

# The Assessment of Physical Education Teaching and Learning in Secondary School in Muang District, Chiangrai Province

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## Abstract

The purpose of this study was to investigate the assessment of physical education teaching and learning in secondary school in Muang district, Chiang Rai province. Respondents were sixty-nine physical education teachers recruited by cluster sampling. Questionnaires developed by researchers were implemented. Data were analyzed in the form of frequency and percentage for respondents' demographics, and arithmetic means and standard deviation were used for the teaching and learning assessment.

The results indicated that physical education teaching and learning assessments in four areas - knowledge and understanding, sport skills, physical fitness, and desired characteristics were ranked at their highest levels.

**Keywords:** *Physical Education, Teaching and Learning, Assessment.*

## Introduction

The Basic Education Core Curriculum is aimed at enhancing the capacity of all learners, who constitute the major force of the country, so as to attain balanced development in all aspects—physical strength, knowledge, and morality (Ministry of Education, 2008: 4). Health and Physical Education (HPE) is one of the learning areas to be learned, which aims to foster knowledge, skills, and favorable attitudes towards strengthening one's own health and that of others; prevention and proper treatment of various things affecting one's health; and life skills. Health Education (HE) emphasizes enabling learners to concurrently develop behaviors related to knowledge, attitudes, morality, values, and health practices. Physical education (PE) places emphasis on enabling learners to participate in kinesthetic activities, physical exercises, playing games, and sports. It serves as an instrument in holistic development in all respects—physical, mental, emotional, social, and intellectual—as well as imparting capacities for health and sports. Measurement and evaluation are part of the learning process. Teachers regularly and continuously measure and evaluate students' performance in teaching-learning activities by using diverse assessment techniques (Ministry of Education, 2008). Since physical education (PE) involves a unique teaching and learning process primarily focused on physical and outdoor activities, its assessment differs from that of other subjects. Therefore, this research focuses on the exploration of the assessment of PE teaching and learning in secondary school in Muang district, Chiang Rai province.

This research aimed to investigate the assessment of PE teaching and learning in secondary school in Muang district, Chiang Rai province. The sample consisted of 69 PE teachers who were recruited through cluster sampling from secondary schools in three clusters. Eight schools from the Secondary Education Service Area Office in Chiang Rai, 3 schools from the Department of Local Administration, and 3 schools from the Office of the Private Education Commission. The research instrument was a questionnaire developed by the researcher, which comprised three parts: Part 1 included questions about the demographics of the respondents in the form of a checklist, and Part 2 contained questions assessing PE teaching and learning using five rating scales of the Likert type. This section's questions focused on four aspects: knowledge and understanding, sports skills, physical fitness, and desirable characteristics. Part 3 consisted of open-ended questions that allowed respondents to freely provide their suggestions or recommendations. Three experts determined the validity of the questionnaire using internal objective congruence (IOC). The first part was analyzed using frequency and percentage, the second part using arithmetic means and standard deviation, and the third part using content analysis.

## Research Results

Most of the respondents were male teachers (79.71%), had teaching experiences over 10 years (75.36%), and were between 46 and 50 years old (34.78%). Physical education teaching and learning assessments in four areas were at the highest levels, as shown in Tables 1 to 4.

**Table 1** : Arithmetic means and standard deviation of knowledge and understanding assessment

<b>Knowledge and understanding assessment</b>		$\bar{x}$	<b>S.D</b>	<b>level</b>
1.	The assessment is based on the indicator in the Basic Education Core Curriculum.	4.88	0.32	highest
2.	Final examination management	4.81	0.43	highest
3.	Mid-term examination management	4.80	0.47	highest
4.	Pre-test before classroom activity	4.77	0.42	highest
5.	The knowledge application skills assessment	4.74	0.63	highest
6.	The critical and analytic thinking skills assessment	4.74	0.44	highest
7.	Knowledge tests created by teachers themselves.	4.74	0.44	highest
8.	Content assessment relevant to the subject content such as the history of sport, rules, and regulations	4.71	0.45	highest
9.	The formative assessment on learning unit	4.67	0.72	highest
10.	The assessment is compatible with the school curriculum.	4.67	0.47	highest
Total		4.75	0.48	highest

The data from table 1 showed that in general, the knowledge and understanding assessment of teachers was at the highest level. It indicated that most of the physical education teachers evaluated knowledge and understanding according to the indicators in the Basic Education Core Curriculum, including key components such as the assessment of knowledge application skills and critical and analytical thinking skills, which were also rated at the highest level.

**Table 2** : Arithmetic means and standard deviation of sport skills assessment

<b>Sport skills test</b>	$\bar{x}$	<b>S.D</b>	<b>level</b>
1. Sport skills test was used by standard sport skills test	4.61	0.54	highest
2. Sport skills test was determined by norms from the standard sport skills test	4.61	0.60	highest
3. Sport skills test was constructed by the teacher	4.70	0.52	highest
4. Sport skills test was determined by the teacher setting criterion	4.59	0.67	highest
5. The assessment was based on the progression of a student's sport skills rather than determined by the setting criterion	4.84	0.37	highest
6. Sport skills test item being used was concerned to individual differences	4.81	0.39	highest
<b>Total</b>	<b>4.69</b>	<b>0.51</b>	<b>highest</b>

The data from table 2 showed that in general, the sport skills test was at the highest level. It indicated assessment of sport skills focused on the progression of students' sport skills rather than determined by the setting criteria, including based on the individual differences.

**Table 3** : Arithmetic means and standard deviation of physical fitness assessment

<b>Physical fitness assessment</b>	$\bar{x}$	<b>S.D</b>	<b>level</b>
1. Physical fitness assessment was used by norms from standard physical fitness test.	4.81	0.39	highest
2. Physical fitness test determines all compositions such as strength, endurance, body mass index, body fat.	4.72	0.50	highest
3. Physical fitness test concerns the individual differences	4.68	0.50	highest
<b>Total</b>	<b>4.74</b>	<b>0.44</b>	<b>highest</b>

The data from table 3 indicated that the assessment of physical fitness was at the highest level, based on standard norms and all compositions, including individual differences.

**Table 4** Arithmetic means and standard deviation of desirable characteristics assessment

<b>Desirable characteristics assessment</b>	$\bar{x}$	<b>S.D</b>	<b>level</b>
1. Class attendance was evaluated.	4.75	0.46	highest
2. Classroom activities participation was evaluated.	4.68	0.47	highest
3. Behaviour observation form was used for desirable characteristics such as activity participation, sportsmanship, self-discipline.	4.90	0.30	highest
<b>Total</b>	<b>4.78</b>	<b>0.41</b>	<b>highest</b>

The data from table 4 reflected that the assessment of desirable characteristics was done at the highest level. The behavior observation form was ranked at the highest level, while classroom activities participation and class attendance were ranked lower, respectively.

Data from the open-ended questionnaires showed that classroom activities focused on learning by doing, physical fitness, and desirable characteristics assessment. The assessment of sport skills varies based on the specific sport. Changing situations may require adjustments to the PE teaching and learning activities. For instance, factors such as rain affecting outdoor activities and the readiness of sports fields and facilities should be considered.

In conclusion, this investigation focused on physical education teaching and learning assessment in secondary school in Muang District, Chiang Rai Province. Findings from this study revealed that most physical education teachers assessed their teaching and learning across all components at the highest level. This might be the responses of physical education teachers to the regulation and socially desirable to a good physical education teaching and learning. The physical education teachers mostly followed the principle of physical education assessment and the principle of the Basic Education Core Curriculum. The key findings, including the assessments, were based on indicators from the Basic Education Core Curriculum, as well as assessments of knowledge application skills and critical and analytic thinking skills, which are important competencies outlined in the Basic Education Core Curriculum (Ministry of Education, 2008: 6). This finding was similar to the result of the research on the status of physical education learning assessment in schools of Subhan Buri Province according to Basic Education Core Curriculum A.D. 2008 stated that Most physical education teachers studied the guidelines for test and measurement procedure according to Basic Education Core Curriculum A.D. 2008, objectives of physical education, and section six of the National Education Act B. E. 2542(1999), and Amendments(Second National Education Act. B. E. 2545(2002) and Third National Education Act. B. E. 2553(2010) (Sukawas, Mawinthorn, and Boonchai,

2021). Concerning sport skills assessment, the assessment is based on the progression of the student's sport skills rather than determined by the setting criterion. This finding, supported by Peanchob (2005: 391), indicates that measurement for evaluation in physical education focuses on assessing student progress according to the principles and processes of teaching and learning in physical education, using a content strand or a set goal. Furthermore, the Basic Education Core Curriculum states that learning assessment is a process aimed at enhancing the quality of learners by utilizing assessment results as data and information to demonstrate their developmental progress and accomplishments. The data will also be useful for strengthening the learners, thus enabling them to learn to their highest potential. (Ministry of Education, 2008: 31). Regarding physical fitness assessment, the norms from the standard physical fitness test were utilized. It might be that there were a standard physical fitness tests and norms constructed by the Sport Science Division, Department of Physical Education, Ministry of Sport and Tourism in 2019 that can be used for students in this age group (Department of Physical Education, 2019). For the desirable characteristics, a behaviour observation form was used. For desirable characteristics, it means that the PE aimed to foster the desirable characteristics of being a good citizen as mentioned in strand 3, standard H3.2: favour for physical exercise, playing games and sports with regular practices; self-discipline; observance of rights, rules, and regulations; having sporting spirit; having true competitive spirit; and appreciation of the aesthetics of sports (Ministry of Education, 2008: 19). Furthermore, physical education promotes teamwork and communication through participation in team sports and group activities (Narayana C M. 2024). Although physical education teaching and learning assessments are generally viewed as being at the highest level, they should focus on evaluating students' progress in all areas, particularly in sports skills and physical fitness, rather than strictly adhering to set criteria; this was a key point of the study.

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