Strategies in advancing braille literacy for individuals with visual impairment in Thailand

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Introduction

Education for individuals with disabilities in Thailand was first established in 1939 with the collaboration of Ms. Genevieve Caulfield, a blind American woman, and generous Thai people in establishing the Bangkok School for the Blind (Pamanee, 2018; Sirirungruang, 2011). Students with visual impairment were the first group to be educated at the Bangkok School for the Blind, the first residential school for the blind. In a while later, the government started two more residential schools for the blind. Currently, there are 17 residential schools for the blind across Thailand including two public schools and 14 private schools. In addition to studying in residential schools, many students with visual impairment join inclusive schools nearby their hometown with the support of provincial special education centers and nonprofit organizations.

In 2022, Department of Empowerment of Persons with Disabilities reported that 2,116,751 people with disabilities received disability identification card. Among those people, 1,649,305 counting to 77.92% received education including elementary 1,340,984 people (81.31%) , secondary and high school 195,279 people (11.81%) , vocational/technical education 40,827 people (2.48%) , higher education 28,087 people (1.70%) and not specified 11,893 people (0.72%) (Department of Empowerment of Persons with Disabilities , 2022). In the same year , Special Education Bureau reported that 495,216 students with disabilities attended basic education in public schools. Among those students , 28,062 students studied in 48 special education schools , 12,573 students received early intervention and support services from 77 special education centers and 454,581 students studied in 21,520 inclusive schools across Thailand. Among those students, there are only 3,070 students with visual impairment (Special Education Bureau , 2022).

While Special Education Bureau, Bangkok School for the Blind, school for the blind under the operation of the Christian Foundation for the Blind in Thailand under His Majesty of the King and other school for the blind under the operation of other nonprofit organizations provide education and educational support services to school age population with visual impairment, Thailand Association of the Blind (TAB) plays essential roles in improving quality of life of people with visual impairment in Thailand. TAB was founded in 1967 by alumni of Bangkok School for the Blind. Over the past 55 years of work, TAB has provided more than 20,000 people with visual impairments with essential support to live their lives independently and happily with others in society. TAB has also worked closely with partner organizations – including public and private; local, national, and international; and disabled and nondisabled – to guarantee the inclusion and participation of people with visual impairments in all aspects of society. Additionally, TAB has collaborated with other disabled persons organizations to strengthen the rights of people with disabilities as guaranteed in domestic and international laws. One of the most concern of TAB is the promotion of standard Braille use among people with visual impairment. TAB believes that Braille is the essential and prerequisite skills for people with visual impairment to learn, grow and contribute to both themselves and society. Therefore, TAB together with partner organizations have been working very hard through several mechanisms to promote standard Braille use among people with visual impairment in Thailand.

Origination and Development of Thai Braille Codes

Getting an education means being literate or being able to read and write. Miss Genevieve Caulfield together with Thai supporters came to think of ways to set up rules for creating Thai Braille. By applying Braille dot patterns and comparing the sounds of Thai consonants and vowels with existing English and Japanese Braille, Thai Braille was created. Since then, Thai people with visual impairment could write Braille with the Slate and Stylus writing equipment that Miss Caulfield brought from the United States, Just like other languages with Braille in use. Besides teaching Braille in Bangkok School for the Blind, Miss Caulfield taught English Braille grade 1 and grade 2 and Mathematics Braille Codes to her students to prepare for secondary integrated schools. With her strong dedication, students with visual impairment were first accepted in secondary integrated schools in 1956. They were also able to pursue higher education Both in the country and abroad. These achievements have resulted in the establishment of schools for teaching children with other disabilities in the countries as well as the establishment of organizations working for people with disabilities throughout the country including vocational training centers, foundations, associations and most importantly Thailand Association of the Blind (TAB). TAB is national organization for people with visual impairment including membership from provincial association of the blind across Thailand. There are several units under operation of TAB including The National Braille Promotion and Development Fund.

In 1995, Ratchasuda Institute, formally known as Ratchasuda College, Mahidol University together with TAB developed the Thai Braille grade 2 for improving Braille writing and reading skills of people with visual impairment. The Thai Braille grade 2 manual was completed in 1997 and distributed to 20 educational and media production agencies for Braille production. The manual was also distributed to Braille users for better understanding in Thai Braille grade 2; unfortunately, it was not officially and widely used among Braille users. In 2008, TAB established The National Braille Promotion and Development Fund. Since then, the Fund has played essential roles in developing a Braille standard manual in Thailand. The fund committee found that the Braille production agencies recognized certain Braille symbols differently. It caused confusion for users when Reading Braille from different sources. Therefore, a working group was appointed to set the standard of Thai Braille grade 1, grade 2, English grade 1, grade 2 and the Nemeth system Mathematical Braille codes for use of the whole country. The first edition was approved and was adopted in 2011. The manual was certified by the Education Committee for Persons with Disabilities chaired by Minister of Ministry of Education. In 2016, The second edition of manual was published with the revision of Thai Braille grade 2. When Thailand accepted the new English Braille standard Unified English Braille (UEB), the second edition of manual was revised to conform with UEB. Dot positions and rules for using certain punctuation marks used in Thai language were adjusted to be the same as UEB and resulted to be the third edition of the manual focusing on using the same symbols and numbers in Thai as UEB and separating Math section to basic and advanced levels. These two math levels were based on the mathematics teaching curriculum in Thailand. Dr. Rujira Songkhao, a Braille expert who began her work as a Braille staff and is now a lecturer at Ratchasuda Institute of Mahidol University has been a valuable member of the Thai Braille standard manual development team. The Fund has recently published the third edition of manual in 2022.

The Development of braille Technologies in Thailand

The braille technology is one of the components in developing the standard Braille manual in Thailand. The use of Braille technology began in 1987 when students and teachers from the Bangkok School for the Blind received scholarship to attend the International Program at Overbrook School for the Blind in Philadelphia, United States. After earning a master's degree from United States, Dr. Wiraman Niyomphol together with teachers of students with visual impairment jointly developed a Thai Braille translation software called Thai Braille Translation (TBT) to use in Thailand. The first TBT training was given to the staffs of media production agencies in 1994 organized by Ratchasuda Foundation and Ratchasuda College, Mahidol University. TBT continued to develop for use in Windows operating system. Besides domestic use, Thai Braille codes were added to the Duxbury Braille Translator (DBT) for global use. However, Thai Braille is not perfectly translated by Duxbury Braille Translator. Braille Proofreader is required for correction. In order for Thai language to be reliable part of global Braille technology, the National Braille Promotion and Development Fund recently started a project to develop Thai braille table for the use with the Software Liblouis management system. The project received funding from Foundation for the Blind in Thailand under the Royal Patronage of Her Majesty the Queen. With the hard work of development team, Thai braille grade 1 has been included in Liblouis version 3.27 since September 2023 as the 80th language in the system. The development team plans that complete Thai Braille, both grade 1 and grade 2, will be in every Braille technology by mid of 2025

The Promotion of Braille Use in Thailand

The promotion of Braille use in Thailand has been carried out through several mechanisms. Definitely, The National Braille Promotion and Development Fund under TAB together with 17 partner organizations have played significant roles for the increase of Braille use in Thailand. The first mechanism is educational technology center, formally known as Caulfield Library, which is the first braille library in Thailand. educational technology center is under the operation of Foundation for the Blind in Thailand under the Royal Patronage of Her Majesty the Queen. The center is to provide Braille textbooks for both students in residential schools for the blind and students in inclusive schools. The center also offers a variety of Braille books for entertainment and lifelong learning.

The second mechanism is National Braille Reading and writing Contest. The National Braille Reading and writing Contest is annually run for promoting Braille use among Braile users in Thailand. The first National Braille Reading Contest was held in 1994 organized by Ratchasuda Foundation in collaboration with Ratchasuda College Mahidol University. The contest started with solely Thai Braille grade 1 reading contest. Little by little, the contest included more activities including English Braille grade 1 reading, English Braille grade 2 reading and Thai Braille grade 2 reading. The reading contest is for both individual and team. Besides reading contest, writing contest was also added with the combination of Thai, English, and math writing. Braille reading marathon was also a part of the reading contest for almost ten years. Now, Braille reading marathon has changed to challenge-to-read activities. The applicants will read the assigned Braille books and livestream through Facebook 1-3 hours a day for a month. This activity aims for using social media for campaigning Braille use among Braille users because people with visual impairment in Thailand are very interested in using social media. Under the leadership of current President of Thailand Association of the Blind, Mr. Ekkamol Phaetthayanan, and great support of current Chairman of the National Braille Promotion and Development Fund, Mr. Tevapong Puangphetch along with effective planning and hard work of the Braille fund committee, especially the fund secretary, Miss Tanapan Kaosim, the 28th upcoming contest will add Chinese braille reading contest because Chinese is another language to which students with visual disabilities in Thailand are paying more attention. In addition, The contest winners will receive royal grace from Her Royal Highness Princess Maha Chakri Sirindhorn in presenting the award plaque to the winners.

Another mechanism is to conduct training for teachers of students with visual impairment and media production staffs for Braille use based on Braille standard manual. The Fund regularly organized the training across the country once the new edition of Braille standard manual was launched. Furthermore, the Fund in collaboration with 17 partner organizations organized the workshop to create a strategic plan for promoting and evaluating Braille use of students and staffs in all partner organizations.

In summary, it can be seen from all these activities that Thailand has put strong efforts to the promotion of Braille use through several mechanisms. Once the Thai Braille tables are in the Liblouis system, people with visual impairment in Thailand will be able to read and write Thai with Braille technology more easily. Therefore, reading and writing Braille will always exist with people visual impairment in Thailand as long as Braille technology continues to develop endlessly. It is definite that The National Braille Promotion and Development Fund under the operation of Thailand Association of the Blind together with all partner organizations have committed to advancing braille literacy for people with visual impairment in Thailand with best effort.

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