

**THE USE OF MEASUREMENT AND ASSESSMENT TOOLS IN PHYSICAL
EDUCATION TEACHING**

Nurumova Dinara Maqsudova

Asia International University

Lecturer, Department of Physical Culture

nurumovadinaramaqsudovna@gmail.com

Abstract

The purpose of this study is to determine physical education teachers' attitudes toward alternative measurement and assessment tools, methods, and approaches, as well as the extent to which they apply these practices in their professional work. Within the scope of the research, the effectiveness of measurement and assessment activities in the educational process, their modes of implementation, and approaches aimed at improvement were analyzed. Performance, which is considered one of the most important factors in achieving predetermined goals within organizational contexts, was also examined as a key concept. The findings indicate that physical education and sport teachers tend to prefer measurement and assessment methods that are easy to use and require less time in practice.

Keywords

Physical education, measurement and assessment, alternative assessment tools, sport.

Introduction

Education is defined as a process through which individuals consciously bring about positive changes in their behavior based on their life experiences. Teaching, on the other hand, refers to a set of planned, controlled, and organized learning activities carried out within educational institutions. In both definitions, the process of changing individual behavior in line with predetermined objectives occupies a central position. Consequently, determining whether the expected behavioral changes in students have occurred—in other words, measuring the level of achievement—constitutes an integral part of the teaching–learning process and should be implemented systematically at all stages of education [1].

Teachers, as the primary agents of the teaching and learning process, are responsible for organizing instructional activities that foster the development of desired behaviors and competencies in students. At the same time, teachers are required to possess sufficient knowledge and practical skills related to measurement and assessment. Teaching is a professional activity that demands in-depth subject-matter knowledge, general cultural competence, and pedagogical expertise. Teacher competence is therefore a key factor that directly influences the quality and effectiveness of education. Today, the growing demand for education requires teachers to demonstrate higher levels of qualification and professional preparedness, particularly in the field of measurement and assessment.

Within the educational process, physical education and sport classes in schools are generally organized around two main objectives. First, they aim to meet students' natural need for movement through various physical activities. Second, they seek to identify students with high levels of physical fitness, ability, and sporting talent and to guide them into the sport system, preparing them as potential sport reserves [2].

The teaching methods applied in physical education and sport classes are selected in accordance with the characteristics of the activities being implemented, the specific objectives pursued, students' age levels, and their physical and motor preparedness. In physical education

and sport, effective teaching methods should be aligned with the content of instructional activities, ensure the active participation of all students, and contribute to the development of their motor skills [3].

Alongside the selected teaching methods, measuring and assessing students' learning outcomes constitutes an important pedagogical process. The assessment process should not be limited to comparing students' physical abilities or performance with those of others. Rather, assessment should be carried out through continuous observation, systematic monitoring, and pedagogical guidance. In this context, students' individual abilities, interests, attitudes toward participation, and efforts should be taken into account; assessment criteria should be clearly explained to students in advance; and evaluation should not be restricted solely to the measurement of physical skills.

Measurement and assessment represent one of the most essential components of the pedagogical sciences. Students' behaviors and achievements in learning activities provide important information about the effectiveness of the education system. Data collected through measurement and assessment practices in the educational process make it possible to identify students' levels of knowledge, skills, and competencies, as well as existing deficiencies and undesirable behavioral patterns [4].

In terms of its scope, this study is of particular importance for the revision and improvement of in-service professional development programs for teachers. Observable differences in educational effectiveness and outcomes can be found between teachers who possess adequate competence in measurement and assessment and those who lack such competencies.

In physical education classes, students' achievement is typically determined through systematic, reliable, and valid observation and assessment of the skills they demonstrate during instructional activities. This process may involve the use of student observation forms, project-based tasks where applicable, performance rubrics that describe the evaluated characteristics at different levels, and the assessment of completed tasks that focus on either the learning process or the final product, often using level-based scoring systems.

In general secondary and upper secondary education institutions, students' quarterly, semester, and end-of-year grades are usually determined based on a 100-point grading system. Within this system, results below a predetermined minimum threshold are considered unsatisfactory, while scores at or above the standard are evaluated as satisfactory or successful. In secondary education institutions, assessment is conducted on the basis of written and practical examinations, completed exercises, projects, and the outcomes of practical activities [5].

In physical education classes, assessment tasks may be organized in both written and practical formats. In lower secondary grades, written assessments are implemented according to methodological decisions established by subject teachers, whereas in primary education, assessment is predominantly based on observation and the outcomes of practical activities. Throughout the academic year, students may prepare at least one individual or group project in physical education under teacher supervision. Project work is assessed at the time of submission.

Assessment tasks may address cognitive and affective learning domains; however, considering the specific nature of physical education, they are primarily designed to target the psychomotor learning domain. In evaluating students' participation and performance during lessons and training sessions, teachers select and apply appropriate tools such as observation forms, checklists, and performance rubrics. At the student's discretion, portfolios compiling achievements and completed tasks in physical education classes may also be prepared.

The use of multiple assessment methods in evaluating student achievement enhances the reliability of the measurement process. Therefore, in addition to traditional assessment tools, the

use of alternative measurement and assessment approaches-such as teacher observation forms, student portfolios, and self-assessment methods-is considered appropriate and effective for improving the overall efficiency of the educational process [6].

Professional activities of physical education teachers

Education is interpreted as a process aimed at the conscious and positive shaping of individuals' behavior. As a result of the rapid development of technological, social, economic, political, and cultural platforms, the dynamic expansion of knowledge has further increased the significance of education in societal life. In particular, education plays a crucial role in the formation of the knowledge, skills, and attitudes required for younger generations to successfully adapt to society.

Education constitutes a complex system that meets societal needs, shapes the future of a nation, and prepares qualified human resources capable of implementing transformations demanded by change. This system encompasses components such as policy, philosophy, culture, and curriculum design. For the system to function effectively, each of its elements must be aligned with societal needs, be functional, and respond to contemporary demands. Societies with functional and efficient education systems possess a clear vision and are able to consciously shape their future. The development, progress, and renewal of nations are undoubtedly closely linked to successful education systems. Education is a systemic process in which human beings represent both the input and output components, and its outcomes determine the social, cultural, economic, and welfare levels of society. There is a direct correlation between the level of societal development and the existence of advanced, continuous, and effective education systems [7].

Preparing qualified human resources is of vital importance for societal development, and education represents the most effective means of achieving this goal. In order to ensure a modern lifestyle aligned with the demands of the time, individuals who constitute society must receive high-quality education. Education is a formative process through which individuals acquire various forms of knowledge and experience, and it makes a significant contribution to personal development throughout the lifespan. Effectively organizing management processes requires knowledge and competencies across multiple domains, as well as the ability to skillfully manage interpersonal relationships.

The teacher is the most important and central agent of educational and instructional activities. Teachers play a key role in enabling students to realize their personal potential by providing effective and transformational educational experiences and by guiding them toward clear goals and future directions. Individuals who develop self-awareness and are able to demonstrate their potential become beneficial to both society and themselves. Achieving this outcome is directly related to teachers' effective communication with students, appropriate guidance, and the ability to maintain high levels of student motivation. Educating students as socially responsible individuals constitutes one of the primary and most important responsibilities of teachers. To attain these objectives, teachers are required to continuously develop themselves, enhance their level of professional competence, and sustain high levels of preparedness and motivation [8].

States that plan and manage their education systems effectively foster the continuous development of individuals in line with societal needs and contemporary demands under innovative educational conditions. In the context of the "knowledge society," educating individuals who create, disseminate, and advance knowledge, as well as who deeply understand ongoing changes, can only be achieved through effective and modern educational approaches. Individuals who receive transformational education in advanced educational institutions

contribute positively to the socio-economic and socio-cultural structure of society, guiding it toward higher levels of development.

Conclusion

For teachers to apply measurement and assessment effectively and at the required level, it is essential that they first possess solid preparation in this field, continuously develop their professional skills, have sufficient knowledge and methodological support related to measurement and assessment, and demonstrate a high level of competence in observing and evaluating students' achievements. For this reason, issues related to measurement and assessment hold particular importance within the educational process.

Measurement and assessment in education have consistently been among the most complex yet indispensable areas for pedagogical researchers. The complex nature of educational assessment requires multidimensional and in-depth procedures of measurement, evaluation, and analysis. This characteristic has long attracted the attention of many educators, researchers, and learners. Assessment is generally understood as the process of determining the extent to which students have acquired knowledge and skills during lessons or within a specific subject area. In addition, assessment helps students recognize the outcomes of their efforts and understand the directions in which further development is needed.

Throughout the academic year, teachers make considerable efforts to ensure that students consistently and effectively master the required subject matter. Without an assessment process, it becomes difficult to determine the effectiveness of these efforts. By using various assessment methods, teachers can identify students' levels of knowledge, stages of development, and the overall effectiveness of pedagogical practice. One of the most important advantages of assessment in educational institutions is that it serves to identify students' performance and achievements. This process is of great practical significance for both students and teachers: students become aware of their classroom performance and outcomes and can identify ways to improve, while teachers gain the opportunity to analyze learning outcomes and identify students who achieve high levels of performance.

Assessment also helps determine whether students have acquired the knowledge and skills required by established standards and whether they are engaging in activities that support their development within a given subject or course. One of the most important initial stages of the educational process involves setting clear objectives and articulating them explicitly; in order to determine whether these objectives have been achieved, teachers must employ appropriate measurement and assessment methods.

Measurement and assessment contribute to the development of students' learning processes from multiple perspectives. They enable students, teachers, and all stakeholders involved in education to identify existing problems, determine ways to address them, clarify needs related to knowledge and skills, and evaluate levels of progress in teaching and learning. The measurement process helps identify students' strengths and weaknesses, stimulates motivation to acquire new knowledge and experiences, and creates opportunities to reinforce strengths while addressing deficiencies.

Ensuring the holistic development of all students and shaping behavior in line with educational goals that correspond to both individual and societal needs are of critical importance in the educational process. For this process to be successful, objectives must be clearly defined and progress toward these objectives must be accurately assessed. Measurement and assessment constitute one of the key tools for achieving these goals in education. Assessment also helps determine whether students have acquired correct and accurate knowledge. Accurate knowledge acquisition contributes to high levels of achievement, whereas misconceptions reduce the

effectiveness of education. Therefore, the assessment process plays a crucial role in determining the accuracy of students' learning.

When measurement and assessment are implemented effectively, the following developments can be expected:

- Students demonstrate essential knowledge, concepts, and skills related to physical education.
- Students are informed in advance about and understand the criteria established for activities to be performed in physical education classes.
- Students share the knowledge and skills acquired during lessons with others.
- Students participate in analytical thinking, self-assessment, and peer-assessment activities.
- Students integrate the knowledge learned in physical education classes with real-life experiences.
- Students analyze their own performance and recognize aspects that require further development.
- Students show respect for diverse opinions, ideas, and perspectives.
- Students provide feedback to teachers regarding the effectiveness of the instructional process.
- Students and teachers participate in planning research-oriented activities.
- Clear criteria are established for evaluating high-quality products or high-level performance expected from students.

References:

1. Brookhart, S. M. (2013). *How to create and use rubrics for formative assessment and grading*. Alexandria, VA: ASCD.
2. Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice*, 5(1), 7–74.
3. Brown, G. T. L. (2004). Teachers' conceptions of assessment: Implications for policy and professional development. *Assessment in Education*, 11(3), 301–318.
4. Harlen, W. (2007). *Assessment of learning*. London: Sage Publications.
5. Hay, P., & Penney, D. (2009). Proposing conditions for assessment efficacy in physical education. *European Physical Education Review*, 15(3), 389–405.
6. Kan, A. (2013). Alternative assessment approaches in education. *International Journal of Educational Research*, 58, 41–48.
7. López-Pastor, V. M., Kirk, D., Lorente-Catalán, E., MacPhail, A., & Macdonald, D. (2013). Alternative assessment in physical education: A review of international literature. *Sport, Education and Society*, 18(1), 57–76.
8. Popham, W. J. (2011). *Classroom assessment: What teachers need to know* (6th ed.). Boston, MA: Pearson Education.