

# ICEVI Higher Education Network

Creating inclusive and welcoming university environments for students with disabilities



## Annual Report

APRIL 2016 - MARCH 2017

(Celebrating a Decade of Partnership)

With the support from



Submitted by:



International Council for Education of  
People with Visual Impairment

**Larry Campbell**  
President Emeritus, ICEVI  
Co-Project Directors

& **M.N.G. Mani**  
CEO, ICEVI

## Higher Education and Leadership Development

The 2016-17 project year marks the 10<sup>th</sup> anniversary of a partnership between ICEVI and The Nippon Foundation that has changed the face of higher education for blind individuals in Southeast Asia and beyond.

What began as a small pilot program in two large cities in Indonesia to determine the feasibility of creating a more inclusive and open system of higher education for blind students has grown into a dynamic regional initiative that has now reached 2,256 blind students in 218 universities in the region.

Based on the positive outcomes of the evaluation of the pilot program in Indonesia, the project was expanded other cities and provinces in Indonesia and to the Philippines and Vietnam in 2008, Cambodia in 2010, Myanmar in 2013, Laos in 2014 and Mongolia in 2017.

The broad objectives of the project are to make higher education more inclusive by assisting blind students to: - more effectively use new technologies, - developing more welcoming university environments, - promoting more inclusive university and public policies and - assuring that blind university graduates are better prepared for open market employment commensurate with this interests and educational background.

Over the past decade this regional higher education network has resulted in significant increases in access to university education ranging from 400% to 1100% in the participating countries. Additionally, initiatives are underway in most countries that are resulting in inclusive university and government policies that are having a positive impact on all students with disabilities.



## Mr. Sasakawa at the Orlando General Assembly:



ICEVI was deeply honored to have Mr. Yohei Sasakawa, Chairman of The Nippon Foundation deliver the keynote address at the Joint General Assemblies of ICEVI and the World Blind Union (WBU) held at Orlando, Florida in August 2016. Mr. Sasakawa explained that The Nippon Foundation has been active for over fifty years, not only in Japan, but throughout the developing world. He further stated:

*“Our vision is to achieve an inclusive society where everyone embraces diversity and able to play an active role. In order to realize this vision, we carry out a number of different projects. In developing countries, many children and youth are not able to receive an appropriate education for a number of different reasons. Disability is one of these reasons. Our goal has been to provide such young people with access to education. The Nippon Foundation’s educational support for blind and partially sighted people began in the 1980s when we established a fund at the Overbrook School for the Blind in the United States. It was through this fund that we started working with Dr. Larry Campbell, who is a strong advocate for the importance of higher education and training for blind people. This was the beginning of our ‘Higher Education project’ with ICEVI in the late 1990s. This joint project has been providing access to higher education for blind and partially sighted people in six countries in the ASEAN region. It has enabled more than 2,000 students to study at institutions of higher education.”*

The presence of Mr. Sasakawa in Orlando added impetus to the higher education program and his interaction with the higher education coordinators and ICEVI officials was considered a highlight of the conference.

ICEVI looks forward to continued collaboration with The Nippon Foundation in achieving our mutually shared goal of educating and empowering individuals who are blind and creating inclusive communities.



## KEY ACTIVITIES IN 2016-17:

All partners focused on the broad objectives of the project to make higher education institutions more inclusive and enhancing the learning potential of students with visual impairment. The key activities include training in use of technology, soft-skills development, preparation of accessible materials, pre-employment training, vocational placement and impact on public policy. These issues, are enumerated along with country specific activities of the project.

### Training in Technology

Effective use of technology to enhance learning has been a key component of the project since its inception. The higher education institutions facilitated the establishment of key resource centres to support the training of students with visual impairment and the preparation of accessible learning materials. Specific training activities were organised for students to improve their skills in using technology and following are some key activities organised by the projects:



- ⤴ A workshop on ICT was organised from 5 to 9 September 2016 in Phnom Penh, Cambodia. Seven computer teachers and a librarian from Krousar Thmey and ten teachers from the Ministry of Education, Youth and Sports participated. The main focus of the training was on the set up a studio for the production of audio books.
- ⤴ The Indonesia Blind Union (PERTUNI) conducted training in programming for 10 university graduate students with visual impairment during September 2016 to December 2016. The program included instruction in the use of HTML, HTML 5, MySQL, Hypertext Preprocessor and Cascade Style Sheet with the objective of demonstrating to universities that qualified blind students are capable of following a course of study in programming which will open new career opportunities that have, to date, largely been closed to blind applicants.
- ⤴ The Sao Mai Centre, Vietnam started three computer training courses for 26 high school and university students, two in the Ho Chi Minh City and one in Nghea province. The courses were designed specifically for students to equip them with essential knowledge and skills to effectively study at the higher education level. The centre also conducted two three-week computer trainings for new students at Sao Mai, one in November 2016 and one in mid-February 2017, with 16 students enrolled.

## Initiatives on Policy Changes and Legislation

Though the immediate goal of the higher education project is to improve the IT skills of the students with visual impairment to enhance their learning potential; one of the long-term objectives is to influence policy changes at the Government level to promote inclusive learning environments for persons with visual impairment pursuing higher education. Many of our project partners are working with their respective Governments on the legislative front. Here are some examples:

- ⤴ PERTUNI was invited by the Director General of Students and Learning of the Ministry of Research, Technology and Higher Education, Government of Indonesia in early April 2017 to provide comments on the new law on disability, education and higher education. It is noteworthy that the PERTUNI worked with the Government in the development stages of the legislation which resulted in the passing of a Decree on Higher Education.
- ⤴ The Krousar Thmey provides technical advice to the Special education activities of the Government of Cambodia and has also organised awareness programmes for Government officials to help influence policy changes.
- ⤴ In Laos, the National University of Laos, itself is the key partner in the implementation of the higher education programme, has influenced the Government to offer free higher education for students with visual impairment. The resource centre of the ICEVI-The Nippon Foundation project is functioning on the University premises which is regularly visited by Government officials.
- ⤴ Resources for the Blind, Philippines has been working with the Department of Education representatives who regularly take part in most of the higher education programmes organised by the project.
- ⤴ Most of the higher education partners have a direct link with the Special Education Centre of the Southeast Asian Ministers of Education Organisation (SEAMEO-SEN) and attend meetings and conferences where presentations in higher education are made. ICEVI is also serving as a special representative on the Board of the SEAMEO-SEN and offers suggestions to make higher education institutes in the region inclusive. ICEVI has also signed a Memorandum of Understanding (MOU) with the SEAMEO-SEN which is being used as a vehicle to strengthen education of persons with visual impairment ranging from primary to higher education.

ICEVI and our project partners will continue to work in the area of public policy with the objective of influencing Governments to expand higher education opportunities for students with visual impairment as well as other disabilities.

## Soft Skills Training

At the beginning of the current cycle of the project (2015-2018), the project added employment creation as one of our goals in addition to promoting higher education. In response to this area of concert our project partners underlined the need to develop “soft-skills” training of graduates with visual impairment to improve their employability. Soft skills can be defined as the interpersonal and social skills need to help the individual succeed in life, with special attention to the work environment. Our project partners have conducted many “soft-skills” programmes and following are some of the highlights.

- ✦ Mr. Alabanyo from Yarsi University, Indonesia along with Krousar Thmey's Academic and Career Counseling (ACC) team organized training for students with visual impairment in Kampong Cham in February 2017. The two-day training focused on Communication and Leadership. Twenty blind/low vision students participated in this training. The training addressed several topics such as theory of communication, perception and attitude, assertiveness, type of audience, verbal and non-verbal communication, stress management and critical thinking.
- ✦ In January 2017, a volunteer from Zimbabwe with special education background visited the Myanmar National Association of the Blind (MNAB). MNAB arranged a session on sharing her knowledge and skill with Dagon University students. She provided O&M training to four students and also trained two staff in resource room on sighted guide techniques and O&M skills. She also audited the building for accessibility and provided suggestions to engineers to make it more accessible.
- ✦ The Sao Mai Centre conducted a two-week training on soft skills and O&M for 10 first-year and second-year students in August 2016.
- ✦ Sao Mai Centre conducted a one-day workshop in March 2017 for 18 blind students on how to “self-improve” their English skills. This was conducted by Mr. Minh, a blind teacher from the NDC School who obtained a master degree of special education in Australia. The second edition of English self-teaching book was published in December 2016 and also been posted on the online library.
- ✦ Sao Mai Centre organized a one-week soft-skill training in mid-January 2017 for 7 graduates who were invited to attend interview at Tan Binh hand-made basket company and the PHP Group International Insurance Company.
- ✦ Resources for the Blind, Inc. implemented two trainings sessions on Soft Skills for higher education students with visual impairment. This was held in October 2016 in Cebu and Davao City in March 2017. A total of 38 students participated in the training.



## Preparation of Accessible Materials

Many textbooks required in higher education courses are not available in Braille and therefore, our project partners often have to prepare them in Braille and in other accessible formats to enable the students to learn. Training in preparing audio books was also arranged and following are some of the activities carried out by the partners in preparing accessible learning materials. In all countries the project is working to establish effective and sustainable solutions for the provision of accessible learning materials.

- ⤴ The MNAB, with the help of volunteers, recorded school text books for Grade 10 and first year university course materials for all majors. Disabled law and policy related materials have also been recorded.
- ⤴ MNAB finished recording Burmese language text books for all major distance education courses provided by the university. Fourteen (14) students were provided with the audio books. MNAB uploads the recorded lessons on the online library and also gives the materials to students in CD format where internet service is not stable.
- ⤴ MNAB provided braille material to ten university students at two universities in Yangon. Daily class notes are sent by E-mail to MNAB Braille Production Centre or students bring in memory sticks when they visit on Saturdays to take Braille copies. University resource center staff takes responsibility to collect soft copy of materials from lecturers and sends to MNAB Braille Production Centre.
- ⤴ Sao Mai Centre has converted 593 book titles and hand-outs into accessible formats for the blind students and all have been uploaded to the portal at <http://saomaicenter.org/library>. The centre has also distributed 112 frequently-used book titles to the “Students with Disabilities Services” of the HCM University of Pedagogy, HCM University of Social Sciences & Humanities and Hanoi self-help group of visually impaired students.
- ⤴ Sao Mai Centre conducted an online training for 6 volunteers to make accessible materials.
- ⤴ Sao Mai Centre jointly with NV Access has distributed modules to almost 200 visually impaired individuals of whom about 50 were blind students and 70 studying at the secondary/high school levels.
- ⤴ Sao Mai Centre conducted one-day training for 3 RMIT university staff on March 20, 2017 to train to produce accessible materials.
- ⤴ Sao Mai Centre conducted three one-day workshops on Mobile devices and Apps to utilize for serving day-to-day learning activities; one in October, one in December 2016 and one in March 2017. The workshops were scheduled on Sunday of the third week of month and were open for all visually impaired individuals.

## ENROLLMENT:

During the project year 2016 – 2017, a total of 114 new students have been enrolled in higher education institutions in implementing countries. To date 2,256 students have benefited from the higher education project since its inception and that number is growing steadily.

The following table provides data on new and cumulative numbers of students enrolled in the higher education institutions.



Country	2006-07	2006-11	2006-14	2006-15	2006-16	2016-17	Cumulative 2006-17
Indonesia	250	385	480	609	631	6	637
Vietnam	28	354	470	563	630	59	689
Philippines	32	460	489	671	710	16	726
Cambodia	4	14	22	52	83	8	91
Myanmar	0	0	29	54	69	19	88
Laos	0	0	7	16	19	6	25
<b>Students enrolled</b>	<b>314</b>	<b>1213</b>	<b>1497</b>	<b>1965</b>	<b>2142</b>	<b>114</b>	<b>2256</b>

## EMPLOYMENT:

During the academic year 2016 – 2017, a total of 75 students have been supported to find employment in Cambodia, Vietnam and Philippines. Students found employment in various categories such as in the teaching profession (both in schools and colleges), telecommunications, sales representatives, insurance companies, online customer care services, online sales and software programming and following are some of the highlights.

- ⤴ In Cambodia 36 students have been placed in jobs by Krousar Thmey Academic Career and Counseling team.
- ⤴ In Vietnam 27 students have been supported by Sao Mai Centre to find employment. However, five of them dropped at the end of the probation period due to personal reasons.
- ⤴ In Philippines 12 students have been supported by the Resources for the Blind, Inc. to find employment. Seven of the twelve students are employed as teachers and one as a university professor.

## Pre - Employment Training for Students and Staff:

Project partners also organised a number of pre-employment training activities to promote employment opportunities for persons with visual impairment and here are some highlights:

- ✦ The PERTUNI conducted pre-employment soft skill training for university blind students in two places. The first training in Bandung was conducted from late October until early November 2016. Twenty blind students attended this training. A second training in Malang, East Java, was conducted in early March 2017, which was attended by 20 blind university students. This training was on the importance of career planning, knowing yourself, goal setting and action plan, time management, communication, both verbal communication as well as non-verbal communication, resume writing, interview preparation and mock interview and basic insights into becoming an entrepreneur.
- ✦ The Sao Mai Centre hosted a dialogue between two employers from Tablet Plaza and Vina Cacao company and 11 blind graduates on October 20, 2016. The Sao Mai staff exchanged and shared concerns related to employment opportunities for persons with visual impairment.
- ✦ In January 2017, the Krousar Thmey's ACC officer took part in a 5 day training facilitated by the Friends International. This training dealt with job placement and career planning. Topics addressed in the training included counseling techniques, job interview preparation, soft skills training, money management, self-motivation, behavior at work and team spirit.
- ✦ In November 2016, the Krousar Thmey's Academic and Career Counseling team traveled to Indonesia to attend a training facilitated by Mr. Alabanyo Brebahama at Yarsi University in Jakarta in collaboration with The Indonesia Blind Union and The Mitra Netra Foundation. The training dealt with pre-employment skills and aimed at developing the abilities of students with visual impairment for their entry into the job market.



## ZERO PROJECT AWARD 2017

The Higher Education Project was selected by the Zero Project Austria as one of the innovative solutions concerning Employment, Work and Vocational Education and Training in the area of disability. As per the Zero Project, out of the 260 nominations, 68 Innovative Practices and Policies were selected as the most outstanding and the ICEVI-TNF project was one among them. A presentation on the higher education project was made at the Zero Project Conference 2017 held on 22-24 February 2017 at the United Nations Vienna International Centre. ICEVI owes this award to The Nippon Foundation, which has made a tremendous impact on more than 2,000 visually impaired higher education students who had the opportunity to pursue higher education through the efforts of our partner organizations.



ICEVI places on record its sincere thanks for the contributions made by the projects country coordinators in Indonesia, Cambodia, Philippines, Vietnam, Myanmar and Lao PDR who have given so selflessly to make this project such a success.

## VOICE OF THE STUDENTS

The students of higher education are happy that they had the opportunity to improve their learning opportunities through the ICEVI- Nippon Foundation higher education project and are becoming advocates for promoting educational opportunities for children with visual impairment. Some of the statements made by the students in various programmes are summarized below:

### **MARICOR D. BOOK (Philippines):**



Maricor D. Book, graduated with honors (CUM LAUDE), Bachelor of Science in Elementary Education majoring in Physical Education from the Philippine Normal University, Manila, Philippines. She said:

*“Many people during this modern time believe that technology gadgets are already part of our lives. It has now become a necessity to us and it can make many things which were once impossible, possible. It enables us to prove our skills and abilities and we can be productive members of the society who are*

*capable of giving our very best. We can now effectively contribute and advocate as successful citizens of the nation. It's such a blessing for me to be a part of one of the programs of RBI in partnership with ICEVI. RBI gave me the opportunity to use the Victor Reader Stream. It served as my review buddy during examinations, it helped me to read the books I needed and it made my note taking easier. Most of all, it helped me to reach my dream to specialize in Physical Education and become the first visually impaired graduate with honors (cum laude)".*

#### **CHHEM HARCH (Cambodia):**



**Chhem Harch** was born sighted but became blind due to measles. In 2002, Krousar Thmey's advocacy team visited his house and told about Krousar Thmey's program for education for deaf and blind children. This moment was a turning point in Harch's life and gave him back hope. With the support of his mother and his teachers Harch studied hard at school and passed his high school diploma in 2014. Harch has now become more

confident and independent. He can communicate in English. He is also able to use computers and internet. Harch is currently in third year of his Bachelor Degree in English Literature at Chea Sim Kamchay Mea University. Though he faces some obstacles with regard to resources and materials available for his study, he always keeps himself busy reading books, listening to English conversations on the internet. Harch has many friends at the university who are helping and supporting him. Besides studying, Harch is working part time at Kampuchea Action of Primary Education (KAPE) as an English teacher. After graduation, he wishes to work as an interpreter or a teacher. He wishes to apply for Masters' Degree in English in Australia with the guidance of ACC.

#### **ADE GUMELAR (Indonesia):**



**Ade Gumelar** is studying Education of Islam in Indonesia University of Education in Bandung. His dream is to become a lecturer in the university where he is studying. He wishes to undergo his Masters and Doctoral in Al Azhar University, Egypt. Ade finished his early years of his elementary school in special school for the blind in Jakarta. During the pre-

employment training, Ade was very active; represented his group to present the result of the group work, he was very assertive during the debate session. Ade was selected as best trainee during the pre-employment training. He initiated the University Blind Student Community in Bandung. This activity has sharpened his sense of leadership.

*"When I read the announcement about the training, I did not really understand what the training would be, but I believed this must be good for me. I was very grateful that I had been selected as one of the training participants. I knew and realized that this opportunity don't come to everybody. After finishing the training my spirit and motivation was in the highest level. I was inspired by our trainers whom two of them were people with visual impairment. Now I have stronger willingness to become lecturer at the Indonesia University of Education".*

## COUNTRY HIGHLIGHTS:

In addition to the theme based activities presented in the previous sections of this report, some of the country specific highlights are also provided in the following sections:

### CAMBODIA

#### University Exhibitions



Four university exhibitions were conducted from December 2016 to March 2017 in the University of Management and Economics in Battambang; PUTITAK University in Kampong Cham; Cambodian University for Specialties in Siem Reap and Norton University in Phnom Penh. Each exhibition lasted for two days. The first half-day was dedicated to education for visually impaired students, distributing leaflets and sharing success stories from students with blindness/low vision. On the afternoon of day one and day two, Krousar Thmey's Advocacy

Officer, accompanied by students with visual impairment, installed stands to display learning materials and other awareness tools and answered questions from participants. Attendees also took part in introduction sessions on the abacus and Braille reading/writing. More than 200 people attended the workshop and more than 800 people visited the exhibition.

#### Exposure visit to Myanmar



From 9 to 11 January 2017, a group of Krousar Thmey staff and two representatives from BTB University and USEA University visited two universities in Myanmar. The objective of the visit was to learn about resource centers and how students with visual impairment are supported. On 10 January 2017, the team visited Yangon University resource center located separately at the library and sponsored by MNAB. The team also visited the Western University. The team met with MNAB representative, Mrs. Kwai Nan shared her experience

regarding the needs for blind students and what Higher Education stakeholders should implement to support them effectively.

#### STEM Training for Core Trainers

During February 2017, 15 trainers/teachers from the Phnom Penh Thmey School participated in training on STEM provided by three trainers from Nhat Hong Centre in Vietnam. This five-day training dealt with several topics such as calculation with the

abacus, secondary and higher education mathematics, braille maths, introduction steps to teaching maths to visual impairment children and connecting math with everyday life. Feedback from the participants were very positive.

### **Orientation at University and Follow-Up**

After a student's admission to University or a vocational training centre, ACC Officers make sure these new students have the means to get around very easily. Thus an orientation visit is organized to help them identify on-site facilities. This is a first important step towards empowerment and inclusion for the blind/low vision students following post-secondary education. Once enrolled at the university the ACC Officers implement a thorough student follow-up. The objective of these follow-up visits is to assess the students' needs, school results and living conditions in order to be able to anticipate any problems.

### **Orientation Workshop and Individual/Group Counseling**

Throughout the academic year, Krousar Thmey's ACC Officers have conducted several orientation and job placement workshops for visually impaired students. Students from Grade 10 to 12 in Krousar Thmey's special schools have benefitted from these sessions. During the year, 18 students in Krousar Thmey's schools participated in the orientation workshops. As part of the orientation for students with visual impairment, the ACC department within Krousar Thmey has organized individual/group counseling for students from Grade 10 to 12. The topics addressed during these counseling sessions ranged from career planning to goals setting. A total of 56 students were provided individual and collective counselling from May 2016 to February 2017.

### **University Visits**

Throughout the year, university visits were organized for students from grades 10 to 12 with visual impairment

- ⤴ Royal University of Law and Economics and Asia Europe University for nine blind/low-vision students in Phnom Penh in January 2017
- ⤴ University of Management and Economics and Komchaymea University for 20 blind/low-vision students - eleven from Phnom Penh Thmey school and nine from Kampong Cham school in Kampong Cham in February 2017
- ⤴ Southeast Asia University in Siem Reap for 10 participants in January 2017
- ⤴ University of Battambang for 10 participants in January 2017
- ⤴ Preah Sihanouk Raja Buddhist university for 10 participants in March 2017

## **ACC Strategy 2017 – 2019**

As part of the ACC department's ongoing functioning, a strategical framework has been designed for the period 2017-2019 with the support of Dr. Mani MNG, CEO, ICEVI. For this period, the overall objective aims at a better integration of Krousar Thmey beneficiaries into Cambodian society through an active participation to the labor market. To reach this goal, the ACC department will work to provide young adults with a better access to vocational training and Higher Education and then to the job market.

## **INDONESIA**

### **Workshop on Inclusive University**

In December 2016, Disability Service Center of Brawijaya University conducted a workshop on "how to develop inclusive university". Representatives from fifty universities attended the workshop. The workshop was funded by the Ministry of Research Technology and Higher Education of Indonesia. Participants had the opportunity to learn directly from Brawijaya University on how Universities can develop themselves as inclusive university step-by-step. Participants also had the opportunity to chat with students with disabilities who are studying in Brawijaya University and got benefit from services which are provided by disability service center.

## **MYANMAR**

### **Setting up Resource Room in Dagon University and Western University**

Resource rooms have been established at the Dagon University and Western University. A well-furnished room in the university library has been provided to start the resource room. Three sets of computers, furniture and internet WIFI are provided. Library staff of the respective Universities were assigned to look after the resource room. Lecturers and sighted classmates come to volunteer by typing and reading class notes and materials. The Resource Room includes an audio recording area. Soft copies of study materials are collected from teaching faculty and are stored in computers in the resource centre. Blind students use these materials for their studies. A special foot path has been created for blind students from bus stand to classrooms. MNAB has also trained the staff who are in charge of the resource room.

### **Laptop Computer Borrowing Service**

Eight laptops have been provided to University students. Three laptops are used in the Resource Centre at the University. Another three laptops are used by visually impaired staff of MNAB. MNAB provides computer training for university students at resource room. Most of the students have their own computers. Local donors also come forward to donate laptop and computers for university students.

## Information Centre

Braille and Audio materials are distributed by the Information Centre. Laptop borrowing service and assistive devices are also available. Students are allowed to use internet in the Information Centre. Twenty-five (25) higher education students regularly use the services provided by the Information Centre.

## Developing Myanmar TTS

- ⤴ MNAB launched the second version of Myanmar Text to Speech software on 3 December 2016 the International Day of Disabled People. MNAB has posted the TTS software on the website with instructions. Further work on this software is underway in partnership with the Sao Mai Centre, Vietnam.
- ⤴ MNAB with the support of ICEVI and ONNET is in the process of developing a voice synthesizer and text reader compliance with Speech Application Programming Interface 5 (SAPI 5).
- ⤴ MNAB team is also working on an NVDA training module translation. Two blind users, two professional tech translators are working together with the MNAB team.

## Conducting Teachers Training

MNAB conducted a training session on how to teach blind students. Volunteer Ms. Eunice handled the session. Teachers currently working in 4 centres and 2 schools for the blind attended the five day training. Participants visited 3 centers and 2 schools which are providing education for blind children. The training focused on developing assessment form, classroom placement, pre-braille activities, O&M, ADLs, creating teaching aids with local materials etc.

## VIETNAM

### Academic Materials Support

- ⤴ The Centre has provided 9 laptops and 10 digital recorders for students based in Danang, Hue and Vinh cities/province. The loan program in this area is coordinated by partner organization, the Hue Blind Association.
- ⤴ The Sao Mi Centre has upgraded the online library platform to support mobile devices such as smart phones and iPads, especially Android and Windows mobile device users as iOS currently doesn't have Vietnamese TTS yet.
- ⤴ In addition to traditional telephone and face-to-face support, the Centre has been coordinating and providing consultation and technical support through the SMCC mailing list, "technology for the blind group" on Facebook and through a "blind

student's corner" on the Sao Mai website. The total requests that Sao Mai has supported so far are 512. The centre has set up a monitoring system since July, 2016 so it can better keep track of exchanges and improve the support service.

## Training and Workshop

In May 2016, the Centre hosted two vocational dialogues at NDC School for the Blind and Sao Mai for 43 high school students to provide consultation and discuss challenges for blind students entering into the higher education.

## Consultation Services

- ▲ Colleagues from the Nhat Hong School are continuing to provide related consultation services via phone, email, face-to-face for visually impaired individuals, parents of blind students and university faculties.
- ▲ Sao Mai has also promoted one self-help group of blind students to gather and support them by giving advice about the avenues for creating online collaboration tools.

## Others

- ▲ Sao Mai is collaborating with the HCM General Library to open both online and face-to-face technology training and provide accessible materials for young blind people and students living in underserved areas. They have finished one course in Vinh, Nghean for 10 visually impaired trainees.
- ▲ The project will also work collaboratively with another HE support project for students with disabilities implemented by Disabilities Resource (DRD); from which the centre will support visually impaired students.

## LAO PDR

- ▲ The Government of Lao PDR has developed an initiative to provide financial assistance to visually impaired students who enroll in higher education. This support covers costs related to tuition fees, accommodation and food.
- ▲ The National University of Laos (NUOL) set up its first Resource Centre under the Department of English at the Faculty of Letters to help students with visual impairment pursue higher education. Students studying in other Faculties of the University are also assisted at this centre.
- ▲ The University has organised orientation programmes for staff from other faculties to encourage admission of more students with visual impairment.
- ▲ The University has also initiated efforts to set-up an audio material production unit to support the visually impaired students enrolled in higher education.

- ▲ The NUOL is also collaborating with the Christian Foundation for the Blind in Thailand (CFBT) to strengthen the technical skills of the staff of the Resource Centre in assisting persons with visual impairment.

## PHILIPPINES

- ▲ Resources for the Blind (RBI), Inc. implemented two programmes in 2016 to 2017 on Soft Skills Training for higher education students with visual impairment. This was held in October 2016 in Cebu and Davao City on March 2017. A total of 38 students participated in this training.
- ▲ RBI has also collaborated with the Philippines Parents Organisation in organizing their national conference and encourage parents to send their children on to higher education.
- ▲ RBI has continued to work on access to the STEM curriculum and to encourage students to pursue science related courses.



### Feedback on Soft Skills Training:

#### Junela F. De Ocampo



*“I have learned about the probable setbacks in the employment phase. I also got more information on the recent trends on the job market, particularly those which are applicable to persons with visual impairment. In addition, I’ve obtained a deeper understanding on possessing effective communication and listening skills. I think it would be much better and more effective if similar trainings in the future would have a longer duration to allow wider scope of topics to be discussed”.*

#### Mike Daryl O. Ocol



*“The soft skills training imparted to me a lot of knowledge. It was through the training I have learned several lessons that are needed in order to enhance my communication ability. I’ve learned not just the basics of communication, which include social media, phones, mails, etc., but also how to become an active listener and effective speaker. I’ve also learned that there are two types of communication; verbal and non-verbal, those are needed to be enhanced. It is also appropriate, as taught, that a person with visual impairment should likewise behave in such a way that a sighted person normally does. This includes the proper gestures of a blind person while communicating with other people. Overall, the goal of developing effective communication skills was achieved through the day”.*

## MATHEMATICS PROJECT

### Development of a Mathematics Training Package for Teachers Working with Blind Students

The Mathematics project, supported through the Higher Education Project by The Nippon Foundation, hopes to unlock the often hidden potentials of blind learners by building upon existing resources and developing a comprehensive package of training modules that will assist classroom teachers in learning how to create appropriate instructional adaptations that will make the learning of mathematical concepts easier and more enjoyable for blind learners, as well as their sighted classmates.

In 2003, ICEVI and the Overbrook-Nippon Network on Educational Technology, (ON-NET) brought out the publication “Mathematics Made Easy for Blind Children” with the assistance of The Nippon Foundation and this publication is used by classroom teachers in many regions of the world to teach visually impaired children. Initially, hard copies of the publication were made available to teachers within the region and as demand increased a free download of the publication was made available on the ICEVI website to encourage teachers and visually impaired children to place more attention on the area of mathematics instruction. This publication is widely used today throughout Asia and beyond and has been translated into a number of additional languages.

Yet despite its popularity the publication, in its current form, does not fully address the needs of teachers who still struggle with how to effectively modify instructional strategies to make abstract math concepts understood by a child without sight. The need for video lessons was expressed by many teachers and parents who used the Math publication as a tool for teaching visually impaired students. This issue was discussed by the ICEVI Executive Committee on a number of occasions.

The ICEVI EXCO endorsed proposal to develop mathematics video packages with Dr. M.N.G. Mani as the Project Director. The project started in late 2016 with preparation work involving a core team consisting of representatives from ICEVI, the Texas School for the Blind and Visually Impaired (TSBVI), Perkins School for the Blind and the ON-NET. The core team met at the Texas School for the Blind in late 2016 and provided a broad framework for the project and also suggested the formation of a small academic team, which would expand into a global team as the project progresses.

A meeting of the Academic Team consisting of M.N.G. Mani, Susan Osterhaus (USA), Derrick Smith (USA), and Sara Larkins (USA) met in December 2016 and suggested the following key aspects.

1. Though the video packages are primarily helpful for preparing teachers to teach mathematics effectively to visually impaired children, the lessons may also be developed as learning materials for visually impaired children. Therefore, the materials used for demonstration should address accessibility issues such as color and contrast for the benefit of low vision children and use of the correct textures for blind children.
  
2. Members agreed to prepare sample video lessons for the following topics which could be reviewed at the next meeting of the academic team.
  - Prime and Composite numbers
  - Addition of integers
  - Comparison of fractions
  - Laws of indices
  - Expanded form
  - Commutative property
  - Bar chart
  - Central tendency and Mean
  - Multiplication of polynomials
  - Skewed lines
  - Parallel lines
  - Perpendicular lines
  - Equation  $(a + b)^2$
  - Equation  $(a + b + c)^2$
  - Sum of the three angles of a Triangle =  $180^\circ$
  - Sum of the four angles of a Quadrilateral =  $360^\circ$
  - Angle formed on a semicircle =  $90^\circ$
  - In a circle the angle subtended at the centre is twice that of the angle subtended at the circumference
  - Centroid
  - Angle in a minor segment is obtuse and Angle in a major segment is acute

In addition to the above samples assigned to the Academic team, a technical team in India is also preparing sample videos for about 20-30 concepts and these samples will be ready by the end of September 2017.

## Way forward

The project is expected to produce approximately 150 video packages by early 2020. The Technical Team in India that includes special education experts who teach Mathematics to visually impaired students, subject experts on Mathematics working in Universities and also at the Regional Centre of the National Institute for the Visually Handicapped (NIVH) is developing sample video lessons for about 20-30 concepts and therefore, about 40-50 sample video lessons will be prepared by the end of the 2017. These will then be shared with the Academic and Core team of the Mathematics project.

The Project Director is also in touch with experts in different regions of the world to form a global academic team, which will assist in the development of video lessons once the sample video lessons are reviewed and guidelines prepared for further production of the lessons.

## Expected outcomes of the project

The project is expected to develop video packages for the following topics, which will be useful in training teachers of mathematics. Each topic may have a single or multiple video lessons depending on the content.

1. Numbers
2. Rational Numbers
3. Four Fundamental Operations
4. Tests of Divisibility
5. Decimals
6. Percentage
7. Fractions
8. Measures of Area
9. Measures of Volume
10. Measure of Time
11. Radicals
12. Algebraic Concepts
13. Laws of Indices
14. Algebraic Identities
15. Polynomials
16. Factorization
17. Logarithm
18. Geometry - Circle

19. Angles
20. Triangles
21. Quadrilaterals
22. Various Geometrical concepts
23. Simple Interest
24. Sets
25. Venn Diagram
26. Relations
27. Functions
28. Binary System
29. Matrices
30. Rectangular Coordinate System
31. Trigonometry
32. Analytical Geometry
33. Statistics
34. Probability
35. Identities

We believe that the video packages prepared for the above topics will be of great assistance to teachers, teacher educators and mathematics faculty in higher education facilities serving blind students. It will certainly be a major step forward in improving mathematics education for blind children everywhere and ICEVI thanks The Nippon Foundation for extending support for this project as a component of the Higher Education continuum.

## **IN SUMMARY: REFLECTIONS AND PROJECTIONS**

As the reader will understand from the previous pages of this report each country has developed its own unique plan and strategies for making higher education more inclusive for blind and visually impaired students.

However, from the beginning ICEVI and The Nippon Foundation set out to create much more than a series of parallel national efforts to address the challenge of creating more inclusive environments in higher education for persons with disabilities. Our goal was to create a dynamic and living network of countries that could benefit from the successes...and yes, sometimes the failures, of their neighbors. This has become the most powerful outcome of this initiative.

Each of the countries involved in this regional initiative began at a different starting point and at a different point in time. Therefore it is understandable that each is still at a somewhat different point in its development.

However, it is clear to both ICEVI and The Nippon Foundation that based upon experience to date, not only have countries benefitted from the opportunity for regular exchanges with their neighbors but the pace of development has been accelerated. This regional initiative has become an excellent example of what can be achieved by a “south-south” approach to development, where every partner country has an equal voice and is respected for what they bring to the effort.

In a number of instances two or more countries have come together and worked together to address commonly shared challenges. Over time the countries involved, much like the people involved, have come to recognize, appreciate and utilize each other's unique strengths which has saved time, resources, and in the end resulted in better outcomes. The new mathematics project is an example of such collaboration which over time will produce learning materials that will be of benefit to all countries in the region and beyond.

While the higher education project has concentrated its efforts in all countries to:

- provide accessible technology and learning materials,
- improve attitudes and climate within institutes of higher education,
- facilitate the development of inclusive university and public policies,
- expand access to new areas study with focus on the STEM curriculum,
- strengthen self-advocacy skills,
- prepare students for employment and
- expand access to open market employment opportunities

The project has also resulted in some additional outcomes that are worthy of noting.

There is a growing amount of anecdotal evidence that while this project focuses on higher education it is having a positive impact on the development of inclusive education at the primary and secondary levels. Often parents have been reluctant to invest in education for their child who is blind. However, as communities are exposed to the growing number of blind beneficiaries of this project their outlook and expectations for their blind child are changed and education is being viewed as a positive investment in the future of their child and their family.

Likewise, as more project beneficiaries successfully enter open labor market we are witnessing slow but steady changes in the attitudes of potential employers. Increasingly we are finding that executives and entrepreneurs who have successfully employed blind

graduates are our best allies in convincing other employers that to overlook what an educated and motivated blind employee can bring to the workplace is a mistake.

The impact of the higher education project has reached well beyond its original parameters when it started as a small pilot effort in two cities in Indonesia. Today it is having a profound impact on the quality of lives of persons with visual impairment in the implementing countries and on their families and communities.

None of the accomplishments of this multi-year initiative would have been possible without the vision and commitment of The Nippon Foundation, and in particular, their long-term view and commitment to the empowerment of persons with visual impairment through education.

ICEVI and the thousands of direct and in-direct beneficiaries of this regional initiative convey deepest thanks to The Nippon Foundation for their ongoing support.

## Partner Organisations



**Krousar Thmey**  
Cambodia  
[www.krousar-thmey.org](http://www.krousar-thmey.org)



**Resources for the Blind, Inc., (RBI)**  
Philippines  
[www.blind.org.ph](http://www.blind.org.ph)



**Pertuni**  
(Indonesian Blind Union)  
Indonesia  
<http://pertuni.idp-europe.org>



**Sao Mai Vocational & Assistive  
Technology Center for the Blind,**  
Vietnam  
[www.saomaicenter.org](http://www.saomaicenter.org)



**Myanmar National Association  
of the Blind (MNAB)**  
Myanmar  
[www.mnab-myanmar.org](http://www.mnab-myanmar.org)



**National University of Laos (NUOL)**  
Lao PDR  
[www.nuol.edu.la](http://www.nuol.edu.la)



**Mongolian National Federation of the Blind (MNFB)**  
Mongolia  
<https://www.facebook.com/BlindMongolia/>

## CONTACT DETAILS

### **Frances Gentle**

*President, ICEVI*

The Renwick Centre

Royal Institute for Deaf and

Blind Children

Private Bag 29

Parramatta, NSW 2124

AUSTRALIA

E-mail: [frances.gentle@ridbc.org.au](mailto:frances.gentle@ridbc.org.au)

### **Lawrence F. Campbell**

*President Emeritus, ICEVI & Project Director*

1, Center Street

Rockland

Maine 04841

USA

E-mail: [larry.icevi@gmail.com](mailto:larry.icevi@gmail.com)

### **M.N.G. Mani**

*CEO, ICEVI*

# 5030, 3rd Floor

Sreevatsa Centre

G.N. Mills Post

Coimbatore 641 029

Tamil Nadu, INDIA

E-mail: [sgicevi@vsnl.net](mailto:sgicevi@vsnl.net)