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Yoichi Kenmochi graduated in 1969 and also received a master degree in 1974 from Keio University, Japan. His employment history is as follows, Ishikawajima-Harima Heavy Industries Co. Ltd. (IHI) from 1974 to 2003, includes manager of Mechatronics Development Section (1987) and chief of Engineering training Institute (1995). Also he acted as president of Creative Service Co. Ltd. (IHI Training Center) from 2003 to 2008. Now he is the director of the Japan Society for Technical Communications, and the director of the Kodaira Cultural Promotion Foundation.

Engineering Education in Japan

Through the modernization process of Japan in the Meiji-period, meaning of the word “engineering” was not properly introduced into Japanese word. Even today, this word is understood as a discipline of academic science consisting of mathematics and physics. It seems to be slightly deviated from universal definition of “engineering”.

“Engineering” in Japan was formerly lectured for sciences in the imperial universities as an academism together with literature, law, philosophy, etc. Before World War II, then, Japan succeeded in development of various military technologies under the effective engineering education led by government. For half a century after the war, Japanese industry world could enjoy remarkable development of durable consumer goods, such as cameras, Walkman, motor-cars, etc. It can be said that Engineering Education in Japan was not a mistaken method.

Recently, however, particularly in 21st century, Japanese production industries have been severely chased by Asian developing countries. In the system creation domain, it is difficult for Japan to compete with Microsoft, Google, Apple etc. Precise reexamination for engineering education is strongly required at this moment.

CDIO seems to be one of the most prospective solutions. Considering CDIO, the speaker proposes some ideas for improvement of Japanese engineering education.