

Meta- Evaluation of Instruction of Classroom in University

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Abstract: *Teaching evaluation is an important part of teaching work and an important means of scientific management in the field of teaching. Reasonable implementation of teaching evaluation activities is an effective guarantee for improving teaching quality. The meta- evaluation of teaching is to evaluate and study the quality and conclusion of teaching evaluation technology according to certain theoretical and value criteria. The meta-evaluation of teaching evaluation is to standardize the research of teaching evaluation, monitor the teaching evaluation activities, reduce the deviation, smoothly realize the evaluation purpose, better play the function of teaching evaluation, and obtain good evaluation benefits.*

Keywords: educational evaluation, meta-evaluation, teaching

INTRODUCTION

Teaching evaluation refers to the use of scientific and feasible evaluation methods according to certain teaching objectives, giving value judgments on teaching process and teaching results, and providing reliable information and scientific basis for improving teaching and improving teaching quality [1]. Educational evaluation research has become one of the three major areas of contemporary educational science research. The evaluation of physical education evaluation is an important part of educational evaluation research, and it is an important link for the school to realize the scientific management of physical education. It is also an effective measure to promote the reform of physical education and improve the quality of physical education. With the continuous deepening and development of the reform of physical education, especially the examination-oriented education to the idea of quality education, the study of physical education evaluation is even more urgent.

Reviewing an evaluation (also known as meta-evaluation) can be done before an evaluation (reviewing the plan) or afterwards. Prior to finalising the evaluation it is useful to review the reporting of the evaluation process, findings and conclusions in order to establish the validity of the findings and to ensure that the key messages from the evaluation are clear and consistent with the findings. Many evaluation systems require evaluation reports to be formally reviewed as part of quality control before they are publicly released. In the field of education, the introduction of meta-evaluation is a new topic in the development of

teaching evaluation theory, and also an important indicator of the maturity of teaching evaluation[2]. The progress of teaching evaluation theory and the improvement of methods must inevitably require teaching evaluation to study and standardize itself. Due to the implementation of various teaching evaluation activities, there are often some inappropriate situations, and there are deviations and mistakes in different degrees, which affects the function of teaching evaluation. This requires us to make necessary evaluation activities. The identification and monitoring make it more consistent with the purpose of the evaluation and more consistent with the goal [3]. In the evaluation of teaching using statistical methods, the analysis of evaluation results by quantitative techniques is indispensable.

THE SIGNIFICANCE OF COMPREHENSIVE ELEVATION FOR PHYSICAL EDUCATION

For college students, physical education is important for maintaining physical fitness and then can contribute to maintaining a healthy weight, regulating digestive health, building and maintaining healthy bone density, muscle strength, and joint mobility, promoting physiological well-being, reducing surgical risks, and strengthening the immune system [4]. Continue in their report that, physical exercise may increase life expectancy and the overall quality of life.

However, how to elevated quality of physical education and make sure that college students have already developed the ability to go on physical fitness and the effect of PE on their life in the future. There are so many factors need to be considered. Under a comprehensive elevation, a physical educators, can use this knowledge to create awareness and develop effective and efficient intervention to motivate the general public to frequently and constantly engage in physical activity,, practice the abstinence knowledge from eating disorders[6], practice the knowledge about the non-usage of drugs, practice the knowledge about abstinence from diseases associated with unsafe sexual practices, focus on knowledge about knowing and monitoring of vital signs, and have knowledge about preventing sport injuries[7], thereby not only increasing the advantages (pros.), motive, behavioural regulation and self efficacy of physical activity, but also help individuals, communities and the environment as a whole to reduce lifestyle-related illnesses, mortality and morbidity.

HOW TO TAKE USE OF META-ELEVATION ON PHYSICAL EDUCATION TEACHING

During the teaching process, the educators have to develop different methods to teaching the college students, and they have different feedback, such as the grades of students , the health indexes, teacher's rating by students and even long term fitness of students and so on. Even though we could get those feedback, it is difficult to know the rank and proportion of each index. Reviewing the evaluation will also help to identify how key messages may be interpreted, concerns about the methodology that need to be discussed, and possible ways that the findings will be used. Being mindful of how the evaluation index could be received helps

in presenting the findings in a way that is likely to support use. From the evidences then we could define the rank of different elevation factors.

The principle of evaluation is required to be correct and scientific. The value subject and object and scale of physical education should be clarified, as well as the subject and object of evaluation, and the content, requirements and relationships should be scientifically grasped. Whether it is to formulate a plan, prepare a scale, or conduct observational interviews and tests, whether it is a student, teacher evaluation, or other evaluation, there should be clear and reasonable scientific basis and legal basis. It also requires that the principles and principles of evaluation be clear and reasonable, and its theoretical framework is scientific and complete, and the theory is correct and applicable.

The structure of physical education evaluation should be organized and unified, and all parts should be coordinated and fully utilized to meet the needs of various situations and levels.

The physical education teaching evaluation method should be scientific and reasonable, to meet the needs of each link, the method system should be perfected, the program should be scientifically feasible, the information collection is accurate and reliable, the information processing is convenient and comprehensive, and the method is compatible. The whole law, the functional complementarity law or the simple optimization law.

As a system, educational evaluation should have a good monitoring mechanism, which can better control, regulate and self-improve to achieve system goals.

CONTENTS OF META-EVALUATION OF PHYSICAL EDUCATION EVALUATION

The evaluation of the evaluation plan mainly includes evaluation of the determination of the evaluation object, the positioning of the evaluation target, the construction of the evaluation index system, the formulation of the evaluation plan, and the selection of the evaluation method. It mainly adopts evaluation methods such as comments, comments, and consultants, such as evaluation forms without calculations, empirical re-evaluation of evaluations or programs, and multi-data empirical re-evaluation of the same program. In the end, the evaluation plan is clear to the evaluation target; the evaluation purpose is clear[8]; the evaluation standard is reasonable, the basis is sufficient, and the expression is clear; the structure and content of the evaluation index system should reflect the requirements of the evaluation, the definition is clear, the weight distribution is appropriate; The arrangement is reasonable; the selected evaluation method is scientific and feasible, the evaluation information is collected, analyzed and processed properly, and the scale is scientific and operable.

The evaluation of the evaluation organization's implementation is mainly to evaluate whether the evaluation organization is sound and whether the evaluation personnel's

understanding of the evaluation is in place. The evaluation method selected is based on evaluations such as comments, comments, and consultants that do not make calculations. In the end, the organization of the evaluation is sound and the responsibilities are clear; the relevant personnel involved in the evaluation have a correct understanding of the guiding ideology of the evaluation; the evaluators can perform their duties, coordinate, and implement the evaluation objectively and impartially according to the requirements of the program and the correct use of the evaluation method; The evaluators have a correct understanding of the evaluation, a positive attitude, and active cooperation, and the information provided is complete.

The evaluation of evaluation results and utility is mainly based on commentary comments of evaluation reports, empirical re-evaluation of one evaluation or scheme, empirical re-evaluation of multiple data on the same scheme, and second analysis of simultaneous raw data. A variety of evaluation methods are used to derive the evaluation results, explain the evaluation results, input and benefits of the evaluation, and evaluate the evaluation as a whole. Finally, the evaluation results are reliable and effective. Through the analysis of the evaluation information collection and processing process, combined with the necessary sampling review, the evaluation has higher reliability and validity. The interpretation of the evaluation results is reasonable, the conclusion is appropriate, and the evaluation object evaluates the evaluation. Approved and accepted; the evaluation function is better, and it has a promoting effect on the evaluation target; the evaluation has good practicability and timeliness; in time and human resources[9].

METHODS AND PROCEDURES FOR META-EVALUATION OF PHYSICAL EDUCATION EVALUATION

As a specific evaluation, meta-evaluation has its own characteristics and methods suitable for meta-evaluation. Content analysis is an important analytical method in meta-evaluation[10].

The content analysis method is an objective and in-depth study, analysis and evaluation method for the content and effectiveness of various materials in the evaluation according to the evaluation purpose and requirements. For the meta-evaluation of the evaluation theory of physical education, it is mainly used for the theoretical basis, framework structure and theoretical system of evaluation, and meta-evaluation research based on evaluation. For the practice of physical education evaluation, it is mainly used for analysis and evaluation of content validity and structural validity. In the process of implementation, the procedures include determining the purpose and research object, designing content analysis indicators and standards, collecting and classifying information materials, systematic analysis and evaluation, and processing and analysis of results.

Design should be based on specific research objects and requirements. For general evaluation theory and evaluation models, it should be analyzed according to its scientific, general, universal, reliability and applicability. For a specific evaluation, the content analysis should be fully consistent with the specific requirements and conditions of the evaluation. The different levels of each indicator in the content indicator system should establish specific operational standards.

Accurate, representative and typical, therefore, it is reasonable to select samples and pay attention to the scientific nature of the method. Apply observations, interviews, questionnaires, case studies, and literature review.

For system Analysis and Judgment, this is the main work of content analysis. It should be strictly in accordance with the analytical dimension and standard operation of the design, strive for objective and fair, standard unification; carefully make records; design the record table, and fill in the results of the analysis and judgment for statistical analysis. .

In the processing of the results, it is necessary to pay attention to the qualitative description through the analysis and summary of the data, and to quantitatively analyze and synthesize some data. Analytical methods such as concentrating trends, degree of difference, correlation, and hypothesis testing can be used for analysis.

QUANTITATIVE ANALYSIS MODEL FOR META-EVALUATION OF PHYSICAL EDUCATION EVALUATION

Based on the reliability and validity analysis, the corresponding scientific quantitative analysis model can be established in the meta-evaluation of physical education evaluation, which can make the meta-evaluation more scientific and rational.

In the physical education evaluation activities, under the condition that there are feasible evaluation programs and the correct scientific evaluation standards are established, the key to improving the quality of evaluation is to collect information and evaluate the results to be accurate and reliable. The reliability of physical education evaluation is the reflection of the reliability of the results. The evaluation of reliability is generally carried out by the evaluator's reliability, internal consistency, stability and equivalence.

For the evaluation of physical education, the evaluation of the stability and reliability of the evaluation of the judge's performance plays an important role in the reliability of the evaluation. The evaluation reliability of the evaluation subject mainly uses the Kendall Harmony Coefficient method to analyze the consistency of the scores.

If there is a high positive correlation between the indicators of the physical education teaching evaluation index system or between the items of a test, then the indicator system or the test has good content consistency, and is called homogenous. In general, the higher the internal consistency, the more homogeneous the project, and the more clear the meaning of

its score. In the comprehensive evaluation, its indicator system often includes evaluation contents of different natures. At this time, although the internal consistency may not be too high in general, there should be high internal consistency for each part. The method of analyzing internal consistency uses the Cronbach coefficient method^[11].

The evaluation of the stability and equivalence of the evaluation is carried out by calculating the correlation coefficient. The former is the correlation coefficient between the results obtained by evaluating the same project at different times for the same group. The purpose of the analysis is to check whether the organization of the evaluation is consistent with the implementation; the latter is for the same evaluation purpose and requirement, but the correlation coefficient between the two groups of results obtained by evaluating the same group by different evaluation schemes is used. Study and judge the similarities and differences between the two programs. If there is information that one of them is of high quality, then the quality of the other scheme can be inferred.

The validity of the evaluation is a reflection of the accuracy and effectiveness of the evaluation. The analysis and evaluation of validity can adopt different methods according to different situations, in which content validity and structural validity can be qualitatively analyzed by content analysis. In many cases, it is difficult to make a pertinent evaluation based on qualitative analysis. It is necessary to use quantitative analysis to improve the reliability of the meta-evaluation.

The factor analysis method summarizes and infers the basic factors that determine the role from the interaction of many variables through the analysis of correlation matrices. In the evaluation of physical education, factor analysis can better grasp the main factors of evaluation and make the index system and evaluation criteria more reasonable. In meta-evaluation, factor analysis can be used for content validity and structural validity.

The validity of the criterion is the validity expressed by the degree of correlation between the evaluation result and the criterion. The validity of the criterion is related to the degree to which the results of the evaluation are closely related to specific criteria. It emphasizes the behavior of the standard and how it is predicted. There are four main aspects to the quality requirements of the standard measures for producing the criterion: First, the correlation, the characteristics measured by the standard measure must be closely related to the requirements of the criterion, that is, the standard measurement itself must have high validity. Second, anti-biasing, when obtaining the standard, must strictly control the interference of various bias factors^[12]; Third, reliability, the standard measure of providing the standard must be reliable, the result should be stable; Fourth, the possibility, Standard measures should be simple and feasible, saving time and economy.

CONCLUSION/SUMMARY

As an important part of educational evaluation, meta-evaluation plays an important role in improving the scientific and rational evaluation and playing a better role in evaluation. Therefore, the evaluation of physical education must evaluate the evaluation at the same time and establish a mechanism for meta-evaluation. It is important to study the regulations, contents, methods and organization of the meta-evaluation, as well as the method for measuring the reliability and validity of the evaluation. Implement technologies and work to make them operational in evaluation.

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