

Ceramics: The Seto Ceramics School

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This chapter outlines the Seto Ceramics School that was founded in 1895 in accordance with the Regulations for Apprentice Schools. This school, which has a history of nearly ninety years, has kept up with the trends of each era and has continued to develop every year in spite of wars, natural calamities, and repeated reforms of the school system since the Meiji period. In 1920 the school was renamed the Aichi Prefectural Ceramics School. Its academic level was equivalent to that of a technical school. This chapter primarily deals with the period of the apprentice school prior to its renaming.

The main fuel for ceramic firing had been coal until heavy oil came to be used after World War II. Thus the town of Seto was so full of soot and smoke that it was said that even the sparrows in Seto were black. Moreover, due to the refining of clay, the Seto River, which flows through the center of the town, was a constant opaque white. These two effluents symbolized the prosperity of the ceramic industry in Seto. This is the reason Koide Tanehiko's biography of entrepreneur Yamashiro Ryūhei was titled *Kuroi Kemuri to Shiroi Kawa* [Black Smoke and the White River], which relates the hard experiences of the production of porcelain dolls referred to as "novelties."

The area stretching from Seto, which is located at the edge of the Owari Hill where it opens up the west, to Mt. Sanage on the east and Tajimi City, Gifu Prefecture, on the north, has been producing high-quality porcelain clay for nearly one thousand years. Seto is one of the "six ancient kilns of Japan." Seto ceramics are so widely used that the general term for ceramic ware is *setomono* (Seto thing).

I. The Establishment of the Apprentice School

The national policy of "Enrich the Nation and Strengthen the Military: Increase Production and Promote Industry" had been exhorted since the Meiji Restoration. From the late 1880s, the economic structure was undergoing change and the industrial revolution was gradually progressing because of the implementation of various systems, the accumulation of a certain amount of capital, the concentration of the work force, and the development of industrial production.

To cope with this social development, industrial education—in particular, technical education—needed to be promoted and expanded. Inoue Kowashi, Minister of Education in the second Itō Cabinet, was an important presence during this important phase; through his zeal, epochal industrial education promotion measures were successively introduced during his term of office from March 1893 to August 1894. One of these important measures was the Regulations for Apprentice Schools which was promulgated in July 1894 with a total of 15 articles. Article 1 stated that "an apprentice school is an institution that offers the necessary curriculum for one to become a worker." Its objective, therefore, was to admit students into primary technical education which was systematic so that they could acquire modern industrial knowledge and technology in lieu of the conventional apprentice system which was related to indentured service. (In the case of the Seto area, most apprentices first became live-in underservants who did miscellaneous jobs from about the age of 11 or 12 for three years in exchange for room, board, and clothing. From about the third year, they were paid a daily wage of 8 to 10 sen, and from about the age of 20, they were regarded as qualified artisans.) The apprentice school truly aimed at nurturing technological bearers of civilization and enlightenment and increasing production and industrial promotion in Japan. According to the Ministry of Education Annual Report, there was only one dyeing school in Kyoto in 1894 when the regulations were promulgated. In the 23rd Annual Report for 1895, however, new schools including the Seto Ceramics School, the Hongō Ceramics Apprentice School in Fukushima, the Tsuruoka Dyeing School in Yamagata and the Arita Apprentice School in Saga had been established. From that time onward, many of the apprentice schools which were established throughout the country every year pertained to such traditional industries of the locality as woodwork, metalwork and lacquerwork. The 23rd Annual Report, in which the name of the Seto Ceramics Apprentice School was mentioned for the first time, stated that the school

was founded in 1895 at Seto-chō, Higashi Kasugai County, Owari Province. The school offered a three-year course of study centered on a ceramics curriculum; it had one classroom, four teachers, and 18 students, and its total expenditure for the year had been ¥937.

II. The School's Founding

It was on 1 October 1895 that this school was opened with the use of a tentative school building located at 2191 Seto-chō, on the basis of a request for its establishment submitted by the town's mayor to the governor of Aichi Prefecture in November of the previous year. The permit from the prefectural governor was granted on 2 February 1895, and on 21 July of the same year the Minister of Education notified the school that an annual subsidy of ¥1,000 would be endowed for five years starting from the day of the school's opening.

Nevertheless, it had been in reality about ten years earlier that influential local kiln owners had begun to see the need for a study of ceramic manufacture based upon scientific Western methods. There was increasingly a strong interest in the founding of a school among civilians who had participated in such a study and upon the establishment of the apprentice school system, it became possible to open one.

1. Semi-Farming and Semi-Ceramics

The environs of Seto have provided high quality Kibushi clay and Gairome clay which are said to be the best in the world, and there are clusters of old kilns which show the evidence of centuries of ceramic production. Despite the fief government's protection, many villagers during the Tokugawa period could not live entirely on ceramic production because there was a restriction on the total number of kilns in the village and because of the system of single child inheritance. As a result, many villagers pursued farming in addition to ceramic production. Upon entering the Meiji period, Seto, without any accumulation of capital, became subordinate to the commercial capital of Nagoya. Both in production and sales its kilns were "controlled kilns" of Nagoya. According to the 1885 "Outlook on Agriculture, Commerce, and Craft," the number of manufacturing households in Seto village was 208 with 690 workers. Since there were only 3.48 workers per household, it should be said that they were nothing but extremely small cottage industries. Table 6.1 shows the population in Seto in the Meiji period. It can be seen that there was a great increase after the establishment of the ceramics school up to the end of the Meiji period.

Table 6.1. Households and Population of Seto, 1872–1913

| | 1872 | 1882 | 1892 | 1902 | 1912 | 1913 |
|----------------------|-------|-------|-------|-------|-------|--------|
| Number of Households | 663 | 771 | 1,431 | 2,404 | 3,970 | 4,002 |
| Population | | | | | | |
| Male | 1,542 | 2,020 | 2,736 | 5,849 | 9,198 | 10,246 |
| Female | 1,442 | 1,851 | 2,645 | 5,041 | 8,163 | 9,334 |

Source: Seto-chō, *Seto-chō shi* [Seto Town Magazine] (Masuya Shoten), Nov. 1915, p. 6.

2. The Community

As can be seen from the history of Seto ceramics, the industry went through ups and downs repeatedly as it constantly met with harsh conditions during each period. Even during the period of feudalism when society tended to be closed, however, this town had the characteristic of “open land” due to technological exchange and product sales. The townspeople were relatively open and optimistically shrewd as they felt that they could somehow feed themselves as long as they had skills. Because independent “kiln artisans” who had completed apprenticeship often had had the experience of having worked at other ceramic production areas, there was also great population mobility at this place as people moved either to develop or transfer technology.

III. The Education and Outline of the Ceramics School

1. “Scamps’ School”

There was a detailed description on the history of this school in *Aichi kenritsu Seto yōgyō kōtō gakkō hachijūnen shi* [An 80-year History of Aichi Prefectural Seto Ceramics High School]. It is worth referring to because it is a fine commemorative bulletin in which precious data was compiled to be preserved for posterity.

At the time of the founding of the school, the buildings and equipment were very poor. There were about twenty people at the school including staff members and students, and it must have been more like a temple school than a modern school. Although a clear curriculum did not exist, the classes emphasized practical training based upon scientific principles such as soil analysis. Nevertheless, the academic level of the students who entered the school after having graduated from four years of ordinary elementary school was low. Boys of the same age were engaged in the most menial of jobs as apprentices at

ceramic manufacturers outside the school. At that time, these apprentices in Seto were called “scamps.” This derogatory term was applied to the ceramics school which was, to a large extent, looked down on as the “scamps school” or “mud-kneading school.” Such disparagement might have been a natural outcome of the early period when school education brought no achievement, causing a low attendance and high dropout rate. It should be pointed out that school education which did not lead to material gain was still evaluated poorly in a period when the elementary school enrollment rate barely reached the 50% to 60% level. The number of staff members, the enrolled students (at the beginning of each academic year) and the alumni is shown in Table 6.2.

2. The Establishment of School Rules

In October 1901 the school was renamed the Town-Run Seto Ceramics

Table 6.2. Faculty, Students, and Alumni of Seto Ceramics School, 1895–1911

| Year | Faculty | Students | Alumni | Remarks |
|------|---------|----------|--------|---|
| 1895 | 4 | 18 | 0 | |
| 1896 | 4 | 20 | 0 | |
| 1897 | 4 | 16 | 3 | The first graduating class had three students. |
| 1898 | 4 | 52 | 3 | |
| 1899 | 4 | 60 | 3 | |
| 1900 | 6 | 80 | 4 | |
| 1901 | 6 | 85 | 8 | Although many were enrolled at this time, only a few actually attended classes. |
| 1902 | 7 | 49 | 3 | |
| 1903 | 7 | 51 | 8 | |
| 1904 | 7 | 71 | 12 | |
| 1905 | 9 | 75 | 12 | |
| 1906 | 10 | 98 | 12 | |
| 1907 | 7 | 108 | 10 | |
| 1908 | 9 | 122 | 27 | |
| 1909 | 10 | 86 | 29 | |
| 1910 | 10 | (85) | 20 | The number of students given for this year is not accurate. |
| 1911 | 11 | 67 | 8 | The management was transferred to the prefecture from this year. |

Source: Aichi Prefecture Ceramics School, Alumni Association, *Kōyū* [School Fellows], No. 22 (April 1936): 148.

School. The school rules were revised, and the period of study was set at three years with a separate curriculum for the advanced level as well as for the ordinary level. Those who had finished more than two years of upper elementary school (the former system) had the qualifications to enter the advanced level course while those who had graduated from ordinary elementary school (the former four year system) entered the ordinary level course. The curriculum comprised of seven subjects such as ethics, Japanese, arithmetic, science, ceramic art, drawing, and practicals. At that time, the students apparently found science to be the most difficult subject.

In response to the revision of the Elementary School Act in 1909, the school rules were revised and the ordinary level course was abolished. The school rules of that time consisted of eight chapters and 26 clauses and their outline is given below.

Chapter 1. Objective. The objective of this school, which is based upon the Regulations for Apprentice Schools, is to provide the necessary education for those who in the future would be engaged in ceramic manufacturing.

Chapter 2. The Period of Study and the Number of School Days. The period of study is for three years. [One academic year lasts for about 37 weeks.] Forty periods are taught each week.

Chapter 3. Academic Year, Terms, and Holidays. The academic year begins on 1 April and ends on 31 March. The academic year is divided into three terms. School holidays are given on Sundays, National Holidays, Grand Festival Days, and the Festival of the Tutelary Deity of Pottery.

Chapter 4. Curriculum. The curriculum consists of ethics, Japanese, mathematics, science, ceramic art, designing, drawing, physical education, and practical training.

Either one or all three of the subjects composed of the potter's wheel, models, and ceramic drawing are chosen and studied as requirements for practical training.

Chapter 5. Admission, Enrollment and Dismissal. Boys older than 12 years with strong physique, good conduct, and firm purpose who either have graduated from ordinary elementary school (those who have completed a six-year curriculum) or possess the equivalent academic ability are qualified for admission. Whenever the number of applicants exceeds the capacity of the school, an entrance examination will be administered.

The principal will order the expulsion of students who infringe upon any one of the following points:

1. those whose behavior is too poor to be improved
2. those whose academic performance is too poor to be improved
3. those who are absent for more than half a year consecutively.

Chapter 6. Examinations. Examinations consist of term examinations and tentative examinations. The full mark is 100 points and anyone who infringes upon one of the following points fails an examination:

1. those who score less than 60 points for an average of all subjects combined
2. those who score less than 60 points in practical training
3. those who score either less than 40 points in any one subject, or less than 50 points in more than three subjects.

Chapter 7. Awards and Disciplinary Punishments. Those with excellent behavior and outstanding academic performance are awarded either certificates or prizes. Those who either violate school rules or school orders are punished according to the severity of the violation. Disciplinary punishments consist of reprimands, confinement, suspension, and expulsion.

Chapter 8. Tuition. The tuition is 30 sen per month and it is to be paid by the tenth of each month.

3. Teachers and Students

Instruction was given by one principal and three teachers for a period of five years after the school's opening. Although the principal alone had academic knowledge of the highest level at that time, it seems that the rest of the teachers were chosen from local experienced ceramicists. Their academic and family backgrounds are unknown. There were such cases as one teacher being in charge of several subjects, a designing teacher also teaching physical education, and an elementary schoolmaster also teaching at this school. The teachers' academic background was generally low, and it appears as if their qualifications had not been examined strictly.

On the other hand, the students could not have entered the school with such a clear-cut awareness of purpose and desire to study. If they needed to make a living, it was common to be employed as apprentices or shopboys immediately after graduating from elementary school. Thus those who entered this school were the children of economically better-off families. Nevertheless, there were many who dropped out of the school; more years were necessary before recognition of school education could take root among the people. With regard to expenses, the town's allocation of funds was insufficient, and it is not difficult to imagine how those who were involved with the school must have labored and exerted themselves.

It was an era in which students were still dressed in *haori* and *hakama* (kimono jacket and pantaloons). The instructional content was about the level of upper elementary school and emphasis was placed upon practical training. The practical training included every process of ceramic manufacturing such as clay kneading, clay refinery, elutriation, potter's wheel, finish, china-painting by hand, and firing.

In the interim, it is noteworthy that several students from the Philippines and Korea came to study at this school every year from 1908. However, for unknown reasons, foreign student enrollment was totally discontinued from 1914.

IV. A Group of Leaders

1. Wagner's Followers

The photograph of thirteen Japanese youth around a grey-haired foreigner in the center (Figure 6.1) was taken in 1890 and depicts Dr. Gottfried Wagner and the students of the Tokyo Worker Training School (presently the Tokyo Institute of Technology). Among these students Kitamura Yaichirō and Kuroda Masanori were both to become principals of the Seto Ceramics School, and Asukai Kōtarō became actively involved with the school as he later became a committee member. Among the others, Matsumura Hachijirō contributed greatly to the development of ceramics in the area around Nagoya.

Gottfried Wagner, a German scholar, came to Japan in the early Meiji period and during his stay of 25 years, he left immeasurable accomplishments in the development of modern industrial technology. He is sometimes called the founder of the Japanese ceramic industry. However, in view of the fact that his leadership was shown not only in ceramics but also in all aspects of technical education, he is a great benefactor whose achievements ought to be appraised more highly. It is not an exaggeration to say that the manner in which young and energetic students who studied under him played an active part in Nagoya and Seto was truly magnificent in the beginning stage of Japanese ceramics.

2. Kitamura Yaichirō, the First Principal

When Kitamura Yaichirō arrived at his post as the first principal of this school in October 1895, he was only 28 years old. In April 1897 he was transferred to the Kanazawa Technical School. Having studied in France and then having taken part in the Russo-Japanese War, he subsequently became chief of the Ceramics Section, Industrial Testing



Fig. 6.1. Dr. G. Wagner and Students of the Tokyo Worker Training School

Source: Mitsui Kōzō, *Gaisetsu kindai tōgyō shi* [An Outline of Modern Ceramic History], Japan Ceramic Industry Association, 1979, p. 10.

Center, the Ministry of Agriculture and Commerce. Due to his great accomplishments in the study of coal kiln and feldspathic ceramics, he was given a doctorate by Kyoto University. After resigning from a public post, he joined Matsukaze Ceramics Company in Kyoto and at the same time acted as an executive both to Nippon Hard Ceramics Company in Kanazawa and to a ceramics company in Korea. He was very diligent by nature and his research was detailed. He was also a gifted writer. He died in 1928 at the age of 59. There are three volumes of Kitamura Yaichirō's complete work on ceramics.

3. Kuroda Masanori, the Third Principal

After having graduated from the Department of Glass, Tokyo College of Technology in 1894, Kuroda Masanori took up posts at the Geological Research Center and the Steel Manufacturing Research Center belonging to the Ministry of Agriculture and Commerce. He then joined the Ceramics School in Tsuna County, Hyōgo Prefecture.

He subsequently became the principal of this school in 1900 and also acted as the Director of the Seto Ceramics Testing Center. Upon resigning in 1909, he took a post at the Middle Technical Center in Chengdu, Sichuan Province, China as well as being the director of the Technical Testing Center in Quanyedao in the same province. He returned to Japan two years later and was appointed the principal of the Arita Technical School. He died in 1919.

While Kuroda devoted himself to vocational education and training students, he gave guidance at various exhibitions. In addition to his official duties, he wrote specialized books and translated materials such as *Jitsuyō seitōgaku* [Practical Ceramic Studies]. His character was firm and his students loved and respected him.

4. Asukai Kōtarō

Tsukada Masao was the fourth principal at the school in the final two years of its management by the town. According to the 1909 School Directory, Tsukada was the principal as well as a teacher in charge of ethics, science, ceramic manufacturing, and practical training. Others listed were two teachers, one assistant teacher, one part-time teacher, three hired hands and one school doctor. In the School Directory, Asukai Kōtarō was listed as chief engineer for Nippon Gōmei Ceramic Company and mention was also made of his position as a school committee member together with four town assembly members who were engaged in ceramic manufacturing. He had also studied under Wagner. When he was teaching at the Tajimi Technical School, he was invited to join Morimura and Company (presently Nippon Tōki Co., Ltd.) and thus came to be an adviser on ceramic manufacturing technology in the Seto region. Because he had studied in Berlin and was one of the explorers of new technology who promoted research on a pure white base, it is assumed that he was involved with this school most likely as a technological advisor.

5. Kuroda Shōsaku, the Fifth Principal

Kuroda Shōsaku who took up the principal's position when the school's management was transferred to the prefecture in April 1911, had graduated from the Teachers' Training Center of the Tokyo Higher College of Technology and contributed greatly to the growth of this school until 1930. This offers proof that specialists in vocational education in Japan had already been trained and that technical education which was different from that found in the mid-Meiji period was taking root.

While he was in office, the school's rules were revised after the school

was renamed, and a school constitution was also enacted. From 1911 the school's buildings and equipment were improved by the successive expansion and remodelling of the school buildings; the floor space was 3,360 m² in a campus area of 18,290 m². By about 1911, the academic background of the staff members had improved greatly, and of the 11 staff members three had graduated from the Tokyo Higher College of Technology, two from the Tokyo Arts School, one from the Aichi Normal School, and two from the Ceramics School.

6. Hino Atsushi

Hino Atsushi was appointed a teacher of design from April 1911 to April 1916. Owing to his guidance, appropriate designs for ceramic-ware were created for the first time in Seto, and the Seto Design Study Group was started. Hino was later invited by Ōkura Ceramics Garden in Tokyo and took part in the establishment of an artistic ceramics factory. As manager, he was in charge of the Ceramics Garden which aimed at the production of exclusive dinner sets and ceramics that would not be inferior to those found in the West.

While Japan's industrial technology was growing in the Meiji period, this group of leaders, and first-rate personnel with the highest academic knowledge available at the time had taken up posts at local apprentice schools. Their activities were so extensive that they were not limited to school education since these leaders were also competent enough to be first-rate in the business world. To put it differently, it can be stated that during the Meiji period when Japan was developing, there existed a vast wilderness in which leaders of high caliber could emerge in every field. They exerted themselves and fulfilled their missions.

V. The Ceramics Industry

1. Export Promotion

As a result of Meiji governmental policy to increase production and promote industry, the production technology in Aichi Prefecture progressed through the exchanges made between the ceramics industry and the foreigners and through the introduction of Western technology. Consequently, the export of ceramics was also on the increase every year. The export value which was ¥700,000 in 1881 increased twofold to ¥1,480,000 in 1892 and grew steadily to ¥2,470,000 in 1900.

Triggered by the advancement of Morimura & Company into Na-

goya in 1890, Nagoya solidified its position as a production and sales center of ceramics export since the great producing centers of Seto and Mino were in the hinterland.

2. Technological Innovations

In the decade from 1897 to 1906, the modernization of the ceramic industry was promoted through the establishment of ceramics schools and technical centers at various places. After excruciating hardships experienced in different places, coal kilns were put to practical use as one of the technological innovations. The Seto Ceramics School constructed the first coal kiln in this region in 1902 with the use of a prefectural subsidy of ¥800. Although this attempt attracted the interest of the townspeople who wondered "whether white ceramics could be fired with black coal," it was reported that repeatedly the results were failure. It was later in the same year that Matsumura Hachijirō in Nagoya invented a single kiln of the inverted flame type. Coal kilns began to spread gradually in various regions at this time in consequence of the research conducted on them.

Technological innovation progressed remarkably in such areas as the production of hard ceramics, the improvement in the mixing method of base clay, the use of electricity as a power source for various operations, and the development of a lithographic transferring process. As a result, conventional cottage industries which had been producing Japanese tableware and daily miscellaneous utensils began to transform and follow a path toward industrialization as they became specialized in the factory production of Western tableware, electric goods such as high-voltage insulators, chemical porcelain, construction tiles and sanitation fixtures.

As manufacturing companies grew, such as Nippon Tōki centered in Nagoya, there was a corresponding growth in the number of wholesalers and related processing industries. In Seto many of these new factories were constructed on the western side, which was closer to Nagoya. The production structure was being transformed from rural cottage industries to urban factory production. Therefore, it is not difficult to imagine that these new enterprises needed the knowledge, skills and manpower of the graduates of the ceramics school.

3. The Modernization of Various Industries

Although the Sino-Japanese War and the Russo-Japanese War seriously affected the ceramics industry, the economy took a favorable turn due to the war victories, and Japan's industrialization began to advance. Around 1897, a bank and a post office started in Seto. In

1905 the railway between Yata-chō, Nagoya and Seto was opened, and Ōzone Station of the Japan National Railways Chūō Line also began operations in 1911. Moreover, the construction of Nagoya Port, which was started in 1896, was completed and opened in 1909. The value of exports in 1909 was ¥17,000,000 whereas that of imports was ¥8,700,000. The majority of the export items were ceramics.

It was really a case where various enterprises which supported the ceramics industry progressed simultaneously in the period of the school's foundation and development. This period certainly coincided with the time when Japanese capitalism achieved development. This was a major historic trend which could not help exerting great influence upon the existence of this school itself as well as upon the future of its graduates.

VI. The Graduates

1. Employment Patterns

As shown in Table 6.3, the number of graduates increased gradually from March 1898 when there were only three students in the first graduating class to 1909 when the school graduated its twelfth class. Table 6.4 shows the employment pattern of these graduates.

Although there were fewer than nine graduates on the annual average, the school assessed the demand for and the achievement of these graduates as follows:

The graduates are in great demand and are welcomed by local businessmen. The fact that the graduates of this school are offered jobs by other prefectures is proof that their value is recognized.

Since one has become a factory owner while another is teaching in Manila, we are greatly satisfied.

Table 6.3. Graduates of Seto Ceramics School, 1898–1909

| | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 |
|----------------|------|------|------|------|------|------|
| Advanced level | 3 | | 3 | 1 | 1 | |
| Ordinary level | | 3 | | 3 | 7 | 3 |
| | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 |
| Advanced level | 3 | 3 | 5 | 1 | 5 | 9 |
| Ordinary level | 5 | 9 | 7 | 11 | 5 | 18 |

Total: 105 graduates (34 from the advanced level and 71 from the ordinary-level course)

Source: *Seto yōgyō kōtō gakkō 80 nen shi* [An 80-Year History of the Seto Ceramics High School], p. 41.

Table 6.4. Seto Ceramics School Alumni Employment Record

| Occupation | Advanced Level | Ordinary Level | Total |
|--|----------------|----------------|-------|
| Those entering high school | 1 | | 1 |
| Those taking up a vocation | 19 | 24 | 43 |
| Those employed by businesses | 9 | 34 | 43 |
| Those entering schools or testing centers | 3 | 5 | 8 |
| Those entering the post-graduate course of this school | | 2 | 2 |
| Those not yet employed | 1 | 1 | 2 |
| Those entering military service | | 1 | 1 |
| Those deceased | 1 | 4 | 5 |
| Total | 34 | 71 | 105 |

Source: Same as Table 6.3.

The results achieved by the alumni have become increasingly distinct. Together with the development of foreign trade, original patterns must be produced extensively. Those who have had school education can do suitable jobs right away and they are obedient. Furthermore, compared with conventional workers, they excel in drawing and designing and have creativity.¹

The original patterns in this case denoted the original molds for the production of porcelain dolls and animals which were generally called "novelties." After World War I, novelties were exported and replaced the German bisque dolls as ornaments. Not only the original patterns but also china painting could not have been entrusted to conventional workers because they were unskilled and depicted baby boys' faces as lecherous and they drew the faces of girls' figurines as if they were sixty-year-old ladies. However, when the graduates of the ceramics school became engaged in the production of original patterns, the quality of the products was improved tremendously. This was all due to technical education.

2. The Transformation of the School's Function

At first the school sent out a small number of graduates and most of them had the intention of becoming independent managers. Due to the subsequent progress of modern industrialization which led to an increased demand for a high-quality labor force from technical schools, the school on the whole gradually inclined toward the training of middle-ranked technicians excluding a fraction of art-oriented students

who lived for traditional art and craft. Regarding this tendency, Iwauchi Ryōichi has published a detailed study which includes the period after the implementation of the educational reform pursued after World War II.²

Being at the center of technological innovation pursued in the local community, the ceramics school in the Meiji period functioned in such a way that it promoted modernization. As the education system improved, however, it was inevitable that the development of technology came to be carried out by universities or by laboratories belonging to big enterprises.

VII. Conclusion

What is the present condition of the ceramics school? Corresponding to the remarkable progress in scientific technology after World War II, the maximum number of students to be enrolled was increased to 290 students: 80 for the ceramics course classes, 90 for the commercial course classes, 40 for the ceramic machinery course, 40 for the electronic material course, and 40 for the design course; and there were another 20 students for the graduate course on ceramics. While many of the technical schools which originated as apprentice schools either disappeared or were transformed greatly during their long history, it can be said that this school based upon the tradition established in the Meiji period has continued its upward mobility to this day.

Notes

1. Aichi Prefectural Seto Ceramics High School 80th-Year Anniversary Committee, ed., *Aichi kenritsu Seto yōgyō kōtō gakkō 80 nen shi* [Eighty-Year History of the Aichi Prefectural Seto Ceramics High School] (1975), p. 34.

2. Iwauchi Ryōichi, "Dentō sangyō no tenkai to gakkō kinō no hen'yō" [The Development of Traditional Industries and the Transformation of the Function of the School] *Kyōiku Shakaigaku Kenkyū*, no. 21, 1960.

Bibliography

- Koide Tanehiko, *Kuroi kemuri to shiroi kawa: Yamashiro Ryūhei to Seto no ningyō* [Black Smoke and the White River: Yamashiro Ryūhei and Seto Dolls] (Bōeki no Nippon-sha, 1959).
- Kokuritsu Kyōiku Kenkyūjo, *Nippon kindai kyōiku 100 nen shi 9 (Sangyō Kyōiku I)* [A Centennial History of Japanese Modern Education 9 (Industrial Education 1)].
- Seto-chō, *Seto-chō shi* [Seto Town Magazine] (Masuya Shoten, 1915).
- Mitsui Kōzō, *Gaisetsu kindai tōgyō shi* [An Outline History of Modern Ceramics] (Nippon Tōgyō Remmei, 1979).
- Andō Masajirō, *Seto tokoro dokoro konjaku monogatari* [A Tale of Seto's Past and Present] (Ōseto Shimbunsha, 1941).

Terauchi Shin'ichi, *Owari Seto Tokoname tōji shi* [Records of China and Porcelain at Seto and Tokoname in Owari] (Gakugei Shoin, 1937).

Ise Motoichirō, *Kindai Nippon tōgyō hatten hishi* [A Secret History Regarding the Development of the Modern Japanese Ceramics Industry] (Gihō-do, 1950).

Nippon Yushutsu Tōjiki Shi Hensan Iinkai, *Nippon yushutsu tōjiki shi* [A History of Japanese Porcelain Exports] (Nagoya Tōjiki Kaikan, 1967).