# Survey of Physical Education Evaluation and Grading Procedures Used in Accredited North Dakota Senior High Schools 

Jake A. Czapiewski

Follow this and additional works at: https://commons.und.edu/theses

## Recommended Citation

Czapiewski, Jake A., "Survey of Physical Education Evaluation and Grading Procedures Used in Accredited North Dakota Senior High Schools" (1972). Theses and Dissertations. 3668.
https://commons.und.edu/theses/3668

This Thesis is brought to you for free and open access by the Theses, Dissertations, and Senior Projects at UND Scholarly Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of UND Scholarly Commons. For more information, please contact und.commons@library.und.edu.

# SURVEY OF PHYSICAL EDUCATION EVALUATION AND GRADING PROCEDURES USED IN ACCREDITED NORTH DAKOTA SENIOR HIGH SCHOOLS 

by<br>Jake A. Czapiewski<br>Bachelor of Science, University of North Dakota 1970

A Thesis
Submitted to the Faculty
of the
University of North Dakota
in partial fulfillment of the requirements
for the degree of Master of Science

Grand Forks, North Dakota

This thesis submitted by Jake A. Czapiewski in partial fulfillment of the requirements for the Degree of Master of Science from the University of North Dakota is hereby approved by the Faculty Advisory Committee under whom the work has been done.


## Permission

SURVEY OF PHYSICAL EDUCATION EVALUATION AND GRADING PROCEDURES
Title USED IN ACCREDITED NORTH DAKOTA SENIOR HIGH SCHOOLS
Department $\qquad$
Degree $\qquad$

In presenting this thesis in partial fulfillment of the requirements for a graduate degree from the University of North Dakota, I agree that the Library of this University shall make it freely available for inspection. I further agree that permission for extensive copying for scholarly purposes may be granted by the professor who supervised my thesis work or, in his absence, by the Chairman of the Department or the Dean of the Graduate School. It is understood that any copying or publication or other use of this thesis or part thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the University of North Dakota in any scholarly use which may be made of any material in my thesis.


## ACKNOWLEDGMENTS

The writer wishes to express his thanks and appreciation for valuable assistance rendered by Dr. Walter Koenig, chairman of his graduate committee. He is also grateful to Dr. John Quaday and Dr. Donald Lemon for time spent on the advisory committee.

Also, he wishes to thank the many teachers and directors who answered the questionnaires.

## TABLE OF CONTENTS

Page
ACKNOWLEDGMENTS ..... iv
LIST OF TABLES ..... vi
ABSTRACT ..... vii
Chapter
I. INTRODUCTION ..... 1
PurposeStatement of the ProblemDelimitations
DefinitionsRelated Literature in Evaluation and GradingProcedures
Summary of the Related Literature
II. METHODS AND PROCEDURES ..... 9
Construction of a Questionnaire The Survey
III. ANALYSES OF DATA ..... 12
Tabulation of ResultsSummary of Results
IV. DISCUSSION ..... 23
V. SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS ..... 26
Summary
FindingsConclusionsRecommendations
APPENDIX A ..... 32
APPENDIX B ..... 34
SELECTED REFERENCES ..... 38

## LIST OF TABLES

Table Page

1. Composition of Physical Education Classes According to Sex ..... 12
2. Number of Days Per Week Physical Education Classes Meet ..... 13
3. Amount of Time Spent in Each Physical Education Class ..... 13
4. Number of Physical Education Instructors Holding Lecture Periods in Physical Education ..... 14
5. Reference Materials Used in Physical Education Classes ..... 15
6. Number of School Personnel Administering Physical Skill Tests ..... 16
7. Breakdown of Times Physical Skill Tests Were Administered in Physical Education ..... 16
8. Types of Physical Skill Tests Utilized ..... 17
9. Number of Physical Skill Tests Administered Per Year ..... 17
10. Number of Physical Education Instructors Administering Physical Education Written Tests ..... 18
11. Breakdown of Times Written Tests Were Administered in Physical Education ..... 18
12. Types of Written Physical Education Tests Utilized ..... 19
13. Number of Physical Education Written Tests Administered Per Year ..... 19
14. Grades Administered in Physical Education Classes ..... 20
15. Percentage of Weight Placed on Various Criteria When Determining a Student's Final Grade ..... 21

## ABSTRACT

The purpose of this study was to investigate the physical education evaluation and grading procedures used in accredited North Dakota senior high schools.

The questionnaire technique was used for obtaining the data. Copies of the questionnaire were mailed to 101 senior high schools, and a return of 76 surveys, or 75 percent, was received.

A brief summary of the findings show:

1. Physical education classes consisted mainly of all boys and all girls. There were very few coeducational classes.
2. Most physical education classes met twice each week.
3. Very few physical education classes use textbooks. Most of the instructors hand out dittoed materials.
4. Most physical education instructors administer self-made physical skill tests to their students.
5. Most of the school personnel participating in the survey do not give written tests in physical education.
6. All of the school personnel returning questionnaires used some type of grading system in their physical education classes.
7. Most of the physical education instructors felt the grades they assigned adequately reflected the objectives of the course.

The following conclusions were made:

1. Physical education instructors strive for improvement in a student's skill level and use it in determining final grades.
2. Instructors are not as concerned about knowledge gained in physical education classes as they should be.
3. Physical education instructors have minimum time allotments in which to have consistently good physical education programs.

The following recommendations were made:

1. Grades should be administered in physical education classes just as they are in any other aspect of the school curriculum.
2. Most physical education instructors need more time, better facilities and more equipment if their programs are to meet ultimate goals.
3. Written examinations should be used to a greater extent so knowledge gained could become more of a determinant in the evaluation process.

## CHAPTER I

## INTRODUCTION

## Purpose

Grading students is a fundamental part of the educational system. The evaluation of a student's performance is one of the major undertakings of a physical education instructor. Each physical education instructor must clarify his own objectives and formulate his foremost philosophy of education in clear and consistent terms. He must critically examine his own practices, determine the foundations upon which they are based and commit himself to the task of grading with respect to fundamental issues, of which today there are many. McCraw (1) stated:

[^0]might also be of value to physical education instructors in evaluating their grading programs and aid them in comparing their situations to other schools in this midwestern area.

## Statement of the Problem

This study was made in an attempt to answer the following questions: What criteria do instructors use when assigning grades in physical education? What types of testing programs are used to evaluate students? What are the major difficulties in evaluation of physical education students? Do the grades assigned to students adequately reflect the objectives of the course and the teacher's philosophy of grading?

## Delimitations

The study was limited to accredited senior high schools in the state of North Dakota. The study encompassed one-hundred one or onehalf of the two-hundred two accredited senior high schools in the state.

## Definitions

Accredited Senior High School:--An educational institution which has been awarded accredited status by the state and provides instruction in grades ten through twelve.

Survey:--A careful study of the existing conditions and needs of situations, so these conditions may be justified, and recommendations made for improvements.

Physical Education:--"The sum of man's physical activities selected as to kind, and conducted as to outcomes" as stated by Williams, Browne11 and Vernier (2).

Total Population:--For the purpose of this study, the total population is the 202 accredited senior high schools in North Dakota.

## Related Literature in Evaluation and Grading Procedures

Progress is the key to any educational goal. In order to reach a goal, progress must be made. If progress is to be made, aims and objectives must be constructed so there are tools to work with. Scott and French (3) in Evaluation in Physical Education stated:

Physical education, in common with all branches of education, has certain aims and objectives, and programs have been established to achieve definite outcomes. Any list of objectives for pupil development through physical education usually includes the following: physical fitness or health, motor skill, knowledge or information, social efficiency, appreciations and recreational competency.

In all educational fields the instructor needs to know how much knowledge or information has been acquired by the student. This information is found through evaluation.

Barrow and McGee (4) in A Practical Approach to Measurement in Physical Education stated that evaluation has been defined as: "The art of judgment scientifically applied to some predetermined standard."

A method of evaluating students can be testing. By administering tests to students, one is able to determine whether the goals of the program have been attained. A testing program, therefore, has a purpose. Marion Broer (5), in her article "Evaluating Skill," stated: "No test is worth giving unless use is to be made of the results. All evaluating should be an outgrowth of the instructional program."

The purpose of evaluation should be to measure knowledge obtained by a student. It should give a student the incentive to
learn and, at the same time, determine the validity and reliability of the instructional program.

Cowell and France (6) remarked:
Evaluation seeks to determine the quality and amount of student development. It has a broader connotation than measurement in appraising the consequences of one's teaching efforts. Evaluation is a qualitative process dealing with a wide range of human activity, such as achievements, attitudes and interests. . . . Appraisal of all outcomes of learning, both quantitative and qualitative, is included in the concept of evaluation.

Evaluation aids in modifying or fortifying the learning experiences provided for the student. By the accumulation of accurate information about the pupil, the instructor can make contributions to that pupil's individual needs and the desired goals can thus be reached.

These factors give purpose to evaluation in educational fields. Must physical education be evaluated? If it is to be a part of oducation and is to fulfill the aims and objectives of the field, it is difficult to visualize an effective program without evaluation.

Should physical education be a significant part of the total educational program and if the aims and objectives of that program are to be realized, a grade must be given to evaluate a student's total performance. McCraw (1) stated:

Grades given students should be based on all the objectives of the course, such as skills, physical fitness, attitudes, appreciation, and knowledge. These factors should be weighed according to the emphasis given in the instruction; however a major portion of the grade should be based on skill and/or physical fitness with a minimum standard of achievement for each of the other objectives.

In 1960, the national conference of the American Association for Health, Physical Elucation, and Recreation (7) made the following summary concerning the grading problem:

Consensus clearly indicated an awareness of the need for all school systems to give far more attention to objective evaluation and measurement. The testing of fitness and skills is an individual program and should point the way to curriculum improvement, revisions of course of study material, and development of methods of meeting individual differences and needs, and to be a source for the improvement of general program quality. It should not be used merely as a form of class competition.

The report goes on to say: "Many conferees felt that one half of the grade should be based on skills and knowledge, and the other half on attitude, citizenship, participation, and attendance."

Reasons for using grading systems vary and often there are those who argue against it. Oberteuffer and U1rich (8) in Physical

## Education mentioned:

Arguments for and against grades in physical education are numerous. Ever since the program was admitted to the academic family and credit given for participation, the physical education teacher has struggled with the task of deriving a suitable letter or numerical grade to represent the standing of the student in the class. Those who favor grading, no matter how difficult it may be to be intelligent about it, do so because, they say:

1. Grades stimulate interest through a fair evaluation of the performance and of improvement.
2. Grades give a basis upon which one may judge one's standing in a group.
3. Grades point out weaknesses as well as strengths, thereby assisting the student to improve his deficiencies.
4. They help the instructor gear his teaching to the needs of the class.

Those who argue against the grades state that:

1. Grades do not mean a thing anyway and attention should be placed wholly on learning what is expected in the course.
2. Grades were invented as evaluations of knowledge and knowledge alone, and thus are fundamentally unsuited to any field which involves creative expression, activity, or behavior changes as part of its learning operations.
3. In physical education, with its multiple objectives, it is mathematically impossible to equate the objectives in fair relationship for all students; therefore any grade made up of fractional representation of the different objectives will be unsatisfactory.

If the grading plan could be reduced to three factors--knowledge, skill, and behavior--both students and teachers would be happier. And even these three are not always easy to handle.

- Nevertheless, if the teacher expects the class to know something at the end of the unit or term, he should test to see if knowledge has accrued. If skill has been bettered he should somehow appraise it.

Attitudes toward what grades or marking systems should consist of were discussed by Francis Stroup (9) in Measurement in Physical Education.

He made the following statement:
While marking systems may vary in detail, certain characteristics seem common to those which contribute most to desirable educational outcomes. (1) Marks should be related to course objectives. (2) Marks should be based at least in part on specific achievements. (3) Marks should carry a quantitative concept. (4) A marking system should be compatible with the purpose and philosophy of the school. (5) Marking systems should be operationally feasible.

Williams et al. (2) gave another six point plan for selection of evaluation material. The points are much like those Stroup made in relation to grading.

Confronted with the problem of adopting a program of evaluation the administrator, supervisor, or teacher needs to establish a set of rules to guide him in the selection or rejection of various instruments. The following criteria may prove helpful: (1) Adaptability to purpose, (2) Accuracy, (3) Available norms, (4) Economy of use, (5) Duplicate forms, and (6) Standardized and clear direction.

Jesse Feiring Williams (10) stated in The Principles of Physical
Education some facts related to tests and testing which should be taken
into consideration when appraising pupils' ability. His remarks were:
It may be stated, therefore, that tests are not ends in themselves; they are merely means by which teachers may hope to better the work of teaching boys and girls. The test may be an important measure of achievement but the most important aspect of the question is what happens to the individual after he takes the test.

When evaluating in the field of physical education one should bear in mind the students come first. |The grading system being used should possess the means by which the students can actually see
themselves improve in comparison to the standards established by the instructor.f Jensen (11) had explained:|

Marks should serve the pupil by informing him how nearly he met the standards on which the mark was based. It should clearly indicate to him how well he performed as contrasted to how well he might be expected to perform. If the mark is not accurate and justifiable, and if it has a weak basis, then it loses its value to the student. It may even destroy incentives and interests and result in a poor attitude toward the subject and the teacher.

In our present school system marks are essential to administrators. They (marks) are symbols of progress and indicate levels of achievement. They are also used as a basis for promotion and scholastic honor awards. Marks are permanent records of achievement which are important to the student. It is essential, then, that marks be established on a solid basis which is fair to all concerned, and that they be accurately reported and interpreted.

To sum up the remarks which have been mentioned thus far concerning evaluation, Kozman, Cassidy, and Jackson (12) in Methods of Physical Education stated: "Evaluation which does not lead to further planning on the part of the teacher and students is a wasteful procedure."

It should be safe to say that educators in general do not find evaluation and grading procedures an easily completed task. There are various aims of education which physical educators must look at when evaluating students. Scott and French (3) stated them in Evaluation in Physical Education when they wrote:

How much improvement has taken place? How much knowledge has been gained? How many new skills have been developed? How much of a social change has taken place in the individual through the educational process that has been used.

In order to answer the aforementioned points, instructors should construct a schedule for evaluation. Students can be evaluated throughout the school term so improvement and the amount of skill developed
can be measured. Methods of evaluation for each point in relation to the total program can be prepared.

Each individual should be evaluated on the four points mentioned in relation to his improvements and the improvements of the other members of the class. Only then, will the grade given show his complete development.

Thorough preparation and consideration on the part of the instructor will go into the evaluation process. Each class and each individual should be evaluated apart from the total population and no prejudices or bias should be a part of that final evaluative step--the grade.

## Summary of the Related Literature

1. Grades given students should be based on all the objectives of the course.
2. Evaluation and testing should point the way to curriculum improvement, revisions of study material, discovery of methods for meeting individual differences, and improvement of general program quality.
3. The grading procedure will include knowledge, skill, and behavior.
4. Tests are not ends; they are means by which teachers may hope to improve the methods of teaching boys and girls.
5. Marks should serve the pupil by informing him as to his outcome in relation to the standards on which the mark was based.
6. Grades are symbols of achievement and indicate levels of progress.
7. Evaluation should be simply a stepping-stone for both teacher and pupil. It should definitely lead to further planning.

## CHAPTER II

## METHODOLOGY

## Construction of a Questionnaire

The questionnaire which was sent to the selected schools had to supply the answers to the questions: What criteria do instructors use when assigning grades in physical education? What types of testing programs are used to evaluate students? What are the major difficulties in evaluation of physical education students? Do the grades assigned to students adequately reflect the objectives of the course and the teacher's philosophy of grading?

In order to provide answers to the posed questions the questionnaire had to contain certain basic parts: (1) The approximate duration of each class and the number of times class met each week. (2) The types of materials the students used for references. (3) Types of tests administered, and how often. (4) The type of grades or grading system used in each school. (5) Criteria contributing the greatest percent in determining the students' final grade. (6) The general attitude of the physical education instructors toward their own evaluation processes.

The questionnaire contained twenty major questions of which nine were yes or no questions and eleven were composed of checklists.

These wore answered by checking the group or groups included in the physical education programs at the schools surveyed.

The first five questions dealt with the number of classes per week, the composition of the classes--whether they were homogeneous or heterogeneous groupings--the duration of each physical education activity class period, and duration and amount of physical education lecture classes held each week, if any.

The next two questions dealt with reference materials used in the physical education classes followed by a set of eight questions dealing with the types of tests used in physical education and the number of times they are administered each year.

The next two questions referred to the type of grading system used in each school, if any.

Question number iwelve dealt with the percentage of weight placed on various criteria in determining a student's final grade. The instructor simply had to divide one hundred percent of the final grade among the various criteria he used in determining that grade.

The last two major questions dealt with the type of performance the instructor was looking for in his students and the quality of his evaluation process. Number fourteen was a space left for any comments the instructors might have had concerning the questionnaire or their plysical education programs.

## The Survey

The questiomaire was sent to one hundred one physical education instructors or directors at accredited senior high schools in North Dakota. These schools were onc-half of the total population (two

## 11

hundred two senior high schools). Each school was alloted a number and one hundred one numbers were chosen at random by being drawn out of a box.

Each communication contained an introductory letter stating the purpose of the study and a stamped, return-addressed envelope.

## CHAPTER III

## ANALYSIS OF DATA

## Tabulation of Results

A return of seventy-six questionnaires, or 75 percent of those sent out, was used for analysis in the survey.

A numerical tabulation process was used for all the responses to the questions and the following tables and explanations of each are a summary of those tabulations.

TABLE 1

COMPOSITION OF PHYSICAL EDUCATION CLASSES ACCORDING TO SEX

| Composition of <br> Classes by Sex | Number of <br> Instructors Responding | Percentage of <br> Instructors Responding |
| :--- | :---: | :---: |
| All Boys | 72 | 96 |
| All Girls* | 57 | 75 |
| Coed** | 2 | 2.6 |

*As one can see from these results, not all schools have physical education classes for girls.
**Two schools had coed classes on an irregular basis, e.g., one school ran their physical education program so that only seventh graders met on a coeducational basis. Another school had their physical education program meet on a coeducational basis only on Fridays.

Seventy-two, or 96 percent, of the school physical education programs had classes which consisted of all boys. Fifty-seven or 75 percent of the school programs held all girl physical education classes.

Only two of the instructors reported regularly scheduled coeducational physical education classes.

## TABLE 2

NUMBER OF DAYS PER WEEK PHYSICAL EDUCATION CLASSES MEET

|  | Number of <br> Instructors Responding | Percentage of <br> Instructors Responding |
| :---: | :---: | :---: |
| 2 | 51 | 67 |
| 3 | 13 | 17 |
| 2 and $3 *$ | 10 | 13 |
| 4 | 1 | 1.3 |
| 5 | 1 | 1.3 |

*Certain physical education instructors held classes 2 days one week and 3 days the next week.

Fifty one (67 percent) of the school personnel held physical education classes two days per week. Physical education classes were held three days per week in thirteen of the schools, or 17 percent, of the total population. Classes were held two or three times per week depending on time allotment in ten, or 13 percent, of the schools. Physical education classes were held four times each week in one school, and five times each week in only one school.

## TABLE 3

AMOUNT OF TIME SPENT IN EACH PHYSICAL EDUCATION CLASS
(INCLUDES DRESSING AND SHOWERING)

| Amount of Time <br> Per Period | Number of <br> Instructors Responding | Percentage of <br> Instructors Responding |
| :--- | :---: | :---: |
| 55 minutes | 27 | 36 |
| 45 minutes | 18 | 24 |
| 50 minutes | 16 | 21 |
| 40 minutes | 10 | 10 |
| 60 minutes | 5 | 5 |

Ten, or 13 percent, of the school personnel had physical education classes which lasted forty minutes. Twenty-four percent of the school personnel held physical education classes for forty-five minutes. Sixteen, or 21 percent, of the instructors responding had physical education classes which lasted fifty minutes. Thirty-six percent, or twenty-seven instructors, held physical education fifty-five minutes per meeting. Only five of the directors had physical education classes lasting one full hour.

TABLE 4
NUMBER OF PHYSICAL EDUCATION INSTRUCTORS HOLDING LECTURE PERIODS IN PHYSICAL EDUCATION

| Number of <br> Response | Instructors Responding <br> Instructors Responding |  |
| :--- | :---: | :---: |
| Yes | 6 | 7.8 |
| No | 70 | 92.1 |

Only six of the instructors, or 7.8 percent, had physical education lecture periods each week. Among those teachers which have them, four of the schools had twenty-minute lecture periods. Another had one forty-minute period while the last school held its lecture class in physical education for fifty-five minutes.

Examination of Table 5 shows that the largest number of school personnel, forty-five, or 59.2 percent, furnished dittoed materials as part of their reference materials. A compilation was made of when dittoed materials were handed out and twenty-six of the physical education instructors, or 34.2 percent, the largest percentage distributed one
dittoed handout for each activity to his students. Physical education instructors in twenty schools handed out a few general dittoed references during each year.

TABLE 5
REFERENCE MATERIALS USED IN PHYSICAL EDUCATION CLASSES

| Types of <br> Reference Materials | Number of <br> Instructors | Percentage of |
| :--- | :---: | :---: |
| Instructors Responding |  |  |

The second highest number of school personnel responding, 31, or 40.8 percent, used official rule books as reference materials. Twenty physical education instructors, or 26.3 percent, used various pamphlets pertaining to sports and physical education activities. Sixteen instructors, or 21.1 percent, used teacher's lecture notes as reference materials, followed by thirteen instructors, or 17.1 percent, using published booklets as part of their references. Eleven, or 14.5 percent, of the school personnel answering this survey used textbooks in physical education while fifteen, or 19.7 percent, of the instructors used no reference materials in their physical education classes.

Table 6 shows that 58 , or 76.3 percent, of the senior high school personnel who answered this survey administered physical skill tests as part of their physical education classes. In eighteen of the schools, or 23.7 percent, physical skills tests were not administered.

TABLE 6
NUMBER OF SCHOOL PERSONNEL ADMINISTERING PHYSICAL SKILL TESTS

| Response | Number of <br> Instructors Responding | Percentage of <br> Instructors Responding |
| :--- | :---: | :---: |
| Yes | 58 | 76.3 |
| No | 18 | 23.7 |

## TABLE 7

BREAKDOWN OF TIMES PHYSICAL SKILL TESTS WERE ADMINISTERED IN PHYSICAL EDUCATION

| Time Test | Number of <br> Instructors <br> Responding | Percentage <br> Instructors <br> Responding |
| :--- | :---: | :---: |
| At the end of each activity | 22 |  |
| A few during each year | 20 | 28.9 |
| At the beginning of each year | 17 | 26.3 |
| At the beginning of each activity | 13 | 22.4 |
| At the end of each year | 13 | 17.1 |
| In the middie of each activity | 2 | 17.1 |

By studying Table 7, one can see that the largest number of physical education instructors participating, twenty-two, or 28.9 percent, administered their physical skill tests at the end of each activity. Twenty, or 26.3 percent of the school personnel, administered a few skill tests during each year, followed by seventeen, or 22.4 percent administering skill tests at the beginning of each year. Skill tests were given at only two schools during the middle of each activity.

TABLE 8
TYPES OF PHYSICAL SKILL TESTS UTILIZED

| Type of Test | Instructors Responding | Number of <br> Instructors Responding |
| :--- | :---: | :---: |
|  | 36 | 62.1 |
| Self-made tests | 12 | 20.7 |
| Standardized tests |  |  |
| Both types of tests used | 10 | 17.2 |

Of the fifty-eight schools where physical skill tests were administered, twelve of them, or 20.7 percent, used standardized skill tests. Thirty-six of the instructors, or 62.1 percent, prepared their own skill tests. In ten of the schools, or 17.2 percent, standardized and self-made skill tests were both used.

TABLE 9
NUMBER OF PHYSICAL SKILL TESTS ADMINISTERED PER YEAR

Number Given
Per year

|  | 35 | 60.3 |
| :--- | ---: | ---: |
| 1 | 20 | 34.4 |
| 2 | 2 | 3.4 |
| 3 | 0 |  |
| 4 | 0 | 1.7 |
| 5 | 1 |  |

Table 9 shows the number of times per year each physical education teacher administers physical skill tests. In thirty-five, or 60.3 percent, of the schools physical skill tests were given once each year. Two physical education teachers administer skill tests three times each
year. Onily one physical education instructor gave his students six skill tests each year.

TABLE 10
NUMBER OF PHYSICAL EDUCATION TNSTRUCTORS ADMINISTERING PHYSICAL EDUCATION WRITTEN TESTS

| Number of <br> Response | Instructors Responding | Percentage of <br> Instructors Responding |
| :--- | :---: | :---: |
| Yes | 37 | 48.7 |
| No | 39 | 51.3 |

Table 10 shows that thirty-nine, or 51.3 percent, of the school personnel participating in the survey did not administer written tests in physical education. Thirty-seven, or 48.7 percent, of the physical education instructors did, however, give thetr students wititen examinations.

TABLE 11

## BREAKDOWN OF TIMES WRITTEN TESTS WERE ADMINISTERED IN PHYSICAL EDUCATION

| Time Tests <br> Administered | Number of <br> Instructors <br> Responding | Percentage <br> Instructors <br> Responding |
| :--- | :---: | :---: |
| At the end of each activity | 24 |  |
| A few during each year | 10 | 64.8 |
| In the middle of each activity | 3 | 27.0 |
| At the beginning of each activity | 1 | 8.1 |
| At the end of each year | 1 | 2.7 |
| At the beginning of each year | 0 | 2.7 |

Table 11 shows when written tests were administered in physical education. In twenty-four, or 64.8 percent, of the schools written tests were given at the end of each activity. The next highest number of school personne1, 10 , or 2.7 percent, gave a few written tests in physical education to their pupils during each year.

TABLE 12
TYPES OF WRITTEN PHYSICAL EDUCATION TESTS UTILIZED

|  | Number of <br> Type of Test | Instructors Responding |
| :--- | :---: | :---: |
| Instructors Responding |  |  |

Table 12 shows that the greatest percentage of school personnel use self-made tests rather than standardized tests. Thirty-three, or 89.1 percent, of the physical education teachers administer self-made written tests to their students as compared to only one school using standardized written physical education examinations.

TABLE 13
NUMBER OF PHYSICAL EDUCATION WRITTEN TESTS ADMINISTERED PER YEAR

Number Given
Per Year

Table 13 shows the number of times per year each instructor administered written tests in physical education. In thirty-four, or 91.9 percent, of the schools, written tests were given once each year. The other three schools of the total of thirty-seven who administered written tests in physical education gave them twice each year.

TABLE 14
GRADES ADMINISTERED IN PHYSICAL EDUCATION CLASSES

| Classification <br> of Grades | Number of <br> Instructors Responding | Percentage of <br> Instructors Responding |
| :--- | :---: | :---: |
| A, B, C, D, F | 49 | 64.5 |
| S, U | 26 | 34.2 |

Note:
In one school the students had the option of receiving either type of grading system.

All of the seventy-six school personnel who returned their surveys used some system of grading in their physical education classes. Forty-nine, or 64.5 percent, of the physical educators used the A, B, C, D, F method of grading while twenty-six, or 34.2 percent, of the school personnel used $S$, U (satisfactory, unsatisfactory) method.

Table 15 shows a tally of the number of physical education instructors who place a weight, percentage wise, in various criteria used in determining their students' final grade. The greatest number of school personnel included, first, attitude and secondly, cooperation, as criteria which determined final grades. In forty-two or 55.3 percent of the schools as much as 50 percent of the students' final grade was weighed on attendance.

TABLE 15
PERCENTAGE OF WEIGHT PLACED ON VARIOUS CRITERIA WHEN DETERMINING A STUDENT'S FINAL GRADE

Criteria Used to Determine Grade

Number of Responding Instructors Who Place Weight on Criteria

Range of Percentage Weights Assigned to Various Criteria

| Attitude | 56 | $5-50$ percent |
| :--- | ---: | ---: |
| Cooperation | 53 | $1-40$ percent |
| Attendance | 42 | $1-50$ percent |
| Skill tests | 41 | $1-75$ percent |
| Uniform | 32 | $1-20$ percent |
| Showers | 31 | $2-30$ percent |
| Leadership | 30 | $5-30$ percent |
| Overall |  | $5-80$ percent |
| Performance | 29 | $2-10$ percent |
| Tardiness | 27 | $1-50$ percent |
| Written tests | 26 | $5-40$ percent |
| Intramurals | 7 | $5-20$ percent |
| Team Membership | 6 | 4 percent |
| Cheerleading | 1 | 6 percent |
| G.A.A. | 1 |  |

The greatest percentage of weight placed on any one of the sixteen criteria used was 80 percent which one physical education teacher placed on the general rating of overall performance when determining a student's final grade. Another instructor weighted skill tests as 75 percent of the final grade. In one school which used the $S$, $U$ method of grading, 30 percent weight was placed on whether its students took showers after physical education class. Only twenty-six of the thirtyseven physical education teachers administering written tests placed weight ranging from one to fifty percent on that specific criterion.

Twenty, or 26.3 percent, of the physical education instructors based their weightings of the criteria used to determine grades on the performance status of the student at the end of instruction. The
largest percentage of school personnel, 60.5 percent, based the weight of their criteria on improvement in performance from the beginning to the end of the instructional period.

## Summary of Results

Physical education instructors at the senior high school level in North Dakota had, in general, two 55 -minute class periods each week.

The instructors were in favor of administering self-made physical skill tests to their students at the end of each activity period.

Physical educators were not in favor of administering written tests as part of their evaluation process. Those instructors who gave written examinations did so only once each year.

Most physical education teachers used the A, B, C, D, F method of grading. The greatest percentage of them also based part of their student's final grade on the criteria of cooperation, attitude and attendance.

CHAPTER IV

DISCUSSION

The physical education instructor in evaluating his program and his students must know the specific objectives he is to follow to reach his goal. The grading system he uses should be educationally sound meeting the needs of the student and constantly improving the program.

The physical education instructors of North Dakota who participated in the survey do not, in many instances, have a good evaluation process. In twenty-one instances, or 27.6 percent of the respondents involved, the physical education instructors did not feel the grades they assigned adequately reflected the objectives of the course. In fifty-four, or 71.1 percent of the schools, the grades distributed reflected the instructor's objectives. One respondent was not certain of the answer.

It is this writer's opinion that, in many instances, the teachers who were answering this survey were not real certain of various answers. They were somewhat vague about the validity or reliability of their evaluation process and did not place a great deal of faith in it. At various times the instructors contradicted themselves. Three physical education teachers did not use physical skill tests as part of their physical education program and yet weighed 5,10 and 25 percent of the student's final grade on that specific criterion.

Some of the physical education instructors wrote various comments about their programs. A very common complaint was the lack of facilities and equipment. It is this writer's opinion that if the yearly budget for the physical education departments in schools were increased and the facilities and equipment improved, the entire program would be uplifted.

Another common complaint was that there are too many students in each physical education class. With the limited time, equipment and facilities, instructors cannot adequately teach various leisure, lifetime activities. The instructor, then, usually fits team sports into the bulk of his program and students, soon after graduation, forget these activities.

The purpose of this study was to determine whether or not physical education students in senior high schools in North Dakota were graded and if so, on what criteria those grades were based.

The two types of grading systems being used (A, B, C, D, F and S, U) were based, primarily, on cooperation, attitude, attendance, and skill tests. In 1964, a similar survey of grading and evaluation procedures was made involving Minnesota, North Dakota, Montana and South Dakota. The 1964 study showed that 97 percent of the physical education instructors used a physical skill testing program (13). This compares positively with this writer's survey which showed that 76.3 percent of the participating schools used physical skill tests.

The administration of written tests in physical education is, however, questionable in both studies. In the 1964 survey, 65 percent of the schools gave written tests as compared to 48.7 percent in this survey (13). The grade determining criteria of attendance and cooperation were also listed very highly in the 1964 survey. Attendance was
used in 76 percent of the schools and cooperation in 93 percent when the physical education instructors determined final grades for their students (13). The aforementioned results coincide greatly with this writer's survey which showed 55 percent of the physical education teachers based part of their students' final grades on attendance and 69.7 percent of them used cooperation as a grade determining criterion.

Evaluation must become more stable in the minds of physical educators. Only then, will their grading procedures be more suitable for the students and they are the ones whom the program aids or injures the most.

## CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Summary

This study was designed to determine the evaluation and grading procedures used in accredited senior high schools in North Dakota. It attempted to answer the following questions: What criteria do instructors use when assigning grades in physical education? What types of testing programs are used to evaluate students? What are the major difficulties in evaluation of physical education students? Do the grades assigned to students adequately reflect the objectives of the course and the teacher's philosophy of grading?

A questionnaire, introductory letter, and stamped, returnaddressed envelope were sent to one hundred one senior high schools in North Dakota. This was one-half of the total population of two hundred two accredited senior high schools. A return of 76 questionnaires, or 75 percent, was received. The data were then arranged for analysis and interpretation.

To establish a frame of reference in this area, the writer reviewed various books, pamphlets, magazine articles and theses.

## Findings

The survey revealed the following findings concerning evaluation and grading proceưures:

1. The range of high school enrollment in North Dakota, 32 to 1371, did not effect the type of grading procedure used. The grading methods of $A, B, C, D, F$ and $S$, U were utilized in large and small schools alike.
2. In 96 percent of the schools physical education classes consisted of all boys. Fifty-eight percent of the schools segregated their girls in physical education. Evidently, in the remaining schools physical education classes were not held for girls. Only two of the instructors responding had regularly scheduled coeducational physical education classes.
3. In sixty-seven percent of the schools, physical education classes met twice a week. In only 25 of the schools were physical education classes held three or more days per week.
4. Thirty-six percent of the respondents, the largest percentage of the answering population, held physical education classes 55 minutes per meeting. In sixty-three percent of the schools classes lasted 50 to 55 minutes. Only five of the physical education instructors had physical education classes lasting one full hour.
5. Only six of the school personnel answering the survey had physical education lecture periods each week.
6. In only 14.5 percent of the schools were textbooks used in physical education. Dittoed materials were used by 59.2 percent.
7. Physical skill tests were administered by 76.3 percent of the physical education instructors questioned.
8. The administration of physical skill tests at the end of each activity was used by 28.9 percent, the largest number of instructors responding.
9. Self-made skill tests were used by 62.1 percent of the physical education instructors who administered skill tests. Standardized skill tests were used by 20.7 percent of the teachers.
10. Physical skill tests once each year were given by 60.3 percent of the physical education teachers. Skill tests twice each year were given by 34.4 percent of the instructors.
11. Of the school personnel participating, 51.3 percent did not administer written tests in physical education. Written examinations were given to their students by 48.7 percent of the physical education instructors.
12. Self-made written tests in physical education were administered by 43.4 percent of the respondents. In only one school was a standardized written examination used in physical education.
13. Of the physical education teachers participating, 91.8 percent administered tests once each year.
14. All of the 76 school personnel which returned their surveys used some type of grade in their physical education classes. Of the instructors participating, 64.5 percent used the A, B, C, D, F method. In 34.2 percent of the schools, the $S$, $U$ method of grading was used.
15. Most of the respondents included attitude and cooperation as criteria in determining final grades. Other factors which were significant in most schools were attendance, physical skill tests, leadership abilities, tardiness, uniform and showers.
16. In 27.6 percent of the school personnel responding, the physical education instructors did not feel the grades they assigned adequately reflected the objectives of the course. In 71.1 percent of
the schools grades which reflected the instructor's objectives were distributed. One physical education instructor was not certain of the answer.

## Conclusions

From information tabulated from the survey the writer has concluded that:

1. Since 76.3 percent of the school personnel returning questionnaires administer physical skill tests, physical education instructors do strive to teach improvement in skill level and use it in determining their final grade. These instructors lack the basic follow-up procedures, however, since 60.3 percent of the respondents administered physical skill tests only once each year rather than a number of times during each school term.
2. Instructors are not as concerned about knowledge gained in physical education classes as they should be. Only 48.7 percent of the physical education teachers administered written examinations. Of that 48.7 percent, 70.3 percent, or twenty-six respondents, placed weight on written examinations when determining a student's final grade.
3. Of the 76 percent return, 64.5 percent of the respondents used the A, B, C, D, F method of grading as compared to 34.2 percent of the schools in which the $S$, $U$ method was used.
4. Of the respondents participating, 67 percent had physical education classes meeting twice a week as compared to only twenty five, or 32.9 percent, in which classes met three or more times per week. This is a very minimum time allotment if schools are to have consistently good physical education programs.
5. Attitude, cooperation, attendance, skill tests, uniforms, showers, general rating of overall performance, tardiness, and written tests (in that order--highest to lowest) were the criteria used most frequently by school personnel in determining final grades.
6. Most physical education instructors felt their evaluation process was sound and worthwhile. Grades which adequately reflected the objectives of the course were distributed by 71.1 percent of the teachers. This is compared to 27.6 percent of the instructors who did not think the grades they assigned reflected their objectives.
7. Most of the physical education instructors felt more time, facilities, and more equipment were needed if their programs were to be improved. A small number of schools were working toward this goal.

In conclusion, the writer believes that competent, imaginative and responsible leadership in physical education is needed. People, in general, should be made aware of the fact that physical education can improve one's way of living. The amount of leisure time available to the public is increasing and should be spent participating in some of the lifetime sports. Physical education classes can instill the mental and physical abilities necessary for the performance of these activities.

## Recommendations

Based on the findings of this study, the writer recommends that:

- 1. The number of physical education class sessions be increased to at least three per week for the majority of the schools. The added time would allow for an increase in lecture periods. Students could thus learn more about the organization and theory of leisure time activities.

2. The amount of physical education textbooks in schools be increased so that students have first-hand knowledge of activities rather than using dittoed materials to such a great extent.
3. Written examinations be used to a greater extent so knowledge gained could become more of a determinant in the evaluation process.
4. Physical skill tests be administered at least four times a year. This would increase the number of times improvement in skills would be evaluated.
5. More physical education classes become coeducational.
6. Physical educators look closely at their evaluation proceedings and improve them along with their method of teaching.
7. Better facilities and more equipment become available to physical education teachers so their students will have a greater opportunity to partake in a wider variety of life-time activities.

APPENDIX A

Department of HPER
University of North Dakota Fieldhouse Grand Forks, North Dakota 58201

Dear Sir:

As a North Dakota resident currently doing graduate work in Physical Education and School Administration, I have become interested in the problems involved in the grading procedures used in statewide physical education classes at the senior high school level.

The following questionnaire has been compiled for your completion and is being sent to a selected group of 100 physical education instructors in accredited senior high schools in North Dakota. Enclosed you will find a copy of the questionnaire and a self addressed stamped envelope for your convenience in returning the completed questionnaire to me. The information obtained is needed to complete the remaining work on my master's degree in physical education.

The purpose of this study is to determine what is being done and what remains to be done in order to standardize grading in physical education in this area. Only with a good testing and evaluation process, will administrations feel that physical education grades should be on the same level as the other courses taught in our high schools.

All information will, of course, be kept strictly confidential.

Thank you in advance for your time and cooperation.

Sincerely yours,

Jake A. Czapiewski
Grading Teaching Assistant
Department of HPER
University of North Dakota

APPENDIX B

## SURVEY OF PHYSICAL EDUCATION EVALUATION AND GRADING PROCEDURES USED IN ACCREDITED NORTH DAKOTA SENIOR HIGH SCHOOLS

GRADING PROCEDURES USED IN GRADES 10, 11 AND 12 ONLY

1. Name of School
(A11 of the following questions refer only to your physical education classes.)
2. Are your physical education classes composed of all boys $\qquad$ , al1 girls $\qquad$ , or coed $\qquad$ ?
3. How many periods does each class have per week?
$\qquad$ 4 $\qquad$ 5
4. What is the approximate duration of each activity class period (including dressing and showering)?

20 min . $\qquad$ 35 min . $\qquad$ 50 min .
25 min . $\qquad$ 40 min . $\qquad$ 55 min . 30 min. $\qquad$ 45 min . $\qquad$ 60 min . $\qquad$
5. Do you hold physical education lecture classes each week? Yes No If yes, how many? 1 $\qquad$ 2 $\qquad$ 3 $\qquad$ 4 $\qquad$
$\qquad$
6. What is the approximate duration of each lecture class period?

$$
20 \text { min. }
$$

$\qquad$ 35 min . $\qquad$ 50 min . 25 min . $\qquad$ 40 min . $\qquad$ 55 min . $\qquad$ 30 min ._ 45 min ._ 60 min _
7. Which of the following reference materials do your classes use?

Textbooks $\qquad$ Published booklets $\qquad$ Pamphlets $\qquad$ Official rule books
Dittoed material $\qquad$ Teacher's Lecture Notes $\qquad$ None $\qquad$
7a. If you prepare dittoed materials, are they:
one for each activity $\qquad$ ?
a few general ones_? Number $\qquad$
handouts at the beginning of the year ?
handouts at the end of the year $\qquad$ Others
8. Do you administer physical skills tests to your students? Yes $\qquad$ No $\qquad$
8a. If yes, are they administered:
at the beginning of each activity $\qquad$ ?
in the middle of each activity $\qquad$
at the end of each activity $\qquad$ ?
at the beginning of each year $\qquad$
a few during each year $\qquad$
at the end of each year $\qquad$ ?

8b. Are they standardized tests? Yes $\qquad$ No $\qquad$
8c. Are they self-made tests? Yes $\qquad$ No $\qquad$
9. Do you administer written tests to your students? Yes $\qquad$ No $\qquad$
9a. If yes, are they administered:
at the beginning of each activity $\qquad$ ?
in the middle of each activity ?
at the end of each activity ?
at the beginning of each year $\qquad$ ?
a few during each year $\qquad$ ?
at the end of each year $\qquad$ ?

9 b . Are they standardized tests? Yes $\qquad$ No $\qquad$
9c. Are they self-made tests? Yes $\qquad$ No
10. Do you assign grades in physical education? Yes $\qquad$ No $\qquad$
10a. If yes, what type?

11. Give the percentage of weight ( $10 \%, 20 \%, 30 \%$, etc.) you place on any of the following criteria in determining a students final grade:

Showers $\qquad$ -

Skill tests $\qquad$ Written tests $\qquad$
Intramurals Attendance $\qquad$
Tardiness $\qquad$ Uniform $\qquad$
$\qquad$
$\square$ Year in School $\qquad$
Cooperation Leadership $\qquad$
Attitude $\qquad$ General rating of overall performance $\qquad$
Athletic team
membership $\qquad$ Cheerleading GAA
Pom-Pom Girl $\qquad$
Others $\qquad$
$\qquad$
12. On what basis are the weighting of question 11 determined? Performance status at the end of instruction $\qquad$ or improvement in performance from beginning to end of instruction $\qquad$ .
13. Do the grades you assign adequately reflect the objectives of the course? Yes $\qquad$ No $\qquad$
14. Comments: $\qquad$
15. If you desire a copy of the results of this study please fill in the spaces below:

Name
Address
City, State and Zip Code

## SELECTED REFERENCES

1. McCraw, Lynn W. "Principles and Practices for Assigning Grades in Physical Education." Journal of Health, Physical Education, Recreation, XXXV (February, 1964), p. 24.
2. Williams, Jesse Feiring, Brownell, Clifford Lee, and Vernier, Elmon Lonis. The Administration of Health Education and Physical Education. 5th ed. Philadelphia: W. B. Saunders Co., 1958.
3. Scott, M. Gladys, and French, Esther. Evaluation in Physical Education. St. Louis: C. V. Mosby Co., 1950.
4. Barrow, H. M., and McGee, R. A Practical Approach to Measurement in Physical Education. Washington Square, Philadelphia, Pennsylvania, 1964.
5. Broer, Marion R. "Evaluating Skil1." Journal of Health, Physical Education, Recreation, XXXIII (November, 1962), p. 74.
6. Cowell, Charles C., and France, Wellman L. Philosophy and Principles of Physical Education. Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1963.
7. American Association for Health, Physical Education and Recreation. Administering City and County School Programs. A Report of the National Conference. Washington, D.C.: American Association for Health, Physical Education and Recreation, 1960.
8. Oberteuffer, Delbert, and Ulrich, Celeste. Physical Education. 3rd ed. New York: Harper and Row, 1962.
9. Stroup, Francis. Measurement in Physical Education. New York: Ronald Press Co., 1957.
10. Williams, Jesse Feiring. The Principles of Physical Education. 7th ed. Philadelphia: W. B. Saunders Co., 1959.
11. Jensen, Clayne. "Improve Your Marking System in Physical Education." Physical Educator, October, 1962, p. 97.
12. Kozman, Hilda Chite, Cassidy, Rosalind, and Jackson, Chester 0. Methods in Physical Education. 3rd ed. Philadelphia: W. B. Saunders Co., 1958.
13. Horejsi, Roman J. "Survey of Physical Education Evaluation and Grading in Selected Midwestern States." Unpublished master's thesis, University of North Dakota, 1964.

[^0]:    One of the most perplexing problems with which physical education teachers are confronted today is that of evaluating student progress and assigning grades. There are few issues on which there are such divergent views or so much concern and interest. There are almost as many different plans for grading as there are teachers of physical education, but many grading practices are educationally unsound. Far too much variation exists among grading plans in schools today, and in too many instances no plan at all seems to be the situation.

    What do the physical education instructors in North Dakota accredited senior high schools do in regard to this problem? An examination of the procedures used by teachers in the field could help administrations formulate some system for evaluation and grading in physical education. It is hoped that the results of this investigation

