

Paper on PEN-International: Focusing on Deaf Education in the Pacific Rim

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Abstract

The Postsecondary Education Network-International (PEN-International) is funded by a grant to the National Technical Institute for the Deaf (NTID) from The Nippon Foundation of Japan. NTID, one of eight colleges of Rochester Institute of Technology in Rochester, New York, U.S.A., serves approximately 1,100 deaf and hard-of-hearing students who study, share residence halls, and enjoy social life together with more than 14,400 hearing students. The PEN-International network is currently made up of nine colleges and universities in Japan, China, the Philippines, Thailand, Russia, the Czech Republic, and the United States. PEN-International shares its expertise with international partners that, like NTID, offer postsecondary educational programs to deaf and hard-of-hearing students. PEN-International is dedicated to providing professional development to teachers of international deaf and hard-of-hearing students, facilitating the use of innovative instructional technologies in the teaching/learning environment, and furnishing its international partner institutions with state-of-the-art equipment. This article describes PEN-International's background, goals, accomplishments, and future activities.

RIT/NTID Background

Founded in 1829, Rochester Institute of Technology (RIT) is internationally recognized as a leader in career education with more than 14,400 students enrolled in its eight colleges. The students represent all 50 states and more than 80 foreign countries. The campus occupies 1,300 acres in suburban Rochester, the third largest city in New York State.

RIT has substantial ties to business and industry through its Office of Cooperative Education (Co-op) and Career Services. The co-op program at RIT is the fourth oldest and one of the largest co-op programs in the world. The program attracts more than 1,300 employers nationwide and serves more than 2,600 students a year. Cooperative education allows students to gain valuable real-world experience in the workplace. The program alternates classroom study with periods of full-time employment. Job placement is also a very important component of the Office of Cooperative Education and Career Services. More than 450 companies visit RIT annually, conducting more than 5,000 employment interviews. RIT has consistently placed more than 90% of its graduates who enter the workforce in jobs that match their education.

The National Technical Institute for the Deaf (NTID), the world's largest technological college for students who are deaf or hard of hearing, was formally established by Congress in 1965. RIT was chosen as the site for NTID in 1967 and officially became one of RIT's eight colleges in 1968. In its first year, 70 deaf and hard-of-hearing students were admitted into the NTID program. One of the unique features of RIT/NTID is that deaf and hard-of-hearing students study, share residence halls, and enjoy social life together with hearing students.

NTID is an international model for educating and preparing deaf students for technology-related careers. Its mission is *“To provide deaf and hard-of-hearing students with outstanding state-of-the-art technical and professional education programs, complemented by a strong liberal arts and sciences curriculum, that prepares them to live and work in the mainstream of a rapidly changing global community and enhance their lifelong learning.”*

Of the 1,100 deaf and hard-of-hearing students currently at NTID, nearly half are enrolled in baccalaureate or graduate programs. NTID's support and access services are unprecedented. During a typical one-year span, NTID logs 80,000 interpreter hours, 40,000 notetaker hours, and 20,000 tutoring hours. In addition, the residence halls are fully networked and equipped with strobe lights and telephone amplifiers, and students have access to C-Print™, an NTID-developed speech-to-text transcription system that allows deaf students to have immediate notes of a teacher's lecture. NTID employs nearly 500 faculty and staff members who are experts in deaf-related fields. Instructors use a variety of communication strategies including sign language, speech, fingerspelling, writing, and visual aids. On-site audiologists provide services related to hearing and hearing aids, assistive devices and cochlear implants, and speech-language pathologists offer a broad range of speech and language services. In addition to NTID having the largest interpreting staff for a college in the U.S., it is the first college in the world to formally educate sign language interpreters. NTID has graduated more interpreters than any other college.

Postsecondary Education Network (PEN-International)

The Nippon Foundation of Japan

The Nippon Foundation of Japan, founded in 1962, provides the grants that support PEN-International. The Foundation believes “that all people share a common duty of transcending antagonism and overcoming conflict, so that cultures of the world may establish consensus and provide assistance to each other.” The Foundation meets that challenge by sponsoring multilateral networks to improve the circumstances of disadvantaged people around the world. The Postsecondary Education Network-International (PEN-International) was created in 2001 to improve and expand postsecondary education to deaf and hard-of-hearing students around the world by sharing educational technology and conducting faculty development and training, particularly in developing countries.

PEN-International Goals

The goals that The Nippon Foundation of Japan has established for PEN-International are to train faculty for improving teaching and learning, to apply innovative instructional technologies to the teaching/learning environment, to provide state-of-the-art equipment to international partners, to promote program self-sufficiency, and to expand career opportunities for deaf and hard-of-hearing students. PEN-International’s vision is to assist partner institutions in the “move from importers to self-sufficiency to exporters of knowledge and skills within their respective home countries.” Establishing an international network was the first step in achieving this end.

Partner Institutions

The host site for PEN-International is the National Technical Institute for the Deaf (NTID) at Rochester Institute of Technology (RIT). A total of nine colleges and universities in Japan, China, the Philippines, Thailand, Russia, and the Czech Republic have partnered with NTID in the last four years to become part of the PEN-International network.

Tsukuba College of Technology (TCT), was an original member of PEN-International, joining in 2001. The Government of Japan chartered Tsukuba College of Technology in October 1987 by amending the Japan Law for Establishing National Schools. Tsukuba's Division for Hearing Impaired offers state-of-the-art programs in design, mechanical engineering, architectural engineering, electronics, and information science. Approximately 200 deaf and hard-of-hearing students are currently enrolled at TCT.

In 2001, **Tianjin Technical College for the Deaf of Tianjin University of Technology (TUT)**, joined PEN-International. Tianjin Technical College for the Deaf is China's first technical college for people who are deaf. Established in 1991, the college enrolls more than 125 students who study technical disciplines that prepare them for productive membership in Chinese society. The college is the lead PEN-International partner in China and coordinates all activities in the country.

During the next two years, PEN-International expanded in China by adding the Special Education Colleges of **Beijing Union University (BUU)** and **Changchun University (CU)**. Beijing Union University, founded in 1985, is a multidisciplinary institution offering humanities, science, social science, natural science, technological science, and management science programs to 12,000 students.

The University's College of Special Education was created in 1999 and serves more than 125 deaf students who study art design, decorating and advertisement, gardening, and office automation.

Changchun University's Technical College for the Disabled was established in 1987. It is the oldest and largest postsecondary program for disabled students in the People's Republic of China. The college currently enrolls more than 200 deaf and hard-of-hearing students who study in the college's fine arts and graphic design programs.

In project year two (2002), **De La Salle University-College of Saint Benilde (CSB)** and **Bauman Moscow State Technical University (BMSTU)** joined the PEN-International network. The College of Saint Benilde was founded in 1980. Fourteen years later, in a move to expand its mission, CSB became an autonomous college in the De La Salle University System. CSB's School of Deaf Education and Applied Studies is a leader in education for the deaf in the Philippines through its academic programs, international linkages, and unique commitment to empower its citizens by preserving deaf heritage and nurturing Filipino deaf culture. Approximately 150 students are currently enrolled at CSB.

Founded in 1830, Bauman Moscow State Technical University is an engineering and scientific university of excellence whose graduates have contributed significantly to developments in engineering and science disciplines. While BMSTU has been educating deaf students since 1934, the University in the 1990s expanded its programs and services for deaf students by establishing the Center on Deafness. Presently, approximately 250 deaf students study in various programs across the university as well as in compensatory programs.

Ratchasuda College of Mahidol University is the first and only education institution in Southeast Asia dedicated to providing tertiary education for deaf students. The College, created in 1991, consulted with worldwide leaders in education of deaf students in formulating its curriculum. Ratchasuda College enrolls 89 students who are deaf and joined the PEN-International network in 2002 as an associate member.

Similarly, **Charles University** in the Czech Republic joined the network in 2002 as an associate member. Charles University in Prague is the oldest university in the Czech Republic and the oldest university in central Europe. Founded in 1348 by King Charles IV, the University enrolls 41,000 students at the bachelor's, master's, and doctoral levels. Among the University's population are 120 students with special needs, including 24 students who are deaf. The University's world renowned Language Resource Centre, which teaches English to deaf and hard-of-hearing students, is a collaborative effort with several international experts, including NTID.

Training and Faculty Development

Although many of the general challenges of teaching English to deaf students in postsecondary programs in non-English-speaking countries can be anticipated on the basis of research and practice within the fields of ESL and deaf education, to make PEN's workshops effective for educators of international deaf students, PEN distributes a needs assessment survey to professors at the partner institution where faculty training is to be held.

On the basis of that survey, the workshop developer specifies sessions and outlines the subtopics, activities, goals, and learning outcomes for each session.

Participants are encouraged to teach colleagues from other institutions the technological skills they learned through training seminars offered by PEN-International, while PEN staff members use program evaluations to assess their programs' effectiveness.

Recent Accomplishments in Faculty Development

Instructional Technology Symposium PEN-International co-sponsored, with NTID and The Nippon Foundation of Japan, an international symposium titled, "Instructional Technology and Education of the Deaf: Supporting Learners, K-College" in 2003. More than 200 educators of deaf and hard-of-hearing learners shared information relative to current and future innovations and developments in the use of educational media and technology. Twenty educators representing all of the partner institutions attended. One of the highlights of the Symposium was the use of videoconferencing technology to reach out to the Asia-Pacific Basin. Two video seminars on the use of technology were conducted with 75 faculty members located in PEN Multimedia Labs in China (Tianjin University of Technology and Beijing Union University) and the Philippines (De La Salle University-College of St. Benilde). The next instructional symposium will be held June 27-30, 2005.

(<http://www.rit.edu/~techsym>)

Training at NTID for Partners from China In February and October 2003, and again in November 2004, faculty members from TUT, BUU, and CU participated in a series of intense training sessions at NTID relating to deaf education and the use of online learning technology at the university level.

Employment Seminars at NTID and CSB The College of Saint Benilde, identified career and employment development as a major area of concentration in 2003. In response, Dr. Sid McQuay, a skilled practitioner of career education, served as a visiting scholar at CSB in March and April of that year.

During his stay, Dr. McQuay conducted in-depth consultations and seminars with CSB faculty, staff, and administrators regarding the construction of a comprehensive career development and employment program for deaf students at the college. As a follow-up to Professor McQuay's visit to CSB, two CSB administrators came to NTID in September 2003 and participated in a series of employment seminars. Subsequently in January 2004, two faculty members from the NTID Center on Employment traveled to CSB and conducted employment symposia with 125 CSB deaf students and training seminars with 15 CSB faculty members on topics related to employment acquisition and career maintenance and enhancement.

Instructional Technology and Deaf Education in Thailand In February 2004, PEN-International conducted a series of lectures, workshops and activities related to state-of-the-art use of instructional technology with postsecondary deaf students at Ratchasuda College, Thailand. A total of 18 educators and 80 deaf and hard-of-hearing students attended the workshops and demonstrations.

Ongoing Videoconference Training in Japan In the past, Tsukuba College of Technology has offered inservice audiology seminars in Japan and in other parts of the Asia-Pacific Basin. In fact, TCT has been one of the prime movers at the Convention of the Japanese Association of Special Education. TCT has also held seminars for university faculty members across Japan regarding research for issues in deaf education. TCT continues these efforts to influence deaf education within Japan through seminars and conference participation. A total of 60 members from postsecondary education institutions have been impacted thus far.

PEPNet Conference Prior to attending the PEPNet Conference in Pittsburgh, Pennsylvania, in April 2004, 22 faculty members from PEN partner institutions participated in three days of pre-

conference training. The workshops, offered by PEN-International, covered a wide range of topics including career counseling, use of interpreters in the mainstream, increasing student classroom interaction, cooperative education, and assistive listening devices. At the actual PEPNet Conference, a poster was presented detailing PEN-International's program and services. More than 200 conference participants visited this poster session. In addition, PEN-International partners from Bauman Moscow State Technical University presented a poster at the conference that specifically addressed PEN-International and its accomplishments within Russia. A paper describing the 2003 Instructional Technology Symposium was also presented at the conference by PEN-International representatives.

Mathematics Workshop at Changchun University Two faculty members from NTID taught and led lectures, workshops, and activities related to teaching mathematics to deaf students to more than 45 faculty members from PEN partner universities in China.

PEN-International Multimedia Computer Labs

PEN-International understands the importance of instructional technology for educating deaf students. For this reason, state-of-the-art high technology multimedia labs have been constructed at partner institutions. In project year three (2003-2004) PEN-International constructed two new labs at Beijing Union University and Changchun University, both in China. In addition, the multimedia lab at Tianjin University of Technology was recently enhanced. These labs provide students and faculty with access to the World Wide Web, offer videoconference capability to the university, provide a local area computer network hub, and serve as a smart classroom for teaching and learning. Students attend classes in these environments as well as use them as general computer labs when formal

classes are not scheduled. Each lab has between 12-18 student computer stations that are used on average 32 hours a week for course work.

Dissemination of Network and Program Information

One of PEN-International's goals is to disseminate technological information worldwide to improve education and increase educational and employment opportunities for deaf and hard-of-hearing individuals. PEN-International does this through participation at conferences, its Web site, and articles in multiple worldwide publications.

PEN-International has a well designed and accessible Web site that is widely publicized and continuously updated. The Web site includes PEN-International's goals and objectives, a list of partner institutions, a resource database, and a complete listing of all PEN-International news and events. All PEN-International and partner events are not only listed, but described in detail and accompanied by photographs. News and events from previous years also are archived on the Web site for easy retrieval.

PEN-International Reporting PEN-International's brochure communicates the essence of the PEN-International network. The brochure outlines PEN-International's goals and mission, describes each of the partner institutions, and highlights the organization's objectives, including faculty professional development and training, implementation of multimedia laboratories, faculty and student exchanges, and research and evaluation efforts. PEN-International also provides an annual report to The Nippon Foundation of Japan. The annual report describes in detail PEN-International's goals

and accomplishments for the year. Additionally, articles about PEN-International's staff members, partners, and research efforts appear periodically in publications worldwide.

Evaluation and Research

PEN's research efforts aim to positively influence postsecondary education within each country.

The training sequence is as follows: training is conducted in the USA, follow-up training is conducted in the targeted country, and participating faculty members train others in their home country.

The vision is that the faculty training will grow exponentially throughout the region.

PEN-International activities and outcomes are evaluated utilizing both formative and summative techniques. The overall evaluation plan addresses the attainment of project goals, level of satisfaction by partner administrators and faculty, and improvement in student performance as a result of PEN activities. Additionally, the role of each partner organization as a regional and national leader is addressed.

Cultural Exchanges

PEN-International supports virtual and real student and faculty exchanges between participating colleges and universities. This program strives to strengthen the knowledge and skills of individual participants as well as those of faculty and students at the host university. The cultural exchanges "strengthen each student participant's cultural and personal identity while simultaneously helping him/her develop an understanding of the diverse cultures that affect our world." Examples of cross-cultural exchanges include student visits to various partner institutions, Haiku Competition,

WWW Design Competition, and faculty exchanges. Participating countries include the United States, Japan, China, Russia, and the Philippines.

Future Activities

The Instructional Technology Symposium sponsored by NTID, The Nippon Foundation of Japan, and PEN-International will be held at NTID June 27-30, 2005. Nearly 300 educators of deaf and hard-of-hearing learners from 12 different countries are expected; they will share information relative to current and future innovations and developments in the use of educational media and technology. Video technology will be prominent throughout the 2005 conference.

(<http://www.rit.edu/~techsym>)

In addition to the Symposium, an English Conference is planned for the coming year, and a Cochlear Implant Conference has been proposed.

PEN-International will continue to expand its network and train and develop faculty within each of the participating countries. PEN-International will also actively seek and expand its network to other countries. Through research and evaluation, PEN-International will continue to gauge and be able to address the needs of its partners, while succeeding in its goal to improve and expand faculty development and training throughout the world.

For more information;

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