

The History and Problem of Swimming Education in Japan

¹Atsunori Matsui, ²Toshiaki Goya, ³Hiroyasu Satake

¹Naruto University of Education (Japan); ²Aichi University of Education (Japan); ³Senshu University (Japan)

Abstract

Introduction: From the ancient times, people in Japan have entered the water for the reasons of predation, hygiene, physical health, spiritual health, religion and enjoyment. In the feudal ages of Japan, swimming training has been performed as military arts of the samurais. They demonstrated the peculiar style of swimming in the presence of the Shogun. When the times of samurai were over, Jigoro Kano (1860-1938), who was the founder of Judo, insisted on the importance of swimming education, and made it as a compulsory subject in a teacher training school. It is important to know the history and the process of swimming to provide the benefit that swimming originally has. **Method:** This study consists of a document review compared to the official document of the Japanese Government (including the H.Doc., history documents), including the results of the research that the writers performed. **Discussion:** When the sinking accident of the passenger boat “Shiunmaru” occurred in 1955, with 100 of children drowned beside a lifeboat, the Diet and the government made action to spend a budget for the construction of swimming pools at schools (1961). The Tokyo Olympics were held at the same period (1964), and swimming races became popular. The program of swimming at school was prescribed by the Ministry of Education, which aimed to develop the swimming strokes of the crawl and of the breast stroke. This has been revised every ten years (1961, 1971, 1980, 1992, 2002, and 2011). However, vertical movements, like diving into the water, surface dive, and underwater swimming, were not adopted because of shallow depths. Most elementary and junior high schools in Japan now have their own swimming pool. The rates of establishing public school pools in 2008 were 86.7% at elementary school, 73.0% at junior high school, and 64.5% at high school. Japan has succeeded in decreasing the incidence of drowning by the constructing of swimming pools in schools, although there still exists the highest rates of drowning in OECD countries (Matsui, 2009; 2011). According to the “Can You Swim?” project, most Japanese can swim well with crawl and breast stroke, but are not good at staying afloat, backstroke, diving, and underwater swimming (Moran, 2009; Goya, 2011). **Conclusion:** Through the swimming education in Japan, people can only develop some part of swimming abilities in the whole area of swimming, which provide us water safety and the joy of aquatic activities. It is therefore necessary to verify a swimming skill standard, and to rebuild the appropriate swimming curriculum in order to fit the purpose of drowning prevention.

Key words: swimming, history, Japan.

Swimming is one of the sports that Japanese love, and many people enjoy swimming and aquatic activity in the swimming pool and in the open water. Swimming is one of the compulsory subjects in school education in Japan, so that children growing up in Japan must learn how to swim in a swimming pool. The swimming ability of Japanese people is related to what they learn and develop in the schools.

It is important to know the history and the process of swimming education, to reconfirm its purpose and its philosophy. It is necessary to assess the enforcement of the swimming education for these past 60 years, and of the current swimming class, to assess the prospects of swimming education. The purpose of this study is to look back on the history of the swimming education, and to analyze the current situation, in order to evaluate swimming education in Japan.

Method

This article was consisted by a literature review. Particularly, the studied documents were official records of the Japanese Diet, the official course of study by Japanese Ministry of Education concerning to physical education, the official guidebook of swimming instruction, by Japanese Ministry of Education, the official guidebook of the construction and management for the swimming pool by Japanese Ministry of Education, the official report of Japanese Police Agency concerning to drowning accidents, the publication for swimming pool construction, the World Health Organization's mortality database and finally historic documents concerning to swimming training and instruction. In addition, results of the research that the authors performed were included.

Discussion

Historic process

From the ancient times, people in Japan have got into the water for the reasons of predation, hygiene, physical health, spiritual health, religion and enjoyment. The fishery people harvested fish, shellfish and seaweed in the sea and river. The diver people who were specialized to get seafood by one's own physical ability, they were called "AMA" which means "sea man" or "sea woman", and it seems they were very good swimmers. People in Japan also got into the water not only to swim but also to put water on their body to clean, cure, well being purpose (Kuroyanagi, 2010). They are a kind of hydrotherapy or therapy in the water, which we can find similar activities all over the world. Some people got into the water to perform "MISOGI", a purification ceremony, purify oneself with water for a religious purpose.

At the warring states period in Japan, in 15th-17th century, there were piratical groups with battleships. These warriors of pirates usually had stayed aboard on ship, without getting into the water, but sometimes had to swim wearing their armor and helmet.

At the Edo Shogunate period (1603-1867), swimming as a military art developed. Due to the conditions and situations of the rivers, seas, and lakes of the country, various schools of military arts developed their original style of swimming (Furuhashi, 1971; Shirayama, 1975). In accordance with the topographical differences in various parts of the country, they developed these schools of different types of swimming. At the middle of Edo period, when the country was unified and had the peaceful times, swimming of warriors was systematized as a culture of samurai, and became one of the items of demonstration. They showed some typical and unique movement in the water, and some performed calligraphy in the water. Such swimming was known as one of military arts and expressed the culture of the samurai. At the present time, Japanese Swimming Federation (JASF) authorizes 28 schools of traditional style of swimming as "Nihon-eiho" (Japanese style of swimming), and keeps supporting for the preservation of these culture.

In the swimming textbook at that time (Figure 1), we can find instructive drawings showing how to put swimsuit on, how to perform sidestroke, how to perform "Nukite" (front crawl with scissors kick), how to stay afloat, how to dive, how to recover from cramping, how to go through a big wave, how to escape from current or eddy, etc. These skills seem to cover all general ability to live in the water, include drown proofing. This textbook was reissued in 1919 by Suikokai (an association of Japanese traditional style of swimming).

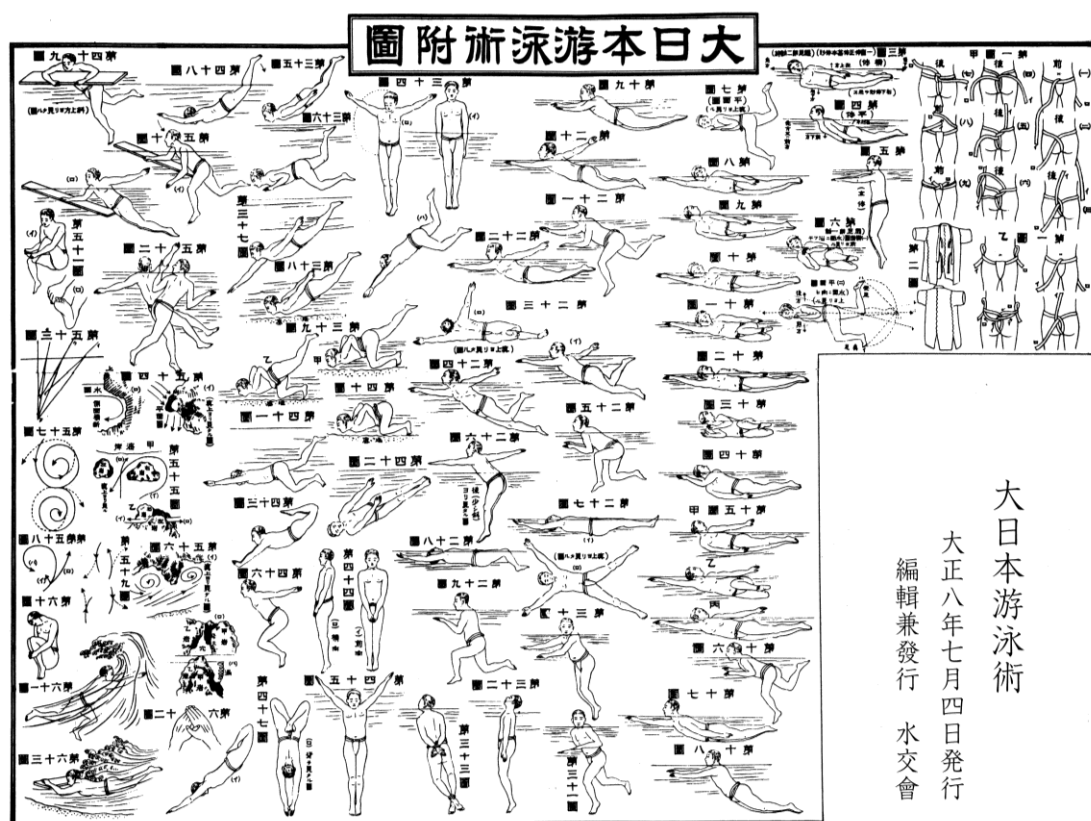


Figure 1: Appended diagram of Japanese swimming method. Note. Taken from Suikokai (1919).

When times of samurai, feudal period in Japan had been over and national seclusion was solved, it was the times freed globally. The traditional Japanese culture had been fused with Europe and American culture and modernized rapidly. Swimming training had become a matter of education at school in historic process.

Swimming in modern education system

Jigoro Kano (1860-1938) is well known as the founder of Judo, the first Japanese martial art to gain widespread international recognition, and the first to become an official Olympic sport. Kano also was the first Asian member of the International Olympic Committee; he was a pioneer of international sports in Japan. But in his professional life, he was an educator, served as director of primary education for the Ministry of Education, and also as president of Tokyo Higher Normal School, in which a lot of excellent teachers were trained. He told that teachers must able to swim, in order to secure their children with their professional responsibility (Sanada, Tsubakimoto, & Takagi, 2007). He insisted on importance of the swimming education and made it with a compulsory subject in a teacher-training curriculum. Now we may call Kano not only a father of Judo, but also a father of sports in Japan, a father of education in Japan, and a father of school swimming.

A trigger to national swimming education

The Siun-maru disaster was a ship collision accident occurred in 1955, killing 168 people (Hagiwara, 2000). The ferry ship named Shiun-maru had sunk completely after colliding

with another ferry, the Uko-maru, in thick fog. The victims included 100 students of elementary and junior high schools during school trips. It was only 6 minute until buried in the sea after colliding. There was no time to pick up a life jacket, nor put on it. Even some people with a life jacket sank with a ship because they were not able to jump off from the deck. When the ship had gone into the sea, many people had stayed on sea surface; it had been impossible to stay afloat without floating device because they had not been able to swim. If they had ability to stay afloat for a few minutes, till the time to have rescue, they may had survived because another collision ship Uko-maru had been still safe as a lifeboat. The next day of this disaster, the details of this cruel accident were reported in the Japanese Diet. Diet members paid attention about that the most adult teachers had been drowned (Yajima, 1955). They examined about appropriate and desirable ability of swimming and water safety, as a teacher who had to protect the life of children (Ogata, 1955).

It had been about 50 years after Jigoro Kano insisted on importance of the swimming education in school. Thus, the Siun-maru disaster could be a trigger to start a series of swimming promotion as a national policy. In addition, this disaster also encouraged the Japanese government to construct the 3 big bridges to connect Japanese Main Island and Shikoku Island including Akashi-kaikyo Bridge, the longest suspension bridge in the world.

National promotion of school swimming

In 1961, the Japanese Government established the law of sports promotion, and released an enforcement order next year. Then they carried a five-year plan for construction of sports facilities including gymnasium, swimming pool, tennis court, football field, baseball stadium, etc. At the first year of five-year plan, the first Olympic games in Asia were held in Tokyo, and competitive sport became much popular.

In school education, swimming had upgraded in 1968, as a major physical exercise in school, by the revision of curriculum guideline by the ministry of education. In 1972, a construction standard of sports institution had been set, and standard number of public swimming pool had prescribed to be 6:100 thousands of residence population. The government also distributed a large amount of subsidy, financial support for cities, public schools and private schools. These series of policies mean huge national projects based on huge budget, executive ability, and the understanding of the nation in acknowledgment for such policy. In another word, Japan had a national energy to promote swimming.

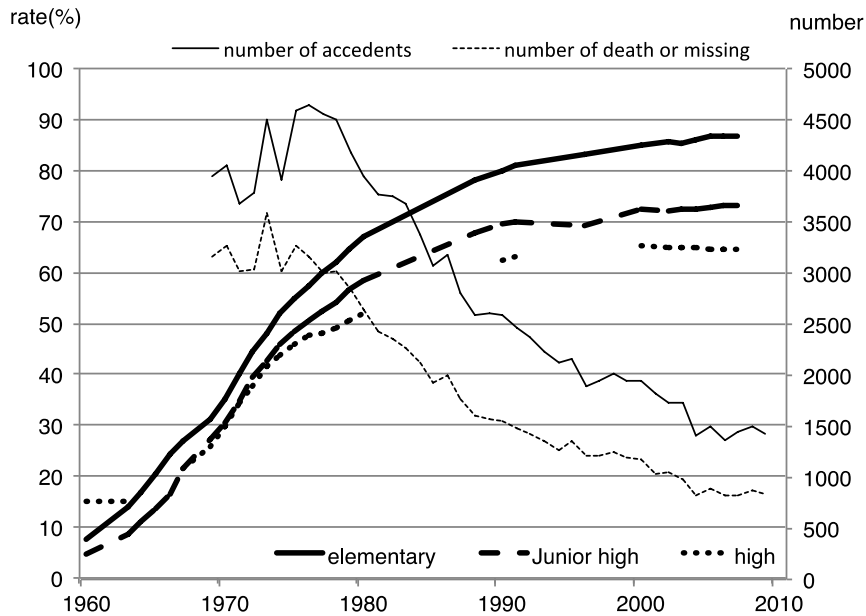
The Ministry of Education, which aimed to develop the skills of the crawl and the breaststroke, prescribed the contents of swimming at school and it has been revised in every ten years (i.e., 1951, 1961, 1971, 1980, 1992, 2002, and 2011). However, vertical movements like diving into the water, surface dive, and underwater swimming were not adopted because of shallow depth of swimming pool.

Swimming pool at school

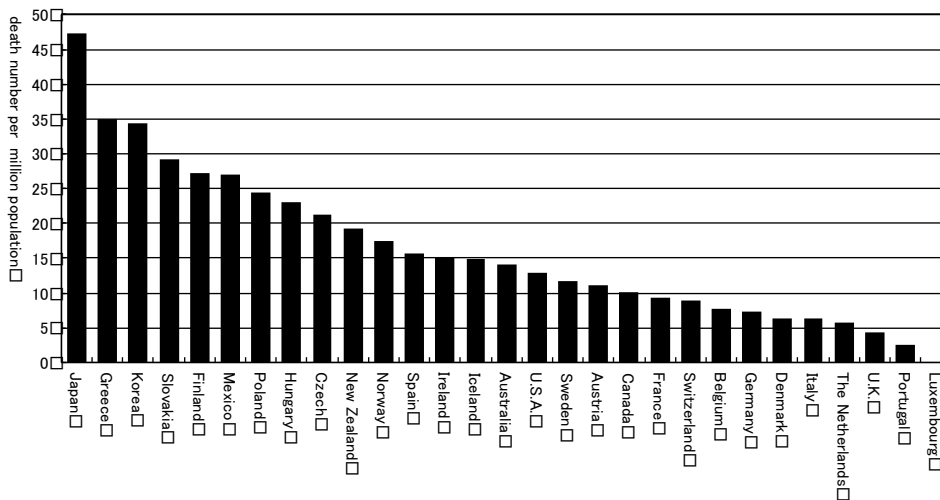
Before 1960s, most schools did not have their own swimming pool. But after the Shiun-maru disaster, by the promotion for construction of sports facilities and spread of swimming education at school by administrative power, rate of public school pool establishment have increased rapidly as shown in Figure 2. Most elementary and junior high schools now have their own swimming pool. Rates in 2008 are 86.7% at elementary school, 73.0% at junior high school, and 64.5% at high school.

At the same time, Figure 2 shows the decrease of drowning accidents reported by the National Police Agency for the same period. It is considered that Japan has succeeded in decreasing drowning by constructing swimming pools in school all over the

country. Although Japan still have the highest rates of drowning in OECD countries at 2004 shown as Figure 3 (Matsui, 2011).



Graph 1: Swimming pool diffusion rate in school and drowning accidents in Japan (Matsui, 2009).



Graph 2: Death rate by drowning in OECD countries in 2004 (Matsui, 2011).

Swimming ability given at school

Figure 4 shows the list of swimming skills dealt with in each school year that Ministry of Education prescribed. Swimming is a required activity in physical education class through Year 1 to Year 8 school years. At Year 1 and Year 2 they learn to fit in the water. At Year 3 and Year 4 they learn the basic and elementary swimming skills. At Year 5 and Year 6 the aim of swimming is to swim long by the front crawl and the breaststroke. At the higher school age backstroke and butterfly will be added, and finally they are demanded to swim a medley and relay. These contents of swimming skills at school

seem to be limited to some competition oriented skills in wide world of swimming and aquatic activities.

According to the “Can You Swim?” project, Japanese can swim well with the crawl and the breaststroke, but are not good at staying afloat, backstroke, dive into, and underwater swim (Moran, 2009; Goya, 2011). It is reasonable that Japanese must have training for the crawl and the breast stroke at school, and it is not required to try treading water, surface dive, and underwater swim at school.

The reason why the Japanese schools do not develop such important skills in swimming is not clear. Before the explosive spread of swimming pools began at 1970s, swimming pool in Japan had enough depth to perform underwater swimming and vertical movement in the water like in foreign countries. But when the government promoted school swimming pool construction, most new pools had shallow depth (0.8-1.1m at elementary school, 0.8-1.4m at junior high). According to the design guidebook of pool construction released by Japan Cement Association at that time (Japan Cement Association, 1952), it is described that swimming pool should be shallow as possible to save building cost and the maintenance cost. For this reason, shallow pools are desirable for both the side to place an order and to receive an order to construct them. It is also desirable to secure the safety not to be drowned for everyone can stand up in the swimming pool. But it is not appropriate as a place of the learning to get abilities for certain swimming security. Thus the abilities given at school are limited by the condition in the design of the swimming pool. And that is one of the major reasons why they train only the styles of race swimming.

School Year	Activity	Skills
*1, *2:	Playing in the water	soak , move, float, open eyes, expirate
*3, *4:	Exercise of float and swimming	various kind of floating, gliding, kicking and stroking with floating device, elementary swimming with breathing
*5, *6	Swimming	swim long by the front crawl continually, swim long by the breast stroke continually
*7, *8, **9	Swimming	front crawl, breast stroke, back stroke, butterfly stroke, plural style of stroke, relay
**10, **11, **12	Swimming	front crawl, breast stroke, back stroke, butterfly stroke, plural style of stroke, relay

Table 1. Swimming skills in the official course of study. Note. *required. **elective.

Average swimming pool in school has shallow depth
 (0.8-1.1m at elementary school, 0.8-1.4m at junior high school)
 + horizontal move - vertical move
 + can stand up - easy to give up
 Outdoor pools / June-July rainy season / 8 times of class
 No achievement standard to complete a swimming class
 Many of school teachers are not good at swimming
 Less opportunity to improve/retrain how to teach swimming
 Recent adults do not recognize value and importance of swimming and the water safety

Table 2. Problem of school swimming in Japan.

Problem to be solved in the Swimming Education

The biggest problem of Japanese swimming education is that most people would have no experience to swim or even stay in the water at the place impossible to stand up.

Beside the limitation of skills developed in shallow pool, there are several problems to be solved. Expecting further development of the future swimming education, we showed those problems in table 2.

Conclusion

Swimming in Japan had developed as military arts of warriors, and became as the culture of the samurais. Swimming is recognized as a matter of education and developed at school. The Japanese government has promoted swimming with an educational intention for these 60 years. The outdoor swimming pools spread in almost every school, but people do not acquire enough ability to secure water safety by the factor of pool facilities and course of study. It is necessary to reexamine a swimming skill standard and assessment for human education, and to rebuild the appropriate swimming curriculum to fit the purpose of the water safety. In swimming education in Japan, people can develop only some parts of swimming abilities in whole area of swimming which provide us water safety and joy of aquatic activities. It is necessary to verify a swimming skill standard, and to rebuild the appropriate swimming curriculum.

References

- Furhashi, H. (Eds.) (1971). *Swimming dictionary*. Tokyo: Kodansha.
- Goya, T., Teramoto, K., Matsui, A., Shimonagata, S., Doi, Y., & Moran, K. (2011). Real and Perceived Swimming Ability, Perceptions of Drowning Risk among Teachers College Students. *Bulletin of Aichi University of Education*, 60, 35-46.
- Hagiwara, M. (2000). *Why did the uko-ferry "Siun-maru" sink?* Tokyo: Seizando-Shoten.
- Japan Cement Association. (1952). Swimming pool. *Concrete Pamphlet*, 21, 9-23.
- Kuroyanagi, A. (2010). *Sea bathing and Japanese*. Tokyo: Chuokoron-Shinsha.
- Matsui, A. (2011). Reconsidering the swimming education from a viewpoint of "water safety" to save our life. *Tainikuka-Kyoiku*, 59(7), 18-21.
- Matsui, A. (2009). Supporting Japanese Swimming by School Education. In *Proceedings of the Japanese Society of Science in Swimming and Water Exercise* (pp. 6-7). Yokohama, Japan: Keio University.
- Ministry of Education (1966). *Guidebook for the swimming pool construction and management*. Tokyo: Kyoiku-Tosyo.
- Ministry of Education, Culture, Sports, Science & Technology (2008). *Instruction for course of study at elementally school (physical education)*. Tokyo: Toyokan.
- Moran, K. (2009). Creating a water safety culture: The New Zealand experience. In *Proceedings of the Japanese Society of Science in Swimming and Water Exercise* (pp. 8-11). Yokohama, Japan: Keio University.
- Ogata, S. (1955, July). Remark record in the House of Councilors Committee on Education. Retrieved March 13, 2011, from http://kokkai.ndl.go.jp/cgi-bin/KENSAKU/swk_dispdoc.cgi?SESSION=22132&SAVED_RID=4&PAGE=0&POS=0&TOTAL=0&SRV_ID=2&DOC_ID=23480&DPAGE=1&DTOTAL=10&DPOS=1&SORT_DIR=1&SORT_TYPE=0&MODE=1&DMY=21185
- Sanada, H., Tsubakimoto, S., & Takagi, H. (2007). Reconstruction of Sujutsu by Kano Jigoro. *Japan Journal of Physical Education, Health and Sport Science*, 52(3), 315-326.
- Shirayama, G. (Eds.) (1975). *Japanese style of swimming Secret method of 12 schools*. Tokyo: Japan Publication.
- Takahashi, Y. (1919). *Japanese Swimming Method*. Tokyo: Suikokai.
- Yajima, M. (1955). Remark record in the House of Councilors Committee on Education. *The Diet Record. 22-San-Bun-4, at 14 May 1955*. 1-8. Retrieved on 13 March from http://kokkai.ndl.go.jp/cgi-bin/KENSAKU/swk_dispdoc.cgi?SESSION=22132&SAVED_RID=6&PAGE=0&POS=0&TOTAL=0&SRV_ID=2&DOC_ID=22323&DPAGE=1&DTOTAL=1&DPOS=1&SORT_DIR=1&SORT_TYPE=0&MODE=1&DMY=28263