PEN-International: Facilitating Deaf Education for Deaf Men and Women around

the World

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## Abstract

The Postsecondary Education Network-International (PEN-International) is funded by grants from the Nippon Foundation of Japan to the National Technical Institute for the Deaf (NTID). NTID, one of the eight colleges of Rochester Institute of Technology (New York), serves approximately 1,250 deaf and hard-of-hearing students who study, share residence halls, and enjoy social life together with more than 15,000 hearing students. The PEN-International network currently consists of thirteen 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-theart equipment. This paper 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 15,000 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.

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 1,250 deaf and hard-of-hearing students currently at NTID, approximately 43% 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 interpreting hours, 40,000 notetaking hours, and 20,000 tutoring hours. During the 2005-2006 academic year, 10,000 C-Print™ hours were logged, and this number is expected to rise. C-Print is an NTID-developed speech-to-text transcription system that allows deaf students to have immediate access to a teacher's lecture, In addition, the residence Skiac Page 4 5/4/2006

halls are fully networked and equipped with strobe lights and telephone amplifiers. 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 co-chlear implants, and speech-language pathologists offer a broad range of speech and language services. In addition to NTID having the largest interpreting staff of any college in the world, it was 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 annual grants that support PEN-

International. The Foundation believes "that all people share a common duty of transcending an-

tagonism and overcoming conflict, so that cultures of the world may establish consensus and pro-

vide assistance to each other." The Foundation meets that challenge by sponsoring multilateral net-

works 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 educa-

tional technology and conducting faculty development and training, particularly in developing coun-

tries.

PEN-International Goals

The goals for PEN-International are as follows: 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 ex-

pand 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 thirteen colleges and universities in Japan,

China, the Philippines, Thailand, Russia, and the Czech Republic have partnered with NTID during

the first five years to become part of the PEN-International network.

National Tsukuba University of Technology (N-TUT), 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, architec-

tural engineering, electronics, and information science. Approximately 200 deaf and hard-of-hearing

students are currently enrolled at N-TUT. There is also the new formation of PEPNet-Japan, a coa-

lition of twelve universities and support centers in Japan that serve deaf and hard of hearing stu-

dents. This structure is modeled after PEPNet's Northeast Technical Assistance Center at

NTID/RIT.

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.

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During the next three years, PEN-International expanded in China by adding the Special Education

Colleges of Beijing Union University (BUU) and Changchun University (CU), and Zhong-

zhou University (ZZU).

Beijing Union University, founded in 1985, is a multidisciplinary institution offering humanities, sci-

ence, 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, and also

the oldest postsecondary program for people who are deaf in 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.

Zhongzhou University, the newest member of PEN-International in China, signed a memorandum

of understanding in March 2005. They serve approximately 200 deaf students, who study such disci-

plines as computer assisted drafting, information technology, fashion design and ceramics, and has

the only postsecondary sign language interpreter training program in China with approximately ten

students.

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In project year two (2002), De La Salle - College of Saint Benilde (CSB), Manila, Philippines and

Bauman Moscow State Technical University (BMSTU) in Russia 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 125 students are cur-

rently enrolled at CSB.

Founded in 1830, Bauman Moscow State Technical University is an engineering and scientific uni-

versity 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 univer-

sity as well as in compensatory programs.

In 2005, three more programs in Russia joined PEN-International. They are the **Institute of Social** 

Rehabilitation at Novosibirsk State Technical University, Vladimir State University Center

for the Deaf, and Academy of Management, "TISBI", at Kazan.

Novosibirsk State Technical University was founded in 1950, currently serving 15,000 students. The

Institute of Social Rehabilitation was established in 1993 to provide high-tech education to individu-

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als with disabilities, currently serving close to 300 deaf students. At Vladimir State University, the

Center of Professional Rehabilitation of the Deaf was established in 1994, and then in 2002 became

an experimental platform for providing education and social support to deaf children. They enroll

approximately 60 postsecondary deaf and hard of hearing students, who study computer systems of

management in industry and business programs. TISBI at Kazan has provided primarily internet-

based education at the secondary and postsecondary levels to individuals with disabilities, currently

serving approximately 25 deaf students.

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 ef-

fort with several internationally recognized institutions, including NTID.

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, con-

sulted 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.

Training and Faculty Development

To assure that PEN's faculty development offerings meet the needs of educators of international

deaf students, PEN has conducted needs assessments in each partner institution. PEN then works

collaboratively with each partner institutions to determine the solutions that meet 'their needs'.

On the basis of the needs assessments, specific solutions are developed that detail activities, goals,

and outcomes. The solutions are developed collaboratively with each partner institutions. Program

evaluations are used to assess the effectiveness of each solution that is implemented.

Recent Accomplishments in Faculty Development

Instructional Technology Symposium PEN-International co-sponsored, with NTID and The Nippon

Foundation of Japan, an international symposium entitled, "Instructional Technology and Education

of the Deaf: Supporting Learners, K-College" in 2005. More than 230 educators of deaf and hard-

of-hearing learners from 17 countries shared information relative to current and future innovations

and developments in the use of educational media and technology. More information can be found

at: (http://www.rit.edu/~techsym)

Representation at the International Congress on Education of the deaf and hard of hearing In July 2005, repre-

sentatives from PEN-International presented and exhibited at the International Congress on Educa-

tion of the Deaf in Maastricht, Netherlands, which attracted close to 900 participants from around

the world.

Delegate Visits Throughout 2005-2006, PEN-International hosted delegations from Korea, the Phil-

ippines, Japan, Hungary and the Czech Republic. Further, PEN-International staff visited the Ko-

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rean Employment Promotion Agency for the Disabled, PEPNet-Japan Partner Institutions and the

Kyoto Consortium of Universities. In addition, various institutions and programs in Russia, the Uni-

versity of Hong Kong, Dong Nai Provincial Teachers College in Vietnam, the College of St. Benilde

in Manila, and postsecondary institutions in China were visited. Training and workshops were an

integral component of all the visits.

Upcoming Activities PEN-International will have representation at the Deaf Studies Conference at

Wolverhampton University in England, the national 2006 AHEAD Conference in San Diego, CA,

and the 2006 Asia-Pacific Conference on Postsecondary Education and deafness in Tokyo. Further,

PEN will hold its first ever Leadership Institute for deaf and hard of hearing postsecondary students

at Herstmonceux Castle in East Sussex, England. Four students from each of PEN-International's

partner institutions in China, Japan, Russia and the Philippines, as well as NTID, will convene for a

week-long training on advocacy and leadership skills development. More information can be found

at: www.pen.ntid.rit.edu/summer-institute.php.

PEN-International Multimedia Computer Labs

PEN-International recognizes the importance of instructional technology for educating deaf stu-

dents. 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. The multimedia labs at Tian-

jin University of Technology and Changchun University were recently enhanced, and in 2006 a sec-

ond lab was opened at the College of St. Benilde. These labs, used an average of about 40 hours per

week for coursework, provide students and faculty with access to the World Wide Web, offer vid-

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eoconference 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.

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 in-

dividuals. PEN-International does this through participation at conferences, via its Web site, and

through articles in various worldwide publications.

PEN-International has a well designed and accessible Web site that is widely publicized and con-

tinuously 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 listed, and also described in detail with accompanying

photographs. News and events from each year also are archived on the Web site for easy retrieval.

PEN-International is in the process of revising and updating its website, which will be available dur-

ing the summer of 2006.

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 profes-

sional development and training, implementation of multimedia laboratories, faculty and student

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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 con-

ducted 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 each country.

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 satisfac-

tion 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

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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.

Conclusion

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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