

Taiwan Teach for the World:
Branding Borderless Bilingual Teachers and Educational Service

Jade Tsui-yu Lee and Yuan-tse Yu
National Kaohsiung Normal University (Taiwan)

[Abstract]

This presentation introduces a talent training and branding project initiated at National Kaohsiung Normal University in Taiwan to promote Taiwanese quality education and share Taiwan's educational resources with educational partners all over the world.

The project contains two parts of promoting Taiwan's education as platform for diplomacy. The first part of the project is a talent training program cultivating competent and committed bilingual (Mandarin and English) graduates and professionals as border-crossing teachers. The second part presents a multi-culturally friendly smart campus model to provide sustainable educational networking for Malaysian independent Chinese schools whose students are mostly underprivileged. Altogether, the teacher training and the IoT educational service can extend Taiwan's educational model, experience and resources beyond Taiwan. It is expected that the project can fulfill its mission to promote educational equity and equality and highlight the role of Taiwan's higher education in enhancing its accountability and responsibility in the global era.

Keywords: bilingual teachers, smart campus model, mandarin learning, educational equity and equality, EMI (English as a Medium of Instruction), CLIL (Content and Language Integrated Learning), bilingual education, soft power

[Presentation]

Education is a basic human right and, undoubtedly, the greatest human capital for civic progress and economic growth. Since 1990 and reiterating in 2000, UNESCO has set the initiative “Education for all” as its vision of the worldwide movement, and indeed the most important commitment, for all governmental and private sectors to attain (Incheon Declaration 2030). As a part of global community, Taiwan has been recognized as providing high-quality human resources and has been known for its advancement in Information Technology. Part of the reason for the high-tech success is its stable and quality higher education and talent training systems to provide ample qualified professionals in humanities and engineering. For decades, Taiwan’s Ministry of Education (MOE) has set up regulations to monitor quality of higher education in Taiwan, including exam screening channels, the quota of incoming students, the tuitions, the ratio of faculty-students and providing funding for universities to boost teaching quality and learning environments. Each year, Taiwan is the main base to receive over ten thousands of students with Chinese descents albeit encountering blatant competition from China to attract these students with scholarship. In addition, Taiwan is the home of many other thousands of international students who wish to learn or polish their Mandarin language skills as in Taiwan’s many universities’ affiliated language centers, traditional and simplified Chinese are simultaneously instructed. Education is indeed the best beacon for Taiwan to impress the world.

Based on this belief, National Kaohsiung Normal University (NKNNU) is committed to promoting Taiwan’s education in the following two strains:

I. Bilingual Teacher Training Program

In the city of Kaohsiung in southern Taiwan, NKNNU is the first public university founded in Kaohsiung in 1954 and is proud of its original and traditional founding mission in teacher training. In addition to its 8000 local students, the university hosts 400-500 international learners to learn Mandarin every year in a language and culture center. To meet the increasing demand of Mandarin learning, NKNNU has set up a regionally unique and signature graduate program offering MA and doctoral degrees emphasizing the training of some 25 graduates every year to teach Mandarin all over the world in addition to the 800 undergraduates from the Department of English majoring in English and having the potential to be bilingual teachers.

In 2018, the National Development Council (NDC) in Taiwan mandated that Taiwan develop into a bilingual nation by 2030. According to NDC, the objectives of the new policy is to enhance Taiwan’s international competitiveness and improve

citizen's English proficiency. The policy is followed by a heated discussion on the high demand for English speaking teachers who can teach subjects in not only English, but also in STEM and Art (STEM A+). In response to the policy, the Ministry of Education is now promoting the training of EMI (English as a Medium of Instruction), teaching-oriented pre-service and in-service teachers. As expansion of bilingual programs has been rapidly increasing, it is expected that 2,000 local teachers will be equipped with the abilities to teach various subjects using English/Mandarin as a medium or assist students with their immersion in a CLIL (Content and Language Integrated) contexts by 2030. It is believed that learners combining excellent STEM+ A literacies and bilingual competencies have access to global competitiveness. Hence, there is genuine demand for bilingual professionals. Bringing bilingual learning together is at the heart of the Taiwan's bilingual EMI (English as a Medium of Instruction) /CLIL (Content and Language Integrated Learning)/STEM+A (Science, Technology, Engineering, Math + Arts) initiative.

As one of the Teacher Training Anchor Centers designated by Taiwan's Ministry of Education, NCKU considers the funding an adequate chance to train teachers who can teach not only for the region, but also for the world. As long as the student teacher are equipped with adequate bilingual literacy and pedagogical skills, they are able to cross the borders and enter the educational job market all over the forward. Aligned with the project, a new initiative has been taken to foster local teachers as future teachers with tertiary "Professional x Language x International Vision", and train the incumbent teachers to equip with abilities to teach various subjects in English. Three specific training task forces as below will be executed.

1.1 Consolidating Resources and Platform

The plan hopes to integrate various professional resources with regional partners, consolidating the alliance of EMI and bilingual education. Based on EMI principles, the anchor center will be dedicated to collecting suitable bilingual teaching materials, proposing innovative teaching methods, curriculum structures and teacher training to accommodate the 12-year compulsory education policy.

1.2 Enhancing Teacher Education

Teachers play an important role in quality education. The plan will offer a series of training programs for the student teachers, including the experience of observation, learning activities, and internship at the local schools or international institutions. The task force will compile and design the suitable bilingual teaching materials, propose teaching methods, coordinate internships to cultivate high-quality and qualified teachers to improve the mechanism

towards the goal of refined cultivation, and meet the diversified needs of modern society.

1.3 Proposing Teacher Empowerment Program

The task force will organize a series of activities such as teacher empowerment, class observation, lectures and professional talks, and teachers' professional growth community. The anchor center collaborates with partner schools to stimulate the integration of various teacher education resources, pay visits to local and international institutions for class observation to gain new knowledge of cross-cultural teaching, expand creative thinking, and boost educational exchange.

The training curriculum is designed to meet the global trend of educational internationalization: EMI (English as a Medium of Instruction) --the use of English to teach all academic subjects; and CLIL (Content and Language Integrated Learning) – teaching both language and subject content in the context of bilingual education. The program will be targeted at students and in-service teachers who are highly motivated in cross-cultural negotiations and mobility. In addition to their specialty, language and cross-cultural pedagogical techniques, school visits, and overseas observerships/internship will be incorporated in their training to prepare them for future career planning. As the trainees will be considered as “cultural ambassadors” for Taiwan, cross-cultural awareness and understanding will be emphasized in the program.

In 2019, NKNU organized various groups to visit local international schools, Kaohsiung American School, I-Shou International School, Chinese-speaking and international High Schools in Malaysia and Singapore, Bilingual Schools in Hong Kong, collecting textbooks used in different language contexts. Training sessions and workshops on bilingual education, EMI and CLIL have been offered for student teachers and in-service teachers. By the end of 2019, six training sessions have been completed and some 500 students/teachers have been engaged.

To polish bilingual language skills, a task force with the local radio station has been put into effect, in which students have the ability to design their programs to general public in both mandarin and English. Through the practice of vocal expression, they are able to train their oral and presentational skills required for future teaching.

II. IoT Smart Campus Model

The second part of the project is to implement the cloud big data computing and IoT campus learning environment designed by National Kaohsiung Normal University (NKNU) in order to mutually cultivate young talents in Malaysia and

Taiwan. The rationale of promoting a smart campus model in and outside Taiwan is that we hope to build a sustainable networking by sharing knowledge base and IT experience at NKNU and providing long-term educational support with our partners in Malaysia. Without the sharing of know-hows, the educational foundation will appear to be fragile and sporadic.

Adopting an action study and incorporating the PDCA (Plan-Do-Check-Action) circular quality management strategies to ensure the quality cultivation of young talents and the operation of school administration, this IoT educational service program plans to implement a platform and install a smart campus model in 70 high schools in Malaysia within three years. The project also contains the recruitment and training of Malaysian youths to enroll in the studies of information science at NKNU, and once graduated, they can return to their home country to work as technicians or professionals for the educational networking service.

In the competition in the global market, talent is the main component. As many youths are used to multimedia, the traditional educational model can no longer fulfill their learning drives. The promotion of smart education, therefore, is an important part of the construction of smart cities, including the introduction of software and hardware. The hardware part, such as the future classroom, 4G mobile broadband and the Internet of Things (IoT) and other equipment; the software part includes PBL teaching flip, online digital teaching materials, open course OCW and other support . Through the application of ICT digital technology learning aids to achieve student-oriented wisdom teaching, teachers can pay attention to each student's unique learning, differences, and long-term tracking records, providing timely, appropriate and appropriate individualized

Today, smart classrooms, smart teachers, smart classrooms, smart campuses, and smart school districts are no longer the words for the future, but those can be immediately realized. There are 6 dimensions for the Smart Campus model (1) i-Social, (2) i Learning, (3) i Governance, (4) i Manage, (5) i Health and (6) i Green. The educational sector introduces cross-disciplinary technologies, integrates resources from all parties, and then lays a solid digital foundation for students. It adopts the existing mode of operation of the school and adopts a more efficient method to reduce the cost of administration, management, teaching and counseling. The completion of the model allows teachers to have more time to accompany and care about students' situation, and at the same time minimize the resources gap between urban and rural areas through the development of networking service

As early as 2006, Singapore launched the "Smart Country 2015" smart city promotion program to develop talents with communication capabilities and global competitiveness, including smart education, hoping that the new generation of

Singaporean citizens can have access to the world. Technology and information carry out campus learning and lifelong learning that best meets individual needs for learning “anytime, anywhere, and continuously improving.” In order to promote smart education, in terms of software, Singapore emphasizes student-centered, through digital technology to change teaching methods, to develop new learning resources; in hardware, to help all schools more convenient and low-cost introduction of high-speed broadband network, let students gain knowledge and information through the Internet.

Malaysia has been actively developing its economy in recent years, especially in the technology industry. Chinese or Taiwanese companies need a considerable amount of talent. However, due to the unequal access to education, it is difficult for Chinese students to have plentiful learning resources, and they can only draw scientific knowledge from textbooks. The project hopes to pursue long-term and stable linkage through cooperation with local independent middle schools, jointly cultivate talents for technology, and conduct cross-border education cooperation programs. Through the smart campus network system, we hope to establish a large data database for talent cultivation, and provide teachers and students from both sides to use the learning platform on the network system to conduct collaborative teaching and cooperative learning. From 2016 onwards, NKNU has closely-knit bilateral exchanges with Malaysian independent schools. Therefore, this project aims to cultivate the scientific talents of both Taiwan and Malaysia. The IT model has the characteristics of teaching and learning anytime and anywhere without being restricted by time and space, in order to achieve high-quality talents, and will assist Malaysian independent middle schools to build hardware and software equipment for campus network information service.

The necessary conditions for promoting digital campus and smart learning can be divided into three aspects: environmental, resource, teaching and so on (Ministry of Education, 2017). (1) Environmental aspects: for teaching or resource, it depends on establishing a high-quality network information environment to support cloud and intelligent learning. In order to create a high-quality network information environment that spans time and space, it is necessary to provide a wide range of information to meet the needs of students' learning and teachers, to build software and hardware facilities, and to continuously improve the campus's information network. The goal of the network is to ensure digital learning. (2) Resources: Cloud, smart and big data have become the trend, using and establishing open cloud learning resources and services provide teachers and students with fair and convenient educational opportunities. Conduct big data analysis includes a cloud service platform and a rich digital learning content which can optimize related

services.

(3) Teaching Aspect: This aspect entails combining emerging technology and cloud tools and resources to enhance students' interest and effectiveness in learning, or conduct cross-country learning to enhance international vision and communication. As far as students' learning is concerned, a personalized learning mechanism is established, and each student is given appropriate courses and counseling. Using online courses, open courses, and MOOCs resources, students can learn according to their abilities. Students can also learn independently through these resources to ensure that each student can equally receive appropriate teaching content.

To sum up, the two programs, teacher training and IoT educational service, are emblematic of Taiwan's soft and hard power. Working together, the two programs pave a solid foundation for achieving sustainable developmental goals in global education as they tend to engage all relevant stakeholders to make education more effective and efficient.

With the dedicated efforts to training Taiwan's borderless teachers and to extend the educational network service, this "Teach for the World" project hopes to work with global partners with the shared vision to accelerate knowledge sharing, to foster future talents, and to access global resources for the benefit of all.