



ISSN: 2456-0057

IJPNPE 2024; 9(1): 215-219

© 2024 IJPNPE

www.journalofsports.com

Received: 08-01-2024

Accepted: 13-02-2024

Tu Tran Thi

Department of Physical
Education and Sports, Thai
Nguyen University of Education,
Vietnam

Tung Ha Si

Sports Class course 56, Faculty
of Physical Education and
Sports, Thai Nguyen University
of Education, Vietnam

Quyen Dang Quy

University of Transport
Technology, Vietnam

Develop test and evaluation tools for the competency of physical education and sports activities in teaching 10th grade physical education syllabus

Tu Tran Thi, Tung Ha Si and Quyen Dang Quy

DOI: <https://doi.org/10.22271/journalofsport.2024.v9.i1d.2919>

Abstract

Designing assessment tools is an important task for teachers to create tools to assess student competencies according to the 2018 General Education Program, including general and specific competencies. The article proposes the process of designing a toolkit to assess specific competencies in Physical Education (PE) for 10th grade students, and also designs a toolkit to assess the competency of physical education and sports activities, with the theme "Techniques for using the instep in soccer" includes 3 groups of tools: Questions; Academic transcripts and Criteria (Rubrics). The tool developed by us has received high appreciation from experts and PE teachers for its necessity and feasibility. This is the basis for deploying and using the developed toolkit in the practice of teaching 10th grade PE for future teachers.

Keywords: Tools, test, the competency of physical education and sports activities, physical education, pupil, Vietnam

Introduction

A teaching program oriented to develop student capacity, also known as learning outcome-oriented teaching, is that teachers use their professional skills and superior teaching methods to teach and orient learning for students, in order to ensure the quality of learning outcome, to achieve the goal of comprehensive development of students, from qualities and abilities, simultaneously focus on the ability to apply knowledge in life practical situations to equip students with skills to handle problems in their life and career ^[1, 2].

Competence is the ability to effectively respond to complex requirements in a specific context. According to the 2018 General Education Program, capacity is a personal attribute formed and developed thanks to existing qualities and the process of learning and training, allowing people to mobilize and synthesize knowledge, skills and other personal attributes such as interest, faith, will, etc. to successfully perform a certain type of activity, achieving desired results under specific conditions ^[2].

Testing and evaluation is a very important step in teaching and learning activities, helping teachers and students have necessary and important information to orient and adjust teaching and learning methods to achieve the set goals. The 2018 General Education Program (GET) is designed according to the orientation of developing students' quality and capacity with the goal of helping learners master general knowledge and know how to effectively apply knowledge in real life. To meet the program, teachers have been conducting thorough research on curriculum innovation, textbooks, teaching methods and means, testing, evaluation, etc. In which, in our opinion, the changes in testing and evaluation are extremely important, largely determining the success of this innovation. However, the development of testing and evaluating tools for students' general and specific abilities is a new and difficult task for teachers. The question is how do we need to change testing and evaluation? How to evaluate students' abilities? etc. These are not easy problems to solve ^[2, 3].

Physical Education applies active, student-centered educational methods, transforming the educational process into self-education; Teachers design, organize, mentor, referee, and guide

Corresponding Author:

Tu Tran Thi

Department of Physical
Education and Sports, Thai
Nguyen University of Education,
Vietnam

practice activities for students, creating a friendly learning environment to encourage students to actively participate in practice activities, experience for themselves, self-discovery and physical development. However, in reality, the work of testing and assessing students' abilities in schools today has not been focused on, and the innovation of testing and assessment methods has not met the requirements to develop students' capacity according to regulations. There is still the stereotypical and mechanical phenomenon, leading to the failure to promote the full capacity of students, many students are not interested in the subject, thereby reducing the quality of physical education and school sports activities. Therefore, the issue of innovating testing and assessment in the direction of developing students' abilities is extremely necessary and important [4, 10].

We conducted this research with the desire to build a specific competency assessment scale with valuable criteria and measuring tools through appropriate subject teaching, helping teachers in high schools to assess students' physical and sports performance capacity.

Research Methods

To solve the set research tasks, we use the following methods

Methods of analyzing and synthesizing documents

Research uses this method to analyze and synthesize relevant documents to form a theoretical basis, build scientific hypotheses, identify tasks and find evidence to analyze and evaluate results research results.

Investigation and survey methods

This method is used to interview and investigate relevant subjects to learn about the current status of the research problem, as well as the information that needs to be collected from interviewee during the performance of the research task.

Pedagogical observation methods

The method used in the project aims to collect information

related to the current status of assessment and evaluation of physical education subjects for 10th grade students at Thai Nguyen High School such as: Current status of facilities, direction and implementation of physical education program, etc. for research subjects, at the same time observing class time as well as testing and evaluating time of the learning results in physical education subjects at the school to collect information to solve research tasks.

Mathematical and statistical methods

This method is used in analyzing and processing data collected during the research process of the project through Excel 2016 software. The typical parameters used by the project are the average value and percentage.

Research results

1. Ability to perform physical and sports activities

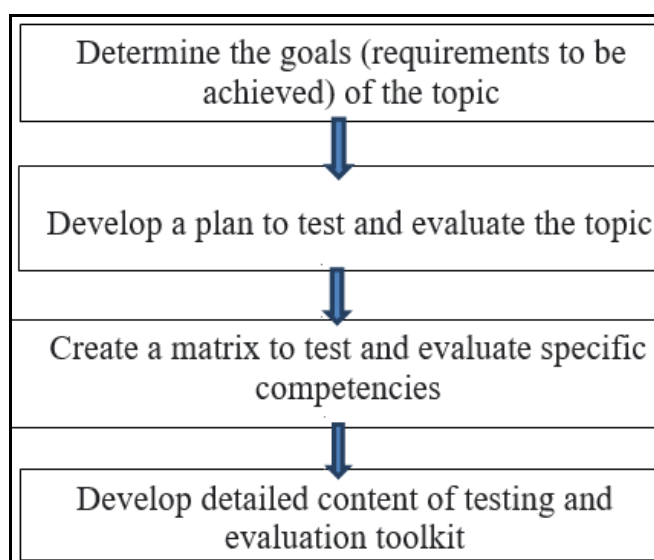
The Physical Education program helps students form and develop physical capacity with the following components: health care capacity, basic movement capacity, and sports activity capacity.

Sports performance capacity is demonstrated in the ability to recognize the role of sports activities for the body. Able to perform basic techniques of some sports content suitable themselves and self-aware and active in practicing sports [2].

2. Process of building testing and evaluation tools

Based on the practical issues evaluated by the topic; Based on the characteristics of the physical education subject, the requirements of the 10th grade curriculum and the theoretical basis, we propose a process to develop a tool to test and evaluate the capacity of physical education and sports activities in the subject of physical education grade 10 illustrates the topic "Techniques for using the instep in soccer" specifically as follows:

Process of building an accounting and evaluation toolkit



Step 1, Determine the goals and requirements to achieve the topic "Techniques for using the instep in soccer" in physical education grade 10, from that goal, develop specific goals in each lesson. Determining goals for each lesson is also relative because there are goals that can be achieved after finishing a lesson, but there are also goals that must be achieved after

studying the topic. These goals must be approved by all physical education teachers at Thai Nguyen High School so that when teaching, they stick to the goals and disseminate them to students so they know what they are asked to do and how they will be evaluated. The content has been determined and presented in table 1.

Table 1: Requirements to be met for the topic "Techniques for using the instep in soccer" in physical education grade 10

Title	Duration	Requirements to be met
Lesson 1: Technique of dribbling and stopping the ball with the instep of the foot	7 periods	<ul style="list-style-type: none"> Understand how to perform the technique of dribbling and stopping the ball with the instep of the middle of foot. Implement the technique of dribbling and stopping the ball with the instep of the foot. Recognize, adjust and correct incorrect movements through listening, observing and practicing for themselves and the team/group. Apply some regulations on balls and football fields in competitions of 11 people. Know how to organize training in teams/groups under the guidance of teachers.
Lesson 2: Technique of dribbling the ball with the outside of the foot and kicking the ball with the inside of the foot 9 lessons	9 periods	<ul style="list-style-type: none"> Understand how to perform the technique of dribbling the ball with the outside of the foot and kicking the ball with the inside of the foot. Able to practice the technique of dribbling the ball with the outside of the foot and kicking the ball with the inside of the foot. Know how to correct movements through listening, observing, and practicing. Apply some regulations on the number of players in football matches of 11 people. Use the sports skills learned in playing, living and studying. - Have self-awareness, collective spirit, solidarity to help each other practice.

Step 2, develop a plan to test and evaluate the subject of 10th grade physical education in the direction of developing students' capacity through the School's Sciences team. Based on the reality of the situation, the project develops a

plan to test and evaluate learning outcomes on the topic "Techniques of using the instep in soccer" for 10th grade students at Thai Nguyen High School specifically in table 2.

Table 2: Plan to test and evaluate learning outcomes in Physical Education subject "Techniques for using the instep in soccer" for 10th grade students at Thai Nguyen High School

No.	Requirements to be met	Method of Testing and Evaluation	Tools of Testing and Evaluation	Time of Testing and Evaluation
1. Capacity for physical education and sports activities				
	- Understand how to perform techniques of dribbling and stopping the ball with the instep of the foot; The technique of dribbling the ball with the outside of the foot and the technique of kicking the ball with the inside of the foot. - Able to perform the techniques of dribbling and stopping the ball with the instep of the foot; The technique of dribbling the ball with the outside of the foot and the technique of kicking the ball with the inside of the foot. - Apply the techniques learned in soccer practice and competition.	Oral; Observe; Learning products	Questions; Rubrics;	Mid and end of semester 1
2. Ability to be autonomous and self-study				
	Recognize, adjust and correct incorrect movements through listening, observing and practicing for themselves and their team/group.	Observe	The Notebook; Scale	While studying the topic
3. Communication and cooperation capacity				
	- Use the sports skills you have learned in playing, living and studying. - Have self-awareness, collective spirit, solidarity to help each other practice.	Observe; Learning products	Notebooks; Scale	While studying the topic
4. Problem solving and creativity capacity				
	Know how to organize practicing in teams/groups under the guidance of teachers.	Observe	Notebook; Scale	While studying the topic

In teaching physical education, to determine students' abilities, it is necessary to regularly evaluate them during the learning process. In each lesson of the topic, teachers need to build a specific plan on evaluating the progress and learning outcomes of students to meet the requirements to be achieved and specifically demonstrate the competency components of the topic, according to the general education program in primary. Evaluate the development of students' abilities through general and physical competencies as follows. General capacity, including component capacities such as: Self-control and self-learning capacity, communication and cooperation, problem solving and creativity;

Physical capacity: Ability to perform physical education and sports activities. We identify specific forms of testing and evaluation including: Regular evaluation and periodic evaluation.
 + Regular assessments performed while studying the topic.
 + Periodic assessment is carried out after finishing studying the topic.
 Step 3, create a matrix table to test and evaluate specific competencies
 Competency assessment matrix table for Sports activities on the topic "Techniques for using the instep in soccer" in physical education grade 10, including:

Table 3: Content matrix for assessing the capacity of sports activities

Level Element	Awareness (7%)	Understanding (9%)	General application (70%)	Creative application (14%)
1	1.1.	1.2	1.3	1.4
3 questions and 1 test (1+1+T+1)	Students remember the purpose and effect of "Techniques for using the instep in soccer"	Students understand the principle of "Techniques for using the instep in soccer" when compared between other soccer skills; Initially have basic knowledge about Soccer.	Able to practice the motor skills of the topic "Techniques for using the instep in soccer"	Students are able to apply "Techniques for using the instep in soccer" diverse in soccer practice and competition situations
Total	1 question	1 question	01 practice test	1 question

Step 4, build a tool to test and evaluate learning outcomes on the topic "Techniques of using the instep in soccer" for 10th grade students at Thai Nguyen High School.

3. Develop a tool to test and evaluate the capacity of physical education and sports activities in physical education grade 10

3.1. Purpose

To evaluate the awareness results of students after finishing the topic "Techniques for using the instep in soccer" for 10th grade students.

Evaluate the degree of completion of the objectives of that topic in the program.

Diagnose students' shortcomings and difficulties in that topic so that students can self-adjust and teachers can take measures to help.

Diagnose limitations in teachers' knowledge and teaching

methods so teachers can make adjustments.

3.2. Form

We use questions to assess knowledge of the topic combined with a practice test to assess content implementation skills after finishing the topic.

3.3. Tool to test and evaluate physical activity capacity on the topic "Techniques for using the instep in soccer" for students of 10th grade.

a) Question

Question 1.

The left column is the name of the movement techniques, the right column is the purpose and effect of each movement technique. Match the answers on the right with each box on the left.

Technique	Purpose and effect
Technique of dribbling the ball with the instep of the foot	Used when passing the ball at a distance and shooting into the goal.
Technique of stopping the ball with the instep of the foot.	Used in fast dribbling and dribbling combined with fake movements.
Technique of dribbling with the outside of the foot	Used when stopping a high ball with a large arc.
Technique of kicking the ball with the inside of the foot	Use when there is space and dribble the ball in a straight direction at high speed to the opponent's field.

Question 2.

Let's analyze the technique of kicking the ball with the inside of the foot.

with the inside of the foot be applied during soccer practice and competition?

Question 3.

In what situations can the technique of dribbling the ball with the outside of the foot and the technique of kicking the ball

b) Rubrics for evaluating practice exercises

Practice the technique of kicking the ball with the inside of the foot (05 goals) (10 points).

Criteria	Level of technical performance of students				
	Very good	Good	Average	Weak	Poor
Perform technique	Perform all 3 steps with good technical momentum, the ball flies straight into the goal good force	Take all 3 steps with good technique and the ball will fly straight into the goal with average force.	Perform all 3 steps of the average momentum technique, the ball flies straight into the goal with average force	Performing enough weak techniques, the ball flies straight into the goal with power weak.	Performing weak technique, the ball flies straight into the goal and rolls on the ground
Achievement	The ball enters goal 4 to 5	The ball enters the goal 3 to 4	The ball enters the goal 2 to 3	Ball enters goal 1 Up to 2	Balls enter goal 1 fruit
Score	9 - 10 points	7-8 points	5-6 points	3-4 points	1-2 points

4. Survey the necessity and feasibility of the developed tools

In order to evaluate the necessity and feasibility of the developed toolkit, we conducted a survey to ask for opinions from experts in physical education. The survey subjects

included 21 professionals including: 15 lecturers of the Department of Physical Education and Sports, University of Education – Thai Nguyen University and 06 teachers of Physical Education at Thai Nguyen High School. The results obtained are presented in table 4.

Table 4: Results of interviews with physical education experts about the tools developed

No.	Capacity assessment tool	The teacher of Faculty of Physical Education and Sports (n = 15)					
		Necessity			Feasibility		
		Very necessary	Necessary	Not necessary	Very feasible	Feasible	Not feasible
Capacity for sports activities							
1	Autonomy and self-study	18	3	0	15	6	0
2	Communication and cooperation	20	1	0	19	2	0
3	Problem solving and creativity	18	3	0	13	8	0
Capacity in physical education and sports							
1	Question	11	10	0	13	8	0
2	Rubrics (evaluated according to criteria)	19	2	0	17	4	0

The interview results show that the teacher of the Department of Physical Education and Sports at the University of Education – Thai Nguyen University and the teacher of Physical Education at Thai Nguyen High School both believe that the toolkit that the project developed is necessary and feasible. No expert believes that the toolkit developed by the project is unnecessary or infeasible. Thus, the toolkit that the project developed has fully guaranteed the principles and is highly appreciated by experts.

Conclusion

Developing testing and assessment tools plays an important role in the process of evaluating students' abilities, including physical abilities (specific sports performance abilities). There are many types of tools that can assess physical and sports performance capacity such as questions, exercises, learning products, checklists, and rubrics. Therefore, teachers need to determine the goals and requirements to be achieved of the topic, from there select the content and design appropriate tools to organize teaching activities to develop the capacity of physical education and sports activity for students.

References

1. Party Central Committee, term XI. Resolution of the 8th Central Conference, term XI on fundamental and comprehensive innovation of education and training, Hanoi; c2013.
2. Ministry of Education and Training. General Education Program - Overall Program. Issued with Circular No. 32/2018/TT-BGDĐT dated December 26, 2018, Hanoi; 2018.
3. Ministry of Education and Training. Promulgating regulations on testing and assessment of primary school students according to Circular No. 27/2020- BGDĐT; 2018.
4. Ha Ngoc Duy. Building an assessment tool to evaluate learning outcomes on the topic of Elective Sports for 3rd grade students in Thai Nguyen city, Thai Nguyen Province. Graduation thesis from Thai Nguyen University of Education; c2022.
5. Tran Ba Hoanh. Evaluation in Education. Hanoi: Education Publishing House; c2006.
6. Tran Van Hoang, Pham Dinh Van. Designing a toolkit to test and evaluate the ability to apply knowledge and skills into practice in the content of Metabolism and Energy Transformation in Biology subject grade 10. Journal of educational equipment: Education management. 2023 Jun;1(290).
7. Trinh Thuy Giang. Assessing student capacity and quality according to the 2018 general education program. Hanoi: University of Education Publishing House; c2021.
8. Nguyen Dang Nhat. Testing and evaluating learning outcomes towards capacity development in teaching

Physics 10 in high school; c2020.

9. Phan Dong Chau Thuy, Nguyen Thi Ngan. Building a scale and toolkit to evaluate students' problem-solving capacity through project teaching. Ho Chi Minh City University of Education - Journal of Science; c2017.
10. Nguyen Thi Kim Yen. Building a testing and evaluation tool for Physical Education for 2nd grade students at DPA Primary School in Thai Nguyen City according to the orientation of developing qualities and capacities; c2021.