

Digital Learning Asia 2006

26-28 April 2006, Bangkok, Thailand

The Digital Learning Asia 2006 Conference organised by the Centre for Science, Development and Media Studies (CSDMS) held on 26-28 April 2006, Bangkok, Thailand deliberated on education strategies in Asia and showcased trends and practices in ICT in education. A brief report of this conference is presented here.

The overarching aim of the Digital Learning Asia 2006 Conference and Exhibition held between 26-28 April, 2006 in Bangkok, Thailand, was to deliberate and learn from the current National ICT and Education strategies of Asian countries and to understand the recent trends in e-learning practices.

The conference held in conjunction with egov Asia- the e-Governance conference and Asian Telecentre forum and saw over 450 participants from Asia and outside. The Digital Learning Conference featured the work of 70 practitioners from 20 countries in Asia and brought together over 150 exponents of technology enhanced learning from Asia in a rich agenda mixing in a variety of formats and programme elements. The agenda was created with the support of the conference Programme Advisory board that included leading exponents and experts of technology enhanced learning. The Exhibition had various government agencies and leading private sector organisations who showcased their projects, products and solutions.

The conference had assumed immense importance with the commitment and support of the Ministry of Information and Communication Technology (MICT), Royal Thai Government, Ministry of Education (MOE), Royal Thai Government, South East Asian Ministers of Education Organisation, (SEAMEO), Asia e-Learning Network

(AEN) Software Industry Promotion Agency (SIPA) Thailand, UNDP APDIP, National Electronics and Computer Technology Centre (NECTEC), Thailand, British Council, Thailand, Danish Technological Institute (Denmark), National Science and Technology Development Agency (NSTDA)-National Online Learning Project (NOLP) Thailand, USAID, India, Thailand Software Park, University of Washington, National University of Singapore and many others as supporting partners. The conference had also received support from the leading private sector organisations involving e-Learning.

Conference Programme

The Conference saw 4 keynote sessions, 2 plenary sessions, parallel sessions, panel discussion and workshops. The first day began with the inauguration of the conference. **The Minister of ICT, Thailand, Suchai Charoenratanakul** and the **Minister of Education, Thailand Chaturon Chaisang** along with the **President of the Centre for Science, Development and Media Studies, M P Narayanan**, inaugurated the conference and the Exhibition.

The inauguration was followed by the **Keynote session** titled the 'Vision Session'. **R Chandrashekhar, Additional Joint Secretary, Ministry of Communication and Information Technology, Government of India**, discussed the synergy between e-Governance and ICT for development



The ICT and Education minister, Royal Thai Government



Suchai Charoenratanakul, the ICT Minister



Chaturon Chaisang, the Education minister



Exhibition



R Chandrashekhar, Add. Secretary, Ministry of IT, India



Susanne Ornager, Unesco



Conference in progress



Attendees pay heed to inauguration ceremony



Speakers of the plenary - Leadership Reflections in ICT ...



Dr Yoshiko Terada, AEN

and pointed out that e-Governance, ICT for development especially ICT for education and capacity building should converge to create a new paradigm of development.

Dr. Susanne Ornager, UNESCO Adviser for Communication and Information, Bangkok, Thailand

elaborated on the development challenges in education and the knowledge society and the need for re-engineering education. She also explained that ICT reflects the increased emphasis on communications and education and is the lead target sector for improvement. She said “*Knowledge society cannot exist without highly educated citizens and Education is sine qua non for the creation of knowledge societies*”.

After Lunch, the first session of the day began as a **plenary session** titled ‘**ICT in Education in Thailand**’. The Ministry of Education, Royal Thai Government, organized this session. The objective of the session was to get an overview of the Ministry of Education initiatives in education and how ICT are being integrated at various levels of education. The session started with the **Keynote address** by the **Deputy Permanent Secretary, Ministry of Education, Dr. Charuaypon Torranin** who in her presentation, ‘The ICT in Education Roadmap in Thailand: Thai Panel on Education’, highlighted that the Thai Government’s focus is to improve the quality of higher education and modernize Thailand education process through ICTs.

This **plenary session** saw key presentation from the Ministry of Education, Royal Thai Government officials. **Asst. Prof. Anuchai Theeraroungchaisri, Deputy director, Thailand Cyber University Project, Commission on Higher Education, Ministry of Education, Thailand**, elaborated the role of the Commission of Higher Education and described the Ministry’s initiatives to encourage the use ICTs in higher education in Thailand and flagship initiatives to

interconnect universities through UniNET and Thailand Cyber University initiative.

Suwat Saktrikul, Director, Bureau of Technology for Teaching and Learning, Ministry of education,

outlined the Thailand ICT Master Plan 2010, National ICT for Education Master Plan, Ministry of Education ICT Policy, ICT Plan and Implementation. He pointed out that as a policy the Ministry focuses on three points: bridging the digital divide, knowledge and content development, science and technology strengthening, and presented the details of activities under the National ICT for Education Master Plan (2004 – 2006) suggesting the importance of training teachers in ICT knowledge.

This session also saw presentation by **Siripan Chumnum, Advisor Secretary General, Office of the Vocational Education Commission, Thongchul Khankaw, Office of Non-Formal Education Commission and Nattavud Pimpa, Office of the Permanent Secretary, Ministry of Education** who spoke on the various initiatives of their respective offices with respect to ICT enabled education and expressed their confidence on the future of ICT in education initiatives in Thailand, in reforming the education process delivery.

The **second Plenary** of the first day was titled “**Leadership reflection in ICT in education in Asia**”. The objective of this session was to understand from leading organisations and key experts, how ICTs has been used to improve the efficiency of education and training. **Dr Yoshiko Terada of Asian e-Learning Network (AEN), Japan**, identifying the various barriers to widespread take-up of ICTs in training and capacity building, pointed out that the government of Japan is spreading and promoting proactive use of e-Learning in the business and higher education for creating e-Learning professionals. **Hammed Aghakhani and S.**

Mohammad Reza Nasserzadeh of Iran Telecommunications Research Centre discussed the critical success factors of e-Learning in Iran, pointed out that there are a lot of overlap of activities among the government organisations and there is a genuine requirement of need assessment and assessment of the programmes that are active at present.

Dr Chadamas Thuvasethakul of National Electronics and Computer Technology Centre (NECTEC), Thailand and Dr Panjai Tantatsanawong of Commission on Higher Education, Ministry of Education, Thailand presented various programmes of the Thai Government, while Dr Chadamas discussed NECTEC's initiatives in education and presented a model of inclusive school education in the 'The Hon'l Princess Maha Chakri Sirindhorn education programme', Dr Panjai discussed several models of ICT use in Higher education and research in the Inter-University Network (UniNet), Thai Research & Education Networks, etc., all of which support distance education programmes and provide other education facilities.

Lim Kin Chew of Dniem Pte.Ltd. Singapore gave an overview of the e-Learning history of practices in schools, Universities and corporate bodies in Singapore. He also pointed out that presently Singapore has emerged as a leader in utilizing ICTs for all kind of capacity building especially in providing end-to-end solutions in education.

This session's last speaker was **Dr Ashish Garg of Global e-Schools and Communities Initiative (GeSCI)**. Dr Garg gave an overview of the GeSCI initiatives and activities in Asia. Dr Garg pointed out that ICT enabled education will be successful and sustainable when there is a guiding policy by the Ministry of education and a National standard for teachers training, a comprehensive implementation plan and a buy-in from

all the stakeholders in education especially the teachers and the community.

Discussion in this session primarily focused on how pilot programmes in ICT in education could be scaled up and what factors have to be kept in mind and frameworks to be put in place for sustaining such initiatives.

Parallel to this plenary session, a tutorial **workshop was organized by NSTDA-NOLP, Thailand on SCORM and its applications. Surasit Vannakrairojn, Director of National Online Learning Project (NOLP)** in the workshop, explained the concept of 'Standards' with reference to e-Learning, concept of Sharable Object Reference Model (SCORM) 2004 and its organisation, application and benefit. In the interactive demonstration session he also elaborated on content packaging, runtime environment, content aggregation model, meta-data, sequencing and navigation and SCORM conformation.

Second day of the conference

Day two of the conference began with a **keynote session on 'ICT and education: strategies and best practices in Asia'**. **Prof Dr Pavich Thongroach, Secretary General, Commission for Higher Education, Thailand**, gave an insightful perspective on the strategies and practices of e-Learning in Thailand Dr Pavich pointed out that *"The challenge for e-learning in the future is how to incorporate virtual, social and moral values into the media of e-learning, such that e-learning have real value for education."*

The second keynote address was by **Prof Dr.Srisakdi Charmonman, Chairman and CEO of the College of Internet and Distance education at the Assumption University.**

Dr. Srisakdi presented an analysis of the existing situation of e-Learning in Higher Education in the ten ASEAN countries and a recommendation for



Manno Ordeedolchest, President, SIPA



Douglas Bell, EDC, India with his presentation



Visitors at Exhibition booths



Alexa Joyce, Unesco



Jahan Choudhury, University of Wolverhampton, UK



The session in progress - a side view



Dr Edilberto C. de Jesus,
Director, SEAMEO



Prof Choo Fook Hoong, Robert
Kheng Leng, Singapore



Erna Surjadi, Ministry of Women
Empowerment, Indonesia

cross accreditation in order to promote development and free flow of skilled personnel.

Dr Cameron Richards of University of Western Australia, the third keynote presenter argued on the kind of ‘dialogical’ approach needed in the digital age to better organize, manage and apply the tacit or informal knowledge in ICT in education, that is to do with learning process and cultural change, with particular reference to an Asia-pacific context.

Post tea break there were joint session on “**e-Learning: Pedagogy and Practices**” and “**e-Learning Practices in K-12 Education**”. **Erna Surjadi of the Ministry of Woman Empowerment, Indonesia**, chaired both these sessions. This joint session was chaired by **Rakesh Sood of Educomp India**. **Dr Robert Gay Kheng Leng of Nanyang Technological University, ICIS, School of EEE**, presented his paper titled ‘Redefining e-Learning’ and focused on some basic concepts and challenges of e-Learning and pointed out that current e-learning systems focus more on information access and distribution rather than learning.

While the session on Pedagogy and Practice in e-Learning delved on redefining e-learning, the parallel session on “**e-Learning Practices in K-12 Education**” saw a several case studies from Asia. The objective of this session was to discuss different models and perspective on how ICTs have been used for the efficient delivery of education. **Madhusudan**

Padhi, State Project Director, Orissa Primary Education Program Authority (OPEPA) Orissa, India presented the state initiated Project e-Shishu where a dynamic Child Tracking System (CTS) was developed to track children by their demographic, educational and physical status.

J. Sundarakrishnan, American India Foundation (AIF), an NGO based in India presented a model of using ICTs to improve learning in under-resourced schools in the ‘Digital Equalizer Program’ model that focuses on primary school children (aged 6-10 years), trains teachers through an in-house facilitator and a visiting trainer, and provides a graded curriculum. **Alexa Joyce of UNESCO, Bangkok**, presented UNESCO’s drawing from UNESCO’s experience in SchoolNet projects in the ASEAN countries. She pointed out that the model follows a blended learning approach combining traditional learning with ICTs.

The post-lunch parallel session focused on ‘**ICTs in Non-formal Capacity Building**’. This session had four speakers who presented case studies from India, Bangladesh, and Iran. **Jahanzeb Chowdhury of Centre for International Development and Training (CIDT), University of Wolverhampton, UK** tried to analyse the extent to which IT services are being promoted in the rural communities by NGOs and the potential role of IT services in the development of skills especially for children. **Randeep Kaur of Plan International, an NGO based in India**

presented three models of ICT for capacity building using Radio, PDA, digital photography and internet resources. **Latha A of Education & Research Department, Infosys Technologies Limited, India** presented a framework of capacity building of employees in an organisation. Another experience of e-Learning in Iran was presented by **Mazid** who focused on how web-based learning had effected the attitude of physicians who underwent online trainings. **Ramlee Mustapha of National University of Malaysia**, discussed the goals and purposes of non-formal adult education in Malaysia and recommended on how the Malaysian government and other stakeholders can work together to support the initiatives.

The other panel session was on **e-Learning practices in higher education** which saw two case studies. **Dr. K. P. Hewagamage of School of Computing, University of Colombo** presented a paper on how Learning Management System (LMS) has been adapted in Higher education system in Colombo. **Mohammad Mehedi Hassan, an IT specialist from BRAC, Bangladesh** gave an overview on how BRAC has introduced and successfully implemented Computer aided learning into its various educational programmes.

During the afternoon tea, participants took a break from the intensive sessions for some informal networking. Post-tea, while the session on “**Technology for Education and Training**” continued in one hall, a panel discussion on “**The role of Universities in ICT for Development**” organised by the University of Washington, continued in the other.

The session on ‘Technology for Education and Training’ was chaired by **Chip Cleary of NIIT**. This session had four presenters who presented various technology options for enhancing learning. **Daniel Churchill of the University of Hong Kong** elaborated on an ongoing study into

issues relevant to the design of Learning Objects (LO) for educational applications via PDA Technology. **Prof. Jussi Puhakainen of Turku School of Economics and Business Administration, Finland** deliberated on Wireless Networks for facilitating learning with reference to their initiative SparkNet which has been used to connect existing wireless networks into a larger entity. **Professor Choo Fook Hoong, Professor Robert K L Gay and Mr Teo Chao Boon from Nanyang Technological University, Singapore** discussed on the methods and frameworks of announcement, calendar, courses, assessment, assignment, whiteboard, etc. as tools for collaborative learning and knowledge sharing. **Rama Vennelakanti, HP Labs India,** showcased 'Printcast', a new technology developed by HP Labs, that enables data broadcasting on existing broadcast networks and discussed the preliminary observations and trend in its usage.

The panel discussion on '**University Role in ICT for Development**' organized by the **University of Washington,** focused on the need to redefine the role of universities to become the producer of ICT4D knowledge and an engaged actor in ICT4D practice. This is understood as the teaching, research and outreach activities of universities that link ICTs to the development needs of their communities and advance the transition to the knowledge society. The panel discussion was meant to discuss the project initiated by the University of Washington, Centre for Internet Studies in collaboration with 10 other universities in Asia, namely National University of Singapore, Chulalongkorn University, Thailand, De La Salle University in the Philippines, Indian Institute of Technology, Chennai, India, Nanyang Technological University (Singapore) and several others. The project aimed to map the university practices in ICT for development in terms of teaching, conducting research and

outreach programs. The panel was led by **Chris Coward** (University of Washington) and included **Nguyen T Anh** (Thai Nguyen University of Agriculture and Forestry, Vietnam), **Royal Colle** (Cornell University, USA), **Soraj Hongladarom** (Chulalongkorn University, Thailand), **Pamela Koch** (Nanyang Technological University), **Francisco Magno** (De La Salle University, Phillipines) and **Colin Maclay** (Harvard Law School).

Third Day of the conference

The third day began with a **Keynote sessions on Public-private partnership** for ICT in education. **Manoo Ordeedolchest, President, Software Industry Promotion Agency (SIPA),** presented the key events that drove education reforms in Thailand and explained how SIPA has supported developers in e-learning content development in Thailand. **Vincent Quah, Regional Academic programme manager, Asia Pacific, Microsoft,** explaining Microsoft's education initiatives through PPP, pointed out that PPP are one of the most effective means to tackle the digital divide. He pointed out that a stable transparent framework, guaranteeing equality; political will, economic viability and social legitimacy form the framework for a successful PPP in education. **Namapong Dejpongarn of SAP Thailand** described SAP partnership with education institutions through the SAP University Alliance Program. **Dr Rangsun Wiboonuppatum of the Ministry of Education, Royal Thai**

Government elaborated on the Ministry's partnership with various private organizations in ICT in education.

After the keynote session, the first parallel session was on "**e-Learning Design, Development and Delivery**". The objective of this session was to understand from practices, the key components that needs kept in mind while designing and developing any e-Learning courses, content or curriculum etc. The session also aimed to explore the possible options of delivery of e-learning products. In this session, while **Douglas Bell of Education Development Centre (EDC),** focused on the designing and delivery of educational software that is a hybrid of rich multimedia and pedagogical strategies, **Subrata Kumar Dey of the Independent University, Bangladesh** explained how the designing and development of education software needed to be aligned with a product-process oriented curriculum. **Pradeep Joseph of Intel India Pvt Ltd** further elaborated that products have to developed after a thorough assessment of the need of the users. **Ganesh Subramaniam of EZ Vidya, India** also pointed out that designing a well thought out holistic curriculum with the diligent use of technology, delivered in a learning environment that is conducive, can enhance higher order thinking in learners. **Bunita Pravalpruk of NECTEC, Thailand** presented a process for choosing type and format of data for e-learning system according to the receiver's environment.



Sussane and Benjamin, Unesco



More discussions, less formal

This session also saw presentation by **Dr Suresh Reddy of Byraju Foundation, an NGO based in India** who focused the delivery process of e-Learning content and curriculum through the Kidsmart programme for developing reading and cognitive skills in under-privileged primary and pre-primary kids with the help of technology and age-specific digital content. **Raghuveer K of the National Institute of Engineering, India** presented a framework of designing and development of feedback mechanisms in distance learning programmes that improved the interaction between teachers and the students.

The other parallel session in the morning was on **‘Regional Practice sin ICT in education’**. The objective of this session was to get a flavour of the various e-Learning practices in Asia-pacific. **Erna Surjadi of the Ministry of woman Empowerment, Republic of Indonesia**, focuses on capacity building of Gender personal in Indonesia. This presentation was followed by an interesting presentation by **Woralak Jumsai Na Ayudhya of Chulalongkorn University of Thailand**. Woralak presented a interesting model of ICT-based curriculum and instruction that can bring out a balance of Emotional Quotient (EQ) and Intellectual Quotient (IQ) in the students. **Jayanthi Ravi from classonweb, India** presented her experience and perspectives of effective e-learning for virtual classrooms. **Julito Contado Aligaen, representing the Department of Education**, presented his experience in implementing the Partner-in-learning programme of Microsoft Philippines.

After lunch, while the parallel session on e-Learning Design, Development and Delivery continued, a very interesting panel discussion organised by **South-East Asian Minister of Education Organisation (SEAMEO)** titled **‘Cyber Education: Management Dimension’** was organised as a panel discussion aimed to provide an opportunity to reflect on how e-Learning can be managed. The session was chaired by **Dr Chantavit Sujatanond, Deputy Director** (Administration and Communication) and saw presentation from four distinguished experts on various issues of e-Learning management and models of management. **Prof Dr Srisakdi Charmonman** Chairman of Board and CEO, College of Internet Distance Education, Assumption University, Thailand, drew from his experience in running a online master degree programme at the Assumption University. **Prof Dr Paulina Pannen, Director, SEAMEO Regional Open Learning Centre (SEAMEO SEAMOLEC), Indonesia** in her very interesting presentation titled “Managing e-Learning: managing the probable”, identified and explained the need and requirement of each components associated with the management of e-Learning. **Associate Prof Dr Supanee Sombuntham, Director - Thailand Cyber University (TCU)** presented her experience in managing the TCU’s online and distance Education programmes. **Alan K Jolliffe, Project Officer, UNESCO Asia and Pacific Bureau for Education**, discussed how to use a development model to manage and develop e-learning events, which can be used with e-learning dependant and full delivery events.

The last sessions of the day were on **‘Enabling policies for ICT in education’** and **‘Emerging technologies in education’**. **Bejamin Vergeldedios, UNESCO Asia and Pacific Bureau for Education**, in his presentation “Policies that make sense” pointed out that there is a need to create policy awareness and support for policy networks among the decision-makers. While in the session on **‘Emerging technologies in education’** speakers **Surasit Vannakraironj, NSTDA-NOLP, Thailand, Dr Suchai Thanawas of Sripatum University, Thailand and Bruno von Niman of European Telecommunications Standards Institute, Sweden** presented different technology options that are increasingly being used as popular tools for learning.

The conference offered a wide-ranging selection of papers delivered by a cross section of practitioners, decision-makers, learning technologists and researchers, not only on how technologies are being integrated in education, but also on what process need to be build, frameworks developed, change management initiated and stakeholders needs to be involved and oriented, for exploiting the full potential of technologies in education. This conference paved the way for thinking of ICT in education in a more holistic way, focusing on people-process-program as against technology-structure-systems. *A full report of the Digital Learning Asia 2006 Conference with key discussion will be made available online at www.digitalllearning.in* ■



Chris Coward, University of Washington, USA



M P Narayanan, President, CSDMS



The valedictory session