



PEN-International Evaluation Report 1 March 2001 - 28 February 2009

Making a Difference in Deaf Education Worldwide

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Executive Summary

The first eight years of Postsecondary Education Network-International (PEN-International) have focused upon achieving the project goals and objectives specified in the original proposal to The Nippon Foundation of Japan dated 30 October 2000. PEN-International has successfully attained its stated goals and objectives with many outcomes exceeding expectations.

PEN-International measures the attainment of project goals and objectives through a variety of means. During years 1-4, the evaluation focused on the establishment of the core network of universities and the corresponding infrastructure necessary to implement such an endeavor. The evaluation methodically was relatively simple; it was clear whether the goals were obtained because each objective was clearly measurable. Namely, faculty professional development and training occurred, cultural exchanges transpired, and state-of-the-art multimedia computer laboratories were designed and constructed.

The second stage of the project (years five to present) focused on expanding the network while encouraging local capability and global networking. This process involves participant institutions evolving from being importers of information to being self-sufficient technology providers and then exporters of this technology to other programs in their home countries. The evaluation of the second stage of the project included in-depth interviews with PEN partners from Russia, China, the Philippines, Japan, the Czech Republic, and Thailand in June 2005; an annual survey with all partner institutions beginning in project year five; and in-depth interviews with major PEN partners from Russia, China, the Philippines, and Japan in June 2008. These evaluations provided a better understanding of the overall effectiveness of the PEN-International program, identified partner successes and challenges, measured partner outcomes and impact, and helped to shape the future direction of the network.

As evidence that PEN-International has successfully attained its goals and objectives, nearly 2,000 educators of people who are deaf representing PEN partner institutions have participated in at least one PEN-International workshop in the last eight years. In project year eight, the number of partners that sought training by PEN-International decreased significantly as many PEN partner institutions attained self-sufficiency. In year three of the project, four of the PEN partner institutions began exporting information learned through PEN-International to other educators of people who are deaf in their own countries. Approximately 240 workshops have been conducted by PEN partners to date, averaging 50 workshops a year. Year eight was the first year that all 18 PEN partner institutions conducted at least one training workshop themselves. As a result of these training initiatives, 9,000 educators of people who are deaf have been trained in the use of instructional technology, impacting more than 9,000 deaf and hard-of-hearing students worldwide. The number of students impacted by training efforts has been steadily increasing over the last four years.

System wide activities sponsored by PEN-International also have made a significant contribution to the successes of the program at large and within each partner institution. The Instructional Technology Symposium, conducted in 2001, 2003, 2005, and 2008, provides a forum for educators supporting deaf and hard-of-hearing students to learn about the current and future innovations and developments in the use of educational media and technology within the teaching and learning process. The Symposium also provides PEN partners with the opportunity to present, share, and discuss their program efforts, research areas, and experiences with other educators of people who are deaf.

The Summer Leadership Institute, conducted in 2006 and 2008, is a multinational weeklong program for postsecondary deaf and hard-of-hearing students representing each of PEN-International's major partner programs in Japan, China, Russia, the Philippines, and the United States. This program promotes the development of leadership skills, self-advocacy in the areas of support service provision, and deaf culture worldwide. Many of the participating students have commented that the experience was life changing, and that they have applied what they learned at the Summer Leadership Institute in their daily lives.

Cultural exchanges among partner institutions are highly encouraged and supported by PEN-International. Many weeklong student exchanges have occurred over the past eight years between institutions from Japan, China, Russia, the Philippines, Korea, and the United States. These exchanges provide students with an opportunity to explore different cultures and strengthen their own identity, foster self-confidence and elevate the motivation of stu-

dents, and build closer relations among the participating institutions. In year eight, the first ever ongoing collaborative agreement was reached between two PEN partner institutions. The National-Tsukuba University of Technology (N-TUT), Japan, and Bauman Moscow State Technical University (BMSTU), Russia, signed a five-year cooperative agreement to share educational and research information in an effort to improve deaf education in each country.

All of the partner institutions agreed that they have benefited greatly from their association with PEN-International. PEN-International has helped many of the partner institutions establish, improve, and/or expand their programs for people who are deaf and hard of hearing. PEN-International has provided valuable training on the use of instructional technology and support service provision that partners have been able to implement at their own institutions and export to other institutions for people who are deaf in their own country. These exporting initiatives have helped in the development of formal collaboration agreements with other programs for people who are deaf within partner countries. In addition, the seed money to start programs has been a catalyst in obtaining additional funding from other sources, supporting the goal of self-sufficiency. As a result of all of these efforts and program improvements, several of the partner institutions have indicated higher job placement rates among their deaf students. The sharing of ideas, practices, and experiences among partner institutions also has been invaluable as partners continue to improve their programs and provide more opportunities for people who are deaf; however, many partners agreed that more collaboration among partner institutions is needed.

Many of the partners expressed concern relating to communications. There is a need to **establish closer relations among the partners by fostering ongoing communications and regular exchanges of information**. One partner institution suggested creating more unity by including existing partners in the application/screening process for selecting new partners into the Network.

In addition, a number of partner institutions will see their principal leader retire in the near future. These institutions would like to see a plan in place to replace these leaders so that their program efforts remain a central focus. **Establishing a senior advisory group** to help with the transitional issues was recommended.

Many barriers still exist regarding the capabilities of people who are deaf and hard of hearing to achieve a postsecondary education and ultimately gain viable employment. As partners look toward the future, they seek assistance and support from PEN-International to help dissolve these barriers and provide deaf and hard-of-hearing students with even more choices and opportunities.

Several partners mentioned that they would like to see PEN-International expand its focus to include support for deaf and hard-of-hearing students at the **primary and secondary educational levels**. One partner mentioned focusing more efforts on the hard of hearing or those with cochlear implants as these numbers are growing and their support needs differ significantly.

PEN-International has indeed attained its stated program goals and objectives. All of the partner institutions have been successful in improving the educational experiences of deaf and hard-of-hearing students at their institutions and within their own countries, and have attained self-sufficiency, in part, as a result of their partnership with PEN-International. PEN-International has made significant progress in the area of deaf education, changing the lives of thousands of deaf and hard-of-hearing people worldwide; however, the opportunity to make an even greater impact in the future still exists.

Introduction

The Postsecondary Education Network-International (PEN-International), a multinational partnership of colleges and universities worldwide, was created in 2001 through funds provided by The Nippon Foundation of Japan to the National Technical Institute for the Deaf (NTID) at Rochester Institute of Technology (RIT). The Nippon Foundation of Japan is a grant-making organization that provides financial assistance for activities that improve the quality of living of people worldwide.

PEN-International's charge is to improve and expand postsecondary education for deaf and hard-of-hearing students around the world. PEN utilizes numerous strategies to achieve this end, including conducting faculty development and training, sponsoring cultural exchanges and events, constructing state-of-the-art multimedia laboratories at partner institutions, providing partners with a platform to share experiences and expertise with other colleagues, and disseminating network and educational resources.

PEN-International is the first and only worldwide network of postsecondary education programs serving deaf students. Currently, the network includes eighteen (18) partner and affiliate institutions from Japan, China, Russia, the Philippines, Thailand, the Czech Republic, Korea, Vietnam, and Hong Kong. The network is growing bigger and stronger every year through expansion initiatives by PEN-International and its partner institutions.

The overarching vision of PEN-International is to develop an international network that enhances and maintains local capability and global networking at each participant institution; this is the primary focus in the second stage of the project. Participant institutions evolve from being importers of information to being self-sufficient technology

PEN-International Partners and Affiliate Institutions

<u>Japan</u>

• National-Tsukuba University of Technology (N-TUT) and Postsecondary Education Programs Network-Japan

China

- Tianjin University of Technology (TUT)
- Beijing Union University (BUU)
- Changchun University (CU)
- Chongqing Normal University (CQNU)
- Zhongzhou University (ZU)

Russia

- Bauman Moscow State Technical University (BMSTU)
- Novosibirsk State Technical University (NSTU)
- Academy of Management-TISBI in Kazan (TISBI)
- Vladimir State University Center for the Deaf (VSU)
- Chelyabinsk State Technical University (CSU)

Philippines

• De La Salle-College of St. Benilde (DLS-CSB)

Thailand

• Ratchasuda College of Mahidol University

Czech Republic

· Charles University

Korea

- Korea Employment Promotion Agency for the Disabled (KEPAD)
- Korea Nazarene University (KNU)

Vietnam

• Dong Nai Provincial Teacher's College

Hong Kong

Centre for Sign Linguistics & Deaf Studies,
 The Chinese University of Hong Kong (CUHK)

providers and then exporters of this technology to other programs in their home countries. PEN-International facilitates this international network by leading and sharing technology and instructional innovations. The other participant institutions are nodes on the international network, fostering an educational ripple effect throughout their home countries. To further the work of PEN and build even stronger allegiances, partner institutions within China and Russia have formed sub-networks (PEN-China, PEN-Russia, and the soon to be established PEN-Korea) to further expand opportunities for people who are deaf and address issues and concerns specific to their country. De La Salle-College of St. Benilde recently has made progress with regards to establishing a network in the Philippines. Further, there are sixteen (16) institutional members representing PEPNet-Japan; PEPNet-Japan is a postsecondary education support system in Japan that evolved through the support and association of PEN-International.

This evaluation report reviews the project goals and objectives, describes the overall program outcomes, and outlines the benefits, challenges and significant accomplishments of each PEN partner institution. The partner information is arranged by country. It is evident that these outcomes have contributed to the successful creation of a functional network consisting of 18 institutions around the world that offer postsecondary opportunities to deaf students.

Project Goals and Objectives

The overall program goals and objectives have remained unchanged from those presented in the original proposal to The Nippon Foundation of Japan in October 2000. The goals are as follows:

- Increase the application of information technology and instructional technology within teaching and learning;
- Improve teaching, learning, curriculum development and instructional development;
- Expand career education opportunities for deaf and hard-of-hearing people internationally; and
- Increase access by people who are deaf and hard of hearing to technology and employment in the information technology industry.

The primary objective of the project is to implement and expand a cooperative network of educational institutions providing postsecondary education to students who are deaf and hard of hearing using innovative information and instructional technologies, and faculty training and development.

The long-term objective is to influence attitudes, practices and policies in the information technology industry so that people who are deaf and hard of hearing are not blocked from access to technology or employment. This goal is achieved through improvement of instruction at postsecondary educational institutions in participating countries.

Project Foci

The primary focus is to adapt instructional and information technologies to the teaching and learning process for deaf and hard-of-hearing students, and improve faculty skills by utilizing instructional and information technologies in the teaching and learning process.

The secondary focus is to expand the career education curriculum available to deaf and hard-of-hearing students, and implement technologies and strategies for assuring that deaf and hard-of-hearing students can learn in a main-stream classroom environment.

The strategy used to enhance and maintain local capability and global networking at each participant institution is to move partner institutions from being **importers** of technology to **self-sufficient** providers, and then **exporters** of information to other educators in their home countries.

Evaluation Process

PEN-International activities and outcomes are continually assessed using both formative and summative evaluation approaches. The overall PEN-International evaluation plan addresses the attainment of project goals, level of satisfaction by partner administrators and faculty, and subsequent impact on deaf and hard-of-hearing students. Additionally, the role of each partner organization as regional and national leaders is also addressed.

The evaluation of faculty development is central to PEN-International goals and as such, a critical component of the evaluation plan. Ongoing evaluations of workshops, seminars, and training sessions are conducted following the professional development evaluation model developed by Thomas Guskey. Guskey specifies five critical levels of evaluation: Participants' Reaction; Participants' Learning; Organizational Support and Change; Participants' Use of New Knowledge and Skills; and Student Learning Outcomes.

To assess overall program goals within participant institutions, an annual partner survey was instituted in year five. The annual partner survey measures participation and impact levels related to faculty development and training initiatives, the use of instructional technology in multimedia laboratories, the amount of funding received from other sources to support program efforts, and significant accomplishments in the field of deaf education. Personal, in-depth interviews were conducted with major partner institutions in years five and eight for the purpose of identifying specific benefits and challenges associated with being a part of the PEN-International Network. This information is used for the purpose of staying on task, meeting specific and changing needs of partner institutions, and helping to guide the future direction of the PEN-International program.

Program Outcomes

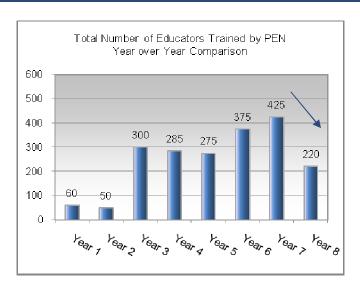
PEN-International's vision of partner institutions becoming self-sufficient technology providers and exporters of technology in their home countries has been achieved.

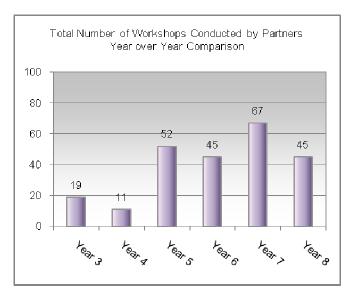
Nearly 2,000 educators of people who are deaf, representing PEN partner institutions, have participated in at least one PEN-International training workshop over the last eight years. In the first two years of operation, PEN-International trained approximately 100 educators of people who are deaf. This number increased significantly in year three to 300, where it remained consistent until increasing slightly in years six and seven. In year eight, the number of educators who sought training by PEN-International decreased significantly to 220. This decline in training by PEN-International representatives was very much anticipated and desired as proof of partner self-sufficiency.

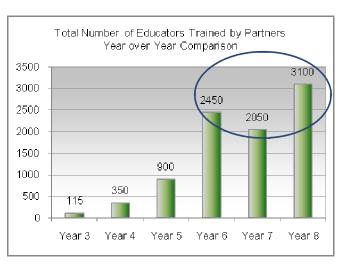
In project year three, four PEN-International partner institutions began exporting new ideas, skills, and technologies learned through PEN-International training initiatives to educators of people who are deaf in their own countries. The number of workshops conducted by PEN partners increased to more than 50 in year five. Although this number has remained fairly consistent the last four years, year eight was the first year that all 18 partner institutions conducted at least one training workshop themselves. Nearly 240 training workshops have been conducted by PEN partner institutions to date.

As a result of PEN partner training initiatives, nearly 9,000 educators of people who are deaf have been trained over the last six years. The biggest impact occurred within the last three years. A total of 3,100 educators of people who are deaf were trained in year eight alone; this finding represents a 35% increase from year seven.

Over the last four years, more than 9,000 deaf students worldwide have been directly impacted by the implementation of new ideas, skills, and technologies learned through PEN partner training initiatives. This number has been steadily increasing, while the number of workshops conducted by PEN partners has remained fairly consistent. (See Chart on Student Impact, p. 10)



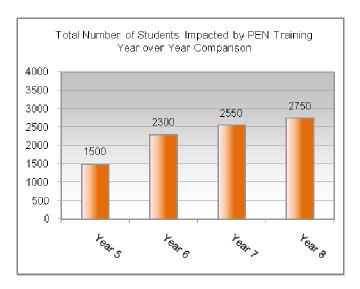


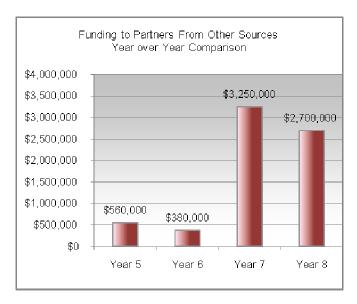


Part of the plan outlined in the original proposal to The Nippon Foundation of Japan was for PEN-International to provide financial support to PEN partners during the initial stages of their program (e.g., seed money), and the partnership with PEN-International would serve as a catalyst for receiving monies from other sources. This strategy supports the vision of PEN partners becoming self-sufficient and enhancing local capability.

This plan started to eventuate in year five. PEN partners have received nearly \$7,000,000 over the last four years from sources other than PEN -International to help fund their programs and improve the postsecondary education of deaf individuals in their home country. In years five and six, PEN partners received less than \$1,000,000. This amount increased to nearly \$6,000,000 in years seven and eight. Sixteen out of the 18 partner institutions reported receiving money from sources other than PEN-International in the last three years.

In addition, PEPNet-Japan, which evolved through the support of PEN-International, is now completely self-sufficient. PEPNet-Japan receives \$1,000,000 annually from the government of Japan to improve the education of deaf and hard-of-hearing students in their country.





System Wide Activities

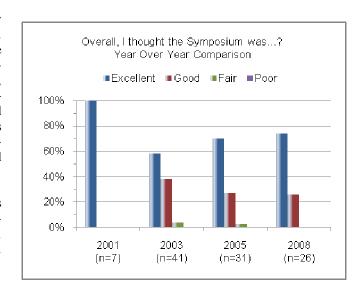
Instructional Technology Symposium

PEN-International co-sponsors, with NTID and The Nippon Foundation of Japan, an international symposium, titled, "Technology and Deaf Education: Exploring Instructional and Access Technologies." The primary goal of the Symposium is to provide a forum for educators supporting deaf and hard-of-hearing students to disseminate information relative to current and future innovations and developments in the use of educational media and technology within the teaching and learning process.

To accomplish this goal, the Symposium focuses on practical applications of technology and showcases enduring technologies with respect to new developments, innovative applications, and research. Teachers, instructional technologists, researchers, technical support specialists, and administrators serving deaf people in K-12 and postsecondary education share ideas through formal workshop and poster presentations.

PEN-International has conducted four technology symposiums to date: 2001, 2003, 2005, and 2008. The most recent Symposium, conducted in June 2008, consisted of two plenary addresses, 45 formal workshop presentations, 26 poster sessions, and 10 commercial exhibits. A total of 222 educators representing more than 20 countries attended the three-day conference. Nearly 40 participants representing all 18 partner institutions were in attendance, and 13 out of the 18 partners conducted either a formal workshop or poster presentation.

All four Symposia received extremely high ratings overall. A majority of respondents enjoyed learning about new and applicable technologies most; however, networking with colleagues also played an important role in Symposium success.



Summer Leadership Institute

PEN-International designs, conducts, and sponsors a biannual Summer Leadership Institute at Herstmonceux Castle in East Sussex, England. The Summer Leadership Institute is a multinational weeklong program for postsecondary deaf and hard-of-hearing students. The goals of the Institute are to promote the development of leadership skills among postsecondary student leaders; focus on self-advocacy skills in the areas of support services in post-secondary education, community access and employment; and engage in learning about deaf culture and awareness. These goals are accomplished through ice-breaking activities, presentations by students and faculty members at partner institutions, cultural performances and demonstrations, exercises and games, and social gatherings.

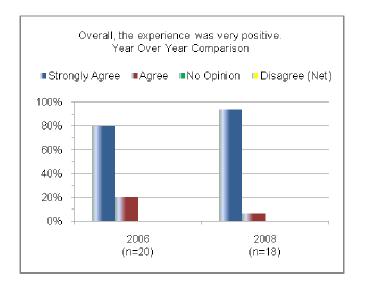
Students, sign language interpreters and voice language translators, and faculty members representing each of PEN -International's major partner programs in Japan, China, Russia, the Philippines, and the United States are invited to attend the program.

This comprehensive leadership program covers an array of topics relating to deaf leadership, communication and negotiation skills, diversity, assumptions and expectations regarding people who are deaf, setting and achieving goals, deaf history and culture, employment, and self-advocacy.

The first Summer Leadership Institute took place in August 2006, and 20 students representing Japan, China, Russia, the Philippines, and the United States were in attendance. The event was so successful that a second Summer Leadership occurred in August 2008. A total of 18 students, representing these same institutions, attended the weeklong conference.

Almost all of the student participants (80% in 2006, and 94% in 2008) strongly agreed that overall, the weeklong experience was very positive.

The next Summer Leadership Institute is scheduled to take place in August 2010.



Cultural Exchanges

PEN-International highly encourages and supports cultural exchanges and events among PEN partner institutions. The belief, which has been validated, is that these cultural exchanges strengthen the knowledge and skills of all participants and help to develop a better understanding of the diverse cultures that affect our world. In addition, these cultural student and faculty exchanges build closer relations among participant institutions through the exchange of information and sharing of ideas, ultimately improving postsecondary educational opportunities for deaf students. Cultural exchange is just one of the ways PEN-International fosters lateral communication among partner institutions.

Numerous weeklong student exchanges have occurred over the past eight years between institutions from Japan, China, Russia, the Philippines, Korea, and the United States. All of the feedback from student participants has been extremely favorable. These successes were the foundation of the first ever ongoing collaborative agreement among partner institutions. The National-Tsukuba University of Technology (N-TUT), Japan, and Bauman Moscow State Technical University (BMSTU), Russia, reached a five-year cooperative educational and research agreement in September 2008.

The visiting scholar program also has proven to be extremely worthwhile. In year two, NTID professor of mathematics Maria Shustorovich assisted BMSTU in developing and establishing a state-of-the-art multimedia laboratory. More recently, Dr. You Hyun-Bae, Dean of Faculty, Division of Design at Korea Nazarene University (KNU), was a visiting scholar at NTID from March 2008 through February 2009. Dr. You developed a comprehensive plan to study English and ASL, become better acquainted with the NTID organizational structure, services, curriculum, and management, and focus on the teaching process and curriculum development at NTID. This visit provided Dr. You with the background and information needed to enhance the academic offerings to deaf students at KNU.

Other cultural events that have been sponsored by PEN-International include: Robert F. Panara Haiku Competitions, Chinese art exhibitions and visiting artists, joint paper car design and race competitions, and Taiko drumming and martial arts performances.

National-Tsukuba University of Technology (N-TUT)

Tsukuba College of Technology for deaf and visually impaired people opened in 1990. The college, which was modeled after NTID, was the first of its kind in Asia. In December 2005, the Government upgraded Tsukuba to the national university level with the new name of National-Tsukuba University of Technology (N-TUT). Tsukuba's Division for Hearing Impaired offers state-of-the-art programs in design, mechanical engineering, architectural engineering, electronics, and information sciences. TCT, which is now referred to as N-TUT, has been a partner of the PEN-International Network since its inception in 2001. N-TUT was able to successfully obtain additional funding as a result of their partnership with PEN-International, exceeding far beyond PEN's initial seed money, making their program one of the most well-funded programs in Japan.

In 2005, N-TUT spearheaded efforts to create a Postsecondary Education Program Network in Japan (PEPNet-Japan). PEPNet-Japan, based at N-TUT, is a collaborative network of 16 universities/institutions established with the support of PEN-International in order to provide better support services for deaf and hard-of-hearing students who are enrolled in postsecondary educational institutions across Japan. In 2005, PEPNet-Japan hosted its first symposium on postsecondary education of deaf and hard-of-hearing students. A total of 160 participants made this event the biggest symposium on postsecondary education for deaf and hard-of-hearing students in Japan's history. PEPNet-Japan achieved financial self-sufficiency in 2008 by securing an ongoing annual grant of \$1,000,000 from the Government of Japan.

"N-TUT has achieved a 100% placement rate for students who seek jobs as a result of the education received through the programs of PEN-Japan."

Dr. Naoki Ohnuma Director, PEN-Japan, N-TUT

Benefits and Significant Accomplishments

Faculty, administrators, and representatives of N-TUT have participated in numerous successful and worthwhile faculty professional development and training workshops over the years; however, Dr. Naoki Ohnuma, Director, PEN-Japan at N-TUT, feels that their participation in the PEN-International sponsored Technology Symposiums and Summer Leadership Institute Programs have made the biggest impact on their program's success. Deaf students have benefited tremendously from these initiatives, contributing to a 100% employment placement rate.

The multimedia laboratories have also been key to N-TUT's success. The implementation and daily usage of Computer-Aided Design (CAD) and Computer-Aided Manufacturing (CAM) software has significantly improved the quality of education received, making these students more marketable upon graduation.

Communication and collaboration among partner universities is essential for long-term program success. In September 2008, N-TUT and Bauman Moscow State Technical University (BMSTU) reached a five-year cooperative educational and research agreement. This is the first agreement of its kind, and will hopefully spark similar collaboration efforts among partner institutions in the future.

Challenges

Dr. Ohnuma reports that the biggest challenge in Japan is the increasing number of deaf students seeking a postsecondary education, and the subsequent lack of interpreting services available at universities across Japan. Further, PEN-International's focus has been on assisting deaf students, not those who are hard of hearing or have cochlear implants. The numbers of these types of students are also increasing and it is imperative that their differing needs be addressed.

Another important challenge that N-TUT and other partner institutions will be facing in the near future relates to transition of leadership. Several prominent leaders in the PEN Network will be retiring soon, creating a need for strong second-generation leadership that will be able to continue to carry out the work of PEN. Dr. Ohnuma suggested implementing a "senior advisory board" to help ease the transition for these affected partner institutions.

Recommendations and Visions for the Future

There is a need to improve communication across the network. This includes communication from headquarters as well as lateral communication among partner institutions. The facilitation and promotion of lateral communications is especially important in order for the PEN-International Network to continue to be successful if and when PEN funds no longer become available.

Dr. Ohnuma suggested communicating to existing partner institutions the guidelines for selecting new partners into the network, and including existing PEN partners in the application/screening process. Including partners in the application/screening process will promote communications, commitment, unity, and even inspiration among all partner institutions.

"PEN-International
will be experiencing
transitional challenges
in the near future.
The directors of
PEN-Japan and
PEN-China will be
retiring soon, creating
a need for continued
strong leadership.
A senior advisory
board will help ease
transitory issues."

Dr. Naoki Ohnuma Director, PEN-Japan, N-TUT

Dr. Ohnuma also suggested creating a faculty exchange program among the PEN partners. PEN-International recognized early on that partner institutions have differing needs, and as a result, training workshops were designed and implemented to meet those specific areas of need. Partners institutions are now experts in these areas, exporting ideas, skills, and technologies to other educators in the own country. Sharing this knowledge with educators in other countries is a logical progression. Creating an international university was also recommended to further faculty development and training among PEN partners.

Expanding PEN-International support to include primary and secondary levels was also recommended as PEN stakeholders envision the future of the Network.

Tianjin University of Technology (TUT)

Tianjin Technical College for the Deaf of Tianjin University of Technology (TUT) 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. TUT has been a part of the PEN-International Network since its inception in 2001, and is the lead PEN-International partner in China, coordinating all activities in the country.

In 2003, Beijing Union University (BUU) and Changchun University (CU) joined TUT to form PEN-China. Zhongzhou University (ZU) and Chongqing Normal University (CQNU) joined PEN-International and the PEN-China Network in 2005 and 2007, respectively. PEN-China is currently made up of five institutions.

"Our partnership with PEN-International and NTID has made us realize that we need to add more majors in the university system to serve deaf and hard-of-hearing students. The partnership has helped us to be more open."

Director Guodong Bao Director, PEN-China, TUT Benefits and Significant Accomplishments

Educators from TUT have made numerous visits to NTID in an effort to improve their teaching methods, through the use of instructional technology, in order to better assist and support deaf and hard-of-hearing students in China. Guodong Bao, Director, PEN-China at TUT, recognized that change happens gradually and that these training sessions "help in a small way to transform deaf education in China." Faculty at TUT began exporting what they learned through PEN training workshops to other educators in their own country in year three. These exporting initiatives have continued throughout the years, impacting nearly 800 educators of people who are deaf.

The state-of-the-art multimedia laboratories at TUT are used regularly, an average of 40 hours per week, to teach students, community members, and other educators of people who are deaf. As a result of these teaching improvements and the implementation of instructional technology, deaf students and community members are now marketable and able to find viable employment more easily.

TUT also has been able to secure funding from other sources as a result of its partnership with PEN-International. TUT's primary funders include Charity Association in Tianjin and the China Disabled Persons' Federation.

Other PEN-International sponsored events mentioned as significant accomplishments include ASL Training program, the Summer Leadership Institute, Chinese Art Exhibition, and the Paper Car Design and Race. Further, PEN -China and PEN-International collaborated on a two-year research study on Tertiary Deaf Education in China. The purpose of this study was to assess postsecondary deaf education in China and provide recommendations for use in the development of a five-year education improvement plan. The research found that deaf students in China are lagging behind deaf students from other countries, and that "fewer than 1,000 deaf students attend college and that there is very little training for deaf children." This extensive study was presented to the China Disabled Persons' Federation in 2004.

Challenges

According to Director Bao, there are 20 million deaf people in China. China is expanding economically, and is now interested in learning how other countries successfully educate their deaf children. China would like to share this kind of information through the help of PEN-International. There is a need to provide more exposure and education to teachers of people who are deaf in China in order to provide more majors in the university system, and ultimately provide deaf and hard-of-hearing students with more choices and opportunities. The curriculum of universities in China that serve deaf students are somewhat limited to the visual arts fields. The partnership with PEN-International and NTID has helped Director Bao and PEN-China realize that offering more majors is in fact obtainable; however, the majority of the population still do not believe deaf people are capable of this kind of success. These kinds of barriers still exist in China and need to be dissolved.

Director Bao mentioned that he plans to retire from his position at the university in the near future and wishes to focus his efforts exclusively on PEN-China. The challenge with this, according to Director Bao, is that PEN is only supporting his travel expenses and not his time, and he feels there is still a lot of work to be done for people who are deaf in China. Further, PEN-International will need to help transition the new leadership at the university.

"We need to watch
others and learn more
from those that are more
advanced than us,
so that there are no more
misunderstandings.
My goal is to pick the
best approach
for China."

Director Guodong Bao Director, PEN-China, TUT

Another challenge faced by PEN-China is the difficulty associated with implementing RIT/NTID's Deaf Education Model. Director Bao explains that this model is too expensive in China as it requires live interpreters in each class-room. Live interpreters are expensive and very difficult to find in China. The Deaf Education Model needs to be flexible and provide options in order to meet individual needs and circumstances.

Recommendations and Visions for the Future

It is Director Bao's vision to have all five major PEN-International partner institutions come to China for a research-focused conference regarding the future of deaf education. There is a need for more lateral communication and this will give partners the opportunity to learn from each other, discuss best practices in deaf education, and decide the model that best meets their individual needs. These kinds of gatherings will foster closer relations among the PEN partner institutions, prompting more ongoing lateral communication and sharing.

PEN-China is now focused on vocational education, and Director Bao would like to see the five universities in the PEN-China network shift efforts to include more opportunities for employment for deaf people. There already have been discussions with five vocational programs, each of which will become a center in its region. The plan is to seek government support in order to expand these regional centers.

Beijing Union University (BUU)

Beijing Union University (BUU), 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. BUU joined the PEN-International Network in 2003.

Benefits and Significant Accomplishments

BUU has participated in many PEN-International faculty professional development and training workshops over the years. As a result, BUU began exporting the skills learned through these workshops to other educators of people who are deaf in China within two years (beginning in 2005) of becoming a PEN-International partner. BUU conducts an average of two workshops a year and has impacted more than 500 deaf students to date.

The facilitation and improvement of long distance and accessible teaching for deaf students is one of BUU's most significant accomplishments. BUU recently restructured its laboratory in order to better assist deaf students in the use of instructional technology. As a result, BUU reported a significant increase in laboratory usage for course related work (average of 40 hours per week in year seven versus 60 hours per week in year eight).

Further, BUU secured funding for their program from an outside source in the amount of \$220,000.

Recommendations and Visions for the Future

BUU would like to receive more faculty training from PEN-International, particularly related to network instruction and how best to teach deaf students who participate in long distance or online learning.

Changchun University (CU)

The Special Education College of Changchun University (CU) 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 400 deaf and hard-of-hearing students who study in the college's fine arts and graphic design programs. CU joined the PEN-International Network in 2003.

Benefits and Significant Accomplishments

CU's participation in PEN-International sponsored workshops has ultimately benefited, through curriculum development and implementation of instructional technology, all 400 deaf students at the university. In the last four years, CU has conducted 15 training workshops with more than 500 educators of people who are deaf. These training initiatives have subsequently impacted approximately 1,500 students throughout China.

In 2005, CU was assessed by the government as the "first important humane studies college of Jilin Province," and received national recognition for its teaching practices by the Education Ministry in 2007. Most recently, CU designed and conducted a seminar, titled, "The Nationwide Fine Art Teaching Seminar for Deaf Undergraduates." Teachers throughout the country, who are involved in the education of deaf students majoring in fine arts, were in attendance. All of these efforts have led to more than \$100,000 in outside funding for the CU program.

Zhongzhou University (ZU)

Zhongzhou University was founded in 1980 and has approximately 10,000 students enrolled at the institution. The University consists of nine colleges, including an institute for special education that was formally established in 2002. Zhongzhou University houses the only higher special education college in China's Midwest region. More than 200 students, including 195 deaf and seven sign language interpretation students, are currently enrolled in the program. ZU joined the PEN-International Network in 2005.

Benefits and Significant Accomplishments

The most significant accomplishment related to faculty professional development and training is ZU's participation in the PEN-International sponsored workshop series titled, "Establishing an Interpreter Training Program." This weeklong workshop series, conducted in April 2007, included nine training sessions in total. Five educators of people who are deaf representing ZU were in attendance. More than 600 faculty and students were subsequently impacted. Zhongzhou University was the first to offer sign interpreting as a major in China, and built a sign language laboratory, the first and only one of its kind in all of China. Zhongzhou University also established a department that assists deaf graduates gain full-time employment.

ZU has conducted a total of nine workshops within the past four years. Approximately 1,200 educators of people who are deaf have been trained through these exporting initiatives based on skills, ideas, and technologies learned through PEN-International. Dr. Li Ying's Lecture, titled, "How to Improve the Deafs' Social Applicability," was reported as one of ZU's significant accomplishments.

ZU reported doubling their laboratory usage in year eight, averaging more than 100 hours per week for course work alone. ZU also received additional funding from China Disabled Persons' Federation in the amount of \$30,000.

All of these factors have led to an increase in higher educational opportunities for deaf students, and more group activities and projects with hearing peers. These combined efforts of deaf and hearing students have been very successful, many of which resulted in the participating students receiving awards and recognition.

Chongqing Normal University (CQNU)

Founded in 1954, Chongqing Normal University (CQNU) is one of the first postsecondary teacher colleges created after the founding of the People's Republic of China. In 2005, the Special Education College in Chongqing Normal University was established, the only special education school in the west of China. Approximately 50 deaf students currently attend this university and study a range of subject areas including computer technology, assistive technology, information science, and art design. CQNU became an official member of the PEN Network in 2008.

Benefits and Significant Accomplishments

CQNU was eager to join the PEN-International Network and made strides to improve postsecondary education for deaf students. As such, CQNU representatives participated in PEN-International workshops before the institution was an official partner. CQNU began exporting information to other educators of people who are deaf within a year. The single biggest faculty development and training initiative conducted by CQNU was a workshop relating to Assistive Technology. A total of 10 people participated in the workshop, which subsequently impacted a total of 66 students. In year eight, an assistive technology course was instituted to support deaf students at CQNU.

Significant accomplishments related to multimedia laboratory and usage include the implementation and utilization of real-time speech recognition technology and captioned television to assist deaf students in the classroom. Further, CQNU nearly doubled its laboratory usage in year eight for both course and non-course work (averaging 45 hours per week in year seven versus 80 hours per week in year eight). The institution was able to secure government funding.

Bauman Moscow State Technical University (BMSTU)

Founded in 1830, Bauman Moscow State Technical University (BMSTU) 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 expanded its programs and services for deaf students in the 1990s by establishing the Center on Deafness. Presently, 250 deaf students study in various programs across the university as well as in compensatory programs.

BMSTU joined the PEN-International Network in 2002. In 2005, three additional institutions in Russia joined the Network to form PEN-Russia: Novosibirsk State Technical University (NSTU), Academy of Management-TISBI in Kazan (TISBI), and Vladimir State University Center for the Deaf (VSU). In 2007, Chelyabinsk State Technical University (CSU) became the fifth institution in Russia to be part of PEN-International. BMSTU is the lead PEN-International partner in Russia, coordinating all activities in the country. The formation of PEN-Russia is BMSTU's single biggest overall accomplishment since joining the establishment of PEN-International.

"Bauman benefits directly from PEN-International by learning new methodologies in educating deaf college students. We also are grateful for the financial support provided to establish new state-of-the-art facilities, and the contact with others who have a common vision in the ways to teach deaf people."

Dr. Alexander Stanevsky Director, PEN-Russia, BMSTU Benefits and Significant Accomplishments

BMSTU has taken the lead in establishing PEN-Russia. Dr. Alexander Stanevsky, Director, PEN-Russia, BMSTU, explains that BMSTU operated in a closed system until its partnership with PEN-International. PEN-International helped BMSTU officials realize the vast opportunities available to people who are deaf and hard-of-hearing through collaboration with other institutions. BMSTU has benefited from its partnership with PEN-International by learning new methodologies and technologies to educate deaf college students, receiving financial support and guidance to develop state-ofthe-art multimedia laboratories, and providing a platform to share experiences and expertise with other partners. PEN-International was able to provide BMSTU with new tools to enhance their program for people who are deaf. PEN-International has encouraged BMSTU and the other four institutions to work together in tighter unity for the good of the whole.

The most significant accomplishment related to faculty professional development and training is the 2004 agreement between BMSTU and the Federal Education Agency. BMSTU agreed to conduct 76 hours of training with faculty members from colleges and higher professional education institutions that work with hearing impaired and/or musculoskeletal system impaired persons on the use of technology in the education of postsecondary deaf and hard-of-hearing students. The training sessions were held at universities with special education programs for disabled persons located in each of the seven Federal Districts of Russia. Approximately 375 educators participated in these training seminars.

PEN-Russia hosted a three-day All-Russia Forum in November 2008. Deaf students representing PEN partner institutions in Russia, government officials, and educators representing vocational schools, colleges, and universities across the country gathered to discuss the future of deaf education in Russia. The main objective of the forum was the establishment of the first all Russian School of Leadership. A highlight of the forum was the student presentations and student videoconferences to the United States and Japan.

BMSTU has been a leader in the PEN-International Network with regards to exporting ideas, skills, and technology learned through PEN-International to other educators of people who are deaf. Over the years, BMSTU has conducted more than 80 workshops and trained nearly 1,200 educators. Additionally, BMSTU has received approximately \$550,000 in grants from within Russia to fund their program efforts.

Another significant accomplishment of BMSTU was the inclusion of five multimedia laboratories into local and global networks. Deaf students are now able to access educational resources remotely, including multipoint video-conference technology. BMSTU has made substantial and continuous improvements to its multimedia laboratories over the years recognizing the importance of instructional technology in the education of deaf and hard-of-hearing students. All five PEN-Russia institutions purchased a multipoint videoconferencing system in 2007 in an effort to further partner relations, advance collaboration initiatives, and train students remotely.

As stated earlier, National-Tsukuba University of Technology (N-TUT) in Japan and BMSTU reached a five-year cooperative educational and research agreement in September 2008. This agreement is the first of its kind among PEN partner institutions.

Challenges

The primary challenges associated with being part of the PEN Network relate to communication and cultural differences among partners. Dr. Stanevsky explains that not all of the partners have their deaf and hard-of-hearing students mainstreamed, causing a difference in opinions on how to best educate and provide support. Additionally, barriers exist within some countries, specifically Japan and China, related to expectations and perceived abilities of deaf and hardof-hearing students. PEN-International and NTID are good examples of what deaf and hard-of-hearing students can and have achieved given the opportunity. PEN-International needs to continue to help countries break down these barriers. Cultural exchanges help participating deaf students realize their potential, and the exchange of information and resources is invaluable. The cooperative agreement between N-TUT and BMSTU will help shape a shared vision.

Recommendations and Visions for the Future

As for the next five years, Dr. Stanvesky hopes for more inter-country collaboration on projects. Exploration and sharing of intellectual and educational resources is needed to further the progress of deaf education worldwide. At BMSTU, Dr. Stanvesky hopes to provide more opportunities for deaf students, including doctorate programs and more choices for majors. Currently, many universities do not have the experience in teaching a wide array of program offerings.

"There are differences in opinions among partners on how to best educate and provide support to deaf students.

PEN can play a role in creating an atmosphere for other countries to adopt. Cultural exchanges can also help, providing valuable opportunity to share information and resources."

Dr. Alexander Stanevsky Director, PEN-Russia, BMSTU Novosibirsk State Technical University (NSTU) was founded in 1950 and has 18,000 students enrolled at the university in one of its three institutions. The Institute of Social Rehabilitation at Novosibirsk State Technical University was established in 1993 for the purpose of providing high technology education to disabled students. The institution has nearly 300 deaf and hard-of-hearing students seeking a postsecondary level education. NSTU joined the PEN-International Network in 2005.

"Collaboration with PEN-International has resulted in new computers for teaching deaf students, the introduction of instructional and videoconference technologies, and new partnerships."

Gennady Ptushkin Director, ISR/NSTU Benefits and Significant Accomplishments

NSTU has benefited from its partnership with PEN-International through the design and construction of a state-of-the-art multimedia laboratory, the introduction of new technologies including videoconferencing, and the provision of a platform to share experiences and ideas with other institutions involved in postsecondary education of people who are deaf and hard of hearing.

NSTU's most significant faculty professional development and training accomplishment is its regular, ongoing regional training workshops. Over the last three years, representatives from NSTU have conducted approximately 25 workshops with faculty members from regional schools for people who are deaf on the use of instructional technology. Approximately, 1,700 educators of people who are deaf have been trained through these exporting initiatives, impacting nearly 800 deaf and hard-of-hearing students to date.

In addition, NSTU hosted a conference titled, "Novosibirsk International Seminar on Deafness" in June 2007. More than 200 educators of people who are deaf from across Siberia were in attendance.

The multimedia laboratory at NSTU is used regularly, and experienced a significant increase in year eight, nearly doubling its usage (averaging 70 hours per week in year seven versus 130 hours per week in year eight). The laboratory at NSTU is used in part to help deaf students at the university prepare for and compete in the Regional IT Competition that occurs twice a year.

Further, NSTU continues to receive annual funding from Novosibirsk Regional Administration to further the development of its program in the amount of \$40,000.

Vladimir State University Center for the Deaf (VSU)

The Center of Professional Rehabilitation of the Deaf was established in 1994 at Vladimir State University (VSU). In 2002, the center became an experimental platform for developing education and social support to deaf students. As a result of these efforts, the university became a leader in deaf education. The university currently has more than 60 deaf and hard-of-hearing students enrolled in its computer systems of management in industry and business programs. VSU joined the PEN-International Network in 2005.

Benefits and Significant Accomplishments

In the last few years, VSU has made significant improvements to their program. In 2006, VSU opened a new specialty center on vocational training, and in 2008, opened a new college for teaching deaf students. VSU also is involved in a project, in coordination with PEN-Russia, related to remote distance education.

PEN-International assisted in equipping VSU laboratories with the latest technologies to support their project initiatives. These improvements included two active SmartBoards, a document chamber, video cameras, video projectors, video screens, additional computer systems, and wireless communication software.

VSU also has been successful in securing funds from sources other than PEN-International, receiving more than \$600,000 to fund program initiatives in the last four years.

VSU began exporting skills and technologies learned from PEN-International to other educators of people who are deaf almost immediately. More than 400 educators have participated in the 10 workshops that have been conducted by VSU to date. These regional workshops focused on the use of technology and curriculum development to support deaf and hard-of-hearing students.

Further, VSU is currently working on a deaf educational instruction system to be used uniformly throughout the institution.

Another significant benefit and recent accomplishment was VSU's participation at the PEN-International sponsored 2008 Technology Symposium and United Nations Educational, Scientific and Cultural Organization (UNESCO) conferences. These conferences provided VSU with the opportunity to discuss experiences and share expertise with other educators of people who are deaf.

Academy of Management-TISBI in Kazan (TISBI)

The Academy of Management-TISBI in Kazan (TISBI) has provided secondary and higher professional training for handicapped students via the Internet since 2001. Students are being trained in high demand professions through a "virtual environment of social communication, partnership and cooperation." Approximately, 80 students are enrolled in this program, of which 25 are deaf or hard of hearing. TISBI joined the PEN-International Network in 2005.

"The permanent and continuous development of the partnership network of PEN-Russia has been a significant benefit to deaf and hard-of-hearing people in Russia."

Nella Pruss Rector, TISBI Benefits and Significant Accomplishments

TISBI recognizes the benefits of being a part of PEN-International as it provides a platform to share experiences and collaborate on projects to advance educational opportunities for people who are deaf and hard of hearing. The most significant accomplishment for TISBI related to faculty professional development and training was their recent involvement and participation in the three-day All-Russia Forum (November 2008) on the future of deaf education. The forum featured an online videoconference between the PEN-Russia institutions regarding the establishment of the first all Russian School of Leadership.

TISBI has also conducted numerous regional workshops in the last four years with educators on the psychology and pedagogy of teaching deaf and hard-of-hearing students. More than 700 educators have been trained through TISBI workshop initiatives. In year seven, a new laboratory was opened at TISBI through funds provided by PEN-International, the Government of Novosibirsk Region, and TISBI. The laboratory is used an average of 60 hours per week for course work alone. The laboratory is utilized for lectures, seminars, and non-course activities for students and teachers. Additionally, TISBI has received more than \$260,000 from outside funders to date.

Other significant accomplishments include TISBI's participation in two international conferences: The 2008 United Nations Educational, Scientific and Cultural Organization (UNESCO) Conference and the 2008 Educational International Conference. TISBI conducted a roundtable discussion at UNESCO regarding the role of family and school in the socialization of persons with restricted health abilities, and was able to participate and share its experiences on inclusive education for people who are deaf at the 2008 Educational International Conference in Geneva, Switzerland.

Chelyabinsk State Technical University (CSU)

In 1999, the Regional Center for the Education of Disabled People (RCEDP) was established at Chelyabinsk State Technical University (CSU). RCEDP was established with the support of the government of Chelyabinsk and the European Union's TACIS program. The idea for such a Center was conceived in 1992, when the preparatory department of CSU first accepted a small group of disabled students, some of whom were veterans of the Afghan war. One of RCEDP's major functions is to prepare disabled students, who often have had a low quality of high school education, for study at the University. CSU joined the PEN-International Network in 2007.

Benefits and Significant Accomplishments

As a result of its partnership with PEN-International, CSU was able to implement a program that provides deaf and hard -of-hearing people in the Chelyabinsk Region with the skills and education needed to pursue a postsecondary education. This pre-university program has increased the opportunities available to deaf and hard-of-hearing people through special training and the availability of assisted materials.

In 2007, a new multimedia laboratory was constructed at CSU to support these training efforts. The laboratory provides students with videoconference technology, distance learning options, and technological resources to assist in their learning process. This laboratory contains 22 computers and is utilized, on average, 40 hours a week for both course and non-course related activities. Additionally, the multipoint videoconference system provides PEN partners a viable platform to share ideas, skills, and expertise.

Within a year of joining the PEN-International Network in 2007, CSU began exporting skills learned through PEN-International to other educators in its region. In year eight, CSU conducted two workshops, trained 16 educators of people who are deaf, which subsequently impacted 30 deaf and hard-of-hearing students. CSU was able to secure \$55,000 in non-PEN funding in just two years.

"As a result of the partnership with PENInternational, we were able to create a system of pre-university learning for deaf and hard-of-hearing people in the Chelyabinsk region to further their education beyond high school."

Elena Martynova Project Manager, CSU

Philippines

De La Salle-College of St. Benilde (DLS-CSB)

The College of St. 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 (DLS-CSB). DLS-CSB's School of Deaf Education and Applied Studies (SDEAS) is a leader in education for people who are deaf in the Philippines through its academic programs, international linkages, and unique commitment to empower deaf citizens by preserving deaf heritage and nurturing Filipino deaf culture. DLS-CSB serves approximately 150 deaf students. DLS-CSB joined the PEN-International network in 2002.

"PEN-International's impact on deaf students in the Philippines has been considerable, particularly in the area of capability building. As a result of PEN training, needed changes and improvements to teaching methods of deaf students have been made.

Before PEN's support, there was always the sense that the government needed to take care of deaf people. DLS-CSB is now recognized as a good program for deaf students."

> Dean Theresa De La Torre Dean, DLS-CSB

Benefits and Significant Accomplishments

Prior to DLS-CSB's partnership with PEN-International, the La Salle college program was considered a charitable welfare organization for people who are deaf and had been neglected by previous government administrations. It was apparent that there were philosophical differences in how deaf people should be educated. Theresa De La Torre was hired as director of the program at De La Salle in 2001, and her primary charge was to convince people that deaf individuals can be successful and educated at the postsecondary level. Her views were validated and supported through the new partnership with PEN-International. This partnership also helped elevate the position of the school. Administrators began to take notice of the program for people who are deaf, and now it is recognized as a prominent postsecondary educational program available to deaf and hard-of-hearing students in the Philippines.

PEN-International's biggest impact has been in the area of "capability building." DLS-CSB faculty, administrators, and students have participated in more PEN-International sponsored workshops than any other partner institution. Through the years, DLS-CSB educators of people who are deaf have participated in numerous workshops, many of which were tailored to meet specific needs, including learning strategies for people who are deaf and hard of hearing; access support services; career development and job placement; counseling skills; student development and advocacy; improving classroom communications; and establishing an interpreting program. Other workshop topics supported course curriculum such as teaching mathematics to deaf and hard-of-hearing postsecondary students; accounting basics for microentrepreneurs; market needs assessment; developing a business plan; and addressing the writing needs of deaf students at different English proficiency levels.

DLS-CSB educators of people who are deaf obtained knowledge, skills, and confidence through these training initiatives to make needed changes and improvements to the methods by which deaf and hard-of-hearing students are taught. Specific outcomes include increased employment rate through effective employer education and support; improved learning and teaching interventions in the areas of English, math, and business; and improved sign language instruction. Additionally, these changes elevated the recognition of deaf people's rights to a postsecondary education and contributed to significant growth of the SDEAS organization.

In years three and four, SDEAS partnered with 10 industry partners to create internships and employment opportunities. In year six, SDEAS opened a new learning center, and its interpreting program was officially recognized as a profession in year seven. Further, DLS-CSB educators of people who are deaf began exporting skills learned through PEN-International workshops within a year of being a part of the Network. To date, DLS-CSB has trained nearly 200 educators of people who are deaf through 15 of its own training initiatives.

DLS-CSB doubled its laboratory usage for both course and non-course work in year eight. The two laboratories are used not only for lectures and training, but also for individual skills-based training, study groups, and projects. The PEN Multimedia Learning Center is also the venue for all PEN-International training conducted using video-conference technology. More than 10 videoconference training workshops have been conducted by PEN-International with DLS-CSB faculty, administrators, and students to date.

PEN-International's impact on deaf students in the Philippines has been considerable. The funds have helped to promote exchange programs and improve existing facilities. In turn, administrators started to provide more funding for the programs. SDEAS, in partnership with Philippine Resources for Sustainable Development (PRSD), won a \$21,000 grant from the Philippines-Australia Community Assistance Program. Participation in this competition was made possible through financial assistance from PEN-International.

Challenges

The primary challenge associated with being a part of the PEN-International network involves the lack of ongoing communication and information sharing among partner institutions. Dean De La Torre commented on the need for more frequent and regular information sharing between partners. She also mentioned the importance of real-time communication with other countries. Communicating once a year is just not enough.

Another challenge relates to breaking down cultural barriers in the Philippines. The government still defines deafness medical versus cultural. Convincing the government that deaf people are a linguistic minority is a difficult task.

Recommendations and Visions for the Future

Dean De La Torre suggested improving communications and information sharing by focusing on inter-PEN relationships. She recognizes the importance of tailoring programs to meet the specific needs of the institution, culture, and country, but feels that more could be learned from one another. She feels it makes sense for partners to learn all the models, programs, and strategies that are in place at different partner institutions, and adopt the ones that make the most sense for individual programs.

Dean De La Torre also would like to see PEN-International broaden its focus by including support and training for deaf and hard-of-hearing students at the secondary level. There is a need to offer a secondary program at De La Salle. However, significant work needs to be done to convince the government of this need in order to receive appropriate funding. educators of people who are deaf in the Philippines regarding

"There is a need for more frequent and regular information sharing between partners.

I would also like PEN to continue with the level of support it is providing, and consider expanding its focus to include secondary education. This will help address significant needs in the Philippines."

Dean Theresa De La Torre Dean, DLS-CSB

ernment of this need in order to receive appropriate funding. Dean De La Torre requests assistance in mentoring educators of people who are deaf in the Philippines regarding how to persuade the government of this need. Securing more government funding can open a lot of doors for deaf and hard-of-hearing students in the future.

Ratchasuda College of Mahidol University

Ratchasuda College of Mahidol University is the first and only educational institution in Southeast Asia dedicated to providing tertiary education for deaf students. The College, created in 1991, consulted with worldwide leaders in the education of deaf students in formulating its curriculum. Ratchasuda enrolls nearly 100 students who are deaf. Ratchasuda joined the PEN-International Network in 2002.

"We would like to thank
PEN-International for all
the training received
through the years. We have
also gained more knowledge
on disabilities through the
exchange of information
among partner institutions.

It was wonderful to have our two lecturers present their work on disability at the 2008 Technology Symposium. This was a great opportunity to meet and share knowledge and experiences with other professionals working in this area."

Chalita Rainua Ratchasuda College

Benefits and Significant Accomplishments

The exchange of information between PEN-International partner institutions is what Ratchasuda College of Mahidol University values most. Having a network that facilitates the exchange of information among institutions that are working toward the same goal — to improve postsecondary educational opportunities for people who are deaf and hard of hearing — has been invaluable. Ratchasuda's hope is that PEN partner institutions will work more closely in the future, engaging in more ongoing communication and exchanging information more freely.

The knowledge gained through participation in PEN-International-sponsored workshops has elevated the program for people who are deaf at Ratchasuda College significantly. Ratchasuda has participated in numerous training workshops with regard to the use of instructional technology and design, teaching English to deaf students, and interpreter and sign language education. In year five, faculty members from NTID conducted a two-week long American Sign Language (ASL) course for graduate students and faculty and staff members at Ratchasuda College. The course focused on the development of basic ASL vocabulary, ASL linguistic structure, conversational fluency, and cultural protocols related to communication. In year seven, representatives from Ratchasuda College visited NTID to participate in a series of workshops related to instructional technology and design. As a result, Ratchasuda College established a B.A. program in educational technology for people who are deaf.

Ratchasuda College also has exported the skills learned through PEN-International workshops to other educators of people who are deaf in Thailand. More than 150 educators have been trained through 10 of its own training initiatives. Further, representatives from Ratchasuda College conducted two formal workshop presentations at the 2008 Technology Symposium at RIT/NTID titled, "Learning Computer with Virtual Sign Animated Pedagogic Agents" and "Web-Based Instruction on Solar Eclipse and Lunar Eclipse for Deaf and Hard-of-Hearing People."

Czech Republic

Charles University

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. Among the University's population are 120 students with special needs, including 25 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 of several international experts, including NTID. PEN-International recognized Charles University's commitment to serving deaf students, and as a result Charles University became an official member of the PEN Network in 2002.

Benefits and Significant Accomplishments

Representatives from Charles University have participated in PEN-International sponsored workshops regularly for the last six years. These workshops have focused primarily on improving English instruction to deaf students and the use of smart classroom technology; however, Charles University's most significant accomplishment with regard to faculty professional development and training was hosting two international Prague teacher training seminars (2000 and 2004). A total of 170 teachers of people who are deaf in the Czech Republic were in attendance.

In addition, Charles University has trained nearly 350 educators of people who are deaf through other exporting initiatives. In year eight, a new teacher of English for deaf students at Charles University, Marie Doležalová, offered a presentation at the 2008 Technology Symposium about the differences between Czech and English grammar and the new ways of teaching English to Czech deaf and hard-ofhearing university students. This paper sparked her interest in follow-up research on this topic, attracting support and cooperation from other universities in the Czech Republic.

The single biggest accomplishment for Charles University, as a result of its partnership with PEN-International, is the creation of a large and well-functioning network of all Czech special needs schools. Charles University designs teaching guides and resource materials on how to best teach English to deaf students. These guides and resource materials, designed and developed in the Charles University's Language Resource Center, are regularly distributed to these schools to assist in the teaching and learning process.

"The 2008 Technology
Symposium provided
Czech participants with
the chance to improve
their teaching and
communication methods,
and present new ways of
teaching English to Czech
people who are deaf. This
step initiated interest in
follow-up research, and
motivated cooperation from
other universities in the
Czech Republic."

Dr. Daniela Janáková Manager, Charles University

The multimedia resource center at Charles University is used daily for direct teaching as well as for independent foreign language studies, averaging 50 hours per week for both course and non-course activities. Dr. Daniela Janáková, director of the Language Resource Lab, feels as though the multimedia laboratory has improved study conditions of all Charles University deaf and hearing students, making the process of learning foreign languages more interesting and entertaining.

Charles University also has received nearly \$1,000,000 in non-PEN funds in the last four years to fund its program efforts.

Korea Employment Promotion Agency for the Disabled (KEPAD)

Korea Employment Promotion Agency for the Disabled (KEPAD) is a government-funded agency, established in 1990, for the purpose of providing employment opportunities for people who are disabled. This objective is accomplished through the provision of vocational rehabilitation information, vocational guidance and training, and job placement services.

KEPAD became an official member of the PEN-International Network in 2006, and in 2007 formed a domestic network agreement with Korea Nazarene University (KNU) and Seoul National School for the Deaf. This network was established to encourage the sharing of ideas, resources, and technologies in an effort to advance the educational process, and employment and career opportunities of deaf and hard-of-hearing individuals in Korea.

Benefits and Significant Accomplishments

The partnership with PEN-International has enabled KEPAD to be a catalyst in making a significant difference in deaf education in Korea.

"Most deaf people have been engaged in low skilled labor jobs as we have limited access to professional education due to communication barriers. This specialized course allows deaf people the chance to achieve more in their work life."

Heaeun Choi Faculty Member, KEPAD In the last few years, representatives of KEPAD and KNU have participated in several of PEN-International's weeklong in-depth workshops. These training topics have included automation technology, student development and counseling, social and personal skills development, instructional technology and design, classroom communications, support services, and employment and career opportunities for people who are deaf. The training received through these PEN-International workshops has led to significant improvements in the education of deaf individuals in Korea, including the development of a personality and social-skills education program, the first course exclusively for deaf students in all of Korea at the postsecondary level, and the expansion of career opportunities to include semi-skilled technical employment positions.

KEPAD began exporting what they learned through PEN-International workshops to other educators of people who are deaf almost immediately. In the last three years, KEPAD has conducted a total of 10 training sessions with nearly 400 educators. In year eight, KEPAD conducted a poster presentation at the 2008 Technology Symposium and a training workshop with a delegation from Sri Lanka, both titled, "Specialized Training Course for the Deaf."

KEPAD also has improved deaf education through the development of several resource guides. In year six, KEPAD published and distributed 300 copies of a Korean Sign Language Dictionary. This dictionary was designed to resolve communication problems encountered during technical education.

In year seven, Ilsan Vocational Competency Agency for the Disabled, a division within KEPAD, translated and adapted a guidance book called, "Class Act." This book, originally developed and produced by NTID, was designed specifically for the purpose of improving the teaching and learning process for students who are deaf or hard of hearing. These improvements are made through the use of instructional technology. The book illustrates strategies that can be implemented by teachers to address a variety of issues and challenges that they regularly encounter in the classroom when instructing deaf students. KEPAD added relevant examples and sign language terms commonly used in Korea. A total of 500 books were printed and distributed to 269 institutions throughout the country.

Further, KEPAD designed and produced a guidebook in year eight, titled, "Adviser's Guide to Counseling Deaf & Hard-of-Hearing Students." This resource guide, the first of its kind in Korea, addresses the personal and social needs of deaf and hard-of-hearing students. The information in this guidebook is based on case studies and provides educational practitioners with sound counseling practices and advice that will help them better educate people who are deaf. Professional counselors from NTID served as advisors on this project. A total of 600 copies of this guide were produced and distributed to 116 affiliate institutions in Korea.

KEPAD's partnership also has served as a catalyst to secure additional funding. In two years, KEPAD has received more than \$100,000 in non-PEN funds to support its program efforts.

Korea Nazarene University (KNU)

Korea Nazarene University (KNU), created in 1959, provides higher education in the areas of teaching, business and management, liberal arts, and religion. KNU was the first university in the country to open its doors to students with disabilities. The Division of Rehabilitation was established to address various fields of rehabilitation such as education for the handicapped, vocational rehabilitation, social psychological rehabilitation, and rehabilitation engineering. This division has been recognized by the Ministry of Education, and a total of 85 disabled students are currently enrolled at the university. KNU joined the PEN-International Network in 2006.

Benefits and Significant Accomplishments

The partnership with PEN-International has provided both students and educators at KNU with invaluable training. As mentioned earlier, KEPAD and KNU have participated in several of PEN-International's weeklong workshop series in the last few years. These workshop topics included automation technology, student development and counseling, social and personal skills development, instructional technology and design, classroom communications, support services, and employment and career opportunities for people who are deaf.

As a result of this training and its partnership with PEN-International, KNU established a new school for students who are deaf called School of Universal Design. In addition, curriculum improvements have been made to KNU's International Sign Language Interpretation program at the graduate level.

"KNU professors and students have received excellent training through PEN-International."

> Seungan Im President, KNU

KNU began exporting information to other educators of people who are deaf in year eight. A poster session, titled, "The Status of Postsecondary Education for Deaf & Hard-of-Hearing Students in Korea Nazarene University (KNU)" was presented at the 2008 Technology Symposium.

Dr. You Hyun-Bae of KNU was a PEN visiting scholar at RIT in year eight. Dr. You, Dean of Faculty, Division of Design at Korea Nazarene University (KNU), was a PEN-International visiting scholar in residence at NTID from March 2008 through February 2009. Dr. You developed a comprehensive plan for his visit— to study English and ASL at NTID; and to become better acquainted with the NTID organization structure, services, curriculum, and management. In addition, he spent considerable time focusing on the teaching process and curriculum development at NTID. The information gained through this experience will provide him with the background and information needed to enhance the academic offerings to deaf students at KNU.

KNU has received more than \$2,300,000 in funds from sources other than PEN-International to fund their program efforts for the disabled. In year eight alone, KNU received \$1,700,000 from the Korean Government.

Vietnam

Dong Nai Provincial Teacher's College

The deafness program at Dong Nai Provincial Teacher's College, located near Ho Chi Minh City, Vietnam, was established in 2000. Before this program was established there was no means for deaf and hard-of-hearing people to receive a upper-secondary education in Vietnam. A unique distinction of this deafness program is its use of local sign language to teach its curriculum and enhance the language and culture of the deaf community. The Nippon Foundation of Japan has fully supported this program for the last seven years.

In 2005, PEN-International representatives visited the deafness program at Dong Nai Provincial Teacher's College to discuss possible collaboration regarding the development of Vietnamese sign language training resources, the initiation of an interpreter training program in Vietnam, and the inclusion of computer skills within the deaf curriculum. As a result of this visit, Dong Nai Provincial Teacher's College formally joined the PEN-International Network in 2006.

Benefits and Significant Accomplishments

The most significant accomplishments of Dong Nai Provincial Teacher's College related to faculty professional development and training were the PEN-International sponsored workshops on the production of Vietnamese sign language print resources, and the different support and access services currently available to deaf students at NTID.

In 2006, PEN-International representatives traveled to Vietnam to present PEN-International prepared prototype training materials to formalize the process of photographing signs, creating clear line drawings from the signs, and preparing the images for print reproduction. These training materials, titled, "A Process for Creating Line Drawings of Sign Language from Digital Color Photographs," served as a guide in the production of Vietnamese sign language print resources to form curriculum and dictionary materials. A total of four students and two staff members participated in this workshop series.

James Woodward and Hoa Thi Nguyen, representatives from Dong Nai Provincial Teacher's College, conducted a poster presentation at the 2008 PEN-International sponsored Technology Symposium. This poster presentation, titled, "The Development of Sign Language Dictionary and Related Resources in Vietnam," provided an overview of the materials that were developed as a result of PEN-International training as well as the process used to create these materials.

Further, PEN-International hosted a 10-person delegation from Vietnam in 2007. This delegation included government representatives from the Ministry of Education and Training, Institute for Strategic Planning and Education, the National School for Higher Education, and several Vice Chairpersons of Peoples Committees in various provinces. Mr. Yasunobu Ishii of The Nippon Foundation of Japan and Dr. James Woodward of the Deaf Cultural Studies Program at Dong Nai Provincial Teacher's College were also in attendance. The purpose of this visit was to receive an overview of RIT/NTID and the various support and access services provided to deaf and hard-of-hearing students mainstreamed at RIT. The delegation participated in training workshops, toured the NTID facilities, and observed RIT classes in session.

Hong Kong

Centre for Sign Linguistics & Deaf Studies (CSLDS), The Chinese University of Hong Kong (CUHK)

The Centre for Sign Linguistics & Deaf Studies (CSLDS) at The Chinese University of Hong Kong (CUHK), established in 2003, heralds a new era of linguistic research and deaf training in the Asia-Pacific region. The Centre's mission is to develop interdisciplinary research and training programs on sign linguistics, deaf culture, and deaf education; raise public awareness toward the well-being of people who are deaf; improve communication between people who are deaf and people who are hearing; and provide people who are deaf with the same educational and social opportunities as the hearing. CUHK joined the PEN-International Network in 2006.

Benefits and Significant Accomplishments

The affiliation between the Centre for Sign Linguistics & Deaf Studies at CUHK and PEN-International provides CSLDS with a privileged position to develop quality training programs that meet international standards.

"CSLDS is proud of its accomplishments with regard to the development of multimedia resources for sign language instruction.
CSLDS could not reached this achievement without the support from PEN-International."

TANG Wai Lan Director, CSLDS

There have been several significant accomplishments with regard to faculty professional development and training. CSLDS received valuable advice and training in the development of sign language resources, the use of online resources in sign language instruction, and instructional technology that facilitates training of deaf individuals. Representatives of CSLDS participated in training on how to set up an infrastructure for establishing postsecondary training for people who are deaf, and observed smart classroom technologies, computer networking, and videoconference technologies during a visit to NTID in September 2007. Additionally, PEN-International helped CSLDS prepare training activities for deaf people in the Asia-Pacific region. The deaf research trainees involved in this program, titled, "Asia Pacific Sign Linguistics Research and Training Program (APSL)," immediately benefited from the skills learned related to computers, desktop publishing, and the production of videos and images for sign language documentation.

During this same training visit at NTID in 2007, the teaching and technical staff of CSLDS were introduced to "SynchronEyes7" software. This software program was installed on the computers in the multimedia laboratory at CSLDS and was utilized in the teaching of IT applications.

Instructors are now able to manage the classroom more effectively through the use of this software program, and are able to specifically monitor the progress of individual students online.

In 2008, Ka Yiu Cheng and Gladys Tang Wai Lan, representatives of CSLDS, presented a poster session at the 2008 Technology Symposium on their experiences with the "SynchronEyes" software program. The presentation, titled, "Using Classroom Management Software in Teaching Deaf People Computer Skills," examined the effectiveness of using classroom management software in teaching Asia-Pacific deaf adults computer technologies.

CSLDS's biggest accomplishment as a result of its partnership with PEN-International is the training received relating to photography and advanced image manipulation. CSLDS's production team is now able to prepare quality images of signs for print and non-print sign language teaching materials, and effectively train deaf research trainees on how to develop sign language instructional materials and dictionaries.

Continued collaboration with PEN-International is needed and desired in order to further assist CSLDS in developing the APSL program into a well-established program for deaf people in the Asia-Pacific region.

Notes



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