



Teacher Education and Policy in Japan. A Norwegian Perspective.

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The purpose of this article is to study teacher education in Japan and to discuss similarities and differences with similar education in Norway. Confucian principles and curriculum theory was used as a frame of reference. The methodology inspired by Grounded Theory (GT). Categories from a similar study of teacher education in Norway was utilized. Major data was collected from written sources and statistics, and from participating observations in schools and universities of teacher education in Japan.

The survey found that teachers in Japan show a high level of competence and they lead their students to high performances on international tests, especially in mathematics and science. But there is a second narrative.

Formally, Japan has a Basic Law of Education from 1945 that is secular, but values from both Shinto and Buddhist religion and Confucian philosophy were observed. It is popular and competitive to become a teacher and their role is defined as “calling” and “public servants”. They must pass an entrance examination and qualify through a license exam after graduation from a university with a bachelor or master’s degree. Their salary is relatively high, and they seem to have higher status in the society than Norwegian teachers. But they have very short vacations because they also take care of club activities after school and in school vacations.

Elementary school teachers for grade 1-6 must take credits in all school subjects and they teach all subjects in one class. Teachers in junior high school and high school are required to take more credits in the subjects they teach, and some teach only one subject. Their teaching is dominated by textbooks approved by the government. OECD surveys indicate that Japanese teachers are less involved in curriculum design than Norwegian teachers. The required number of credits in pedagogy and didactics is about the same as in Norway, but recent reforms require all teachers to take credits in moral education, Constitution of Japan, gymnastics, foreign language communication, information processing and nursing care.

Key words: teacher education, pedagogy, Japan, Norway



1. Introduction

East Asian countries are often praised for their education systems. Japan led the way for a long time, but in recent years countries such as Singapore, Taiwan/China, Hong Kong/China and South Korea have cut into the lead. Their recognition on education is often given with reference to economic development by international organizations such as OECD (2018) and WorldBank (2018). The same countries also score highly on international tests such as PISA (2018) and TIMMS/PERLS (2019). However, somewhat less well known are critical considerations and concerns in the same countries about the needs for educational reforms (Horio, 1987). Attention seems shifting from a uniform, teacher-centered, exam-oriented pedagogy towards diverse, student-centered learning pathways that aim to instill capabilities for lifelong learning. This shift represents an increased focus on skills like learning and innovation, digital literacies, and life and career skills (Cheng, 2017, p.14). The importance of the teacher and teacher education is often highlighted in this discourse and appears as a key factor in the ongoing reform processes

The purpose of this article is to explore teacher education and contemporary reforms in Japan from a Norwegian perspective. Such research can be justified from several points of view. From a utility perspective, one would argue the value of learning from others and that good practice can be transferred to one's own education and practice. Reforms in Norwegian teacher education have, among other things, focused on quality through longer education from 4 to 5 years, the introduction of a master's degree for teachers, specialization and higher requirements for deepening in central school subjects such as language and mathematics (Aakre, 2022). What does Japan emphasize in its teacher education and the reforms that are now being carried out?

On the other hand, some researchers point to cultural factors and that the Confucian tradition that characterizes education in Japan and other East Asian countries (Schenck, 2015). Researchers in organizational development have pointed to the link between Confucian morality and education as a possible explanation for the economic progress that has occurred in East Asian countries (Ma and Ouyang, 2019). Confucianism is an old complex philosophy that was adopted as a main ruling doctrine by the Shogun during the Edo era 1603 – 1868 (Levi, 2013, p.10). However, this article deals with only five key factors, or principles, that may help to better understand the norms and values that characterize schools in Japan and



other East Asian countries. These five principles are Je, Yi, Li and Jen who have their own unique Chinese character (Guo-Ming and Jensen, 1993, p. 5).

Most countries are facing challenges to their societal and educational institutions due to the information revolution, globalization, and environmental changes. In response to these changes many countries have implemented reforms in their teacher education programs in recent years. Norway and Japan are two examples (KD, 2014/2016 and MEXT, 2019).

Among the many other countries that can be mentioned is Singapore (Lim, 2013), Germany (Lee and Ehmke, 2021) and Minnesota USA where each state decides the content of education (McMhan, 2018). What are the most important measures in these reforms and how are they justified? Can these reforms be understood in the light of an international trend and how are national characteristics and interests expressed in these processes?

The purpose of this article is to explore such questions through a study of teacher education and contemporary reforms in Japan from a Norwegian perspective. Such research can be justified from several points of view. From a utility perspective, one would argue the value of learning from others and that good practice can be transferred to one's own education and practice. Japan is often praised for its education system and the importance it had on the development of the Japanese society. Such arguments are often based on international tests and often referred to as a seal of quality both inside and outside of Japan (TIMM&PIRLS, 2019). But how can these results be justified? Is it the teacher training, the teachers' efforts in the schools, teaching methods or more cultural factors?

First of all, Confucianism is based on a hierarchical structure that regulates the interaction between people such as teachers and students. It is believed that personal harmony is the best way to maintain dignity, self-respect, and prestige. Harmony, or “*Reiwa*”, is also the present Emperor's language of choice. It is related to the principles of Yi (righteousness) and Li (propriety) which dictates how individuals must follow a proper way and a proper ritual in a social interaction. In this social structure the teacher is a substitute for the parents and have their authority. By the former law even in the community defined as “public servants” (Horio, 1987, p.401). In the context of education, li is manifested in all learning activities such as establishing one's aspiration in learning, analyzing texts, asking questions and making friends (Tan, 2018, p.3). Ren is the normativity of li in the sense that to observe li is to possess and demonstrate ren in all our thoughts, feelings and actions.



Only through Yi and Li is the meaning of Jen, which is the core meaning of "love". To oneself, Jen is self-restraint and self-discipline. To others, benevolence, to parents it is filial piety and to elders brotherly love. To personal duty, loyalty; and to interpersonal behaviors, trust.

Yi is the binding force of social interaction. It refers to the righteousness, faithfulness, loyalty, and justice in the process of social interaction. Yi serves two major functions: guidance of behavior and connection of all appropriate behaviors.

John Dewey also made comments on the Confucian philosophy when he visited Japan. He also raised question about democracy and education (Dewey, 1920, p.38 and 69).

Contemporary Japanese researchers have problematized the same theme and raised critical questions about the conditions of democracy in the current education system in Japan (Horio, 1987, p. 106). In contrast to the positive Western reports on Japanese education, they point to a number of critical conditions that can be difficult to see during brief visits to Japanese schools (Arai, 2019; Okano and Tsuchiya, 1999, p. 110). It is about topics such as democracy, teachers' limited opportunities to raise critical social issues in teaching, centralized textbooks, participation in political processes, individuality, gender, minorities and lower-class students access to higher education and professional jobs. Participation in political elections in Japan, for example, is very low. It may be related to limited opportunities at school.

In most of his research Dewey argued that curricula must not be perceived as static and final, or as something outside the student's own life and experiences. Curricula must be understood as something fluid with moving and democratic goals that are created in a meeting between student, teacher and society (Dewey, 1902, p. 11). He neither saw the curriculum as a neutral list of tasks the teachers and the school had to carry out on behalf of the state. On the other hand, there are different types of plans that may tell something about the rationality and ideology behind the ideology (Aakre, 2005, p. 40). A subject-centered curriculum design focus on a particular subject matter or discipline, such as mathematics, literature or biology. A learner-centered curriculum design, by contrast, focus on student needs, interests and goals. It acknowledges that students are not uniform but individuals, and therefore should not, in all cases, be subject to a standardized curriculum. More recent curriculum research seeks to emphasize epistemic knowledge (Rata, 2019). It is about insight into one's own knowledge development, which is believed to be essential for acquiring knowledge oneself and for reflecting critically. Epistemic knowledge is believed to be important in a world where we



have to sort the flow of conflicting information and at the same time construct meaning for ourselves.

Curricula are not neutral either, but expressions of various political or ideological interests. Curriculum thinking in recent decades has been dominated by a neoliberal ideology and put into practice with the implementation of strategies from New Public Management (NPM) with the intention of making public services more efficient (Pollitt and Bouckart, 2004, p.7). Typical features of this ideology are that competitiveness in a global market can be improved by training human resources who can be innovative, adopt new technology and work effectively based on the needs of the labor market and the technological changes required (Al-Haija and Mahamid, 2021, p. 20). One means of achieving this is to use detailed measurements that are used to correct behavior at the individual and community level. This is expressed in the form of national and international tests, standardization of the curriculum at national level and accountability through feedback and control (Hays, 2016, p. 2).

Lorense Stenhouse emphasized that curricula are an attempt to communicate the essential principles and characteristics of an education. He argued that curricula should, as a minimum, provide a basis for planning learning, studying learning processes empirically and that the rationale for the plan must be able to be critically assessed (Stenhouse, 1975, p. 4-5). Similar ideas originally formed the basis of the idea of quality and professionalism in the teaching profession. But several people are now pointing out that concepts such as quality and professionalism have been transformed and given new meaning adapted to a neoliberal ideology. Quality has become market adaptation and teacher professionalism is about effectiveness on behalf of goal-directed curricula (Hall and Ginity, 2015, p. 4). Norwegian researchers have also contributed to the debate (Aagre, Schaaning, 2022).

In short: development of the teacher's role takes place on many levels from actions in practice via theory in teacher training, national reforms and research.

Contemporary research is among the most prominent arguments used to justify reforms in teacher education internationally. Most of this research conclude that good teachers are crucial for the student's learning. On the other hand, it has proven difficult to define what characterizes good teachers and which factors in the teachers' efforts contribute best to developing good learning environments and schools (Arfwedson, 1994; Hattie, 2012; Ulvik and Smith, 2018; Irvine, 2018).



A possible explanation for this disagreement could be individual, that students are different and learn best in different ways. Another possible explanation could be expectations from parents and various actors in society about what the school's purpose is and how these can best be realized. Such perceptions are also expressed in various theories about knowledge as capital. A classic variant are theories of human capital which, briefly explained, are concerned with measuring efficiency and financial return as a function of effort in education (Shultz, 1962). Measurable skills and cognitive abilities play an important role in such examinations. Such a theory stands strong in the OECD, which has regularly given advice on Norwegian education since the late 1980s (OECD, 2022). Another feature of this type of neoliberal theory is market adaptation and efficiency through the privatization of education and other public services (Pollit and Bouckaert, 2004).

An opposite view is based on the idea of education as a value in itself and that education gives back to society and culture in the form of independent and competent citizens who take responsibility for themselves and the community (Colemann, 1990; Bourdieu, 1984). These theories are either referred to as social capital, cultural capital or in a combination. They emphasize both cognitive and non-cognitive abilities. For the teaching profession, Hargraves and Fullan have also launched the term professional capital as a synthesis of human capital, social capital and decision-making capital (Hargraves and Fullan, 2012, p.107).

Arfwedson was among the first to come to the conclusion that it is difficult to point to a consensus. In his analysis, he found three main categories of teacher research: Teaching effectiveness, teacher education, and teacher cultures. We also find these categories in later research. In addition, there are now also theories about teachers' experiences and their importance, about teachers' professional competence, gender, teacher behavior and teachers' opportunity to learn in practice (Burroughs et al., 2019).

In recent years, researchers have also taken an interest in the failing recruitment to teacher education in many countries, a problem that began to be felt in Norway at the end of the 1990s and which is still a challenge (Mevorach and Ezer, 2010). Teacher shortages in the districts are one example. The last perspective also touches on the relationship between the center and periphery, which came to play a role in the Norwegian Storting election in autumn 2021 (Aakre, 2021 a and b).

Against this background, the following research problem was formulated:

What characterizes teacher education in Japan and its contemporary reforms, and how can it be understood from a Norwegian perspective?

These questions are examined and analyzed with the main emphasis on Elementary school teacher education. Against this background, teacher education for higher levels, and special need education, are analyzed with focus on the most important differences.

2. Method

This study of teacher education in Japan from a Norwegian perspective was carried out within the same frame of reference as a similar study of teacher education in Norway (Aakre, 2022). The methodology was inspired by Grounded Theory (GT). The analytical categories from that study were used as a basis and supplemented with codes from the Japanese context. The main categories turned out to be quite similar as shown in Figure 1, but the subcategories turned out to be different in the Japanese context. Some examples are shown in Table 2.

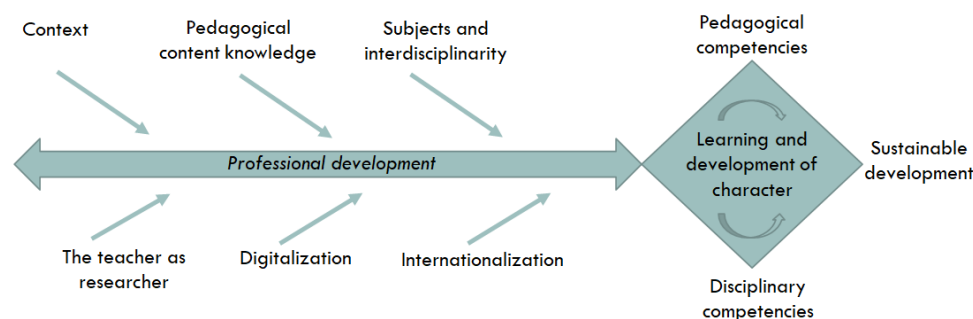


Figure 1. Analytical categories (Aakre, 2022).

Grounded theory (GT) is a systematic, context sensitive and flexible research method where, in addition to describing phenomena, one also tries to build theory and possible explanation through constant comparison, condensation and structuring of statements and concepts (Glaser and Strauss, 1967; Charmaz, 2014, p.16; Creswell, 2013, p.89). Grounded theory is widespread in social research and has over time developed in slightly different directions, including a Japanese variant M-GTA (Aakre, 2018). The flexibility depends, among other things, on the types of data used. It became important in this investigation where both



qualitative and quantitative data was used as well as combination of self-produced and existing data (Charmaz 2014, p. 330). Quantitative data such as length of studies, number of compulsory subjects and credits, size of theses, class sizes etc. were collected and analyzed.

Teacher education, as well as education in general, exist and operate within a context of many changing factors. To achieve a deeper understanding of a given school system, one must explore and seek to understand such factors and the impact they may have on the present practice we observe. This context of education can be analyzed along three main dimensions: peoples, places, and time (Wedell and Malderez, 2013). Education involves human activities which are mediated by people who interact with each other. Learners differ in terms of their cognitive abilities, and instructors are generally required to work with all of them in the same class. People tend to behave differently because they think differently due to their different experiences in relation to a particular subject

Qualitative and quantitative data was collected from a variety of sources and compiled in memos. They were collected from 1) research literature on teacher education fromERIC, Science direct and ProQuest databases, 2) policy documents and curriculums from the Ministry of education in Japan (MEXT), and 3) universities of teacher education and participating observation in classes with teacher students and teachers in schools. They include schools and universities in Sapporo, Nagoya and Fukuoka.

To arrive at suitable categories, documents and notes were coded and condensed in three steps: open coding, selective coding and theoretical coding. In the final analyses there are elements of hermeneutic interpretation in the light of contexts.

As indicated in the introduction and in *Figure 1*, teacher education, like all other education, depends on time and place, but is also influenced by ideas and impulses from outside. It also appears differently depending on which perspective one takes. This may be one reason why most researchers in the teaching profession and teacher education agree on the importance of teachers for pupils' learning and development, while at the same time it is difficult to point to any universal consensus on which competences and which characteristics are more significant than others. What is important and significant in one situation and context may be of less importance in another. One must therefore try to understand the whole and part in terms of time and place.



Table 1. Unique codes from the Japanese data

Coding	Num.	A selection of categories and codes from the Japanese data
Theoretical	5	<i>professional development ... learning ... pedagogical competences ... disciplinary competences ... sustainable development</i>
Selective	7	<i>context ... pedagogical content knowledge ... subjects and interdisciplinarity ... professional development ... the teacher as researcher ... digitalization ... internationalization</i>
Open	320	<i>kizuna ... reiya ... entrance examination ... ronin ... license criteria ... public servant ... teaching as a calling ... home room ... moral education ... rules ... confusion values ... loyalty ... lesson study ... textbooks ... club activities ... school rotation ... short vacation ... few members of teacher union ... salary ... PISA ... TIMMS&PIRLS ... minorities ... jimin ... internship ... volunteer teacher</i>

4. Context

Teachers in Japan have a good reputation nationally and internationally, and they lead their students to good achievements, especially in mathematics and science (OECD, 2018). But how are they educated? This survey will contribute to answer the question.

The important role of teachers in Japanese society is enshrined in the Basic Act on Education, Article 9. It was last revised in 2006 (MEXT, 2006). To be a teacher is defined as a “*calling*” and expected to “remain deeply conscious of the exalted nature of their calling and continuously devoting themselves to research and self-improvement”. The law requires that the “status of teachers must be respected”. Teachers are also referred to as “*public servants*” with a special responsibility even outside the school.

Japanese teachers enjoy a high status in society, although both teachers and principals reported that it has become more challenging in recent years. They explain it with school refusal, behavioral problems and lack of respect for teachers. Increasing criticism from parents were also reported. This makes it extra difficult since Japanese teachers have a great responsibility for bringing up children in line with the norms and values that have long stood strong in the Japanese society. Globalization and new trends challenge this tradition even more, as the Japanese society is changing.



Most primary schools in Japan are public with increasing number of private schools at higher levels. In elementary school 63,9% of the teachers are women, on secondary level 37,5% (OECD, 2020). In kindergarten 96,7 % of the teachers are women.

Public schools in Japan, including universities, often have a standardized form of functionalist architecture. They exude a military feel and are reminiscent of early Bauhaus style (Aakre, 2005). But teachers seem familiar with it and do not express that the architecture affects the students in any way. The teachers have a common staff room with separate desks set up against and next to each teacher. Frequent informal communication between the teachers was observed and they emphasize emotional bonds with colleagues and student, often referred to as *kizuna*. Younger teachers reported that they felt respected equal and easily asked older teachers for help and advice. On the other hand, bullying and exclusion were observed among the students. *Ijime*, bullying, is one of the most discussed problems in the Japanese schools and used as, among other things, as an argument for the introduction of moral education as a special subject. Bullying and punishment from teachers was also reported.

The culture at private universities and schools seems not very different from public schools, but they are more varied in design and modern architecture, often with a clear aesthetic expression.

The observed teachers talk and share experiences with each other. They were observed at school between 0800 and 1730, and often later. They had to continue preparation of next day at home. Survey by OECD indicates that Japanese teacher work more than 11 hours per day on average (Kyodo News, 2018). It is also reported that “teachers are currently suffering from chronic depression due to the intense workload required by schools” (Ruide, 2019). Teachers explained the problem of large classes, many assignments, few teachers, bureaucracy, no substitutes in case of illness, responsibility for club activities, demanding parents and increasing social problems among students.

“The biggest challenge for me as principal is getting students and staff to follow our rules”. This is how the principal at one of the schools responded to the question about what he finds most demanding about being principal. The purpose of rules he explained is to “maintain respect and good relations” and to “avoid conflicts”. Some rules are quite vague, not necessarily written down and their origin seems not clear. Teachers explained them as an inherited part of Japanese culture. Some from Confucian ruling traditions, like the hierarchy, others from Shinto or Buddhist religion. Other rules are very specific, such as being punctual,



greeting, showing respect for teachers, being nice to fellow students, participate in cleaning the school and serving school lunch. Other rules may seem rather strange, such as specific dress codes, hairstyle, ban on parfum, length of socks, white underwear and similar rules that students in other countries decide themselves. Teenagers under 18 are not allowed to drink alcohol and seldom observed. Drugs are even more rare in the Japanese society. From observations and discussions with students there is growing opposition to such rules.

Rules can also be understood in the light of moral education, which has a special function and a long history in Japan and strengthened in recent reforms. The term “rules” is used in the curriculum as: “people keep promises, follow rules, and have a sense of public duty” (NIER, 2012, p.4). In a broad sense moral education in Japan aims at cultivating morality in virtues such as feeling, judgement, attitude and the will to actively contribute in the school and community. Moral education is discussed more in a later chapter.

The principles and direction of today's education in Japan can be traced back to 1947 and the first Act on Education (教育憲法, *kyōiku kenpō*), last revised in 2006 (MEXT, 2006). It entailed a new and democratic constitution and an education system based on a model from the United States divided into four stages: 6+3+3+4. It comprises 6 years of primary school, one year shorter than in Norway, 3 years of lower secondary school, 3 years of upper secondary school and 4 years of higher education as the main model. In addition, there is kindergarten before primary school and a master's and or doctorate after a 4-year bachelor's degree. From 2017, a 5-year master's degree became compulsory in Norway (KD, 2016).

Teacher education in Japan was changed from a nationalist education based on "normal schools" to a more liberal and open university education model where a 4-year bachelor's degree is the most common. But there are exceptions and elements from the old system. The transition to a liberal legislation is related to Japan's capitulation in 1945 and the following year. However, in spite of a liberal legislation some claim the practice is different and still influenced by nationalist ideas (Horio, 1987, p.16 and p.373).

The Japanese school seems to build on values from several schools of thought and religions, not just Confucianism but also Shinto and Buddhism as well as Christianity and Western philosophy embedded in Japanese culture and education from long ago (Naito, 1990). Japan had advanced education and teachers long before 1947. Its history can be traced back to the Confucian tradition from China and the arrival of Buddhism from Korea in the 6th century AC. The native religion of Japan is Shinto that also served as state religion between 1868 and



1945. The Japanese writing system Kanji was developed from logographic Chinese characters by Shingon Buddhist monks in the 8th century (Aakre, 2013). Japanese students start to learn kanji together with hiragana and katakana in elementary school.

The first Western schools were established by Jesuit priests around 1580 (Moran and Moran, 2003). Today there are quite many Christians schools and universities, even though Christianity is a very small religion in Japan. The latter may be related to the fact that Christianity was banned, and Christians persecuted a few decades after the Tokugawa clan came to rule Japan continuously from about 1603 until 1868. This period is called the Edo era when Japan enjoyed a long period of peace, social stability, and cultural development. The goal of formal education in Tokugawa Japan was primarily moral: to gain access to the teaching of the Sages in order to understand proper human relations; and to acquire useful skills, broaden wisdom, and acquire that knowledge appropriate to good government (Beauchamp and Rubinger, 1989).

Different types of schools were developed for the different classes. There was public education for the ruling samurai class, referred to as *Hankou*. These schools were taught mostly by masters from the samurai class and the major studies were on classical Chinese literature (Horio, 1987, p. 27). The *Shinjuku* were private schools open to lower classes. They were also taught by samurais, priests, or enlightened wealthy farmers. Finally, there were schools for popular learning *Terakoya* aiming at teaching the practical skills like reading, writing, and arithmetic to the commoners. These schools were often taught by commoner teacher, including female teachers. However, to be a teacher was in most cases a calling or heavenly mission, not a regular occupation. This idea may still have an influence on present day education. The Basic Act of Education still use the concept “calling” (MEXT, 2006, Article 9). At the end of the Edo era in 1868 the majority of Japanese were literate.

When industrialization and the use of modern science and technology gained momentum in the West, Japan fell behind in its development. It led to a form of civil war that brought about extensive changes in Japan. The emperor was reinstated as head of state and a form of democracy with elite rule was introduced from 1868. The new government made every effort to catch up with western countries through a major investment in education, modern science, industrialization and military build-up. Consequently, a national education system based on the Western model was established. In 1872, the government invited a specialist in teacher education from the United States, and the Tokyo Normal School was established. Soon a new generation of teachers were educated. Their aim were to ensure high professional quality in



teaching, patriotism and loyalty to the new state. Shinto was introduced as a state religion with the emperor as a divine head. Teacher education became quite nationalistic (Okano and Tsuchya, 1999, p. 24 and p. 144)

Japan made rapid progress and became a major power that also asserted itself militarily in Asia, first through, among other things, the occupation of Korea and Taiwan. During the 1920s, society became increasingly militarized, and Japan transitioned into a dictatorship collaborating with Nazi Germany. First, they attacked China and in 1941 they occupied most countries in East Asia. It all ended with the atomic bombs over Hiroshima and Nagasaki. Japan capitulated and was occupied by the US.

A new start for Japan after 1945 required a completely new, democratic and less nationalistic education system. Shinto was banned as the state religion and there was criticism that the old system of teacher education had a narrow vision and a sense of subservience to authority. In 1949, all normal schools were abolished, and in their place faculties of education were newly established within 45 national universities. Furthermore, after 1947, it became possible for teacher training courses to be offered in faculties other than the faculties of education in all national and private universities for students who wanted to acquire a teacher certificate in specified subjects. Teacher training carried out in accordance with this type of formula became known as an “open system”.

A liberal-conservative coalition has dominated Japanese politics since the World War II, but more progressive and left-wing groups are influential. The Japanese Communist Party is the largest non-governing communist parties in the world, but they seem to have little formal influence. Neoliberal ideas have stood strong in the last twenty years and have led the school in a nationalist, but also internationally oriented direction. They prefer to see education as an instrument for economic development and international competition like it used to be in the modernization of Japan (Okano and Tsuchiya, 1999 p.215, Iwata, 2015; Kawaguchi and Watanabe, 2021, p. 66; OPTU, 2019, p. 3)

International research literature reflects to a lesser extent more critical aspects of Japanese society in general and education in particular. It also seems quite difficult to form deeper insights through short visits to Japanese schools and universities. One is easily blown away by the cleanliness, calm and order, by politeness and students who do their duty of cleaning and tidying the school. But not all schools are like that. A broader perspective is gained by studying prominent social scientists and researchers in Japan (Horio, 1987, Okano and Tsuchiya, 1999; Fujita, 2004; Tanaka et.al, 2017; Yamanaka and Suzuki, 2020).



The criticism spans a wide range of topics such as human rights and minorities, democracy, approval of textbooks, relaxed education, teachers' autonomy and the rights of teacher unions. Japanese teachers are expected not to get involved in political issues and unions have been under pressure for years. Membership has decreased and barely 25% of teachers are organized today. This is very different from Norway, where 95% of teachers are organized and play an active role in shaping education policy. On the other hand, wages are at about the same level (OECD, 2022).

The demand for neutrality and being politically correct also means that critical thinking is problematic in the education system. Approved textbooks rarely or never address socially critical questions and do not set out to discuss such questions. Control questions and tests are often in the form "right or wrong", or at best as "advantages or disadvantages". Lack of critical reflection may be the reason that interest in public issues and participation in elections is very low (Dunn 2015). Critics also point out that ethnic and social minorities in the Japanese society, such as Ainu, Koreans, Buraku etc. have few or no special rights (Okano and Tsuchiya, 199, p. 110; Aakre, 2005-b). There are also no guidelines for teacher education to prepare students for such challenges, such as in, for example, Norway and the Nordic countries.

With changes in society, globalization and new media, there are challenges with the education of the young, which make the work of teachers more demanding. This applies to behavioral problems, physical and online bullying, mental problems and school refusal. Similar problems are reported in Norway and other countries (Brochmann and Madsen, 2022).

5. Structure, content and strategies

The structure of Japanese teacher education is somewhat complicated to explain and difficult to compare with similar education in other countries such as Norway. Most teachers in Japan have a 4-year bachelor's or 5-year master's degree in education from a university accredited for teacher education. But it is also possible to get a teaching license with an associate degree from a 2-year college. Some kindergarten teachers are in this category.

In contrast to, for example Norway, where passing teacher education qualifies for the teaching profession, teachers in Japan must have a special approval in the form of a license. An approved bachelor's degree is therefore no guarantee of being appointed as a teacher. It can often be only 25% or fewer who get a license.



To be hired as a teacher in a public school, it is necessary to pass a teacher recruitment examination conducted by the board of education of a prefecture, or the recruitment examination conducted by a private school corporation. The certificates are issued for the level of education and there are different types of certificates: Specialized, Type 1 and Type 2. To obtain a license, a candidate must take a minimum number of credits in a selection of subjects depending on the level of education he or she will teach. For instance, elementary school teachers must take credits in all school subjects while teachers in secondary education must specialize in at least one school subject. These criteria are set nationally and were last revised in 2019 (MEXT, 2019). Table 1 shows the three most common certificates and estimated total number of credits based on information from teachers and universities.

Table 1. General required credits in Japanese teacher education (1 Credit ~ 2 ECTS). (Author)

	Specialized 5-year Master's degree	Type I 4-year Bachelor degree	Type II 2-year Associate degree
<i>Liberal arts program</i>	(154)	(124)	(62)
<i>Compulsory teacher subjects</i>	91	67	45
<i>Subjects from program</i>	115	108	42
Typical teacher license	206	175	87

The total number of credits among teachers may vary, even if they have the same degree. The minimum criteria for a general 4-year bachelor's degree in Japan is 124 credits (Suisan, 2022, p. 57). But the program in each university may require more credits. To achieve the requirement for a bachelor's degree and Type I teacher license at Suisan university, the requirement is 175 credits (350 ECTS), which is equivalent to a master's degree in Norway (Suisan, 2022, p. 176).

A regular teaching certificate is valid for all prefectures in Japan. The period of validity used to be 10 years, but this requirement was lifted from 2022. Regular teaching certificates are further categorized into Specialized, Type I, and Type II certificates, depending on the teacher's academic background.

A master's degree is the basic qualification for a specialized certificate. To earn such a certificate, a person needs to obtain more than a certain number of credits for teaching subjects and professional subjects at a graduate school, in addition to the requirements for a Type I certificate. A bachelor's degree is the basic qualification for the Type I certificate, and in general, a person needs to obtain more than a certain number of credits for teaching

subjects and professional subjects at a university to earn it. An associate degree from a junior college is the basic qualification for a Type II certificate.

A Special teaching certificate is issued based on employer recommendation (adopting board of education, school, etc.) after an interview with specialists. This certificate is valid only in the prefecture that provides it. The valid period of the certificate is for 10 years, and can be renewed just like a regular certificate, by taking a certificate renewal course.

In addition, Temporary teaching certificates are given when an employer cannot employ a person with a regular teaching certificate. The valid period is three years in general, and the certificate is valid only in the prefecture that awards it. Very few temporary teaching certificates have been issued in recent years.

Types of licenses	Required Qualifications	Basic Qualifications	Minimum number of credits					sum
			Subjects related to the subject	Subjects related to the teaching profession	Subjects or subjects related to the teaching profession	Special Education Subjects	Others (Note)	
Elementary School Teacher	Specialized license	Master's degree	8	41	34		8	91
	Type 1 license	Bachelor's degree	8	41	10		8	67
	Class 2 license	Junior College Bachelor's Degree	4	31	2		8	45
Junior High School Teacher	Specialized license	Master's degree	20	31	32		8	91
	Type 1 license	Bachelor's degree	20	31	8		8	67
	Class 2 license	Junior College Bachelor's Degree	10	21	4		8	43
High School Teacher	Specialized license	Master's degree	20	23	40		8	91
	Type 1 license	Bachelor's degree	20	23	16		8	67
Teacher, School for the Blind and School for the Deaf	Specialized license	Master's degree and license for elementary, junior high, high school, and kindergarten teachers					47	47
	Type 1 license	Bachelor's degree and license for teaching elementary schools, junior high schools, high schools, and kindergartens					23	23
	Class 2 license	Elementary school, junior high school, high school, and kindergarten teacher's license					13	13
Kindergarten Teacher	Specialized license	Master's degree	6	35	34		8	83
	Type 1 license	Bachelor's degree	6	35	10		8	59
	Class 2 license	Junior College Bachelor's Degree	4	27			8	39

Note 1. Other subjects are the Constitution of Japan, Physical Education, Foreign Language Communication, and Operation of Information Equipment.
 Note 2. In addition, there are licenses for yoga teachers and nutrition teachers.

Figure 2. Minimum number of credits in specific subjects to become a teacher in Japan (MEXT, 2022-a).

The different types of certificates and their minimum requirements are outlined in Figure 2 (MEXT, 2022-a). In addition to the type of license there are requirements on the contents. A Type I license with a 4-year bachelor's degree for Elementary school teacher will be explained. There are four categories of compulsory subjects: 1) minimum of 8 credits in school subjects (20 for Junior High School), 2) 41 credits in pedagogy and practice, 3) 34 credits that can be either pedagogy, teaching methods or a combination, and 4) special subjects listed in Note 1 and 2 (Figure 2). In addition, most universities require a graduation theses of 8 credits. These subjects were introduced as compulsory by a new reform from 2019 (MEXT, 2017). They will be elaborated in the next chapters. To earn a master's degree an



extra 30 credits is required on top of the 4-year bachelor's degree.

7. Elementary school teacher education (Grade 1-6)

The majority of Elementary school teachers in Japan are women, 63,9%. They must take credits in all ten school subjects to earn a Type I license based on a 4-year bachelor's degree. This is quite different from Norway. To earn a 5-year master's degree, that is compulsory in Norway, an extra 30 credits is required on top of the 4-year bachelor's degree.

According to the national guidelines "each school should formulate a proper curriculum in compliance with the Basic Act on Education etc." (MEXT, 2017). These guidelines are less specific than qualification frameworks in Europe (Cedefop, 2020). However, the textbooks that is used in schools is "verified by the state, with the request that school education be conducted in line with these textbooks (Horio, 1987, p. 199; Nishioka, 2017, p.17). This has long been a controversial topic that makes textbooks the curriculum itself. The advantage is that the education is fairly similar on a national basis, but also rigid and standardized.

In the Teacher universities each university design their own curriculum as long as they comply with national criteria. A review of three current university plans shows a clear distinction between *teaching* and *learning* and that concepts such as *help ... aquire ... foster ... enrich ... develop ... motivate ... learn ... study habits* and *goals* are frequently used. In more recent plans, the concept of *competence* has been introduced more strongly, as in Norway and other countries. In that sense they are pragmatic and flexible types of curriculums close to the idea of Dewey (1902).

7.1 Pedagogy and practice

Pedagogy and practice are compulsory in all teacher education in Japan and consists of topics on the teaching profession, classroom management, students counselling and moral education.

Kizuna is a pedagogical concept teachers and teacher students often refer too, and they refer to teaching as a *calling* defined by the Basic law of education. *Kizuna* means the enduring bonds between people, as close relationships forged through mutual trust and support. *Kizuna* can be observed in a wider context among people, like during natural calamities which fosters feelings of solidarity and serves as the underlying strength to overcome hardships.



“*Chi, Toku, Tai*” are three other pedagogical metaphors teachers sometimes referred to. They represent some overall values and a focal point for good teaching. They are also used in documents with their unique kanji characters by the Ministry of education (MEXT, 2022-c). Briefly explained: “*Chi*” refer to solid academic ability, “*Toku*” to richness in humanity and “*Tai*” healthy body. In the West, Johann Friedrich Pestalozzi expressed similar metaphors to express a holistic philosophy in education (Myhre, 1991, p.83).

More formally, the content of pedagogy consists of theory and practice, and some special subjects made compulsory from 2019 (*Table 2*). Their purpose is to strengthen moral, “love for the country” and “patriotism” in a globalized world. They will be elaborated more in the next chapters. Each university structures content and progression in its own way, but can be briefly explained as follows:

In the first year, the focus is on learning, which is the foundation of children's understanding. From the second year, students choose one of three courses according to their specialty and career path. Students acquire the ability to respond to the diverse forms of support required in the field of education and broaden their career paths.

First, in the introductory subjects of educational development, students learn the basics of understanding children, including psychological, developmental, and disability issues. In the second year, students are divided into courses to deepen their expertise while emphasizing on campus practice. From the third year, students learn specific theories and methods for supporting child development. Students develop their practical skills through exercises on campus in which they learn independently. The university specific subject varies between institutions. Bukkyo university offered only one subject on human rights education. At Seinan university the students chose between 5 subjects: human rights education, Dowa, teaching practice or foreign language (Seinan, 2022, p.176). Dowa refers to a national movement to redress discrimination and to improve school attendances among minorities like Ainu and Buraku people (Okano and Tsuchiya, 1999, p.45).

In the fourth year, the students have to do a graduation theses of 8 credits. They prepare their problem and research design under guidance with presentation and discussions in the class before implementation. The final theses is submitted for evaluation. From the participating discussion the following examples of research topics were noted: “Education and care”, “Self-control”, “How children deal with music”, “The role of play in learning”, “LEGO”, “Assessment and social class”, “Analyses of Indonesian curriculum”.



Table 2. Minimum number of credits in pedagogy, teaching practice and Article 66-6 subjects for Type 1 Teacher certificate. The column on the right shows examples of how the requirements are operationalized at Bukkyo university (2020) and Sseinan university (2022, p. 176). (Translated from Japanese).

National minimum criteria	Credits	Examples from universities (Credits)	Credits
A. Pedagogy and practice:		<i>Principles of Education</i>	2
<i>The teaching profession</i>	2	<i>Introduction to School Teaching Professions</i>	3
<i>Basic theory of education</i>	6	<i>Sociology of Education</i>	2
<i>Curriculum, instruction and methods</i>	12	<i>Educational Psychology</i>	2
<i>Student counselling and career guidance</i>	4	<i>Understanding and support for special educational needs</i>	2
<i>Seminars</i>	2	<i>School Curriculum</i>	2
<i>Teaching practice</i>	5	<i>Moral Theory and Teaching Methods</i>	2
<i>Elective: Related to pedagogy or school subjects</i>	(8)	<i>Integrated Learning Time Teaching Methods</i>	2
		<i>Educational methodology (including ICT utilization)</i>	2
		<i>Theories and Methods of Student Guidance and Career Guidance</i>	2
B. Article 66-6:		<i>Theory and method of educational consultation</i>	2
<i>Constitution of Japan</i>	2	<i>Teaching Practice</i>	2
<i>Gymnastics</i>	2	<i>Teaching Practice Guidance</i>	2
<i>Foreign language communication</i>	2	<i>Practical Seminar for Teaching Profession (Teacher)</i>	2
<i>Information Processing</i>	2		
<i>Nursing Care</i>	1	+ Article 66-6)	8
C. University specific subj.	2	+ University specific subjects	2
		+ Graduation theses (8)	8
Sum	41 (48)		48

7.1 Moral education (道徳, *dōtoku*). Compulsory from 2017

Moral education was introduced as a compulsory subject with the latest reform in Japanese teacher education (MEXT, 2019). The content bears the stamp of rules and has no direct references to religion or ethical theory. It amounts to 35 hours a year, which is significantly lower than, for example, religion and ethics in the Norwegian school (Hagen, 2020).

Historically, moral education, its aims and methods, has been one of the most debated and controversial topics on education in Japan after 1945 (NIER, 2013; Naito, 1988). Its status as a subject seems unclear, but in teacher education it is taken care of by the subject pedagogy.

When asked, teachers and teacher students referred to concepts like *Toku Iku* and *Ikiru Chikara* which can be translated as ethics and zest for living. There are also national guidelines through a “*Notebooks for the Heart*” (*Kokoro no Noto*). Reported content and forms of learning varied but work with the school's rules and various cases such as personal responsibility, consideration for others, respect for nature and social cases such as bullying



were mentioned. Teachers also mentioned some odd practices like “morning running” and “gymnastics” as means of strengthening the students moral.

Local researchers claim that the Japanese society is changing due to globalization, and that social differences and conflicts like bullying are increasing. They point out that the school is characterized by rules and that teachers no longer have the same authority as before. “The school is flooded with rules” that are not well suited to teaching children to acquire and internalize moral and ethical attitudes (Naito, 1990, p. 10). Surveys also indicate that young people see these rules as temporary, that respect for them decreases with age and that they are not perceived as an ethical compass in long life situations.

The contradictions on moral education sharpened after late Shinzu Abe became prime minister for the first time in 2006 (Bamkin, 2018). His desire was to boost moral education for young people in a bid to prevent crimes and bullying, as well as provide greater support for juveniles isolated from society. The term *morality* was then included in the Education Act and put into practice in new curricula in 2008. In 2017, the subject was introduced as a special subject at school and compulsory in all teacher education (MEXT, 2017). To enrich and support moral education in all subjects new teaching materials were prepared for elementary and junior high school. 2 credits on moral education were also made compulsory in teacher education from 2019, included in the subject pedagogy. In addition, Japanese constitution and nursing care which can be understood in the context of moral education. Government officials have also cited school bullying as a major reason for the curriculum change, as it led to the suicide of a high school student (Kawai, 2020; Ashai Shimbun, 2020). More jarring was a decision announced last Friday to include “jukendo”, a martial art based on bayonet fighting, among sports that can be taught in junior high schools, a step that one local governor tweeted showed a “nostalgia for militarism”.

Those who have criticized moral education point to Japan's militaristic history before 1945 and a revival of the *Sushin* from before 1945, (Naito, 1990). *Sushin* was associated with indoctrination and militarization in schools and not compatible with freedom and democracy. Therefore, the subject was banned, and moral education was integrated into all the school's subjects. The American occupation forces was more in line with Dewey ideas that ‘the moral purpose of the school is universal and dominant in all instruction, whatever the topic’ (Dewey, 1909, p. 2).



7.2 Teaching practice

Teaching practice is compulsory and requires students to earn 5 credits in the prescribed subjects. It takes about 4 weeks for those who wish to obtain an elementary school license, about 3 weeks for junior high school, and about 2 weeks for high school. This is far less than in Norway and many other countries. On the other hand, there is an Article 23 of the Act on Education and Public Servants: for one year from the date of hiring, newly hired teachers are required to receive practical training in order to cultivate practical leadership skills and a sense of mission at the school.

Each university organizes practice in its own way and may consist of classes at the university with pre- and post-guidance in the third year, and practical training conducted at schools in the fourth year. If they cannot earn credits in the third year, they will not be sent to teaching practice. After the completion of the teaching practice, reflection meetings are held to nurture better teachers. In addition, the Practical Seminar for the Teaching Profession is set as the last semester so that students can look back on their past classes and think about whether they have acquired the knowledge and skills necessary as teachers and what they will need in the future.

Some teacher students may already have been school volunteers. They may have experienced such as guidance on club activities, individual learning support in class, and support for leading school events. By observing the school from the student's point of view, you learn what kind of teacher they want to be in the future, the role of teachers in the school field, and faculty and staff cooperation.

As a means of professional development teacher, some local governments may have a system of internship to realize the educational task as a school that is compatible with their school's educational objectives (Nishioka, 2017).

7.4 Special needs education and Yogo teachers

The term "special needs" in Japan constitute a wide range of conditions, from learning difficulties such as dyslexia to intellectual or physical disabilities (Isogai, 2017). Some early signs can be developmental delays in speech, motor, socialization or other skills.



Special needs education teachers must acquire both a teaching certificate for the relevant level of school and a teaching certificate for special needs education (NISE, 2017). A minimum of 27 credits in special needs education is required for a Type 1 license (*Figure 2*). For a special license a master's degree is required and a minimum of 47 credits in special education.

Programs in special need education is based on the idea of inclusive education but transfer to special schools seem still more common in Japan than in Norway and some countries.

Discussions on this topic was observed in classes with teacher students and they explained three methods of assistance in Japanese public schools. The lowest-need group is taught within regular classes at public schools, using team teaching and small-group teaching. The next approach is a resource room system, which students attend several times a week for special instructions. This is for children with speech or language impairment, autism, emotional disturbance, visual or hearing impairment, attention deficit/hyperactivity disorder or learning disabilities. The third method is special needs education classes at regular public schools. Around 62% of schools run such lessons, which are limited to eight students a class. This is for children with relatively mild intellectual or physical/motor disabilities, autism/emotional disturbance, or health, visual, hearing or speech/language impairment

Most Japanese schools of all levels have one or more Yogo teachers instead of school nurses. They are special licensed educators who support children's growth and development through health education and health services. They promote the principles of health in all areas of educational activities in schools. According to the school health and safety law, every school must have a health room where students can receive both physical and emotional care maintained by the Yogo teachers. They work with both children, teachers, parents, and the community within their role of coordinating and promoting health at school.

7.5 School subjects and methods of instruction (Grade 1-6)

This part elaborates further on school subjects in Elementary teacher education for Grade 1-6. Elementary school teachers must take a minimum of 2 credits in all nine school subjects to earn a valid certificate for Elementary school teacher (Table 3). A certificate for teaching in junior high school or high school only one school subject is required, but most teacher take more credits in one or more school subject. Some teachers take a certificate for both Elementary school teacher and Secondary school teacher. In this analyses, five subjects are used as examples: Japanese language and calligraphy, Mathematics, Social science, Arts and



Crafts and Foreign Language. The curriculum from one of the Teacher universities are used.

Table 3. Minimum credits in school subjects and teaching methods, Type 1 Teacher (1 Credit ~ 2 ECTS)
For Secondary school teacher license minimum 1 school subjects of 20 credits is required

School subjects	Elementary School Teacher	Secondary School Teacher
<i>Japanese language and calligraphy</i>	2	(20)
<i>Social science (1)</i>	2	(20)
<i>Mathematics</i>	2	(20)
<i>Science (1)</i>	2	(20)
<i>Home economics</i>	2	(20)
<i>Music</i>	2	(20)
<i>Arts and Crafts</i>	2	(20)
<i>Family</i>	2	(20)
<i>Physical education</i>	2	(20)
<i>Foreign Language</i>	2	(20)
<i>Teaching methods (Subject didactics)</i>	10	10
<i>Graduation theses</i>	8	8
Sum	38	38

Japanese language and calligraphy is very different from teaching Norwegian and most other mother languages. In the curriculum it is defined as a basic subject as well as a key to learning other subjects, an argument that is also emphasized in Norway. The content is Japanese, Japanese literature and calligraphy. Calligraphy can be compared to *skriftforming* in Norwegian teacher education. But in Japan, calligraphy is also a key to learning the morphographic *kanji*, which is one of the three scripts used in the Japanese language. The other two are *hiragana* and *katakana*. A big challenge for foreigners to learn. An interesting point is that Japan has been considered dyslexia-free because of the nature of the orthography, but without any clear conclusion (Wydell, 2019).

In elementary school, Japanese children learn more than 1000 kanji and there are some unique methods to teach it. There is more than just plain memorizing involved, but also the basics of the meaning, stroke order, and different readings for each kanji. Often there are colorful pictures appealing to children and easy-to-understand practice sentences. There are also various tips and tricks for fixing the kanji in their memory. Handwriting is emphasized by using special sheets and repeated action of writing to help cement the knowledge more firmly through reading alone. Writing also forces students to focus on the shape of a character, emphasizing the difference between similar kanji that are easily confused.



In order to accomplish appropriate instruction of a diverse group of students in all subjects at different levels and ages of children, students in the language course strive to acquire firm academic as well as practical teaching skills based in Japanese through a carefully chosen curriculum. For this reason, the division is staffed with specialists in various areas of Japanese education such as Japanese education, children's literature, Japanese philology, Japanese literature and calligraphy. The division also provides opportunities for on-site learning so that prospective teachers will be equipped with academic skills and teaching abilities appropriate for elementary school teachers.

Mathematics and science are the subjects in which Japanese students score high, and significantly higher than, for example, Norwegian students (TIMMS&PIRLS, 2019). The observed teaching was structured and well organized, partly with students in groups called “*han*”. The teaching methods may be a possible explanation for the good results (Isoda, 2010), but the most visible difference is that *soroban* (abacus) is still used in Japan. Teachers emphasized that it provides both a visual and tactile input to understanding quantities, numbers, and arithmetic. The pupils also had access to good worksheets, but otherwise not particularly different from similar teaching in Norway. The fact that many go to cram schools may also have an effect. Another relationship that may be significant is that teachers had good knowledge of mathematics before they started their teacher studies, and they were tested in mathematics after their studies in order to get their license. In the teacher education curriculum consists of algebra geometry, analyses, probability statistics, and computer science. The subject aims to cultivate highly skilled teachers who excel in arithmetic and mathematics. The university stress the students to gain accurate understanding of the meaning of and methods in mathematics and use such understanding in a classroom environment. The first year consists of the foundation of mathematics with subjects such as differential and integral calculus. From the second year, specialized subjects in algebra, geometry, and mathematical analysis as well as those related to mathematical education are taught.

Social science in the teacher education curriculum is explained as students strive to acquire abilities to teach and develop class based "social studies." The content includes Japanese and world history, geography, law, economics, philosophy, ethics and religion. The course aims to cultivate student abilities to think critically, understand, and perform research on social issues. But even if critical thinking is emphasized in the curriculum, it is a sore point in Japanese education (Dunn 2015). But some unique projects were observed: At Hakata Seisho HS an interesting project on gender equality and LGBT was presented for the whole school. The



same issue was discussed with great commitment with teacher students at Seinan university in Fukuoka. Finally, a project on peace education at Ashaioka HS in Nagoya (Ashaioka, 2022).

The progress emphasize introduction to social science and social studies in the first year through seminars and survey courses. Students also participate in training courses at affiliated schools. In the second year, students continue with the seminars and survey courses and they begin their practical teaching training including research on social studies practical research. In the third and fourth years, students conduct specialized research in areas of their choice in training seminars for two years. Those who take social science as their major also spend the fourth year writing their graduation theses. In addition, students participate in practice teach for two years.

English communication is a new compulsory subject for all teacher students. The argument is that English is the subject in which Japanese pupils and students score the lowest. This is because foreign language until recently has been given low priority in schools and that teachers have had limited skills in English. Their teaching has been characterized by memorizing words that are easy to test but of little use for practical use. Classes with 40 students and more have also made it difficult to practice communication.

The new curriculum aims at cultivating basic knowledge appropriate for teachers in primary school. It also trains students to become teachers who can take initiative in elementary school English activities with the emphasis on listening and speaking. Students are also trained to take into consideration how elementary school English prepares for junior high school English education.

Arts and Crafts is a compulsory subject in elementary school teacher education and in primary school grades 1 - 6 and 7- 9. But the number of hours is significantly lower than, for example, in Norway. In Japan, arts is also a compulsory subject in high school grade 10 - 12. In the teaching, emphasis is placed on a wide selection of materials and techniques. But it is considered to be somewhat instrumental with an emphasis on copying and the use of techniques to achieve a good result. *Origami* is a special form of Japanese paper art that is learned and used in many contexts.

The curriculum aims at nurturing students to become highly skilled elementary school teachers with strong creative and practical abilities. Classes are sometimes organized as project integrating practical training, lectures and workshops. The content covers the topics



basics of painting, sculpture, design, craft and art theory, modeling, life-design and art appreciation. From 5th grade and above, some teachers have specialized art education.

Integrated studies and special activities, with 50 and 35 hours respectively, correspond to interdisciplinary themes in the new curriculum in Norway (Udir, 2020). The purpose is to help the students understand subjects in a context and work with issues that are not directly linked to a single subject. One of the themes is related to sustainable development goals (SDG). In 2005, the Ministry of Education in Japan also adopted a ten-year plan for education in sustainability (MEXT, 2005). Professors of social science in teacher education reported that it was not much emphasized in teacher education, but some projects were observed in elementary and secondary schools (Aakre, 2021). One of the projects had focus on peace education involving students in Japan and South Korea (Asahioka, 2021). Historically, the two countries have a complicated relationship that still creates conflicts. Some other observed projects were related to environmental education, but most academic oriented secondary schools seem more focused on classical discipline subjects.

8. Secondary School Teacher Education (Grade 7-9 and 10-12)

In this part only major differences from Elementary school teacher education are highlighted and discussed. The majority of teachers in secondary schools are men, about 62%.

In the transition to junior high school, there is gradual differentiation in that students apply to schools with high prestige. Many students also prepare via cram schools called *Yuku*. At junior high school the teaching becomes more specialized than in elementary school, and it has more focus on academic knowledge and preparation for entrance examination to high prestige universities. Similar proposals have recently been put forward in Norway (Høyre, 2022). In Japan there is also differentiation in that the proportion of private schools increases at higher levels of education. The entrance examination system is one of the most discussed and controversial topics in Japanese education. The entrance examination system is one of the most discussed and controversial topics in Japanese education. Partly because it limits childhood as a value in itself and leads to stress and mental problems, but also because that type of test does not provide a good basis for the competence a modern society needs.



Pedagogy and practice are similar to the subject in elementary school teacher education, but adapted to the level of school, grade 7 - 9 and 10 - 12.

School subjects and methods of instruction also have many similarities, but there is one major difference: secondary school teachers must take minimum 20 credits in a school subject and 10 credits of methods of instruction in the same subject, total 30 credits. However, most teacher students take credits in more than one school subjects, either for elementary school and or secondary school.

Secondary education teachers are required to have not only the knowledge of a particular subject, but also the ability to teach students, who are growing from childhood to adulthood, The graduate schools intended to educate future secondary education teachers with a good balance of firm special knowledge and practical skills by deepening the specialty of the major as well as promoting frequent visits between the university and educational fields.

Practice (grade 7-9 and 10-12) also have many similarities, but they can settle for a shorter period of practice at school, just four weeks. It is considerably less than in, for example, Norway.

Special subjects that became compulsory from 2019 are the same in all teacher education but adapted to the levels for which the students are taking education.

9. Professional development

Professional development is the very hub of Japanese teacher education, mandated by law as a lifelong process in Article 9 of the Basic Act on Education: “Teachers of the schools prescribed by law shall endeavor to fulfill their duties while remaining deeply conscious of the exalted nature of their calling and continuously devoting themselves to research and self-improvement” (MEXT, 2006).

Professional development consists of measures before, during and after teacher education. What includes practice during education is described under pedagogy and practice, while professional development after education is a comprehensive system that includes measures for new teachers, updates after a few years and measures aimed at recruiting school leaders (MEXT, 2009). Furthermore, it is the case that the local school authorities decide which schools the teachers will work at, and teachers are moved to other schools at regular intervals.



It would hardly be conceivable in Norway, but perhaps helps to spread and sharing of experience between schools and teachers.

School-based *lesson study* has been a major source of professional development in Japan for many years (Tanaka et.al, 2017). Lesson study has also attracted interest in Norway and other countries (Baugstø et al., 2017). It seems that lesson study is not so much emphasized in the teacher universities in Japan, but some students reported they had experience during practice in schools. Lesson study is more emphasized after graduation as a means of continuous improvement and professional learning that emphasizes mutual observation and reflection and planning. Teachers usually leads lesson study by themselves, but sometimes they invite faculty members from universities. Considering the purpose of the courses concerned, it is appropriate for the following three items to be additionally required of the teacher: 1) A sense of mission and responsibility, and a passion for education, 2) Social and interpersonal skills and 3) Understanding children and students and classroom management.

From a critical point of view, it must be noted that the way lesson study is practiced can seem somewhat instrumental, for example together with Deming's circle with the four categories of “Plan - Do - Check – Action” that was widely adopted by Japan industry in the 1950’s (Deming, 2018). It can work well when improving existing practice, but in the face of new practice and new challenges, a more creative approach is needed, a form of double-loop learning (Aakre, 2013).

The establishment of new graduate courses for teaching staff is expected to promote more effective efforts in teacher training, as it demonstrates models for systematically training well qualified teachers, effective educational methods, and the guidance system. In addition, the establishment of new graduate courses for teaching staff is expected to secure guidance teachers who share a common awareness and aims to foster teachers to be highly specialized professionals and experienced teachers.

Japan is known for both developing and adopting advanced technology in industry and business, and in many other areas. But when it comes to school and teaching, they lag behind many countries. Young teacher students were observed as active users of digital technology and social media, but in schools the teaching methods are more traditional due to lack of equipment. This has raised concerns among the school authorities for many years and is the reason why the use of digital teaching aids was introduced as a compulsory subject in all



teacher education from 2019 (MEXT, 2017). But the biggest challenge remains: Changing practice in schools.

Japan has an internationally oriented economy and is highly dependent on trade and cooperation with other countries. It is then a paradox that education has become more inward-looking, which is expressed, among other things, in weak language skills and lower student exchange rates than many of the countries they trade with. This has been a concern in recent years and measures have been taken to increase internationalization. Despite these promising results, Japan's inbound mobility rate remains low compared to that of other developed countries. Although increasing by more than a third over the previous decade, Japan's inbound mobility rate stood at just 4.7 percent in 2018. Several obstacles hinder efforts to increase international student enrollments, most notably, language. Despite attempts to increase their English language offerings, few programs in Japanese universities are taught in English

Assistant language teachers were observed at two schools. They are native English-speaking teachers who teach Japanese students about their native countries, in the course of teaching English conversation. Foreign students and resident foreigners may also be invited to schools. Most universities have already established exchange programs and conduct classes taught in English. One of the universities with teacher programs reported they had 80 exchange students in 2018, before the pandemic caused universities to close most of their exchange.

Global Schools is an initiative of a UN network which Japan has joined to support the implementation of the Sustainable Development Goals (Aakre, 2021). This program was observed at two high schools. One of the schools focused on peace education and a special program on partnership between Japan and South Korea (Ashaioka, 2021).

10. Discussions – a Norwegian perspective

From a Norwegian perspective, one found that teacher education in Japan is different from teacher education in Norway. A candidate must first pass the entrance exam for teacher education. After passing teacher education from an approved university, those applying for a teaching position must take a separate exam to obtain a license for the type of school they will be teaching in. This is followed by a candidate year before they can be appointed permanently. As permanent teachers, they are also transferred to other schools every few



years. This means that only 1 in 5 with a teacher education can count on getting a permanent job. It is also closely related to the fact that fewer children are born in Japan and that the youth cohorts are smaller.

Japanese teachers seem more valued and respected than teachers in Norway, even though the salary level is quite similar. But Japanese teachers have limited autonomy. Expressing criticism will easily conflict with the importance of harmony and good relationships, and it may have a negative effect on your career. Teachers' unions have long been opposed by the authorities, they are weak and had a declining number of members for many years. This is different from Norway, where more than 95% of teachers are members of a union and play an active role in the design of education policy.

Japanese teachers work long hours, and they only have a couple of weeks of vacation. This is because they have many tasks that Norwegian teachers do not have, for example responsibility for leisure activities in the evenings and during holidays. Japanese students also have projects during the holidays which the teachers have to follow up on. Like Norway, the majority of primary school teachers are women, while men make up the majority of teachers at secondary level.

The structure and content of Japanese teacher education is also different from Norway. It is based on an open university system that is more similar to university education in combination with practical-pedagogical education (PPU) in Norway. The majority of Japanese teachers have a 4-year bachelor's degree, but the number of credits is higher than a regular bachelor and corresponds to a Norwegian 5-year master's degree. That means it is more flexible with a combination of national requirements, university degree programs and the student's free choice of subjects.

Pedagogy, didactic and practice make up more than one year of study compared to Norway, but in Japan significantly less practice is required. On the other hand, Japanese teachers have a one-year internship with special follow-up at the school they are appointed to. Japan also has a well-developed system for professional development in practice through, among other things, lesson study, which is used in most schools. From a critical point of view, it must be noted that the way lesson study is practiced can seem somewhat instrumental, for example together with Deming's circle with the four categories of "*plan - do - check - action*". It can work well when improving existing practice, but in the face of changing to new practice and new challenges, there will be a need for a creative element, a form of double-loop learning.



The teaching in Japan is dominated by textbooks approved by the government. The teaching practice therefore seems standardized with the advantages and disadvantages it provides. This is different from Norway, where the curriculum governs their teaching, and the teachers have the freedom to choose suitable content and method themselves. That might be why OECD surveys indicate that Japanese teachers are less involved in curriculum design than Norwegian teachers.

Recent reforms are also different. While Norway has prioritized less subjects, longer and more specialized education, Japan has emphasized topics like moral education, English communication, gymnastics, national values, health and nursing care and improved digital competence as compulsory subjects for all teachers.

The survey also found that teachers in Japan show a high level of competence and they lead their students to high performances on international tests, especially in mathematics and science. Japan has this in common with countries such as Singapore, Taiwan/China, Hong Kong/China and South Korea where the Confucian way of thinking and views on education have a long, and well-built tradition. Social codes that resemble Confucian principles as described in the theory were experienced and observed. Especially with regard to the hierarchical structure of Japanese society and the complicated rules that apply based on the status of the individual. But today's Japan is far more complicated in that both Confucianism, Shinto and Buddhist religion as well as Christian and secular values are at play.

However, the good results on a few subjects may rather be explained by prioritization at the expense of other human values and areas of society such as individuality, freedom, and democracy etc. The entrance examination system is one of the most discussed and controversial topics in Japanese education. Partly because it limits childhood as a value in itself and leads to stress and mental problems, but also because that type of test does not provide a good basis for the competence a modern Japan needs. Teachers also report that they feel pressure to achieve good results on tests and that teaching for testing is a problem. This happens because schools are ranked according to how many students enter highly prestigious universities. Norway experienced similar problems since the first Pisa-shock in 2001.

Elementary school teacher education for grade 1 - 6 in Japan is broader than similar teacher education for grade 1 - 7 in Norway after the 2017 reform. On the other hand, teacher education for secondary school grade 7 - 9 and 10 - 12 in Japan require specialization in only 1 school subject is required, and a master's degree is not compulsory. On the other hand, most



Japanese teachers has a broad base of knowledge from a 4-year bachelor programs. Teaching from junior high school onwards is more academic and competitive than in Norway, and many schools has focus on entrance exam and teaching for testing.

Formally, Japan has a basic law on education is secular. On the other hand, values from both Shinto and Buddhist religion and Confucian philosophy were observed. These values can be observed as being considerate and respectful to others, be polite don't be greedy, act for the good of the whole, don't lie, keep your promises and be honest, etc. These values are qualities most cultures would be proud to have. They also correspond to Christian and humanistic values as they are expressed in Norwegian education. But perhaps they go deeper and are more binding in Japanese culture. On the other hand, problems such as bullying and suicide among pupils are serious problems, especially at junior high school level.

In Norway, ethnic minorities such as *Same* and *Kven* have special rights with regard to their own language and culture in education. In Japan, *Ainu and Koreans* do not have similar rights and the topic is not compulsory in teacher education. Socially discriminated groups like the *Buraku* people do not have such rights either and their rights have been weakened in later reforms. On the other hand, some teacher universities still offer *Dowa* as a 2-credit special subject. *Dowa* refers to a national movement to redress discrimination and to improve school attendances among minorities like *Ainu* and *Buraku* people

Critical thinking has entered recent Japanese curricula, but still seems to be a difficult topic. The hierarchical structure is early in Japanese society and still stands strong. Therefore, practicing criticism becomes hard and the Japanese school has no tradition for it.

Information technology is another new compulsory subject. Based on what was observed, today's university students in Japan are active users of new technology and social media like students in Norway, but in schools the teaching seems more traditional. Mobiles and tablets were observed in university classes, but not in schools other than in special rooms. On the other hand, it may have its advantages in relation to concentration in subjects such as reading, writing and arithmetic where Japanese students score highly. Less unrest and less downtime than in Norwegian schools was observed. Such factors can help to explain good learning results in the Japanese school

Japan has a unique category of teachers called "Nursing teacher" called "Yogo teacher". Their role is to help students in their mental and physical development and healthy food practice. From 2019 all Japanese teacher students must take credit in nursing care and have practice at



a nursing institution. The idea seems to be to transfer skills to their classes, and to involve young students in respect and care for elderly and other social groups who need care.

Despite many differences and some similarities with teacher education in Norway, the differences found are not so much about teaching content and methods. It is more about national prioritization, culture and what is believed to contribute best to sustainable development nationally and globally.

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