

# Social Revolution & Education

By Kazumasa Kusaka

The current generation is seeing many unskilled or difficult manual jobs being replaced by robotics. But the future generation is also predicted to see not only taxi or truck drivers' jobs but highly-skilled jobs such as software programming, financial analysis and medical diagnostics being replaced by AI. So what is needed for a community to be sustainable and well prepared for such changes? The key is education for the next generation, and should the speed of change be faster than generational turnover, the key point then becomes re-education and re-training of the current generation.

In the mid-19th century, Japan underwent a social revolution. Seen from outside, the Meiji Restoration of imperial power in 1868 occurred in the face of Western “gun-boat diplomacy” to open up the country, ending over 200 years of national isolation, with the exception of trade with the Netherlands in Dejima Island and with China in Nagasaki. To the surprise of many, the following half-century saw Japan become the first industrial power in Asia.

What enabled Japan to adapt to the abrupt change in external environment? In the transformation process from the Tokugawa Shogunate to a centralized government under the emperor, supported by the Satsuma-Choshu *han* (a feudal domain) coalition, a big social change had taken place. Samurai had been deprived of their social position and hereditary stipends, and had become unemployed. While many from Satsuma and Choshu who were on the winning side found positions in the new Meiji government, those on the losing side suffered failure in their career change in becoming a farmer or merchant, trades that were unfamiliar to them. However, they had been samurai — warriors during a time of peace lasting over 200 years, and by reason of that they had certain capabilities. They had been trained to be good scholars as well as warriors. In the Tokugawa Period, 300 *han* had *han* schools for samurai from the age of seven to 18 with a curriculum of liberal arts and martial arts. Kangien, a private school for advanced studies in liberal arts, mathematics, astronomy and medicine established by the Edo Period Confucian scholar Tanso Hirose, was the first to adopt a monthly grouping of class members based on academic achievement and also accepted the best and brightest students throughout Japan regardless of their origins and position in society. Narutaki Jyuku, Philip Franz von Siebold's private Western studies school in Nagasaki, was the center of Western medicine and natural science and educated many young elite students.

Interestingly, under the Tokugawa Shogunate, governance was done by each *han*, and therefore each *han*, likened to a de facto autonomous country with its own military power, devoted its

efforts to enhancing its security, intelligence and promotion of new industry. More importantly, to achieve these goals, they were serious in educating young elites. With that deep pool of human resources capable of running their own *han*, when the opening of the country took place they naturally shared the sense that an emerging Japan could survive among the great powers of the world.

In the early Meiji Period, those who were on the losing side were exposed to Western studies, read Descartes, Kant, Schopenhauer and Nietzsche, and some of them became Christians. They became leaders in the transformation of business, academia and governance.

In parallel with this elite education, the role played by *Terakoya* — some 16,000 private elementary schools that taught reading, writing and arithmetic to the children of commoners, such as merchants and farmers — was very important, achieving a literacy rate of 80% in paving the way for the modernization of Japan. This combination of “elite” education and “practical” education fostered Japan's adaptability to the rapidly changing environment it had to face.

We have been increasingly engaging with our Asian friends in brainstorming over the future nature of work in an age of technological innovation with AI at its core. Asian dynamism has perhaps blurred the negative aspects of AI, holding off political intervention to adjust the pace of deployment in replacing jobs. The concern now is what happens to the next generation. Perhaps we would be better to go back to the basics, which are philosophy, history and mathematics, like the origin of universities, and train students to learn from the lessons of the past to prepare them to lead into the future. The point is whether current education is tailored too much to meeting the segmented demands of the job market and whether these specialists are good at coping with a sea change of a wider scope.

In parallel with education for leaders, practical training for ordinary people, including mid-career re-education, will be essential for them to live resiliently. Knowledge can start becoming obsolete from day one. But the ability to think and the skill to analyze and interpret would empower and protect students during their lifelong voyage even when they happen to venture into uncharted waters.

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