

IP Education at Kindergartens Affiliated with Tokai University

By *Sumida Masayoshi*

■ Tokai University and IP

The founder of Tokai University is a creator of intellectual property (IP), that is, an inventor. The process by which he created, protected and used IP offers useful lessons in IP education. In the early Showa period (late 1920s and early 30s), the university founder Matsumae Shigeyoshi made a groundbreaking discovery, a substitute for the “loaded cable communication system” that used a coil invented by US inventor Michael Pupin, which had been used throughout the world up until that time and could be only be used at a high licensing cost in Japan. Matsumae’s “non-loaded cable carrier communication system” used only local technologies, without a coil. He patented it and saw it successfully installed as far as China, via the Sea of Japan and the Korean Peninsula.

Today, Japan’s national policy for becoming a “country built on IP” highlights the importance of developing the cycle of IP creation, that is, the creation, protection and use of IP, and the cultivation of human resources in this field. IP education consists of three fields, corresponding to the three components of the IP creation cycle: creation, protection and use. These are: (1) education that cultivates the ability to create IP, that is, science, technology and art (IP education as creativity education); (2) education that teaches that IP, which is the result of creative efforts, enriches society and humanity, and that teaches the importance of cultivating a spirit of respect for IP and the (rights of) creators thereof (IP education as institutional understanding); and (3) education that teaches that the use of IP enriches society and humanity (IP education as entrepreneurial spirit education).

The Tokai University Intellectual Property Rights (IPRs) Research Project, established in 1999, conducted research on behalf of the Japan Patent Office (JPO) on IP education, and the results

were the above understanding of IP at Tokai University. To create a system for promoting IP education at Tokai University, this project was supplemented with the formation of the IP Education Subcommittee of the Comprehensive Education Committee. In addition, all of the university’s affiliated schools and kindergartens have IP Education Directors and IP Education Committees, and the IP Division Committee of the School Olympics was established for junior high school and high school students. These are supported by the university’s Primary and Secondary Education Departments, Advanced Education Department, and Headquarters for IP Management. Such a system is essential to the development of new educational methods, and the university is constantly seeking guidance in this area from specialists in the field of pedagogy.

Insofar as IP education cultivates the ability to produce science, technologies and art, it is an educational exercise in both creativity and science/technology. IP has to be used and developed for commercial purposes in society, and if emphasis is placed on its role in business development, IP education can really be viewed as education that fosters creativity or entrepreneurial spirit education. IP education in the narrow sense, which focuses on teaching respect for IP, is also a form of legal education, or an education in rules and morals.

In this regard, starting IP education at the university level is too late. It must be taught at the primary level, or even at the preschool level. Given the indisputable importance of early childhood education, starting IP education in the early childhood stages will form the foundations for Japan’s development as a “country built on IP.”

The IP Strategic Program 2004, which was formulated by the government’s IP Policy Headquarters, identified “the early stages of elementary

school” as the time to begin offering IP education. The 2005 version of that plan went so far as to call for IP education to start “in early childhood.” This revision is grounded in the same basic understanding as our policy.

IP education at Tokai University, therefore, begins at the kindergarten level, and teaching methods and materials are being developed for use at each stage of development: elementary, junior high, high school, university and graduate school.

■ IP Education in Kindergartens

In general, education in Japan today is still focused on the goals of making it into a reputable university and gaining employment at a reputable company, therefore, lacks an emphasis on cultivating creativity. IP education not only makes up for this deficiency, but also offers powerful techniques for improving academic skills. But it must be taught starting in kindergarten.

Implementing IP education at the kindergarten level means offering an education that produces people with rich creative capabilities and imaginations. This is specifically done by encouraging the inherent creativity in all children, fostering their curiosity and allowing them to experience the fun, joy and feelings of self-efficacy and achievement that come from making things and engaging in creative endeavors.

Kindergartens affiliated with Tokai University do not believe that standardized methods and teaching materials are necessary for implementing IP education as a means of fostering creativity. Thus, each kindergarten is developing its own techniques. They are, however, adhering to shared principles with regard to fostering creativity and the entrepreneurial spirit, using a model of entrepreneurial education developed in Vassa, Finland, which boasts the world’s highest levels of children’s academic skills



IP education at kindergartens affiliated with Tokai University. Creating a picture with stones (above) and making a model car with a PET bottle.



and international competitiveness. At Tokai University, we call this the Vassa Model. It emphasizes process over results, and individual development over competition and comparison. It is not just an education of didactic instruction, but an education of learning, and creative strategies are used to develop educational practices that meet the needs of individual students. At Tokai University, kindergarten is viewed as “the period for cultivating curiosity and creative thinking skills” and IP education is adapted to the children’s stage of development. The next section will introduce some of the specific ways that IP education is being implemented at Tokai University kindergartens.

Examples of IP Education in Kindergartens

(1) IP Education at Jiyugaoka Kindergarten Affiliated with Tokai University

Under the leadership of principal Shiroishi Kikumi, staff members at Jiyugaoka Kindergarten establish goals with regard to IP education and develop their own ideas based on the Vassa Model, for actively promoting educational activities that allow children to experience the fun of creation and the sense of self-efficacy it imparts, in ways appropriate for their age level.

One activity developed for the 3-year-old class is called “You are an Artist! Fun Activities with Newspaper.” In this exercise, children have fun making things out of newspaper. The teachers want the students to experience the joy of discovering the properties of newspaper and the ways it can be used as a raw material, and to learn to challenge themselves and develop creative skills. The 4-year-old class has an activity session entitled “Feel, Experience and Create Music: Let’s Make and Play Original Instruments.” Using objects that are familiar to them, the children experience the joy of discovering sound and have fun creating instruments that they come up with on their own. They also develop the self-confidence that comes from the realization that they “can do it!” In a 5-year-old class exercise entitled “Let’s Make Our Own Songs!” children experience the fun of creating music. The goal is for the children to work together to develop lyrics and music so that they experience a sense of connectedness, learn the importance of originality, learn to respect both themselves and others, and develop a zest for living. In March 2006, Jiyugaoka Kindergarten invited the director of the Education Department of Vassa City for an International Symposium in Munakata. Given that this international symposium was sponsored by a kindergarten, the event attracted a great deal of attention.

(2) IP Education at Honda Memorial Kindergarten Affiliated with Tokai University

Honda Memorial Kindergarten is developing an active IP education system under the leadership of principal Takahashi Isao. The school’s specific goals are: (1) to allow children to experience the joy and fun of creation; (2) to offer childcare services and educational activities that emphasize a sense of self-efficacy (sense of one’s own capability); (3) to cultivate an attitude and sense of respect for oneself and others (human relationships); and (4) to cultivate an attitude and sense of respect for things (IP) created by people (right relationships). Specific activities include: (1) reading picture books; (2) storytelling caravans (copyright handling); (3) Christmas club (licensing to a book’s author); and (4) TIP (The IP Project) Week, held from the 2nd to 3rd week of November. TIP Week activities have included “Let’s Become Junior Fine” (imitation by 4-5-year-olds), “Let’s Play Store,” “Create Stories, Put on a Puppet Show, Children’s Performances,” “Fun with Science (Make Your Own Car!),” “Cheerleading,” “Let’s Make a City,” and “Pakistan Fundraising Activities” (¥158,485 was raised in 2005). **JS**

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