases of marking in boys' physical education were revealed.

Aims and Objectives of Education

The primary object of all education is the proper and normal growth or development of the child. In 1937, the National Education Association listed the aims briefly as:

¹Nixon, E. W., and Cozens, F. W., Introduction to Physical Education, p. 178.

²Mathews, D. K., Measurement in Physical Education, p. 319.

1. Self-realization
2. Social relationships
3. Economic efficiency
4. Civic responsibility³

In further explanation and elaboration of these objectives, Shephard made the following statements:

Cooperative formulation of educational objectives, the goal of education is presented in the terms of what the individual needs and should receive.

Thus it is stated that the individual should:

1. Achieve self-realization skills which includes development of an inquiring mind, skills for effective communication, knowledge for maintaining and protecting and improving his health, satisfying intellectual, recreational, and athletic skills, and responsible character.
2. Achieve comfortable, effective, and happy social relationships in his family, with his friends, and at work, at play with others. He should develop respect of humanity in general.
3. Attain economic efficiency by becoming an intelligent consumer, and by preparing for efficient work performance in a field suited to his talents and interests in the needs of society.
4. Develop civic responsibility, which involves a sense of justice, understanding of one's society, participation as a citizen, tolerance, contributions to conservation, and ideals of democracy.⁴

One source related that it should be understood that the physical, mental, and social qualities of an individual can not be separated except for convenience of discussion, and that all of these

³Shephard, N. M., Foundations and Principles of Physical Education, p. 62.

⁴Ibid, p. 63.

components are dependent one upon the other--a change in one usually means adjustment in the other.⁵ The study mentioned that if a student meets his physical needs only, he has no guarantee that it is sufficient to make him a happy contented member of society, whereas if he achieves, in addition, mental, moral and social growth he will more than likely become a contented member of society.

The educational program should develop the attitudes and skills of the students. The carry-over values should allow for the greater teachings of education in their adult lives.

Aims and Objectives of Physical Education

There was no disagreement among authorities to the principle that physical education is an integral part of the whole of education. All of the readings indicated that the development of the whole child is of primary concern in the specific as well as the general educative processes. Physical education is a full-fledged partner in the academic enterprise.

Shephard held that, "the objectives of physical education agreed upon by most authorities are not separate and apart, but there exists a concept of unity."⁶ This was in agreement with the trend of thought that the integration of objectives is so important that they should never be considered apart, only with organismic unity.

⁵Intramural Manual, Curriculum Bulletin 217, Cincinnati Public Schools, 1947, p. 3.

⁶Shephard, op. cit., p. 90.

The authorities made definite statements of objectives, typified in the expression of Brownell and Hagman,⁷ who list the objectives of physical education as:

1. Physical fitness
2. Social motor skills
3. Knowledge and understanding
4. Habits, attitudes, and appreciations

In a more specific statement of the objectives of physical education, Nixon and Cozens listed the following:

1. The development of the students' organic power and vigor.
2. The development of the specific skills in the physical education activities.
3. The development of desirable social habits and attitudes.
4. The development of the enjoyment of recreation.⁸

The objectives of physical education in the State of California, as outlined by the California Association of Health, Physical Education, and Recreation in 1949 at the request of the State Department of Education, were basically the same as the objectives accepted by many of the other states of the union.

The effort to attain the objectives of achievement of skills,

⁷Brownell, C. L., and Hagman, E. P., Physical Education, Foundation and Principles, p. 34.

⁸Nixon, and Cozens, op. cit., p. 69.

social development, mental development, and moral development, the State of California has created and established a program that, "is a model of design and efficiency."⁹

The attainment of aims, objectives, and specific objectives by the secondary schools of the State of California has been aided and facilitated by progressive legislation passed by the state legislature. The Code, in authorizing physical education in the schools of the State of California, required that:

Attention shall be given to such physical exercise for the pupils to be conducive to health and to vigor, as well as to mind, and to the ventilation and temperature of school rooms.

The Department of Education shall: adopt such rules and regulations as it deems necessary and proper to secure the establishment of courses in physical education in the elementary and secondary schools . . . exercise general supervision over the courses of physical education in elementary and secondary schools of the State; exercise control over all athletic activities of the public schools . . .

The California Code aims and objectives are:

1. To develop organic vigor.
2. To provide neuromuscular training.
3. To provide bodily and mental poise.
4. To correct postural defects.
5. To secure the most advanced forms of coordination and strength.
6. To promote such desirable moral and social qualities as appreciation of the value of co-operation, self subordination and obedience to authority and higher ideals, courage, and wholesome interest in truly recreational activities.

⁹Nash, J. B., Moench, F. J., and Saurborn, J. B., Physical Education and Administration, p. 275.

7. To secure scientific supervision of the sanitation and safety of school buildings, playgrounds, and athletic fields, and the equipment thereof.

8. To promote hygienic school and home life.¹⁰

Authorities in the field of physical education were generally in agreement on the basic principles which govern the conduct of a physical education program in attaining the specific objectives.

The basic principles recommended by Nash were:

State Provision

1. The state department of education should require instruction as one of the essential areas of physical education.

2. The state department of education should include physical education among the basic units required for graduation from high school.

3. The state department of education should provide adequate and qualified leadership on the state level to assist the local schools in the promotion and development of secondary physical education programs.

State and Local Support

Adequate financial support should be provided by the state and local districts to make suitable physical education services available to all students.

School-Community Relationships

1. The school authorities should endeavor to create local community understanding and support the school program in physical education through effective public relations.

2. The co-ordination of school and community resources should be considered in the establishment and operation of physical education on the secondary level.

¹⁰Ibid., p. 484.

School Administration

1. The local school administrator should have knowledge and understanding of the educational outcomes attainable in physical education.
2. The local administrator should be sympathetic, co-operative, and dynamic in his leadership of the physical education program.

School Program Organization

1. The over-all school organization and administration should provide the essential conditions and opportunities favorable to the attaining of desirable physical education outcomes for all pupils.
2. The secondary school physical education program, on the local level should be an integral part of the school program.

Program, Philosophy, and Objectives

1. The program of physical education should be responsible for the unique function in the total plan of secondary education.
2. Physical education should co-operate with other phases of education in contributing to the general objectives of secondary education and make major contributions to health, recreation, and social competency.
3. Physical education objectives should be expressed in terms of attainable and measurable student outcomes which are clearly stated and suitable to the needs and interests of maturing boys and girls.¹¹

The California schools have done an effective piece of work in establishing basic principles to aid in the attainment of the objectives of physical education. In 1929, manuals were written for guidance in the teaching of physical education, and they were revised

¹¹Nash, Moench, and Saurborn, op. cit., p. 270.

in 1949. They were ordered published by the State Board of Education. The publication resulted in a request for copies from many states.¹² The demand was so great that the State Board of Education granted permission to the authors to have the book published for general distribution, in addition to adopting the text for use as a course of study in the public schools.

In reports issued by the California State Department of Education in 1961,¹³ the schools were said to be meeting the basic principles of physical education as accepted by most authorities. This was noted in the following items:

1. A complete instructional guide as published by the State Department of Education is used in all the public schools.

2. Provisions are made for the pupils needs by establishing a general program for all schools which meets the requirements of the average pupil. An adaptive program has been established to meet the requirements and needs of the handicapped, physically unfit, and convalescent pupil. Special training in this work has been made available to instructors in the adaptive field. The adaptive class is limited to an enrollment of twenty pupils in order to receive state monies. Extensive inter-school and intra-mural programs are directed toward meeting the moral and social objectives and not to just meet the physical needs of pupils. Most schools support three closely integrated programs. These could be labeled as general, adaptive, and athletic.

3. It is required by State Law that all students will participate in the physical education program of the California high schools. The student is required to participate until graduation from high school or until the age of twenty-one, whichever comes first. An adaptive program is provided upon the advice of a physician for students in need of such a program.

¹²Nielson, N. P., and Van Hagen, W., Physical Education for Elementary Schools, Preface, p. vii.

¹³Reports for Physical Education, California State Department of Education, 1961.

4. A very extensive building program, demanded by the population boom, is being attempted by local agencies aided by the state and federal governments.

5. Informed instructor leadership is being provided for by the upgrading of the teacher credential. Five years of training at a college level is now required for certification. In the near future each teacher will have to possess a major or minor in their teaching position.¹⁴

Marking of Physical Education

Physical education is marked as part of general education.

Grading, or marking, has been defined as:

. . . the more formalized part in the evaluation process, wherein the student is ranked in individual achievement by use of a symbol, numerical or alphabetical. Individual progress is usually measured in the terms of an established criterion.¹⁵

While the trend in marking in high school academic subjects is toward a more scientific process, nothing in this direction is being attempted in physical education. In many cases, "the present practice of marking leaves much to be desired . . . in some schools no one ever fails physical education."¹⁶ With allowed credit and compulsory attendance provided for, it would seem important that there be established a stimulating, fair, and functional type of marking in physical education. At present there exists no uniformity of method or principles in this regard. Nash¹⁷ suggested the possibility of research in

¹⁴Certification Bulletin, California State Board of Education, 1961, p. 5.

¹⁵Shephard, op. cit., p. 315.

¹⁶Mathews, op. cit., p. 320.

¹⁷Nash, op. cit., p. 471.

order to measure and mark more effectively.

It was reported in the literature that in some schools marking is done on the basis of skills alone. If this is done, Glassow held that "the mark is open to question if consideration is given toward the objectives."¹⁸

Another trend in the marking of physical education is the elimination of marks completely if a subjective mark must be given. Sharman lists the common arguments used against marking as:

1. Marks are too subjective.
2. Marks are not related to desirable educational objectives.
3. The mark becomes the prime objective of the student rather than the achievement.
4. Teacher-pupil relationship difficulties.
5. Marks contribute toward inferiority and superiority complexes of students.
6. The mark is a poor substitute for pupil, parent, and teacher relationship.¹⁹

A number of authorities were in agreement that marking is better accomplished by a system that combines subjective and objective marking principles in order to achieve the greatest effectiveness. Shephard illustrated this view in this manner:

¹⁸Glassow, R. B., and Broer, M. R., Measuring Achievement in Physical Education, p. 342.

¹⁹Sharman, J. R., The Teaching of Physical Education, p. 59.

The principles of marking includes a combination of many factors. Testing should be positive rather than negative when possible . . . a combination of many factors should be used for higher validity and more effective evaluation.²⁰

Sharman stated that, "criteria must be supported by sound principles and be an integral part of the teaching process."²¹

Shephard recommended the following criteria:

1. Improvement. (progress or regression)
2. Peer group comparison.
3. Objective standards. (national or absolute norms used)
4. Potential and subjective capacity.²²

Williams²³ supported this process of marking and added that it must be valid, reliable, and as objective as possible.

The review of literature indicated that there was no quarrel with any plan of marking based upon sound philosophy where conscientious efforts are made to evaluate, either objectively or subjectively, the attaining of the major objectives of physical and academic education.²⁴ There are many problems existant in physical education, and many of the problems affecting the physical education teacher were

²⁰Shephard, op. cit., p. 309.

²¹Sharman, op. cit., p. 58.

²²Shephard, op. cit., p. 315.

²³Williams, J. F., Principles of Physical Education, p. 350.

²⁴Nixon and Cozens, op. cit., p. 176.

concerned with the functions of carrying out the duties of administration and supervision of program operation. The problem of marking falls within these duties of the physical education teacher.

A discussion of the practices in Southern California in assigning marks in boys' physical education classes is presented in Chapter 3.

CHAPTER III

PRACTICES IN MARKING BOYS' PHYSICAL
EDUCATION CLASSES

In order to determine the practices in marking boys' physical education in the secondary schools of California, a questionnaire, constructed by the writer, was sent to 80 schools located in various parts of Southern California. The questionnaire was completed and returned by 74 schools.

In complying with state law, all high schools in California require participation in physical education class by all students in regular attendance until the age of twenty-one years.

The marking of physical education and the establishment of the requirements for graduation beyond the state minimum is at the option of the board of education of the local school district.

Some of the practices in marking boys' physical education classes in California determined by the questionnaire were:

1. All 74 schools answering the questionnaire used a marking system of the letters A, B, C, D, and F to designate the mark in boys' physical education classes. Marking by the use of only one symbol was the practice in 70 of the schools responding. The letters U and S were used by the remaining schools. Citizenship was marked separately and not included in the mark by four respondents.

2. A passing mark of "D" or better in boys' physical education in order to graduate was required by only two of the schools. Schools giving marks in physical education, but not requiring a passing mark for graduation, was practiced in the remaining 68 schools.

This mark often was a verification of attendance.

3. Comparing marking systems in the academic departments with those in the physical education departments revealed that the same method, or system, of marking was used in 15 percent of the schools. Schools in which the academic and physical education departments used entirely different systems of marking made up 36 percent. Nearly half of the schools (49 percent) said that the system of marking physical education was similar in many respects to the system of marking academic subjects, but were also different in many respects. The big differences in marking methods were centered in the degree of objectivity of the mark.

4. Schools reporting that they marked objectively in every respect amounted to 14 of the 74 schools. One large school stated that they could not prove their complete objectivity. At the extreme opposite, six schools are marking subjectively in every way. One director of physical education said that their marking system was just "Guess and be damned!" The schools combining features of the two methods were in the majority. Marking both objectively and subjectively was found in 54 of the schools. Within these 54 schools, two schools were inclined to feel that they were more objective than subjective in their marking. This was supported by the extensive use of testing devices. In schools where women were acting in the capacity of chairman of the physical education department, the marking was considered objective. The women attempted to support their marks by use of objective measurements. The objective system used followed a variety of point systems to determine the given mark, whereas most of

the combination systems balanced the awarding of points for skills with a subjective method for marks involving related subjects concerned with moral and social evaluations.

5. In marking, 26 of the schools did not consider the athletes as a special group in physical education. Two schools had a system where athletic participation automatically guaranteed the student an "A" marking in physical education. There were also two schools which allowed athletic participation as a substitute for participation in the regular physical education class. The remaining 44 schools thought it possible, or even probable that the marking in physical education classes was affected by the students' athletic participation. It was mentioned by one teacher of physical education that, "a class taught by an individual who was coaching would definitely show an affect on the marks of the athletes in every way."

6. The normal distribution curve in the marking of boys' physical education classes was not utilized by 69 percent of those schools responding. The remaining 31 percent attempted to establish and use a normal distribution curve in marking boys' physical education classes. Three of the schools not using the curve in marking stated that it had been noted that their marks fell into an accepted normal curve. It was indicated that the average physical education instructors' training in the principles of marking would tend to cause most systems in use to result in a normal distribution curve for marks. Of the schools which did not use a curve, 19 indicated that the marking of athletes in physical education prevented the effective use of a curve. This was substantiated by a statement that the majority of school

patrons can not divorce physical education from athletics and expect students who participate to get the best marks in the physical education classes. This idea was prevalent in one of the largest high schools in Orange County.

It was noted that the total number of marks given in physical education classes of the 74 schools, established a curve that could be considered nearly normal. This curve could be drawn from the data reported in Table 1.

Although the curve drawn according to the data from the 74 Southern California schools would be slightly skewed negatively, the data would closely approximate the typical normal curve drawn according to the data given in Table 1.

TABLE 1. DISTRIBUTION BY PERCENTAGES OF MARKS GIVEN TO BOYS IN PHYSICAL EDUCATION CLASSES IN 74 HIGH SCHOOLS IN SOUTHERN CALIFORNIA.

Marks	Distribution as reported by 74 Sou. Cal. H.S.	Typical normal [*] distribution
A	10 %	7 %
B	27 %	24 %
C	41 %	38 %
D	15 %	24 %
F	6 %	7 %

* Stroup, Francis, Measurement in Physical Education, p. 155.

7. The factors used as criteria in the 74 schools as the bases of determining student marks in boys' physical education classes in California ranked in the following order of importance:

1. Participation
2. Achievement
3. Attitude
4. Effort
5. Ability
6. Citizenship
7. Health habits

An analysis of the factors, or criteria, listed in the order of importance in establishing the boys' physical education marks showed that the first and second criteria were objective measures, whereas the third and fourth were subjective criteria. Predominately objective criteria were selected by 68 percent of the schools, whereas predominately subjective criteria were selected by 32 percent of the schools.

8. In the measurement of achievement in boys' physical education classes all the schools used similar systems of measurement. In objective measurements the schools followed norms that had been established by California for use in the schools of the state. There was no indication of method used in any of the 74 schools in subjective measurement of boys' physical education classes.

Chapter 3 has presented some of the present practices used in marking boys' physical education classes in California, as indicated

in a survey of 74 Southern California schools. A discussion of opinions of students and parents on a simplified marking procedure in a boys' physical education class in the Imperial Valley Union High School, Imperial, California is given in Chapter 4.

CHAPTER IV

ATTITUDES OF PARENTS AND STUDENTS TOWARD A
SIMPLIFIED SYSTEM OF MARKING IN A
BOYS' PHYSICAL EDUCATION CLASS

A class of boys' physical education at Imperial Valley Union High School, Imperial, California was selected in order to determine attitudes of parents and students in regard to marking practices of boys' physical education classes. The class was made up of 64 boys between the ages of 13 and 19 years. With regard to physical attributes and abilities, it was a heterogeneous grouping. The marking period covered one school year. Marking with the use of the symbols A., B, C, D, and F was done every nine weeks.

A Simplified Marking System

The marking of the boys' physical education class was done by use of a point system. The student could earn points by suiting up in proper gym dress, showering, participating in class activities, by showing proper conduct and sportsmanship in class, and for scores on written and practical tests on skills. The number of points that a student could earn was determined by the number of activity days in the marking period. Ten points could be earned in each class period by judgement of the following criteria:

1. Proper gym dress 4 points
2. Participation in class activity 3 points
3. Attitudes, conduct, and behavior..... 3 points

Each student was required to suit up and participate more than 75 percent of the days class was conducted in order to receive a mark higher than a "C".

No effort was made to establish or follow a marking curve of any kind, but it was of interest to note that the mark distribution compared favorably with a curve of normal distribution, as shown in Table 2.

Although the curve drawn according to the data from the 64 boys in the class would be slightly skewed negatively, the data would closely approximate the typical normal curve drawn according to the data given in Table 2.

TABLE 2. DISTRIBUTION BY PERCENTAGES OF MARKS GIVEN TO 64 BOYS IN PHYSICAL EDUCATION CLASS AT IMPERIAL VALLEY UNION HIGH SCHOOL, IMPERIAL, CALIFORNIA.

Marks	Distribution of marks given to 64 boys of I. V. U. H. S.	Typical normal* distribution
A	12 %	7 %
B	39 %	24 %
C	42 %	38 %
D	5 %	24 %
F	2 %	7 %

* Stroup, Francis, Measurement in Physical Education, p. 155.

Testing of Skills

In the evaluation of skills, the California Fitness Test was given twice to each student during the school term. It was used to classify each student physically, then measure and test the students' basic skills. Other skill tests using national norms, were conducted twice during the school term. Rule tests were given at the seasons' end of the various games and sports taught.

The following sports were conducted during the school year as a means of development of skills:

1. Touch football
2. Basketball
3. Track (pentathlon)
4. Softball
5. Swimming and diving
6. Soccer
7. Wrestling
8. Boxing
9. Volleyball
10. Tumbling

Parent Reaction to Marking System

Before this program was inaugurated, the marking system was explained in detail to the students in class. The marking was then explained to parents in talks to the high school P.-T. A. and the

Imperial Valley Union High School Quarterback Club. The reactions of both groups was that the marking process and criteria to be used appeared very fair and just. The suggestion was made that each student have access to his records and to assist in the determination of his own mark. This was thought to be a deterrent against cheating. The Quarterback Club expressed the opinion that athletics and physical education should not be separated for marking purposes.

During the year of operation of the marking system, no complaints from any school patron was received concerning the marking of any student. At no time was complaint made against the mark or the criteria used in its determination. The system of marking boys' physical education was determined as fair and efficient. Using a minimum of subjective measurement seemed to stifle all doubts and complaints on the students' marks in physical education.

Student Reaction to Marking System

Student reaction to the marking system in use was determined by the writer from observations of the class and direct questioning of the students. All students indicated that the system left little to judgement under a subjective criterion. The students also indicated that they were of the opinion that athletes should be credited for their special talents and athletic skills toward the mark in physical education. Marks given to the athletes were higher in physical education than the marks given to non-athletes, but this was more attributed to higher degree of skills than any favoritism toward the

athlete.

There were a few direct complaints by the students, but they were concerned with the bookkeeping, records, and measurements and not with the whole marking system or criteria.

The marking system seemed to indicate that a more objective marking system for boys' physical education will work effectively, efficiently, and with very little dissatisfaction on the parent or the student.

The summary, conclusions, and recommendations for this study are given in Chapter 5.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of the study was to determine practices in marking boys' physical education classes in California, considering the aims and objectives of education and physical education. Another objective of the study was the application of objective and subjective methods of marking in a class of boys' physical education at Imperial Valley Union High School, Imperial, California and the evaluation of opinions of marking as expressed by parents and students.

SUMMARY

The majority of the authorities cited in the review of literature acknowledged that marking in boys' physical education was necessary and should be treated with as much concern as marking in the academic classes. It was held that the marking should be as objective as possible, but that the subjective marks would have to be applied in a manner that was fair, accurate, and possessed a degree of validity.

Returns of inquiry blanks sent to eighty secondary schools of the Southern California area revealed that marking systems varied in many respects, but were basically similar in the attempt to achieve the goals of marking boys' physical education classes. *k*

The results of the questionnaires from the schools and an experiment in marking in a boys' physical education class at Imperial Valley Union High School were in general as follows:

1. All schools used the same system of A, B, C, D, and F for marking boys' physical education classes. The system was generally satisfactory, and no change was recommended.

2. Marks were not used in the determination of graduation requirements by a large percentage of schools.

3. The following of academic principles and methods in the awarding of marks in boys' physical education was done in nearly 50 percent of the schools.

4. A normal curve was predominate in all of the marks issued, but only 50 percent of the schools required that the normal curve be followed.

5. Objective and subjective criteria in marking were used by more than 60 percent of the schools.

6. An objective criterion, such as participation and achievement was used by a large percentage of schools as first or second choice in the determination of the mark. This criterion was supplemented by the use of subjective criteria such as attitude and effort.

7. The participation in athletics influenced the marking of physical education classes but little.

8. The majority of students in the experimental class preferred a combination of objective and subjective criteria in marking.

9. A large group of students in the experimental class of boys' physical education said that the participation in athletics should favorably affect the students' mark in physical education.

10. The parents and students of Imperial Valley Union High School were little concerned with the physical education mark as long

as it was fairly objective.

CONCLUSIONS

Conclusions resulting from this study were based upon the literature reviewed, marking of a class in boys' physical education at Imperial Valley Union High School, and the findings derived from the questionnaire sent to 80 Southern California high schools. These conclusions are:

1. That there are established criteria for the marking of boys' physical education classes in California. These criteria are:

- A. Participation
- B. Achievement
- C. Attitude
- D. Effort
- E. Ability
- F. Citizenship
- G. Health habits

2. That these criteria for the marking of boys' physical education in California are followed in practice by nearly all of the physical education instructors, but the methods of attainment are variable and differ in nearly as many ways as there are instructors.

3. That there exists, as indicated by the experimental class in physical education at Imperial Valley Union High School, an objective and simplified process for judging and assigning marks that are in agreement with the criteria for marking physical education in

use in California.

In addition, some secondary conclusions have been determined from this study. These conclusions are:

1. Marks in physical education should be counted towards the students' graduation, or the marking of physical education classes should be abandoned entirely.

2. The marking of physical education should be done by use of a method which combines the use of both objective and subjective measurements. Equal weight should be given these measures in establishing the mark.

3. Since athletics are considered as a part of most of the physical education programs, athletes should receive credit for their athletic efforts toward a mark in physical education.

4. The practices for marking boys' physical education classes in California differ widely.

5. The marking of physical education classes should be similar to that of academic subjects.

RECOMMENDATIONS FOR FURTHER STUDY

The writer felt that the following recommendations should be made to school administrators:

1. A study should be made into the advisability of a change in the present marking system, if the marking of physical education is to continue, but the course is not counted as a requirement toward graduation.

2. A study should be made to determine a criteria for the marking of boys' physical education classes that would give equal weight to participation, achievement, attitude, and effort.

3. A study should be made to determine if the high school athletic program should be divorced from the physical education program.

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APPENDIX

Appendix A

Letter Sent to Directors of Physical Education

1015 Brewster Ave.
Anaheim, Calif.

Departmental Chairman
Department of Physical Education

Dear Sir:

In partial fulfillment of the requirements of a Master of Education degree granted by Montana State College, Bozeman, Montana, I am attempting to establish more valid criteria for the marking of students of boys' physical education in the secondary school.

As a fellow teacher of physical education, it is felt that the majority of marking criteria in use today are inadequate and unsound in educational principles.

To establish this criteria, the help of you and your instructors is essential and needed. Your completion of the enclosed questionnaire will be greatly appreciated. A self addressed and stamped envelope is enclosed for your convenience.

Thanking you for your time and attention, I remain,

Sincerely yours

John E. Ansell

Appendix B

Questionnaire Answered by Directors
of Physical Education

1. Marking system now in use?

- a. Letter _____
- b. Number _____
- c. U or S _____
- d. Other _____

Remarks:

2. Is passing mark required for graduation?

- a. Yes _____
- b. No _____

Remarks:

3. Is system in use satisfactory:

- a. Yes _____
- b. No _____
- c. Undecided _____

Remarks:

4. Factors used in determining the students' mark?
Number according to degree of importance, if any.

- a. Ability _____
- b. Achievement _____
- c. Effort _____
- d. Participation _____
- e. Attitude _____
- f. Health habits _____
- g. Citizenship _____
- h. Others _____
- _____
- _____
- _____

Remarks:

5. Is it felt that the marking is objective or subjective?

- a. Objective _____
- b. Subjective _____
- c. Both _____

Remarks:

6. Is a normal distribution curve followed?

- a. Yes _____
b. No _____

Remarks:

7. Estimated number of given last marking period?

- a. Superior _____ %
b. Above Ave. _____ %
c. Average _____ %
d. Below Ave. _____ %
e. Failure _____ %

8. Is it felt that the degree of attainment of your criteria is the determining factor of the pupils mark?

- a. Yes _____
b. No _____
c. In part _____

If in part, what percent?

_____ %

9. How does your marking system compare with those in use by other departments of the school?

- a. Same _____
b. Similar _____
c. Different _____

Remarks:

10. Would you recommend a change in your system of marking?

- a. Yes _____
b. No _____

Remarks:

Any additional comments or remarks you may desire to make regarding this questionnaire will be appreciated.

Results of this study will be sent to you upon request.

Name _____

Position _____

School _____

Additional comments: