

Trends in evaluating professional preparation

Introduction

The administrator must assess all aspects of the organization's operations and compare the results to some criteria or standards which have validity. One needs to determine if expectations have to be met.

Measurement techniques and evaluation procedures have seen many changes in recent years. The progress of participants in such areas as physical fitness, social development, cognitive development and skill improvement are some of the areas where positive changes have taken place. The term 'Measurement' is used here to refer to the use of techniques to determine the degree to which a trait, ability, or characteristics exists in an individual. Measurement and evaluation techniques other than tests include rating scales, checklists, controlled observation, and various measuring instrument.

Importance of Evaluation

Evaluation is a major responsibility of the physical education administrator. The need for evaluation is present in any viable, dynamic organization. For only when results are measured against original purposes or stated goals will the administrator be able to judge progress. And with the resources at his or her command, one is expected to accomplish the objectives for which the organization is created. The administrator's goal is the greatest possible accomplishment of the objectives and this requires the maximum contribution of all staff members.

The importance of evaluation is aptly expressed by Williams – "Occasionally an administrator or teacher contends that the practical affairs of his work leave no time for attending to evaluation. In a sense evaluation is like bookkeeping in business, it indicates direction, and shows degrees of accomplishment. The worth of administrative procedures remains obscure or unknown unless their effectives are evaluated."

Purpose of Measurement and Evaluation

Measurement helps to determine the progress being made in meeting the objectives of the professional preparation program in physical education. It aids in discovering the needs of the participants. It identifies strengths and weaknesses of participants and instructors, aides in curriculum planning, and shows where emphasis should be placed. Measurement helps determine where instructional emphasis should be placed and which procedures are effective and ineffective and it also gives directions and helps supply information for guidance purposes. Besides, the information provided by measurement techniques can also be used in the grouping individuals according to similar mental, physical, and other traits that will ensure better instruction; as an indication of a person's achievement in various skills and activities; to provide information that can be used to predict future performance and development; as an indication on attitudes that determine whether or not the participant had proper motivation and; to focus attention on future action that should be taken in the program.

From the administrator point of view the purposes of evaluation in physical education and professional preparation program is to determine the extent to which the objectives of the program are being accomplished; to provide evidence demonstrating the worth and contribution of the program; to ascertain the teaching effectiveness of each staff member and to encourage staff members to adjust and improve the teaching process and method; to obtain a basis for the periodic ratings of faculty members and recommendations for tenure, promotions, and bonus, salary increase, to determine whether all operations are proceeding according to plan.

The Computer Uses in Measurement and Evaluation

Today, the computer has much implication for the management of data concerned with the achievement of physical education programs. Not only does it enable the administration to reduce the amount of time devoted to the data analysis, it also permits the analysis of test score for thousands of persons with comparative ease. Computer also enables the physical educator to identify differentiating characteristics of participants, such as scores that are high or low. And it is the application of computer in physical education and sports that enables a battery of test items on such characteristics as speed, strength or power to be analysed item by item. It also makes it possible to prepare the profile of each person on the various physical education tests that are administered. Now, comparison of test scores of one class of students with other classes within the same school or with other schools where norms are available can be done with ease.

Evaluative Physical Education Objectives

1. The Physical Development Objective

The physical development objective cannot be evaluated with single tests because it involves a variety of components. A test battery with different tests for each of the various components is needed. A number of valid test batteries are available and, probably the most extensively used physical fitness test is the AAHPER Youth Fitness Test (1958), where National norms are available for each test for boys and girls from 5-12 grades. With later revision, norms are also available for college men and women.

With this validated test one is able to compare the performance of students with those of other children of the same age. Thus also giving the added advantage of evaluating the effectiveness of the physical education program i.e. if students are unable to meet the standards the reason could be that the time allotment or facilities are inadequate or, could be due to poorly qualified physical educators. If the administrator prefers not to use an already established test battery to evaluate the physical fitness of students there is another alternative. Separate tests can be used for each of the various components of physical fitness viz. cardiovascular, strength, endurance, agility tests.

2. The Motor Skill Development Objective

To evaluate motor skill development requires more than one test; in fact, a battery of test is required to assess skill in one sport adequately. Skill tests in a wide variety of physical education activities have been developed over the years, some of these are excellent test but have many limitations in its administrations. Or, their validity coefficients may not be high enough, they may require too much

equipment, they may take too long to administer, their reliability may be too low, norms may be lacking, they have limited applicability etc. before a test is used it should be examined for appropriateness in the local situation.

3. The Knowledge and Understanding Objective

Physical educators have used knowledge tests for many decades. These test have usually been the objective type. The test may have been constructed by the instructor or they may have published tests that have been statistically validated. Mostly, such tests may include any or all of the following areas like - knowledge of the skill performance, rules, strategy or activity pattern, conditioning procedures, effects of activity upon health, codes of etiquette appropriate to the activity and, factors affecting performance such as age, sex, drugs, nutrition, fatigue, alcohol etc.

4. The Social Development Objectives

Can the teachers or administrator evaluate how much progress the students have made regarding the social development objectives? Apparently, physical educators do much less evaluation of this objective than they do of physical development, motor skills, and knowledge and understanding. And probably, they also do much less planning for this objective than the others. The idea is unfortunately prevalent that social development is concomitant of the physical education program and does not require careful planning and specially designed programs.

Criteria for Test Construction & Selection

Criteria refer to those particular standards that may be used to evaluate measurement and evaluation materials.

Validity: Validity may be defined as how well a test measures what it claims to measure. In order to determine validity, an instructor should ask some of the following questions:

- 1) Does the test cover the content area for which it was designed?
- 2) Is it applicable to the participants for whom it was designed?
- 3) Is the criterion with which the material was correlated acceptable, and is the correlation coefficient also acceptable?
- 4) Does the test give insight into program objectives?
- 5) Does evidence support whether the test is classification, achievement, diagnostic, or prognostic technique?
- 6) Has the technique been tested in appropriate area?
- 7) Is the sampling sufficiently representative and random?

Reliability: Reliability may be defined as the consistency of measurement on the same individual or group, under the same conditions, and by the same person. Some questions relating to reliability include:

- 1) What are the conditions under which reliability was determined?
- 2) Is the size of the coefficient correlation acceptable?
- 3) What are the means of the two tests?
- 4) What is the method used for determining reliability? Is it valid?
- 5) Is the sample sufficient, random, and representative?

6) Has reliability been determined by using a group similar to the group for which the technique has been designed?

Objectivity: This is the degree to which the technique can be given to the same individual or group and obtain the same results. Questions that may be asked include:

- 1) Are the instruction simple and complete?
- 2) Is objective determined valid?
- 3) Is the sample sufficient, representative, and random?
- 4) Are the means indicated or is there difference in mean scores?
- 5) Are the procedures easily understood by examiner and subject?
- 6) Are alternative test form available if needed?

Norms : The level of the group performance or statistical average may be defined as a norm for a group. Some question concerning norms include:

- 1) What basis is used for norm construction chronological age, grade level, skill achievement?
- 2) Is sample sufficient, random, and representative?
- 3) Are the norm based on local or national statistics?
- 4) Are the norm tentative, arbitrary, or experimental?
- 5) Is appropriate statistical tool used?

Administrative Economy: The procedures involved with conducting the program may be defined as administrative economy. Questions concerning this area of testing criteria include:

- 1) What is the time allotted for the administration of the test or other technique?
- 2) What are the costs involved in administering the technique?
- 3) Is the technique easy to administer, and does it require much training on the part of the examiner?
- 4) Are the objectives of the technique and program compatible?
- 5) How many examiners are necessary, and is the technique within the scope of the physical educator's training?

Conclusion

The main concern of all physical educators wherever they are employed is to do the best job possible, then, evaluation will take care by itself. In other words, one should be enthusiastic, develop as much expertise as possible concerning the position and responsibilities one has, and provide the best service possible to the persons being served. In addition one should develop good human relations with everyone concerned. If these points were taken in seriously, the physical educator should not have to worry about the evaluation process and professional advancement will automatically be the result. Administrators should be particularly concerned that the tests they use meet these criteria. And if they do, properly interpreted results should aid considerably in developing adequate physical education programs. The best way to evaluate staff effectiveness is to determine the extent to which the department objectives are being achieved. If evidence is available that student performance on standard test for the various physical

education objectives has attained satisfactory level, the administrator is justified in believing that the staffs as a whole has met the most important criterion. This is not to say that, perfection has been attained, there is always a possibility that an even better performance of students might be obtained.
