Meaning of the Term “Tai-iku” in the Principles of Physical Education by Heizaburo Takashima*

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This paper clarifies the meaning of the term tai-iku (physical education) in the Principles of Physical Education by Heizaburo Takashima (1865-1946), who advocated physical education (PE) in the latter part of Japan’s Meiji era. Takashima wrote many books on PE, which included examples of the term tai-iku. PE-related subjects were discussed from various angles, but the meaning of tai-iku was not self-evident. In Japanese, Tai-iku has many meanings throughout history. Therefore, previous references to tai-iku must be clarified through an empirical approach when reading books on PE written in past times, as there is a risk that Takashima’s term tai-iku may unconsciously conform to our concept of PE. This paper represents the first attempt to define the term. We concluded that first, Takashima’s concept of tai-iku should be defined in terms of his Principles of Physical Education (1904), and second, the definition was methodological, by which intellectual and moral education can be perfected, while retaining the previous meaning in the context of the human body. In Takashima’s book, tai-iku has these two meanings. Other issues include whether alternative meanings exist in Takashima’s books, or whether these (Principles of Physical Education etc.) can be read consistently and coherently.

Keywords: body-mind relationship, Spencer, Meiji era

Introduction

Heizaburo Takashima was a prominent advocate of tai-iku or physical education (PE) in the late Meiji era, and a prolific writer on the topic of PE. His Principles of Physical Education (1904, abbreviated to Principles below) developed a diversified discussion, and the “style” of the book is highly regarded as “belonging to the highest category throughout the Meiji and Taisho eras” (Imamura, 1970, p.447). However, the semantic content termed tai-iku in Takashima’s book is not self-evident. For Kinoshita, Takashima’s book is a classic example of the new concept of PE in that era (Kinoshita, 1971, pp.166-168). Sato also alludes to the concept of PE in Takashima’s work in tracing changes in the historical concept of PE (Sato, 1993, pp.56-59). However, it seems that both advocates are careful about considering the content of the concept as particular to Takashima.

Kinoshita and Sato looked to the Theory and Practice of Physical Education (Inokuchi et al., 1906, abbreviated to Theory and Practice below) for the definition of PE. Theory and Practice is a commentary based on a report by members of the Investigation Committee of Gymnastics, Play, and Games in School, in which Takashima also participated. The opinions it demonstrates are shared by the collaborators including Akuri Inokuchi, Isao Kani, and other committee members. Even if we assume that Takashima was the supervising author of items related to definitions, we should be cautious about attributing the essence of these sections to Takashima alone. Especially based on the arguments of Kinoshita and Sato, Takashima’s statements contain some items that introduce the understanding of PE circulating at that time, and possibly, several meanings for the term tai-iku in the book. One issue is organizing and comprehending the semantic content of the term tai-iku for Takashima.

Historically, the term tai-iku is tinged with ambiguity, and when reading past discussions of PE, the internal logic of the circumstances (semantic
content) the word refers to must first be ascertained. This is because there is a risk of unknowingly substituting or replacing the word with our modern concept of PE. The truth is that there are many instances of the term tai-iку in Takashima’s writing, and many significant discussions about its peripheral conditions. Therefore, we should seek more careful readings, although until now, studies of Takashima’s discussions on PE have not included efforts to avoid this concern. In short, although it has been pointed out that Takashima’s discourse on PE was epoch-making, the content of his assertions remains unexplained. This paper engages with the unexplained issues overlooked in previous studies by analyzing the term tai-iку in Takashima’s writing and attempting to demarcate the meaning thereof.

The specific work process was as follows. I first generally outlined Takashima’s writings, and extracted examples to use as analysis subjects. Next, by reading the context before and after the term, I began to demarcate the semantic content of the term tai-iку. Finally, while tracing the discussion about the body-mind relationship, I sorted the semantic content of tai-iку discovered there.

1. Selection of analysis subjects

According to Oizumi, in addition to Principles and Theory and Practice, Takashima’s discussions on PE include a lecture report with the same name, “Principles of Physical Education” (1906) and Exposition on Gymnastics and Game Methods (1907, abbreviated as Exposition below), a collaborative work with Iwataro Tominaga (Oizumi, 2009, p.32). Takashima was originally a teacher, and his connection with PE started when he became a Nippon Association of Physical Culture instructor in 1900 at the age of 34 years (Oizumi, 2009, p.14). His writings about PE began in 1901 with “Physical Cultivation Theory”, and are concentrated over a period of 10 years. However, even in this relatively short time span, certain changes are evident in Takashima’s assertions (Kimura, 1965, p.466, 468, etc.). Principles, published at the end of 1904, is a single work created by summarizing many papers he had previous written, with the addition of further supplements (Oba, 1981, pp.224-244). Certainly, it can be considered Takashima’s own grand culmination.

After this, his publications include Theory and Practice¹ in 1906, in which Kinoshita and Sato found the definition of PE; the lecture report “Principles of Physical Education” in the same year; and Exposition. As mentioned, Theory and Practice explains a report by members of the Investigation Committee of Gymnastics, Play, and Games in School, and its writing was divided between Akuri Inokuchi, Isao Kani, and others. According to the Preface, after the “Report” was announced in an official telegram, the authors decided to write it to “chiefly explain the said report”, because “so many doubts and questions were coming in daily from gymnastics instructors across the country, the authors are overwhelmed by trying to answer them” (Inokuchi et al., 1906, “Preface”, p.1). When publishing, some parts were newly written, such as Takashima’s “Introduction”. Items pertaining to the definition of PE are also included, but there was also the process of “selecting items and maintaining the overall harmony of the work” after its sections were divided and written by each author (Inokuchi et al., 1906, “Explanatory Notes”, p.1). Regarding the content of the descriptions, the intent of the book seems to be aligned to “explaining the said report”. These are difficult grounds on which to attribute the definitions of a collaborative book to Takashima alone.

On the other hand, the lecture “Principles of Physical Education” was conducted from connections to the Investigation Committee, and its contents, which can be considered items, overlap with the sections he was responsible for writing in Theory and Practice (Takashima, 1906, in particular pp.27-28). Furthermore, after Theory and Practice was published, Exposition was written as a collaboration with practitioner Iwataro Tominaga, because “there was a need for many warning plans” and “there were so many detailed and practical PE writings that further simplified things” (Takashima and Tominaga, 1907, pp.1-4). In other words, both works are positioned as being derivative of Theory and Practice, and as with Theory and Practice, there are concerns about seeking a basis for demarcating the semantic content of the term tai-iку for Takashima in these works.

Oizumi further points out the existence of PE items in Takashima’s writing on education theory and that these are connected to Principles (Oizumi, 2009, p.33). These works are Newly Compiled
Pedagogy Lectures (1901) and New Pedagogy for Girls (1905). They are noted for avoiding the difficulties in the collaborative works listed above and for having a number of examples of tai-iku. However, references to PE in these works are based on their own themes; thus, for now, it is safer to limit them to the role of secondary reference.

Ultimately, Principles remains a book related to PE. In my opinion, there are at least 228 examples of tai-iku in this book, and these seem to suffice for seeking the semantic content of the term. However, as mentioned, there are almost no references indicating the semantic content of the word, and many examples can be understood within the historically ambiguous concept of PE, a neutral term. Therefore, although we should be able to demarcate the semantic content indicated by tai-iku in Takashima’s works according to Principles, this is not self-evident in the book.

2. The nature of Principles of physical education

As mentioned, there are many examples of tai-iku in Principles. Of these, only its identification as “PE that is part of education” in the “Author’s Preface” is an example that self-referentially suggests the semantic content of the term (Takashima, 1904, “Author’s Preface”, p.1; ensuing citations from Principles list only the page number to avoid confusion). However, the attributes of PE are only demonstrated as being within education, and no discussions get to the core of it beyond this. On the other hand, in Principles, PE is referred to in connection with various social and institutional subjects including “education”. For example, in “The Need for PE” in the first section of the “Preface”, its usefulness is explained from viewpoints such as “well-being”, “economics”, “education”, “aesthetics”, “manners”, “competition”, and “national defense” (pp.1-33).

In Takashima’s writings, PE is always referred to in the context of particular, concrete, or empirical standards such as these. The discussions do not extend to abstract or normative theory-type standards. Principles is similar, and a thesis of an unambiguous concept that can cut across diverse contexts is not sought after. Based on this, Principles does not aim for “a reliable point of departure for contemplation or perception”, but at the pursuit of “functioning as practical principles” that “offer a basis for physical education practice” (Ohashi et al., 2011, pp.65-68). Takata positions it as “predating physical education philosophy” (Takata, 2007, especially p.61).

The descriptions in “The Need for PE” are classic examples of the discussion on empirical levels. If PE is part of education, an argument defining PE is expected in items on “education”. However, no discussions sort both into a species relationship and suggest the content of the concept. References to PE in the items on “education” are confined to the same level as other items considered in parallel—“well-being”, “economics”, etc.—and no special rights based in logic are observed that indicate the content of the concept.

However, in the organization of this work in the “Main Body” of Principles, much space is allotted to discussing PE in “school education”, allowing us to infer that this is the subject of the book. The term tai-iku in Takashima’s works hints at ambiguity, but possibly its chief meaning is developed in school PE theory.

3. A semantic divide

Principles is organized into three parts: “Chapter 1: Preface”, “Chapter 2: Main Body”, and “Chapter 3: PE History”. Of these, the main topic in the “Main Body” is “school PE”. At the beginning, it is shown through general classifications of “movement” and “hygiene” as a “method of school PE”, and explained in detail throughout the “Main Body” chapter. Examples that should be observed when pursuing the semantic contents of tai-iku are evident in this “Main Body”.

Consequently, the word tai-iku, in a new sense, should occupy an important position in education (p.199).

This “new sense” comes with an implicit “old sense”. To elaborate, conventional tai-iku is not highly regarded, but now, it must be understood in a new sense, perhaps meaning it should occupy an “important position in education”. The above is an opinion concerning valuation, but noteworthy here is that the semantic content of tai-iku in the surrounding context is developing in a way that contrasts new and old.

In the paragraph preceding “Consequently”, Takashima references two thinkers, namely Spencer...
and Herbart. Spencer is Herbert Spencer (1820-1903), known as the author of the san-iku (education as trinity) educational theory of "intellectual/moral/physical [education]". Takashima criticizes the three divisions of education as "not really based in science". While he highlights the current state of "not adhering to the relevant divisions", he recognizes that such divisions have a degree of usefulness from a "methodological" perspective (p.198).

Herbart is Johann Friedrich Herbart (1776-1841). In the field of sport and physical education sciences, his theories are known along with a somewhat negative assessment as detaching physical cultivation from the field of education (Kinoshita, 1971, p.154). Takashima contends that the "scholars" of the time were "perceiving flaws" in the exclusion of PE, and accordingly, they took up "training of the body" from a "methodological" perspective to compensate (pp.198-199).

Takashima takes over immediately following the above discussions in "Consequently". Based on this, the tai-iku Takashima hints at in the old sense is based on Spencer’s san-iku (in Takashima’s opinion, there was no PE in Herbart’s theories in the first place). Tai-iku in the "new sense" was not a subdivision field obtained by dividing all education, but had a meaning grasped from the perspective of "methodology". In particular, it was a concept of methods oriented toward certain "educational" purposes. The old and new tai-iku seem to be positioned in different conceptual foundations.

Tai-iku in the new sense seems to demonstrate distinctiveness because of Takashima. This is shown in the following continuation of the latter half of Takashima’s "Consequently".

In this case, I strongly believe that PE in school education should include movement with the same goal as the core subject, as well as school hygiene and sex education to have benefits in practice. This is why I included movement and hygiene in PE, especially without relying on examples from common customs (p.199).

As mentioned, "school PE methods" are classified as "movement" and "hygiene". "Hygiene" is then further delineated into "school hygiene and sex education". The use of these requirements in PE methods has been identified as lacking a basis in "science", but it is justified based on having "the same goal". Here, the semantic content of tai-iku can be interpreted as the "new sense" in context. Because of the self-awareness of its difference from "common customs", it is possible to consider it as original to Takashima.

Thus, Takashima criticizes Spencer’s theory of education and presents a "new sense" of tai-iku. Let us trace Takashima’s logic with this contrasting composition in mind. In doing so, we can observe the meaning of sentences critical of Spencer in sections in the "Need for PE" on "education" and references to PE in the contrasting methodological meaning, although these references are unclear.

It is said that divisions of education into intellectual/moral/physical (san-iku) have taken place since ancient times, but these were given definite distinctions by the British thinkers Herbert Spencer. Although educators have long praised this theory, viewed from today’s theories, we must not consider intellectual, moral, and physical educations as parallel to one another. As training of the body establishes the base of other intellectual and moral cultivation (shuyo), without being based in the training of the body, it will increasingly become clear that both knowledge and morals cannot be cultivated (shuyo) without the basis of physical training (p.7, underlined by the author).

The term tai-iku is not found here, but the "physical" in san-iku is identifiable as the aforementioned old sense of PE. Furthermore, it is clear from the context that "training of the body" is a rephrasing of the term. In "san-iku" theory, the three types of education (intellectual, moral, and physical) are interpreted "in parallel", but judging from "today’s theories", this is not valid, and we must think of PE as the basis of intellectual and moral education. PE is considered as having a "method-purpose" relationship between "intellectual and moral cultivation (shuyo)", and is positioned as a method for these.

To borrow the author’s words, a "scientific basis" and "today's theories" made it possible to criticize san-iku and became the standpoint for guiding PE in the new sense. Specifically, it is explained as follows.

The grounds for the occurrence of this theory follow the recent progress in biology, physiolo-
gy, and psychology... [omission] ..., many of the causes of people’s emotions often tending toward extremes and the anti-social have been
confirmed as based on abnormal circumstances in their bodily functions. At the same time, along with developments in physiological psychology, it is becoming increasingly clear that all our mental functions are based on bodily functions (pp.7-8).

Takashima emphasizes that progress in “physiology” and “psychology” clarifies that “bodily functions” are the foundations of “emotion” and “all mental functions”. Then, if for example, one is to “acquire knowledge”, if there is an abnormality in the “sense organs”, this would be considered “no ability to get a perfect insight” and that “memory”, “judgment”, “reasoning”, and “concept” are connected and “shall not escape imperfection” (pp.8-9). He continues that it would be difficult to accomplish “instruction in the two major divisions of education methodology” (p.12). Knowledge of the body-mind relationship, which is based on the various sciences of that era, is the foundation that supports PE in Takashima’s new sense.

It was already noted that body-mind relationship theory has an important position in Takashima’s PE theory (Kimura, 2005). However, as the author clarified, Takashima’s body-mind relationship theory may not be based on so-called ontological level This is because Takashima considered “explaining the facts about the mind-body correlation” sufficient for “attempting to contribute to the principles of PE”, and did not recognize a need to “explain and comment on dualism or monism in philosophy” (p.55). His position is summarized in the remark, “those who try to study psychology and physiology as a science only grasp the phenomena that correlate between the two, and should only attempt to study this” (p.55). Ultimately, Takashima’s body-mind relationship theory does not extend beyond a discussion based on empirical levels.

In this way, in Takashima’s logic, the basic logic from which the semantic content of *tai-iku* arises transitions from a *san-iku* type of education theory to a body-mind relationship theory based on empirical science. Not only do the two types of *tai-iku* differ in their semantic content, but they have different ideological foundations as well. The two meanings of the term *tai-iku*, old and new, each correspond to these two basic logics.

### 4. PE according to body-mind relationship theory

PE in the “new sense” advocated by Takashima is a methodological concept based on mind-body relationship theory. However, this does not dismiss the meaning of cultivating the body, as implied by Spencer’s *san-iku* theory and others from *tai-iku*. Takashima’s body-mind relationship theory explains the mechanism of PE’s operations reaching the mind through the body, but does not directly connect PE with the mind. In other words, to establish the meaning of *tai-iku* in the new sense, we must first recognize the operations and effects of PE on the body.

Regarding “movement”, one of the two major divisions of “school PE methods”, Takashima states that “the places that directly influence movement are in the physiological functions and do not wait for words” (p.128). In contrast, he continues that “although movement influences mental functions indirectly, when viewing it based on the purposes of school PE, we must place the utmost importance on this” (p.130). The emphasis moves to the “mind”, but he suggests the precedence of the body in the sequence of the influential relationship.

Furthermore, Takashima comments on the relationship between mind and body as follows, referencing the other “method” of “hygiene”.

Based on the facts above, parents and educators should know that the human body, as a material, has a marked relationship with mental functions, and not merely the functions of the body itself. They must promote the health of children’s bodies in accord with general hygiene rules. Most important, we must pay attention to the nutrition and training of the nervous system (p.76).

In the statements preceding this contention, the influential relationship between the body and mind is pointed out, and having taken this in, the above citation advocates that people “promote” the “health” of “children’s bodies” through “hygiene”. The reason for improving and promoting the “body” through the “PE method” of “hygiene” is the aim for “mental functions”. The medium of the body is recognized in the operations on the mental through the practice of PE.

In other words, Takashima proposes *tai-iku* in
the “new sense”, but simultaneously maintains the old meaning of tai-iku. Possibly, he is trying to grasp both in a multilayered way, as supported by the following description.

Consequently, we should be aware that PE aims merely for the robustness of the body, but also is the root of knowledge (instruction) and morals (exercise) (p.10).

The two meanings are arranged in parallel, and in context, can be seen respectively as the san-iku type of tai-iku and tai-iku as a methodological concept. In the order of the description, the meaning of tai-iku that aims for “robustness of the body” is recognized first, and next, the methodological meaning is added as the “root” of intellectual and moral education. Tai-iku that views the “body” is still meaningful, and possibly for Takashima, the term carries a two-fold meaning. The logic of the mind-body correlation relates to tai-iku in the “new sense” and ensures its meaning in the old sense in a multilayered way.

Regarding the general mechanisms of PE practice based on the mind-body correlation, in the section “Mind-Body Correlation Theory” in Principles, the following explanation about “sympathetic nerves” and “sentiment” is included (the following summary is based on pp.60-64). Although “sympathetic nerves” “cannot directly influence the area of knowledge”, these are recognized as “influencing all mental activity”, as “the actual feeling of being or organic sensations that should form the core of the self are based in general on these nerves”. Furthermore, although “sympathetic nerves” are a physical organ, “they affect the state of consciousness” and produce “sentiment”, the mental phenomenon that plays a central role in the self. Sympathetic nerves are mainly located in the vicinity of the internal organs, so to keep “sentiment” refreshed, one must maintain “activity to keep the internal organs healthy”. On the other hand, if “sentiment” is not “refreshed”, it is “by no means [possible] to get good results” in educational activities in general. Thus, in the course of education, it is considered important that “the sentiment of both educators and students always be refreshed”. PE practice is required to make “sentiment” “refreshed” and to ensure “activity to keep the internal organs healthy”, in which the “sympathetic nerves” are located, which form the basis of sentiment. In this way, he develops a logic in which the encouragement of the body through PE practice produces direct effects on the body, and with the effects in the body as a medium, these operations are extended to the mental state.

Only after firmly embedding oneself in the above mind-body correlation logic can one understand the organization of the “Main Body” of Principles. As mentioned, in the “Main Body”, the “school PE methods” are presented, and at first, entirely physical importance of “movement” and “hygiene” discussed. In each of the ensuing sections, each item is explained in detail: for “movement”, there are statements about the “educational value” of things such as “gymnastics” and “movement at will”. The statement structures share the following: “(1) Physiological”, “(2) Psychological”, and “(3) Moral”. Each carries through a sequence in which the physical influences and effects are first revealed, and then the intellectual and moral influences and effects discussed.

5. Conclusion

Takashima advocates for a new meaning of the semantic content of the term tai-iku. This is a methodological meaning regarding “intellectual and moral” education. On the other hand, Takashima retains the san-iku type of meaning for tai-iku, which aims for direct effects on the body. The term tai-iku in Takashima’s work indicates these two separate meanings simultaneously. Takashima is a PE advocate marking a certain era, but the true value of his claims must be sought again in the future. The results of this study should become the first cornerstone for that work.

The issues of whether the semantic content of the term tai-iku in Takashima’s work is fully covered and whether one can consistently read his works including Principles according to these meanings are topics that should be considered separately. However, regarding tai-iku as a method concept, there is evidence that Takashima attempted to introduce other terms (such as “physical training”); thus, special caution is needed. If the semantic meaning is altered and the term itself replaced, it will already be impossible to positively comprehend it, and it will be a different term or concept from tai-iku.
``Tai-iku” in the Principles of Physical Education

Notes
1. In the Heizaburo Takashima Collection, Volume 6, "Chronological Record” (p.6), the date of publication of Theory and Practice is incorrectly listed as 1910. The publication information imprinted at the end of the book states “Meiji 39”; thus, the correct year is 1906.
2. I revised the citations in the text to make them modern expressions. I have done the same for ensuing citations from Takashima’s works.
3. “Instruction” is an educational method to foster “curiosity” and “skills”, (p.7) or “methods for gaining knowledge” (p.198).
4. According to Oba’s (1981) historical investigation, this seemed to have already been acknowledged at the time.
5. Consequently, Hayashi’s attempt to position Takashima’s body-mind relationship theory as a discussion “in the field of philosophy” is invalid (Hayashi, 2013, p.41).
6. See Kinoshita (1971) for more on the historical transformation of the modern concept of PE.
7. Generally, it is difficult for both san-iku theory and body-mind relationship theory to coexist. In san-iku theory, human existence is first understood as segmented into the “intellectual”, “moral”, and “physical”, and then characteristic education methods are presented that correspond to each category. In contrast, body-mind relationship theory considers the influential relationship between these segmented conditions, and relativizes the methodological divisions in san-iku. Therefore, when positioned within body-mind relationship theory, a new education theory is needed to replace san-iku to orient tai-iku.
8. As an issue based on logic, assuming that PE’s operations directly operate on the mind, it may not be necessary to deliberately explain the circuitous path toward the mind that PE’s operations take through the medium of the body.
9. “Physical training” is proposed as an explicit substitute in the Newly Compiled Pedagogy Lectures. “I will now explain education methods as being one for the body (physical training) and the other for mental aspects, which can be delineated into instruction and exercise” (Takashima, 1901, p.139). However, there are few examples. In the same work, while tai-iku is mentioned 56 times, this phrase (including “training of the body”) is only mentioned 11 times. Furthermore, in Principles, the ratio has 228 mentions compared to 29. On the other hand, Kimura (1965) focuses on the term “physical cultivation (shuyo)”, which is often used in “Physical Cultivation Theory” (Takashima, 1902). However, although the examples in this work are somewhat frequent at 19 mentions, this phrase is only used 3 times each in the Newly Compiled Pedagogy Lectures and Principles.

References
Inokuchi, A., Kani, I., Kawase, M., Takashima, H., and Tsuboi, G. (1906). Taiiku no riron oyobi jissai [Theory and Practice of Physical Education]. Tokyo: Kokkosha. (in Japanese)
Kimura, K. (1965). Takashima Heizaburo: kagakuteki-taiiku no shiko [Heizaburo Takashima: an intention of Scientific Physical education]. J. Health Phys. Educ. Recreat. (pp.465-471). (in Japanese)
Kimura, K. (2005). Takashima Heizaburo [Heizaburo Takashima]. J. Health Phys. Educ. Recreat. (pp.713-716). (in Japanese)
Kinoshita, H. (1971). Nihon taiikushi kenkyu josetsu [The Introduction to Study of Physical Education in Japan]. Tokyo: Fumaido. (in Japanese)
Hayashi, Y. (2013). Genri kara tetsugaku e [From Principles to Philosophy]. Annu. Rep. Health Phys. Educ. Sport Sci. (pp.39-51). (in Japanese)
Imamura Y. (1970). Nippon taiikushi [The history of Physical education in Japan]. Tokyo: Fumaido. (in Japanese)
Oba, Y. (1981). Takashima Heizaburo “Taiiku genri” [Heizaburo Takashima “Principles of Physical education”]. In Matsuda, I., and Narita, J. (eds) Education of body and mind (pp.224-244). Tokyo: Kodansha. (in Japanese)
Ohashi, M., Hattori, T., and Abe, G. (2011). Taiiku tetsugaku genron [Principles of physical education philosophy]. Tokyo: Fumaido. (in Japanese)
Oizumi H. (2009). Takashima Heizaburo chosakushu kaisetsu [The commentary on collection of Heizaburo Takashima]. In Takashima Heizaburo chosakushu Vol. 6 (pp.13-60). Tokyo: Gakujutsu Shuppankai. (in Japanese)
Sato, T. (1993). Shintai shyuu wo tetsugaku suru [Philosophy of physical education]. Tokyo: Hokusui shuppan. (in Japanese)
Takata, T. (2007). Nihon ni okeru taiiku tetsugaku no gakusei keisei ni kansuru kenkyu [A Study on the Formation of the Philosophy of Physical Education in Japan]. Bull. Grad. Sch. Educ. Hiroshima Univ. 1. (pp.59-66). (in Japanese)
Takashima, H. (1901). Shinshenkyouikugaku kogi [Newly Compiled Pedagogy Lectures]. In Takashima Heizaburo chosakushu Vol. 2 (pp.1-217). Tokyo: Gakujutsu Shuppankai. (in Japanese)
Takashima, H. (1902). Shintai shyu no ron [physical cultivation theory]. In Kurosawa, I. (ed.), Naigai meika taiiku ronsuu [The collection of important treatises in and outside Japan] (pp8-32). (in Japanese)
Takashima, H. (1904). Taiiku genri [Principles of Physical Education]. Tokyo: Ikueisha. (in Japanese)
Takashima, H. (1905). Joshi shin kyoikugaku [New Pedagogy for Girls]. In Takashima heizaburo chosakushu Vol. 2 (pp.1-189). Tokyo: Gakujutsu Shuppankai. (in Japanese)
Takashima, H. (1906). Taiiku genri [Principles of Physical Education]. In Takai kenkyukai (ed.) Shogakkou taiso yugi koshukai kagai koenshu [The collection of extracurricular lectures on the sessions of gymnastics, play, and games in elementary school]. (pp.1-123). http://dl.ndl.go.jp/info:ndljp/pid/860137. (in Japanese)
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• Sasaki, K. (2012). 'Physique' and education: Focusing on 'Emile' of Rousseau. Jpn. J. Phys. Educ. Health Sport Sci., 57(2): 399-414.
• Sasaki, K. (2009). Human body and education in J. J. Rousseau: focusing on the discuss of public education. Jpn. J. Phys. Educ. Health Sport Sci., 54(2): 279-291.

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