

ТЕОРІЯ І МЕТОДИКА ПІДГОТОВКИ СПОРТСМЕНІВ

A study on physical education curriculum and its issues in Japan

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Abstract. Recently, Japan has shifted from a content-based curriculum to a competency-based curriculum. It is not difficult to conceive that the OECD framework underlies the educational guidelines. And The efforts for future-oriented curricular reform that meets social needs have received praise from OECD. The educational guidelines created in response to these social changes has great prospects, but some challenges remain. The purpose of this paper was to provide an overview of PE in Japan by focusing on the educational guidelines, and to present its issues. Then, I considered «concern for formalism» and «disregarding individuality and relationships» as issues that have changed the direction to a competence-based curriculum. These formalistic and technicistic tendencies arose from the discrepancy were attributed to between learning content and learning activities as well as from a reductionist perspective resulting from methodological attitudes.

Key words: physical education, the educational guidelines, curriculum, the qualities and abilities

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A STUDY ON PHYSICAL EDUCATION CURRICULUM AND ITS ISSUES IN JAPAN

Аннотация. Недавно Японія перейшла від навчальної програми, заснованої на змісті, до навчальної програми, заснованої на компетенціях. Неважко зрозуміти, що принципи ОЕСР лежать в основі керівних принципів у сфері освіти. І зусилля з реформування навчальних програм, орієнтованих на майбутнє, що відповідають соціальним потребам, отримали схвалення ОЕСР. Освітні керівні принципи, створені у відповідь на ці соціальні зміни, мають великі перспективи, але залишаються деякі проблеми. *Мета.* Дати огляд стану фізичного виховання в Японії, зосередивши увагу на освітніх рекомендаціях, і виявити його проблеми. *Результати.* Розглянуто «турботу про формалізм» і «ігнорування індивідуальності і взаємовідносин» як проблем, що змінили спрямування в бік навчальної програми, заснованої на компетенціях. Ці формалістичні і технічні тенденції виникли через невідповідність між змістом навчання і навчальною діяльністю, а також унаслідок редуцціоністської точки зору, що впливає із методологічних підходів.

Ключові слова: фізичне виховання, навчальні посібники, навчальна програма, якість і здатності.

Introduction. Owing to globalization and technological advances, the world in which children live today is full of uncertainty in every domain including society, environment, and the economy. Japan has therefore begun to develop the abilities of children currently in school who will be entering the labor market in 2030 to find jobs that have not yet been created, use technologies that have not yet been invented and solve problems that have not yet been anticipated.

To navigate through such uncertainty, students will need to develop curiosity, imagination, resilience and self-regulation; they will need to respect and appreciate the ideas, perspectives and values of others; and they will need to cope with failure and rejection, and to move forward in the face of adversity. Their motivation will be more than getting a good job and a high income; they will also need to care about the well-being of their friends and families, their communities and the planet (OECD, 2018).

This trend of qualitative changes in education is a common issue not only in Japan but in other countries. For this reason, the OECD developed the «Learning Framework 2030» that sets out a vision for the future of the education system and the principles underpinning it in the «Education 2030» project. The OECD adopted the «Learning Compass» offering competencies whose components include knowledge (disciplinary, interdisciplinary, epistemic and procedural); skills (cognitive & meta-cognitive, social & emotional, and physical & practical); and attitudes and values (personal, local, societal and global) which mediate their utilization; as well as «transformative competencies» (creating new value, reconciling tensions and dilemmas and taking responsibility). These competencies can be acquired through a series of processes of anti-

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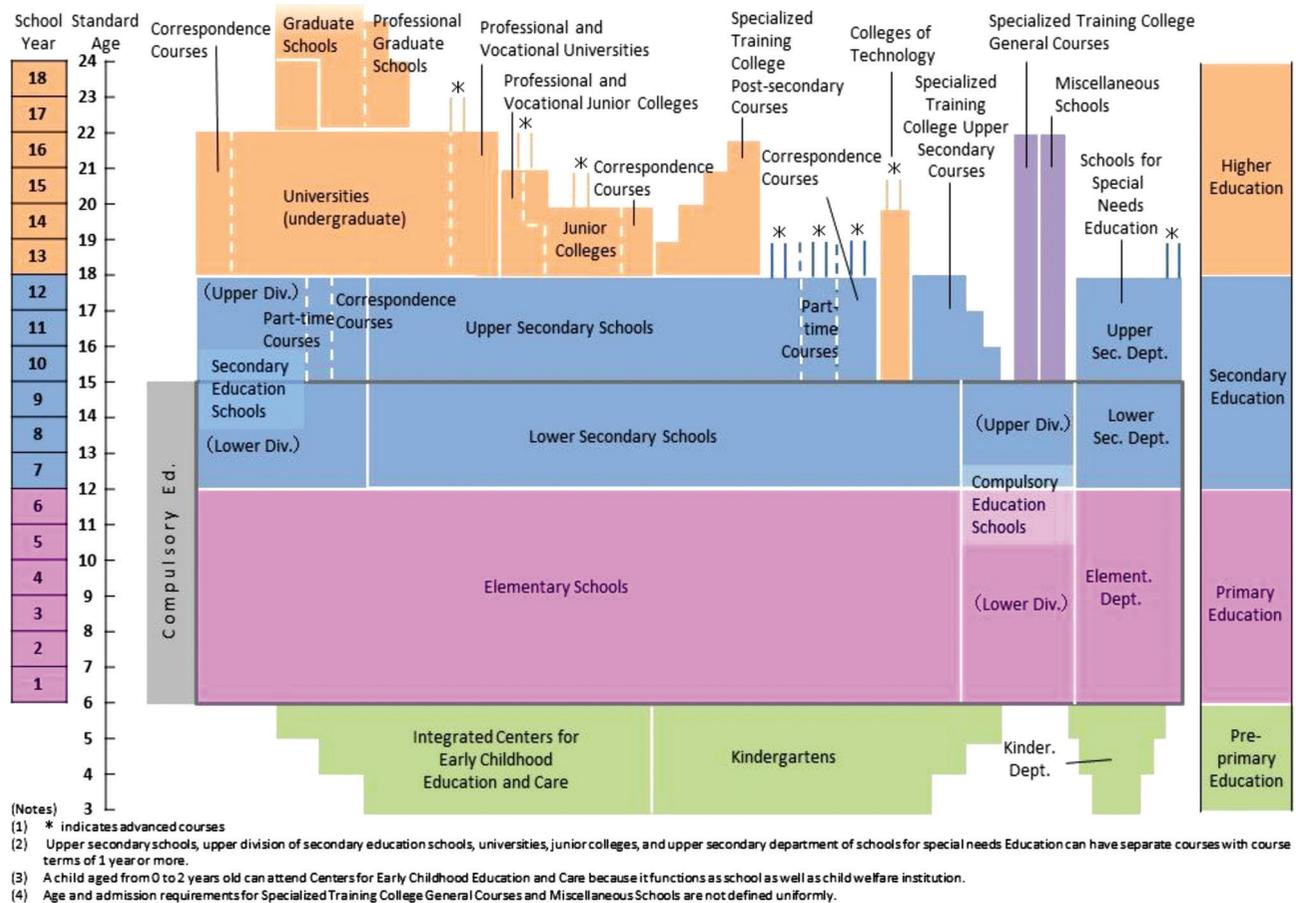


Figure 1 – Organization of the school system in Japan (adapted from MEXT)

icipation, action, and reflection (AAR) (OECD, 2018).

In the context of changes in competency demands for schools associated with changes in society, Japan is also in the midst of a global trend which seeks to clarify the knowledge and skills of subjects as well as subject-specific or cross-curricular versatile skills. The educational guidelines, revised in 2018, describe the aim for «curricula open to the society» by developing qualities and abilities in collaboration and cooperation with schools and society (MEXT, 2018). It is not difficult to conceive that the OECD framework underlies these guidelines. The efforts for future-oriented curricular reform that meets social needs have received praise from OECD. Japanese physical education (PE) has participated in an international curriculum survey and a case study in the Education 2030 project (OECD, 2019).

The educational guidelines created in response to these social changes has great prospects, but some challenges

remain. The purpose of this paper is to provide an overview of PE in Japan by focusing on the educational guidelines, and to present its issues.

Characteristics of education in Japan. After the Second World War, Japan's schooling system was drastically reformed under the American influence. For secondary education, boys' liberal secondary school, girls' secondary schools, and vocational schools were unified to form new upper secondary schools in 1948. In addition, lower secondary schools (3 years) were newly created after elementary school (6 years), and the number of years of compulsory education was extended to nine years (Fig. 1). The first post-war revisions were designed to change the schools from a militaristic educational system to a democratic system, with the main philosophy based on American educational values and ideals. Then All schools, from kindergarten to upper secondary school, design their courses of study according to the educational

guidelines designed by the Ministry of Education, Culture, Sport, Science and Technology (MEXT). The educational guidelines regulates the number of class hours (or units for upper secondary schools) for each subject and other activities divided by grade level, and the corresponding educational objectives that must be achieved (Table 1). Also private upper secondary schools provide unique education to meet the needs of their students and parents guardians based on their independent educational policies. Even so, private schools, from kindergarten to upper secondary school, are subject to the educational guidelines set by MEXT. There are 19,892 elementary schools in Japan; 70 are national, 19,591 are public, 231 are private schools (MEXT, 2018). In elementary school homeroom teachers teach all subjects for a class. Additional full-time and part-time teachers are assigned for team teaching or small-group studies. And there are 10,270 lower secondary school; 71 are national,

9,421 are public, 778 are private schools (MEXT, 2018). At lower secondary schools, homeroom teachers are assigned to a class and they visit their class at the beginning and the end of the school day.

The school year in Japan has three terms, beginning in April. Classes are 45 minutes long in the elementary grades and 50 minutes long at each of the secondary schools. In the elementary school in Japan, PE classes are taught by classroom teachers. elementary school teachers are prepared and certified to teach all subjects, including PE. PE classes in lower- and upper-secondary schools are taught only by PE specialists. However, some elementary schools are taught by PE specialists. In Japan, class size is regulated by the government, with the maximum number of students set at 40 for all subjects.

The educational guidelines in Japan.

MEXT determines the educational guidelines as broad standards for all schools, from kindergarten through upper secondary schools, to organize their programs in order to ensure a fixed standard of education throughout the country. Each school organizes the curriculum according to the Courses of Study, the standard number of lessons per year, the region and the actual situation of the school (MEXT, 2011). The educational guidelines have generally been revised once every 10 years. Along with the rapid progress of artificial intelligence (AI) and globalization, social changes are accelerating and becoming more and more difficult to predict and increasingly complicated. In order to surely develop the competencies of children necessary for creating their future under such

circumstances, MEXT revised the educational guidelines for kindergartens and elementary and lower secondary schools in 2017 and for upper secondary schools in 2018. MEXT shows the concept of this revision as follows.

To realize the principle of «the educational curriculum opened to society», which fosters qualities and abilities in children required for the new era, the goal of «creating a better society through better school education» should be shared collaboratively and cooperatively by schools and society. For this purpose, realization of «curriculum management» is required that improves the framework based on the following six points and that produces a virtuous cycle of improvement and enhancement of school education with the education curriculum acting as an axis at each school so that

Table 1. Curriculum in Japan

Area	Elementary School			Lower secondary school	Upper secondary school (General stream courses)*
Grade	1 · 2	3 · 4	5 · 6	1 · 2 · 3	1 · 2 · 3
Age	7 · 8	9 · 10	11 · 12	13-15	16-18
Subjects	Japanese Language	Japanese Language	Japanese Language	Japanese Language	Japanese Language
		Social Studies	Social Studies	Social Studies	Social Studies
	Arithmetic	Arithmetic	Arithmetic	Mathematics	Mathematics
		Science	Science	Science	Science
	Living Environment Studies			Music	Music
	Music	Music	Music	Art	Art
	Art and Handicraft	Art and Handicraft	Art and Handicraft	Technology and Home Economics	Technology and Home Economics
			Home Economics		
	Physical Education	Physical Education	Physical Education	Health & Physical Education	Health & Physical Education
				Foreign Languages	Foreign Languages
Special Subjects	Moral Education	Moral Education	Moral Education	Moral Education	
Educational Activities		Integrated Studies	Integrated Studies	Integrated Studies	Integrated Studies
	Special Activities	Special Activities	Special Activities	Special Activities	Special Activities
			Foreign Language Activities		
Lesson Hour (1 Credits)	45 minutes			50 minutes	50 minutes

*In addition to general stream courses, senior high schools have various departments such as professional departments (agriculture, industry, and commerce, etc.) and comprehensive departments.

Table 2. Scope of Activities and Range of Selection at Each schools

Area	Elementary School			Lower secondary school			
Subjects	Physical Education			Health & Physical Education			
Grade	1 - 2	3 - 4	5 - 6	1	2	3	
Lesson Hour & Credits	102 - 105	105	90	105	105	105	
Strand & Contents	Play with physical Fitness	Physical Fitness	Physical Fitness	A. Physical Fitness	*both	*both	*both
				(a) Exercise for releasing the body and mind			
				(b) Exercise for enhancing physical fitness			
	Play with apparatus and equipment	Apparatus Gymnastics	Apparatus Gymnastics	B. Apparatus Gymnastics	*either		
				(a) Mat work			
				(b) Horizontal bar			
				(c) Balance beam			
	Play with Running and Jumping	Running and Jumping	Track and Field	C. Track and Field	*either		
				(a) Short distance run and relay, long distance run, or hurdle run			
				(b) Long jump or high jump			
	Playing in water	Floating and Swimming	Swimming	D. Swimming	*either		Selection of 1 or more items each from strands B, C, D, or G, and 1 more items each from strands E or F
				(a) Crawl stroke			
				(b) Breast stroke			
				(c) Back stroke			
				(d) Butterfly			
	(e) multiple style or relay						
	Games	Games	Ball Games	E. Ball Games	*either		
				(a) Goal-type games			
				(b) Net-type games			
			F. Budo	*either			
			(a) Judo				
			(b) Kendo				
			(c) Sumo				
Expression and Rhythm Play	Expressive Activity	Expressive Activity	G. Dance	*either			
			(a) Creative dance				
			(b) Folk dance				
			H. Theory of Sport and Physical Education	*both	*both	*both	
			(a) Diversity of exercise and sports				
			(b) Significance and results of exercise and sports				
			(c) Significance of sports as culture				
		Health Education	Health Education	*	*	*	

*Compulsory

Upper secondary school (General stream courses)			
Health & Physical Education			
	1	2	3
	7~8 credits		
A. Physical Fitness	*both	*both	*both
(a) Exercise for releasing the body and mind			
(b) Planning exercise for actual life	Selection of 1 or more items each from strands B, C, D, or G, and 1 more items each from strands E or F	Selection of 2 or more items each from strands B~G	Selection of 2 or more items each from strands B~G
B. Apparatus Gymnastics			
(a) Mat work			
(b) Horizontal bar			
(c) Balance beam			
(d) Vault box			
C. Track and Field			
(a) Short distance run and relay, long distance run, or hurdle run			
(b) Long jump, high jump, or triple jump			
(c) Shot put or javelin throw			
D. Swimming			
(a) Crawl stroke			
(b) Breast stroke			
(c) Back stroke			
(d) Butterfly			
(e) long distance with multiple style or relay			
E. Ball Games			
(a) Goal-type games			
(b) Net-type games			
(c) Baseball-type games			
F. Budo			
(a) Judo			
(b) Kendo			
G. Dance			
(a) Creative dance			
(b) Folk dance			
(c) Contemporary rhythmic dance			
H. Theory of Sport and Physical Education	*both	*both	*both
(a)The cultural characteristics of sports and the development of modern sports			
(b) How to learn effectively exercise and sports			
(c)How to design a rich sports life	*	*	
Health Education			

the education guidelines can serve as a «map for learning», which can be shared and utilized widely by schools, families and local residents concerned:

(1) «What can be done?» (qualities and abilities that students need to learn or develop);

(2) «What to learn?» (organization of curriculum based on factors such as significance of learning subjects, the connection between subjects, and school levels);

(3) «How to learn?» (preparation and implementation of teaching plans for each subject, and improvement and enhancement of learning and teaching);

(4) «How to support the development of each and every child?» (guidance based on the development of children);

(5) «What is learned?» (enhancement of learning evaluation); and

(6) «What is needed for implementation?» (measures necessary for conforming to educational guidelines and achieving objectives) (MEXT, 2017).

And qualities and abilities to be cultivated are set in: 1) acquisition of knowledge and technical skills; 2) ability to think, make judgements and express themselves; 3) the motivation to learn and humanity. To achieve this, MEXT (2017) shows there was a required deeply understand the contents of learning, acquire qualities and abilities, and improving classes from the perspective of «proactive, interactive, and authentic learning».

Curriculum of Health and Physical Education. The of Health Education (HE) and PE at Lower secondary schools set in accordance with this concept are as follows.

By applying «perspective/ways of thinking» of HE/PE, finding issues and treating the mind and body as one through a learning process for rational solution, and aim for realize a rich sports life maintaining and improving mental and physical health throughout life. Therefore fostering the qualities and abilities as follows.

(1) To acquire the skills corresponding to the characteristics of various types of exercises. To understanding about Health and Safety in individual life and to acquire basic skills involved there.

(2) To identify issues regarding exercises and health of oneself and others, to develop skills to think and make a

judgement for rational solutions, and to communicate them to others.

(3) To enjoy a lifelong love of exercise, to maintain good health, and improve physical power and to develop healthy attitudes that help lead a bright and productive life (MEXT, 2017).

In order to achieve this purpose, the contents dealt with in PE curriculum are organized into eight strands and annual standard lesson hours (Tables 2).

Also this revision more emphasizes the link between HE/PE. Furthermore, required appropriate educational content and instructional methods must be used based on the difficulties which students with disabilities may encounter during learning activities. Even in regular classes, on the premise that students with disabilities, including developmental disabilities, it is important to adjust instructional methods to the needs of students with disabilities in order to provide finely tuned teaching and support.

In this way, MEXT has revised the educational guidelines eight times, five groups of fundamental outcomes have remained in school programs (Takahashi, 2000): (1) democratic PE, (2) culture-oriented PE, (3) fitness-oriented PE, (4) PE as preparation for lifelong sport participation, and (5) PE for mind and body. The ultimate objective is to cultivate an attitude that will cause all students to live a happy and cheerful life that is well integrated with physical activity and to acquire an understanding of the value of health and safety. Through experiences in PE, students develop a love of sport and attain the level of personal fitness needed for a healthy life. In Japanese culture, body and mind are viewed from a holistic perspective, and this relationship must be maintained in order to keep PE in the schools (Nakai and Metzler, 2005).

Future prospects and issues of physical education. The Japanese curriculum illustrates that the aim of each subject, including PE, is to develop the qualities and abilities which consist of the three pillars of «knowledge / skills, thinking ability / judgment / expressiveness, and capability for learning / humanity etc.», through independent, dialogic, and profound learning. It also describes cross-curricular learning and curriculum

management for developing these qualities and abilities.

However, though revised, there are no major changes in the content of PE in the educational guidelines. Based on this, the current revision is seen as providing a boost to promoting the relevance and integration within the subject as well as leading PE to a higher level. Besides this, development of versatility through cross-curricular learning removes the barrier between subjects and contributes to the realization of a holistic development of knowledge. In the process, the development of intellectual and social abilities as citizens can be expected, such as the ability to face questions without knowing the correct answer, and the ability to resolve questions in cooperation with others.

However, the achievement of the prospects mentioned above cannot be expected causally by only implementing the examples described in the educational guidelines. The following are two issues in the educational guidelines that have changed the direction to a competence-based curriculum:

The first is «concern for formalism». The characteristics of the latest revised guidelines refer to the clear goals of each subject and even to the learning process for realization of these goals. Ishii (2017) expressed concern about the complication and formalization of implementing a competence-based curricular reform due to the institutional regulations on learning processes such as active learning, as well as on short-term teaching and evaluation of externally added cognitive and social skills. The intent of this reform is considered to develop the abilities of students by deriving an instructional method suitable for their actual conditions after examining the learning contents. In this way, the educational guidelines avoid being interpreted univocally and ensure both the creative efforts of teachers and independent efforts of students. Therefore, focusing on activities and formalism without investigating the contents of learning encourages a tendency toward technicism and psychologism.

The second is «disregarding individuality and relationships». In line with the above-mentioned problem, Ishii (2017) maintained that what is lacking

is a concrete context and mode of action that connect the qualities and abilities classified into a one-size-fits-all category derived from economic figures and citizens with social characteristics (global society). This is because it is necessary to establish prospects, attitudes, learning contents, and cross-curricular contents through them. He stated that behind these situations, education with relational nature, direction, and educational values is replaced with learning concepts as an individualistic process. Moreover, this replacement also fulfills a function that supports evidence-based education and measurement culture as well as performativity culture. Therefore, learning science is a discourse that stipulates discussion about educational methods and educational teleology (Ishii, 2017).

These points cannot be overlooked in PE. For example, since the revision of the educational guidelines in 2008 and 2009 has been adopted in the field of ball games similar events have been organized into one «type» and the prototypic movement extracted from each type is instructed. This is because it is impossible to manage many types of events in limited class hours, and it is even more impossible to assign specialists to instruct these events. However, «ball games» is the name generically written into class plans and both teachers and students believe that aiming at acquiring proficiency in any competitive sport is the direction that ball game instruction should take. Although it is difficult to acquire skills through training in a limited period of time, the focus has been placed on technical guidance. In addition, it is assumed that a task game set by a teacher will be played by trained players with certain knowledge and skills, which is different from that in PE where games are played by those with differing exercise experience and proficiency levels. This is because a system with the same mechanism is considered to be the same type even if the way it is implemented differs. In addition, since the effects of the teaching materials applied to them have been verified by perspectives and methods based on a natural science technique, the instruction and evaluation

of students by teachers in objective recognition tend to be neutral in value.

These formalistic and technicistic tendencies arise from the discrepancy between learning content and learning activities as well as from a reductionist perspective resulting from methodological attitudes. In view of the fact that the same type of discussion as previously indicated has already occurred, it becomes particularly necessary to clarify «what to teach». Through this «understanding», the meaning of «skills» can be enjoyed. Classification research on ball games has been advanced, and learning contents and principles of ball games derived (Suzuki et al., 2010; Suzuki et al., 2018), enabling structural discussion and instructions. Since the educational guidelines in Japan are the basis for organizing the learning activities in each school's curriculum, the learning processes are only partially described and univocal interpretation, which implies that they are the «correct knowledge and skills», is avoided in order to assure the ingenuity of teachers and independent efforts of students. Therefore, it will be necessary to undertake future research from various perspectives on learning contents as well as the practice for instruction in each field.

Conclusion. The purpose of this paper was to provide an overview of PE in Japan by focusing on the educational guidelines, and to present its issues. Then, I considered «concern for formalism» and «disregarding individuality and relationships» as issues that have changed the direction to a competence-based curriculum. These formalistic and technicistic tendencies arose from the discrepancy were attributed to between learning content and learning activities as well as from a reductionist perspective resulting from methodological attitudes.

Teacher education is responsible for avoiding such limited object recognition. PE teachers teach in ways that resemble some styles and models, such as teaching skill (Siedentop and Tannehill, 2000), the reciprocal style, tactical games, sport education models, constructivist approaches, and sports kinematics approaches. However, teachers as professional adapt through reflection in action based on conversation with situation (Schön. D., 1983) rather than applying instructional methods to promote student learning. Teachers need knowledge and thinking that integrate theory and practice to develop the qualities and abilities of students living in uncertain times. For example introduction of STEAM (Science, Technology, Engineering, the Arts and Mathematics) in PE class, collaborative learning of students with diverse cultures and values, in PE classes that students with disabilities including developmental disabilities are instructed and so on. In other words, PE teachers require to paradigm shift from «technical expert» focusing on instructional skills to «reflective teacher» focusing on reflection in practice (Sato, 2015). Therefore, teacher educators should develop «Teacher as continued learner» who explore practical knowledge and wisdom through reflection on practice and deliberation.

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