



IDENTIFYING EVALUATION CRITERIA FOR THE PHYSICAL EDUCATION CURRICULUM FOR STUDENTS AT CAN THO UNIVERSITY OF MEDICINE AND PHARMACY, VIETNAM

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Abstract:

The evaluation criteria for the physical education curriculum play an important role in determining its relevance, effectiveness, and overall quality; they serve as a key basis for reviewing, assessing, and adjusting the program. The purpose of this study is to identify the evaluation criteria for the Physical Education curriculum for students at Can Tho University of Medicine and Pharmacy, Vietnam (CTUMP). The research employs methods of literature synthesis and analysis, surveys, and statistical processing to address the research objectives. The study subjects include 18 experts and administrators with experience in physical education nationwide, and 724 students from cohort 49 of Can Tho University of Medicine and Pharmacy. The results identified three components with 26 evaluation criteria for the Physical Education curriculum: (1) Objectives and learning outcomes of the program (11 criteria), (2) Program volume, structure, and content (8 criteria), and (3) Conditions ensuring effective program implementation (7 criteria).

Keywords: criteria, the Physical Education curriculum, students, Can Tho University of Medicine and Pharmacy, Vietnam

1. Introduction

Renewing education and training in accordance with societal development has always been identified by the Party and the State as one of the most urgent requirements in the national development strategy. This perspective has been consistently reflected in the documents of the National Party Congresses, from the 4th to the 11th Congress, as well

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as in various directives and resolutions on Education and Training. At the 4th National Party Congress, the Party emphasized the need for comprehensive educational reform, particularly in the development of general education. It called for the reorganization and expansion of the network of universities, colleges, vocational training institutions, and professional secondary schools. This viewpoint on educational reform continued to be supplemented and refined in subsequent Party Congresses. By the 11th National Party Congress, the Party reaffirmed: *“Fundamentally and comprehensively reform Vietnamese education... in which reforming the education management mechanism and developing the teaching and managerial workforce are key elements”* [1].

To concretize the resolutions of the National Party Congresses regarding the alignment of educational reforms with national development, the Party and State have issued multiple documents on educational reform during different periods. These include Resolution 14/2005/NQ-CP dated November 2, 2005 on the “Fundamental and comprehensive reform of Vietnamese higher education for the period 2006–2010” [2], and more recently, Resolution No. 29-NQ/TW dated November 4, 2013 on the “Fundamental and comprehensive reform of education and training to meet the requirements of industrialization and modernization within a socialist-oriented market economy and international integration” [3]. These guiding viewpoints were further concretized through Government Resolution No. 44/NQ-CP dated June 9, 2014 and the Education Sector Action Plan (issued together with Decision No. 2653/QĐ-BGDĐT dated July 25, 2014 by the Minister of Education and Training) [4], [5]. Thus, the Party’s perspective on educational reform has been continuously supplemented and developed to meet the demands of the new era. These viewpoints serve as the foundation for the Ministry of Education and Training, Departments and Offices of Education, and educational institutions nationwide to reform teaching and learning, thereby improving educational effectiveness.

At the 13th National Party Congress, the Party continued to emphasize that for national development, *“human resources are the most important,”* requiring the *“comprehensive development of people”* and the need to *“create breakthroughs in the fundamental and comprehensive reform of education and training, develop high-quality human resources, and attract and nurture talent”* [6]. In the new era of Industry 4.0, the Party reaffirmed that Education and Training remain the top national policy, determining the future of the nation [7], and serving as the foundation for the country’s rapid and sustainable development. The Party further asserted that *“Health is the most precious asset of any individual, and for the prosperous and sustainable development of the country. Hence, improving the health of the citizens is often seen as the priority in national development strategies”* [8].

Stemming from the demand for fundamental and comprehensive reform of higher education, in which Physical Education (PE) plays a crucial role in enhancing health, physical fitness, and promoting a healthy lifestyle for students, especially those in health sciences, Can Tho University of Medicine and Pharmacy (CTUMP) bears the responsibility of training high-quality healthcare personnel for the Mekong Delta region.

Students of health sciences must possess strong physical fitness to meet the demands of study, clinical training, and healthcare service. However, current PE programs in many universities, including CTUMP, still lack a comprehensive set of evaluation criteria that accurately assess the physical characteristics of their student population. This poses challenges in program management, monitoring, improvement, and assessment of educational effectiveness. Therefore, developing evaluation criteria for the PE curriculum has become essential to provide a scientific basis for program adjustment and enhancement, ensuring alignment with learning outcomes, improving training quality, and better developing students' physical capacity.

From these practical needs and scientific significance, this topic is selected with the expectation of contributing to improving the quality of Physical Education at CTUMP, and supporting the enhancement of quality assurance in higher education within health sciences. With this importance, I chose to conduct the study entitled: "Identifying Evaluation Criteria for the Physical Education Curriculum for Students at Can Tho University of Medicine and Pharmacy, Vietnam".

The purpose of this study is to identify evaluation criteria assessing the current content of the Physical Education curriculum for students at Can Tho University of Medicine and Pharmacy, Vietnam.

2. Materials & Methods

2.1 Participants

18 experts and administrators experienced in the field of physical education nationwide, selected using convenient and judgment sampling methods, were involved in surveys regarding the selection of curricular-assessing criteria at Can Tho University of Medicine and Pharmacy.

724 second-year students from cohort 49 (up to 50 male and 50 female students per major, totaling 309 males and 415 females) who had completed the Physical Education module, selected using simple random and convenience sampling methods, were involved in the assessments of the chosen criteria.

2.2 Methodology

2.2.1 Method of Document Synthesis and Analysis

This method is used to synthesize documents and systematize knowledge related to the research topic. At the same time, it supports the examination of issues relevant to the evaluation criteria for the Physical Education curriculum.

2.2.2 Survey Method

A survey questionnaire was developed based on the classification of the importance level of each item, and both direct and indirect surveys were conducted with experts and administrators experienced in physical education nationwide, as well as with students to verify the reliability of the measurement scale. The survey results assisted the study in

selecting evaluation criteria for the Physical Education curriculum for students at Can Tho University of Medicine and Pharmacy.

2.2.3 Statistical Method

This method is used to process and analyze data to test the reliability of the scale through the Cronbach's Alpha coefficient, with the support of SPSS for Windows (version 2022).

3. Results and Discussion

To identify the evaluation criteria for the Physical Education (PE) curriculum for students at Can Tho University of Medicine and Pharmacy, the study followed these steps:

- **Step 1:** Synthesize the foundations and conditions for determining the criteria.
- **Step 2:** Develop an initial draft questionnaire to seek feedback from experts and administrators.
- **Step 3:** Revise and complete the questionnaire.
- **Step 4:** Test the reliability of the questionnaire using the Cronbach's Alpha coefficient.

3.1 Synthesizing the Foundations and Conditions for Determining the Criteria

To establish the evaluation criteria for the PE curriculum for students at Can Tho University of Medicine and Pharmacy, the study was based on:

The objectives and learning outcomes of the undergraduate training programs of CTUMP [9]; the 2023 curricula and detailed syllabi of the Medicine program [10], [11], [12]; the 2024 decision on regulations for developing, reviewing, and adjusting training programs and course syllabi [13]; Circular 04/2016/TT-BGDĐT dated March 14, 2016 of the Ministry of Education and Training (MOET) [14]; Official Letter No. 1669/QLCL-KĐCLGD dated December 31, 2019 from the Quality Management Department [15]; Circular 17/2021/TT-BGDĐT dated June 22, 2021 on standards for training programs and procedures for development, appraisal, and issuance of higher education curricula [16]; and Circular 25/2015/TT-BGDĐT [17].

Based on these foundations, along with expert consultation and the experience of specialists in program evaluation and PE curriculum development, the study identified criteria for evaluating the PE curriculum, including the following components:

- Objectives and learning outcomes of the program,
 - Program volume, structure, and content,
 - Conditions ensuring program implementation,
- Specific criteria for the three components are:
- Objectives and learning outcomes of the program,
 - Program objectives (6 criteria),
 - Program learning outcomes (6 criteria),
 - Program volume, structure, and content (8 criteria),
 - Conditions ensuring program implementation,

- Teaching staff (3 criteria),
- Facilities, training grounds, equipment, and PE tools (4 criteria).

3.2 Developing the Initial Draft Questionnaire for Expert and Administrator Feedback

The study developed an initial draft questionnaire and collected feedback from 18 experts and administrators experienced in PE and PE curriculum development for health sciences students nationwide. Their feedback focused on the structure, format, content, and purpose of the questionnaire to refine the scale for evaluating the criteria. The results were as follows:

- 6/18 experts (33.33%) agreed with the first draft questionnaire,
- 3/18 experts (16.67%) suggested removing 2 items and adjusting wording in 2 items,
- 4/18 experts (22.22%) suggested adding 1 item and adjusting wording in 2 items,
- 5/18 experts (27.78%) recommended wording adjustments in 6 items.

3.3 Revising and Finalizing the Questionnaire

Based on the survey results and expert feedback, the questionnaire was revised accordingly, and data collection was conducted using SPSS 22.0.

The finalized evaluation scale questionnaire included 3 components with 26 items:

- Objectives and learning outcomes of the program,
- Program objectives (6 criteria),
- Program learning outcomes (5 criteria),
- Program volume, structure, and content (8 criteria),
- Conditions ensuring program implementation,
- Teaching staff (3 criteria),
- Facilities, training grounds, equipment, and PE tools (4 criteria).

3.4 Testing the Reliability of the Questionnaire Using Cronbach's Alpha

A survey was conducted with 724 second-year students from cohort 49 (up to 50 male and 50 female students per major; 309 males and 415 females in total) who had completed the PE course. Students rated each item on a scale from 1 to 5, corresponding to aspects of the PE curriculum at CTUMP.

The results of the reliability test of the PE curriculum evaluation scale using Cronbach's Alpha are presented in Table 1.

Table 1: Description of Cronbach's Alpha reliability coefficients for items evaluating the PE curriculum at CTUMP

	Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
	Program objectives and learning outcomes				
	Program objectives				
1	MT1	13.89	10.780	.935	.932
2	MT2	13.90	10.822	.905	.936
3	MT3	13.72	12.078	.717	.956
4	MT4	13.87	10.764	.914	.935
5	MT5	13.69	11.654	.736	.955
6	MT6	13.87	10.852	.893	.937
Cronbach's Alpha = .948		N of Items = 6			
	Program learning outcomes				
1	CDR1	11.23	6.816	.972	.923
2	CDR2	11.24	7.166	.924	.932
3	CDR3	11.00	8.094	.752	.961
4	CDR4	11.20	6.745	.948	.928
5	CDR5	10.91	7.778	.761	.959
Cronbach's Alpha = .951		N of Items = 5			
	Program volume, structure, and content				
1	ND1	19.14	24.931	.910	.976
2	ND2	19.18	25.426	.892	.977
3	ND3	19.10	24.710	.959	.973
4	ND4	19.13	24.859	.956	.974
5	ND5	19.07	24.413	.959	.973
6	ND6.	18.94	26.559	.753	.983
7	ND7	19.14	25.011	.936	.975
8	ND8	18.99	23.957	.938	.975
Cronbach's Alpha = .979		N of Items = 8			
	Conditions ensuring program implementation				
	Teaching staff				
1	ĐN1	5.77	1.274	.894	.636
2	ĐN2	5.80	1.336	.851	.685
3	ĐN3	5.39	2.208	.525	.970
Cronbach's Alpha = .859		N of Items = 3			
	Facilities, training grounds, equipment, and sports tools	8.29	4.079	.914	.911
1	CSV1	8.24	4.177	.871	.925
2	CSV2.	8.01	4.683	.746	.961
3	CSV3	8.25	3.874	.937	.903
4	CSV4	8.29	4.079	.914	.911
Cronbach's Alpha = .944		N of Items = 4			

The results of the Cronbach's Alpha reliability test for the items evaluating the Physical Education (PE) program for students at Can Tho University of Medicine and Pharmacy (CTUMP), presented in Table 1, show that the overall Cronbach's Alpha coefficients = 0.948, 0.951, 0.979, 0.859, and 0.944, all greater than 0.6. All items have Corrected Item-Total Correlation values higher than the acceptable threshold (>0.3). The study identified 06 items evaluating the objectives of the PE program for CTUMP students.

Through the process of synthesizing relevant bases and conditions for determining the criteria, developing the initial draft questionnaire, revising and finalizing the questionnaire, and testing the reliability using Cronbach's Alpha, the study established a measurement scale consisting of 03 components with 26 items as follows:

3.5 Program Objectives and Learning Outcomes (11 criteria)

3.5.1 Program Objectives (PO, 6 criteria)

- **PO1:** The objectives of the PE program are clearly defined and consistent with the overall training objectives of CTUMP.
- **PO2:** The objectives reflect an orientation toward comprehensive education, focusing on physical development, motor skills, and professional qualities required in health sciences.
- **PO3:** The objectives are aligned with the specific demands of the health professions (endurance, posture, fine motor skills, ability to withstand occupational stress).
- **PO4:** The objectives ensure feasibility based on available facilities, teaching staff, and allocated training time.
- **PO5:** The objectives comply with the official regulations on PE curricula in higher education.
- **PO6:** The objectives demonstrate coherence with the professional academic curriculum and physical training activities throughout the program.

3.5.2 Program Learning Outcomes (PLO, 5 criteria)

- **PLO1:** Learning outcomes clearly and specifically describe the competencies students must achieve after completing the course, including knowledge, skills, autonomy–responsibility, and physical capacity relevant to the health professions.
- **PLO2:** Learning outcomes use measurable action verbs aligned with standardized assessment frameworks.
- **PLO3:** Learning outcomes meet the professional requirements related to physical health and the psychological–physiological characteristics of health science students.
- **PLO4:** Learning outcomes are aligned with program objectives, course content, teaching methods, and assessment approaches.
- **PLO5:** Learning outcomes ensure feasibility and are appropriate to the PE curriculum workload, enabling students to accomplish them within the required timeframe.

3.5.3 Program Volume, Structure, and Content (PVSC, 8 criteria)

- **PVSC1:** The PE curriculum workload complies with regulations on PE programs in undergraduate education.
- **PVSC2:** The curriculum structure meets official requirements, including compulsory and elective modules.
- **PVSC3:** The content is logically designed, ensuring balance between theory – practice – self-study.
- **PVSC4:** The curriculum reflects continuity and progression across stages (compulsory, elective).
- **PVSC5:** The content is appropriate to the physical characteristics, work posture, and occupational requirements of health science students.
- **PVSC6:** The content includes the development of physical fitness components (endurance, agility, flexibility, balance) and job-related motor skills.
- **PVSC7:** The content is updated according to modern PE trends, sports biomechanics, and public health needs.
- **PVSC8:** The curriculum allows integration of elective courses or advanced modules.

3.5.4 Conditions Ensuring Program Implementation (7 criteria)

3.5.4.1 Teaching staff (T, 3 criteria)

- **T1:** Instructors meet qualification standards, with appropriate academic degrees (Master's degree or higher in PE or sports sciences) and required teaching certifications.
- **T2:** Instructors are capable of applying IT tools, modern teaching methods, and have experience in PE education for health science students.
- **T3:** The number of instructors meets the professional requirements for teaching both compulsory and elective PE modules.

3.5.4.2 Facilities, Training Grounds, Equipment, and Sports Tools (F, 4 criteria)

- **F1:** Training grounds, gymnasiums, equipment, and tools meet requirements regarding size, safety, hygiene, and suitability for each sport.
- **F2:** A school health system and on-site first-aid facilities are available.
- **F3:** Modern teaching equipment is available, such as projectors, physical fitness testing devices, and physical education management software.
- **F4:** Facilities and equipment are regularly maintained and upgraded, with periodic plans for improvement and replacement.

4. Conclusion

Through synthesizing the regulatory foundations, identifying necessary conditions for establishing criteria, developing the initial questionnaire, revising and finalizing the

instrument, and testing its reliability using Cronbach's Alpha, the study identified 03 key components with 26 criteria for evaluating the PE curriculum at CTUMP:

- **Program objectives and learning outcomes:**
 - Program objectives (6 criteria),
 - Program learning outcomes (5 criteria).
- **Program volume, structure, and content (8 criteria)**
- **Conditions ensuring program implementation:**
 - Teaching staff (3 criteria),
 - Facilities, training grounds, equipment, and
 - Sports tools (4 criteria).

Conflict of Interest Statement

The authors declare no conflicts of interest.

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