Twelfth Anniversary of the Distance Learning Foundation:
Free and Open Low-Cost
Distance Education via Satellite and Internet,
Wang Klaikangwon Model

by

Khwankeo Vajarodaya

Grand Chamberlain and Chairman of the Executive Board the Distance Learning Foundation
At the 4th International Conference on eLearning for Knowledge-Based Society
and 24th South East Asia Regional Computer Conference
IMPACT, Muang Thong Thani
Sunday 18 November 2007

Professor Dr. Srisakdi Charmonman,
HE Khunying Thipawadee Meksawan,
Distinguished Authors,
Members of the Press,
Ladies and Gentlemen,

This afternoon, Dr. Srisakdi will give the country report on eEverything from Thailand. And I thought I could be spared on Sunday. Dr. Srisakdi has been kind to invite me to speak at nearly every eLearning conference. I am pleased to hear that eEverything is not e-Nough. So I have to oblige. I hope you would give me your kind indulgence as I give you the update of the work of the Distance Learning Foundation throughout the 12 year operation.

The first live satellite broadcast of all secondary classes, Grade 7 to Grade 12, from Wang Klaikangwon School in 1995, was launched with a clear goal and objective. With severe lack of teacher in the rural areas, our mission is to deliver basic education to the doorsteps of all remote school.

In Thailand, compulsory education is not yet 12 years.

The satellite tele-education from Wang Klaikangwon School is the only serious attempt to provide basic education across-the-board within the reach of all students at all remote schools in Thailand. To combat ignorance at the grass-root level by means of practical distance education module would be a proper tribute to His Majesty the King’s advocacy of lifelong learning on the auspicious occasion of His Majesty the King’s Fiftieth Anniversary of Accession to the Throne.

The 30,000 primary schools are matched by only 3,000 secondary schools. Children aged 12 with primary education cannot get secondary education. If we adopt the “do nothing” attitude and allow this trend to continue, we will lose a great number of young promising kids to drugs, AIDS, human trade and other abuses. We would live to see our future slipping away from our hands.

Conventional solution of building new schools and training new teachers would miss the timing. The sensible choice of technology and proper management is the only timely solution.
Satellite is the simple answer for one to multi-point broadcast. The Ku band signal can reach all corners. The dish antenna of 75 centimetre diameter is handy. Per class, the receiving equipment (the dish), two 21 inch television sets for 40 students, and one IRD is much cheaper when compared to the cost of internet and personal computer per student. Students cannot strain their eyes at the computer screen for long hours.

His Majesty the King’s educational policy of “Ob Rom Bom Nisai”, a Thai traditional way of teaching and training a child to be a good, honest person and Economic Sufficiency, is the core of our operation. The Distance Education via Satellite Wang Klaikangwon Model is human oriented, a low cost operation which is free and open to all. It is the only system in the world that operates on “Live One Class, One Channel” modality.

My background is in hotel management with a First Class Honours from Switzerland. In 1952, I was asked by the Ministry of Interior to teach and train personnels for the first hotel, the Erawan, Bangkok. In 1955, I was invited to teach at the Pranakorn Finishing School. In 1979, I became the Director at Wan Klaikangwon School, Hua Hin.

Wang Klaikangwon School is His Majesty the King’s private school in Hua Hin, 200 kilometres south of Bangkok. In 1979, 28 years ago, only 2 teachers held university degree. I encouraged other teachers to take twilight courses until all obtained bachelor degree. With help from the Ministry of Education, Wang Klaikangwon School is staffed with teachers for all subjects and all classes. In 2003, the Ministry of Education asked the Distance Learning Foundation to combine together live broadcast of the twelve year primary and secondary classes, Grade 1 to Grade 12 on UBC-TRUE channel 81-92.

To date we operate 15 channels 24 hours on UBC-TRUE channel 81-95. It is equivalent to 15 transmitters with 24 hour operation. And we employ around 100 technicians and 30 personnels at Hua Hin Distance Learning Television Station and Bangkok Office.

Wang Klaikangwon Vocational College and the Rajamangala University at Wang Klaikangwon campus offer “Full Cycle Education” – primary, secondary, vocational and university education.

That adds two more channels: Community Education Channel and University Education Channel. The International Channel features programmes on arts, music, culture, innovation, environment and tourism. It is supported by FAO, UNICEF, WHO, UNESCO, foreign embassies and Thai embassies abroad. English, Chinese, French, Japanese, German, Japanese are taught on air mostly by native speakers free-of-charge.

The Eminent Experts at the UN ESCAP Meeting on Space Technology Applications for Sustainable Development has commended the Wang Klaikangwon system on its technical simplicity.

To save cost, the 12 actual classrooms, Grade 1 to Grade 12, are used as studio. There is no physical difference between the actual classrooms at the parent school and schools upcountry.

Two cameras are used for each classroom studio - one on the teacher, and the other on the activities of the students or the experiment. Whiteboard replaces Blackboard. Magic pens replace chalk. Dust can damage the expensive cameras.
Maintenance on a daily basis is important. Teachers can observe their gesture and movements from the monitor at the back of the classroom. We use normal fluorescent light. Venetian blind replaces heavy curtain. Without Hollywood glaring light, there is no need for heavy makeup. That saves cost of makeup and electricity for air conditioning. Students and teachers do not have stage fright.

Camera angle that focuses on the nose tip produces a natural younger look on the screen. Wrinkles cannot be seen. Our technique is known as “Magic Camera”. Teachers look poised and smart in their uniform. That saves cost of dressing up.

A number of 40 students in each classroom provides natural echo. Not the dead room. No thick carpet is needed on the floor.

Two television sets are fixed at eye level on the left and right hand side of the white board. Plasma screen in the middle. Plasma is cheaper than projector in the case of continuous 8-hour usage. Teachers’ desks in the twelve on-air classrooms are furnished with telephone, facsimile, computer and document station. TOT Public Company limited provides 4 toll free numbers for remote schools to interact with Wang Klaikangwon School for questions or comments. Every Saturday, local video conferencing is conducted as a follow-up with distant schools from 09:00 to 11:00 am.

These simple thoughts about low-cost classroom management have accumulated from my work experience of 55 years as Director of the Royal A.S.Radio Station, Dusit Palace, which operates on medium wave, short wave and FM. I am most grateful to His Majesty the King’s technical advice and guidance.

As on the job training and cost saving, on-air teachers volunteer to do their own PowerPoint for all subjects.

According to his Majesty the King’s advice, Teacher Manuals, Grade 1 to Grade 12, are sent to all remote schools before the start of each semester one month in advance.

Local Videoconferencings are regularly conducted to promote friendship and exchange. Students in the North, Northeast and the South say Hallo, learn about each other. They play music together with smiles and laughter.

Videoconferencings with University of Oregon at Eugene, the United States of America, offer certificate course trainings for English, Mathematics, Science, Physics and Green Chemistry teachers in Thailand. With the authorization of the Ministry of Education, teachers nationwide gathered in Bangkok at TOT Public Company Limited headquarters and Wang Klaikangwon School in Hua Hin. We replay the tapes of the trainings every Sunday morning at UBC-TRUE channel 94.

With the help of the distance learning, the number of First Class and Second Class Honours of university graduates from schools all over Thailand has increased every year.

Patrararin, a former Wang Klaikangwon student was granted the permission from His Majesty the King to perform Thai classical music and Thai classical dancing at the Melia and Chivasom hotels in Hua Hin for extra income. At that time in 1993 she was Grade 8 student. This is the Economic Sufficiency Theory at work. His Majesty does not wish to walking dictionary or to see everyone race for university education. It is His wish to see good upright persons who
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are taught and trained to be self-sufficient and self-dependent to be their potentials. Now, Patrararin is working for the Distance Learning Foundation. She is a Ph.D. candidate in Education Technology at Kasetsart University.

Chandee, a straight-A’s university student from Rajaprajanugnoh School in Sri Saket, has got her Barrister of Law. Chandee is now teaching law at Kasem Bundit University. In her third year, she won the Crown Prince’s Trophy over 20 universities at the Contest of Oratory Legal Debate. The School Director, Mr. Wisit Withayawarakarn was awarded, a few days ago, one million bath prize from the Security Exchange of Thailand for his outstanding achievement in the school’s educational development.

The 44 Rajaprajanugroh Schools throughout the country has adopted distance education from Wang Klaikangwon School. His Majesty the King has commanded Rajaprajanugnoh Foundation to set up schools in areas afflicted by natural disasters, drugs, human trade and AIDS. Rajaprajanugroh schools become “a Home and a School” free for the orphans who lost their fathers in those misfortunes. Rajaprajanugroh schools, like other upcountry schools, suffer from shortage of teacher.

In 2003, at the Fortieth Anniversary of the Rajaprajanugroh Foundation, we installed the distance learning equipment for most of the classrooms at Moslem School. In 2004, the situation in the South prompted teachers to leave schools. The Moslem Schools requested for more equipment. TV Teachers are needed in Thai, English and Science.

The Foundation absorbs the cost of satellite uplink and rent half of the transponder, including the Teacher Manuals and free receiving devices.

The Royal Thai Army provides assistance for the installation of equipment at remote schools.

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Kasetsat University and Diethelm offer the popular “Brand Summer Camp” tutorial courses for university entrance examination.

DLFeSchool project is in the Foundation’s structure since 2003 as the third phase of distance learning development. In terms of technology, we start TV educational broadcast in 1995. In 2000, an eLearning methodology in the form of web broadcast was introduced.

The DLF eSchool system offer courses on multimedia computer as web-based instruction and online learning. DLFeSchool is designed to give education to Thai youths in Thailand and overseas as well as adult learners who are interested to learn a variety of Thai language and Thai culture. The system offer 3 programmes: Programme One teaching 8 subjects for primary compulsory education students. Programme Two presenting Thai language and Thai culture for adult learners and Programme Three teaching Thai language to Thai youths and interested people.

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The Foundation by DLF eSchool pioneers the videoconferencing methodology in bringing knowledge from overseas leading institutions and universities to Thai learners. Starting in 2001, three videoconference teacher training sessions on distance methodology were conducted from the National Centre for Flexible learning in Sweden to His Majesty’s Wang Klaikangwon School.

The University of Oregon, since 2002 up to now, has taught a new methodology
series of teaching English to Thai teachers via videoconference. The topics are for example; Critical Thinking, Project-Based Learning, Creating a Resource Rich Classroom.

To utilize the system and benefit the teachers, DLF is working on web based training courses in 2007 for English teachers. Science subjects are next in line to be produced as digital content and media for science teachers.

In 2000, we hosted 2 trainings for Cambodia, Laos, Myanmar and Vietnam.

Now, five Universities in Yunnan, China are now studying Thai language and culture from Wang Klaikangwon School. In Laos, Mattayom Somboon School for the Gifted Students, Orphanan Cultural School Lak 67 in Vientiane, Mattayom Santipab in Bo Keow are connected for Wang Klaikangwon distance learning. Vietnam, Hanoi Open University and Industrial, Economic and Technical Junior College No.1 in Hanoi joined some sessions of the teacher trainings with Oregon Kampongecheuteaul College in Cambodia sent the teachers for a study visit last August. The College is equipped with the receiving equipment. In Myanmar, the equipment has been installed at the University of Distance Education in Yangon.

During 2002-2004, 4 training programmes were organized for Papua New Guinea Ministry of Education and JICA experts. The distance learning education system in Papua New Guinea is modeled after Wang Klaikangwon system.

Recently, Indonesia, Malaysia and the Philippines have sent missions from the Ministry of Education for the study visit. The Philippines Secretary of Education has commended the DLF system as example of best practices in distance education via satellite in the region. They agree to apply the Thai experience in their Cyber Education Project.

Kotabaru, Kelantan in Malaysia, has requested the Foundation to set up satellite tele-education classrooms at 15 Thai temples for Thai-Malay people. The project is under the Royal Patronage of the Rajaperempuan of Kelantan.

Right now we have the network of a total of 3,000 secondary schools and 15,000 out of 30,000 primary schools nationwide. Everything would simply fail if we could not get the involvement from the remote students. But the remote students know they are granted the same quality education and same treatment as the King’s students at Wang Klaikangwon School. The distance education from Wang Klaikangwon School has taught and trained them to be punctual, disciplined and accountable for their future. Above all, it grooms them to “Rak Dhee” to have passion for goodness and excellence.

Our younger generation should be entitled to have a brighter and better future. Technology should serve that purpose and bring us together and closer. The humanized distance education can open up door of friendship, knowledge and wisdom, opportunitites and quality lifestyles of our children. And never forget that eEverything starts with eEveryone. I wish the Conference best success. Thank you.