

SECTION: PHYSICAL EDUCATION AND SPORT

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KEY FEATURES AND CHALLENGES OF SCHOOL PHYSICAL EDUCATION: A CROSS-COUNTRY COMPARISON

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Physical education is an integral component of the overall development of students in the majority of countries worldwide [3]. In the context of globalization and the integration of the national education system into the European educational space, it is important to examine advanced international practices in the organization of Physical Education (PE) in secondary schools. From our perspective, it is essential to investigate and analyze the available scientific evidence regarding the contributions and benefits of PE and sport (PES) in schools, both for students and for educational systems as a whole.

Such analysis will facilitate the improvement of Ukraine's national PE system, enhance the effectiveness of classes, and strengthen the health of school-aged youth. Based on the analysis and synthesis of existing scientific and scientific-methodological literature, this section presents a description of the experience in organizing PE in various countries and regions of the world, as documented in official programs, legislative acts, distinctive methodological approaches, and statistical data [14].

For the purposes of comparison with the Ukrainian context, we selected countries with a well-developed system of PE in schools (see Table). Canada, for instance, is a federal state in which provinces and territories enjoy autonomy in education, including in the sphere of PE. This means that there is no unified national PE standard; however, all provinces follow common principles outlined in official documents that take into account structural features and regulatory frameworks, integrated into the curricula of schools across most Canadian provinces.

Table 1. Comparative Table of PE (PE) System Organization in Secondary Education Institutions of Different Countries

Country	Program Structure	Mandatory / Voluntary Participation	Weekly Hours	Features Innovations
Canada	Federal Daily Physical Activity (DPA) program and individual provincial approaches.	Mandatory in most provinces. DPA is the minimum requirement.	2.5 hours	Individual development. Focus on equal access and the development of inclusive physical education.
Finland	Integrated health-promoting education. Curricula are developed based on national guidelines.	Mandatory in basic education. High school autonomy.	2 hours	Students are involved in creating the learning environment. Emphasis on psychosocial health and well-being.
Japan	Daily PE (taiiku) lessons included in the general timetable. National standards set by MEXT (Ministry of Education, Culture, Sports, Science and Technology).	Mandatory in all schools. High attendance rate.	3 hours	Close connection with traditional culture and etiquette. Daily morning exercise routine. MEXT integrates moral education.
China	PE in primary and secondary schools, including traditional wushu elements. Supported by the Ministry of Education (MOE) and the Healthy China-2030 initiative.	Mandatory according to national standards.	3 hours	Integration of national culture, use of digital learning tools.

The main thematic components typically included in Canadian school PE programs encompass the following:

1. Development of physical literacy – a core concept in the Canadian approach (as defined by Sport for Life Canada).
2. Cardiorespiratory and muscular endurance.
3. Motor skills and coordination.
4. Social interaction and teamwork.
5. Psychological well-being and mental health.

Independent organizations are also engaged in governmental programs and initiatives, such as ParticipACTION – a national organization that promotes physical activity among youth [12]. The Daily Physical Activity (DPA) Policies program has

been implemented in several provinces, providing daily 20–30-minute activity sessions, even outside of regular PE classes [1]. These documents carefully record the development of global concepts, learning competencies, and curricular content for students of different ages.

European countries have their own distinctive features in both their education systems in general and PE (PE) (PE) in particular. Finland is a recognized leader in school education and health promotion thanks to its innovative approaches to PE, which incorporate key programs, the School as a Movement concept, and comparative statistical data. In Finnish schools, the emphasis is on voluntary participation and deriving enjoyment from physical activity. The curriculum integrates contemporary scientific approaches to the psychophysiological development of schoolchildren.

Finland has long been considered a benchmark for educational reforms and the creation of health-promoting systems. A unique feature of Finnish school PE is the integration of physical activity throughout the entire learning process, rather than limiting it to specific PE classes. This approach is based on the “Liikkuva koulu” (English – Finnish School as a Movement) concept, launched by the government in the 2010s.

The main principles of the Finnish model of PE (PE) (PE) within secondary education are as follows:

1. Flexibility: Each school adapts the program to its own capabilities.
2. Holistic approach: Physical activity is not separated from other aspects of learning.
3. Partnership: Schools, parents, municipalities, and local sports organizations work collaboratively.
4. Individualization: The focus is not on competition but on personal progress and enjoyment of movement.

The system of PE and instruction in physical culture in Finland, as in recent years in Ukraine, is based on the National Standards. For the past 11 years, PE has been included in the National Core Curriculum. This requires not only the assessment of physical fitness but also the development of healthy lifestyle skills, interpersonal communication, cooperation, and self-regulation [6]. In primary school, the curriculum provides for 90–120 minutes of PE per week, while in secondary school the figure reaches up to 150 minutes plus optional activities. However, thanks to the Liikkuva koulu program, the actual duration of physical activity is often significantly higher. In the Finnish secondary education system, PE focuses on the well-being and emotional comfort of students. Physical education teachers receive training in psychopedagogy. The objectives of the lessons include not only the development of physical qualities but also the promotion of mental health, the formation of a positive body image, and the acquisition of social skills [13].

In Japan, one of the leading countries in the East Asian region, PE is an important component in fostering discipline, respect for elders, and group identity. Classes are held daily, and traditional martial arts and sports typical of the East – such as kendo, sumo, karate, ju-jutsu, and judo – play a significant role. Martial arts training (judo, kendo, jujutsu) is included in the compulsory program of secondary schools as part of the national curriculum aimed at developing “character through the body” (karada de

manabu) [2].

The Japanese PE system as a whole harmoniously integrates physical culture with general educational and upbringing activities and is rooted in a deeply ingrained culture of discipline, collectivism, and holistic personal development. In Japan's school education, particular emphasis is placed on moral education through physical culture. According to The National Course of Study, which is regularly updated by the Ministry of Education, Culture, Sports, Science and Technology of Japan (MEXT), students follow a program designed not only to develop physical abilities but also to cultivate moral values such as respect, self-control, teamwork, and perseverance (*gambaru*) [10].

Physical education is a compulsory subject in all Japanese schools from the first through the twelfth grade [11]. In both content and approach, Japanese PE shows similarities as well as differences compared to the PE system in the United States. A typical structure of PE in Japan includes, first, traditional *taisō* exercises (daily group gymnastics); second, general developmental exercises incorporating elements of martial arts (judo, kendo); third, team games (baseball, volleyball); fourth, activities aimed at developing coordination and endurance (running, jumping, orienteering); and finally, lessons on safety rules and first aid. Every morning, most Japanese schools also conduct mass exercise sessions – *raijō taisō* – broadcast nationwide on the radio since 1928 [7]. A distinctive feature of the Japanese model is the high level of extracurricular physical activity. Students are required to choose a *bukatsu* – a club based on their interests – in which sports sections (judo, karate, baseball, athletics) dominate. Participation in *bukatsu* usually takes place five to six days a week, sometimes including weekends, which significantly increases the overall level of physical activity [4].

The PE system in China is one of the oldest in the world, with roots that go back thousands of years. However, the modern model of PE in the country largely took shape in the 20th century and continues to adapt to socio-economic challenges. The primary goals of PE in China are to promote the all-round development of students, strengthen their health, and foster patriotism and social responsibility.

The national PE system falls under the jurisdiction of the Ministry of Education of the People's Republic of China. The main document regulating PE in schools is the nationwide strategy aimed at enhancing physical activity among youth, along with the current Healthy China 2030 plan. In addition, a range of regulatory acts establish the mandatory number of PE hours, requirements for sports infrastructure, and the integration of physical culture into the student assessment system [9].

China also implements national standards for PE and health, which serve as an updated system for testing and evaluating physical fitness. Furthermore, policy documents lay the foundation for integrating physical, intellectual, and moral development – primarily for the younger generation. In general education schools in China, PE is a compulsory subject at all levels of schooling. According to the requirements of the Ministry of Education, primary school students must have at least four PE lessons per week, while lower and upper secondary school students are required to have at least three. Considerable emphasis is placed on mass physical activity, morning exercises, exercise breaks between classes, and participation in sports clubs [17].

A distinctive feature of the Chinese model is the integration of traditional practices – such as taijiquan (太极拳), an ancient Chinese martial art that combines movement, breathing, and meditation and holds a special place in China's school PE curriculum as a form of traditional gymnastics – and the martial art of wushu, alongside modern sports. Chinese schools also compete with one another in sports achievements, which stimulates the development of physical activity at regional and municipal levels [5]. China also invests significant resources in training PE teachers. There are specialized pedagogical universities as well as postgraduate training programs for PE instructors. In addition, the state actively uses a nationwide monitoring system for students' physical fitness: every year, a national test of physical condition (National Student Physical Fitness Standard) is conducted [16].

It is worth noting that PE in China has a distinctly strategic function. The established education system as a whole, and PE in particular, is based, among other things, on a nationwide strategy aimed at enhancing physical activity among young people. The government views it as a tool for improving national health, strengthening social cohesion, and preparing future elite athletes. Due to its mass participation, standardization, and strong state support, China's PE system is one of the most effective in the world. The main achievements of the Chinese school PE system include a high level of integration of physical culture into school life. Owing to its scale, standardized approach, and governmental backing, the PE system in the PRC is considered among the most efficient globally [15].

Currently, Chinese authorities, researchers, and the teaching community face pressing issues and challenges, many of which closely mirror those in developed countries of the Americas and Europe. The first is the gradual rise in the prevalence of obesity among school-aged children [8]. The second major issue is the heavy academic workload and the predominance of core academic subjects, which reduce the time allocated for PE. The third challenge lies in the uneven development of sports infrastructure between urban and rural areas.

In conclusion, many countries worldwide have gained positive experience in PE, where locomotions are closely linked to health promotion, socialization, and the development of healthy lifestyle values. In numerous countries, integrated interdisciplinary approaches and collaboration among PE teachers, psychologists, and healthcare professionals have proven effective. Thus, international experience in organizing PE in secondary schools demonstrates the necessity of innovation, flexibility in curricula, and the consideration of students' individual and cultural characteristics. For Ukraine's PE system, it would be advisable to incorporate elements of these practices to enhance both its effectiveness and its relevance.

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