



SHARING EDUCATIONAL RESOURCES WORLDWIDE

An Interview with **Shimizu Yasutaka**

By Diana G. Oblinger



Shimizu Yasutaka is President of the National Institute of Multimedia Education (NIME) and Professor Emeritus at the Tokyo Institute of Technology. After meeting with Shimizu in December 2005 in Washington, D.C., and in January 2006 in Tokyo, Japan, EDUCAUSE Vice President **Diana G. Oblinger** asked him some questions about NIME, about IT in Japanese colleges and universities, and about issues facing higher education worldwide.

Oblinger: Dr. Shimizu, you head an organization called NIME, the National Institute for Multimedia Education (<http://www.nime.ac.jp/index-e.html>), which I was recently able to visit. Can you tell us about NIME and its mission?

Shimizu: NIME is a Japanese national research and development (R&D) organization with the objective of supporting educational reform in higher education institutions: universities, junior colleges, and technical colleges. The mission of NIME is to carry out R&D and dissemi-

nation relating to education that utilizes advanced information technologies and to provide support for universities and colleges. Our R&D emphasizes the important field of e-learning and the improvement of the online learning environment. When educational programs are supplied online, they very easily transcend national borders and are transmitted to other countries as well, so it is necessary to think about them from a global perspective. We also conduct R&D in the areas of collaborative systems, learning content and digital learning resources, faculty development,



multimedia environments, the application of multimedia technology, surveying, and international research. An important part of our mission involves contributing to national policy-making by undertaking surveys, research, and collaborative studies commissioned by the government.

NIME manages higher educational information portals and also develops and distributes educational content. We provide the infrastructure that allows students to attend classes at other institutions via the Space Collaboration System (SCS), an interuniversity satellite communications network linking more than one hundred institutions and providing two-way interaction. We also run training courses, forums, and international symposia. Our publications include research reports, newsletters to institutions, and the scholarly periodical *Media Kyoiku Kenkyu* (*Media Education Research*). In addition, NIME is engaged in postgraduate educational activities in collaboration with universities and colleges. For example,

NIME runs the Cyber Society and Culture course for the School of Cultural and Social Studies at the Graduate University for Advanced Studies. Finally, the establishment of the Council of IT Support for Higher Education has strengthened our cooperation with related consortia.

Oblinger: NIME has been in existence for many years. In fact, NIME was established “before the Internet.” Tell us, how has NIME evolved over its long history?

Shimizu: NIME was established in October 1978 as an inter-university research institute with the original purpose of serving national universities under the then Ministry of Education, Science, and Culture (now the Ministry of Education, Culture, Sports, Science, and Technology). At the time, it was not economical or efficient to establish expensive research facilities at each university, so the objectives were to establish such facilities at NIME, to conduct R&D relating to multi-

media education through the joint use of these facilities by faculty members, and to have NIME's faculty carry out collaborative research with researchers at the various national universities. However, even though the Internet was spreading rapidly, NIME did not devote much effort to research relating to the building of an educational environment utilizing advanced information and communication technologies, such as the Internet. Such research may not have been suited to the work of an inter-university research institute, which focused on joint research. Also, since NIME at that time was a national organization, members of faculty and staff were civil servants. In addition, I think that NIME was perhaps not very sensitive to social needs.

In April 2004, NIME was reorganized as an independent administrative institution, and faculty and staff ceased to be civil servants. Although almost all of NIME's budget, including the salaries of faculty, is covered by operating subsidies

from the government, we were required to think about what kind of services we would supply to the public. On being appointed by the government as the first president, I greatly changed the direction of NIME's strategic activities toward the undertaking of R&D that can respond properly to the changing times and the educational needs of Japan and toward the diffusion of NIME's research results.

Oblinger: You've mentioned the importance of being sensitive to society's needs—and your own willingness to make significant changes. What are NIME's goals in continuing to serve Japan's changing educational needs?

Shimizu: Regarding learning in Japanese universities and colleges, our aim is to build a Japanese-style support environment that responds to Japanese learners and instructors, who have learning and teaching styles that differ from those of learners and instructors

in Western Europe and elsewhere. In addition, our aim for quality assurance in education utilizing advanced media is not limited to university and college education but extends to all stages of education, from elementary and secondary education to lifelong learning.

Oblinger: Speaking of quality assurance, when you and I met in Washington, D.C., last December, you were investigating how to define quality in online learning. As a result of what you've learned, how *will* NIME define quality in online learning?

Shimizu: There is no clear method for how quality can be guaranteed and, especially, of how the quality of online learning can be guaranteed. Thus, commissioned by the Ministry of Education, Culture, Sports, Science, and Technology, I visited the United States and South Korea for research and also dispatched survey missions to the United Kingdom, France,

and Australia. We learned many things. Putting this all together has not been easy, given the differences in the educational systems and educational conditions of the various countries, but we have made comparisons on the following points:

1. The strategic policy and operational setup for universities and colleges implementing online learning programs
2. The process of selecting excellent educational content programs
3. Instructional methodology that incorporates such methods as instructional design
4. The certification of credits through online learning
5. Graduation conditions and qualification certification through credits acquired by online learning
6. Accreditation and evaluation for universities and colleges giving degrees
7. Other efforts and ways of thinking related to ensuring the quality of higher education

The issue of guaranteeing quality assurance in higher education is an issue not only in Japan. I think it is an important issue in all countries.

Oblinger: In addition to exploring current issues, NIME has been very proactive in thinking about the future—for example, by investigating the kinds of graduates needed by businesses, particularly high-tech businesses. Based on what you know now, what do businesses need from higher education?



Shimizu: At NIME, in consideration of the needs of universities and colleges, we have developed many systems utilizing information technology and are continuously commencing operations. However, I believe that we cannot hope for spectacular development from now on by responding only to present needs. Therefore, as you noted, we are beginning research that focuses on the competency required of graduates released into the society by higher education institutions. We have already developed the competency list required by Japanese companies in terms of knowledge, skills, and behavior. For example, a competency that is required by companies but that is lacking in young people recently is “emotional fortitude.” We thus have developed a learning course designed to enhance emotional fortitude. From now on, our policy will be to promote research focusing on those competencies that society requires of university and college graduates and that are lacking in today’s young people.

Also, since competency as global human resources has come to be required recently, we visited leading companies in the United States in January and in the United Kingdom in March of 2006 and

conducted a survey of what kind of competency is required by foreign companies. Among the many things that we learned, we came to realize that employability is important as a necessary competency for university and college graduates. Here again, our aim is to summarize the concrete ideas relating to this point and build a learning environment so that students can acquire this competency.

In addition, many young people have little will to work, and an increasing number are part-time job-hoppers. A

major issue, therefore, is how to increase the will to work among young people. The birthrate is decreasing, the aging of society is advancing, and the share of the working population is declining. If this situation is left untouched, Japan is going to face a very difficult time in the future.

Oblinger: Is NIME interested in developing an EDUCAUSE-like organization in Japan to support the IT profession? What do you believe Japan needs so that the country can support IT in higher education? Is there a role for international collaboration here?

Shimizu: When I met you, you explained the activities of EDUCAUSE, and I was impressed by its wonderful achievements. EDUCAUSE is making a major contribution to the advancement of higher education in the United States by building a network of faculty and staff at colleges and universities throughout the country, by offering comprehensive conferences, and by providing extensive resources for its members. We do need to make efforts so that EDUCAUSE-type activities will be possible in Japan in the future. Unfortunately, however, I think it

would be hard to establish an organization with the same type of activities as EDUCAUSE in Japan at this time.

For the time being, instead of aiming for the same level of activities, we should engage in sharing the results of our R&D. Currently, one of the most important aspects of our R&D involves how to build a global learning environment, rather than a closed world consisting only of Japan. For example, the objective of NIME-glad (<http://nime-glad.nime.ac.jp/en/>) is the sharing of educational information around the world. NIME-glad, the gateway for educational learning in Japan, and ARIADNE, the gateway in the European Union (EU), have already developed and commenced operation of the Federated Search. If a user searches for a keyword on NIME-glad, the search will cover ARIADNE information for Europe as well as study information for Japan. And vice versa, if a user searches via ARIADNE, the search will cover the study resources of both Europe and Japan. We are preparing to offer similar shared functions with MERLOT in the United States.

As a solution on a larger worldwide scale, consortiums for the sharing and reuse of learning content in five regions around the world—ARIADNE (<http://www.ariadne-eu.org/>) in the EU; education.au limited (<http://www.educationau.edu.au/>) in Australia; eduSource (<http://www.edusource.ca/>) in Canada; MERLOT (<http://www.merlot.org/>) in the United States; and NIME in Japan—joined together and formed GLOBE (Global Learning Objects Brokered Exchange) in 2004. LORNET (<http://www.lornet.org/>) replaced eduSourceCanada as the Canadian representative in the spring of 2006. To further strengthen the activities of GLOBE, NIME has invited researchers from these organizations to Japan and has held two international seminars to consider the directions of joint development. This is because I believe that spreading and integrating the learning environment by building a setup that enables the mutual sharing of the world’s educational resources is vitally important to higher education in Japan—and also to higher education in nations throughout the world. *e*