Highlight: Innovative Schools
These briefs describe three innovative schools that have been awarded the Regional Intel® Teach School Awards during the 15th UNESCO-APEID Conference in Jakarta in December 2011, in recognition of their work to transform education through the integration of technology, creativity and innovation.

Crescent Girls’ School – A FutureSchool@Singapore

ICT breakthrough in Caraga Regional Science High School, Philippines

Nguyen bính khiêm primary school – Vietnam - "make each day at school an exciting day of the students!"

News & Events
UNESCO Mobile Learning Week produces tangible results
A set of mobile learning guidelines, teacher training initiatives in four regions and a series of working papers, along with a budding community of practice are among the initiatives launched during the first UNESCO Mobile Learning Week last December.

UNESCO chief stresses need for innovation to ensure quality, equitable education
The Director-General of UNESCO tasked with promoting education recently underscored the role that information and communications technologies can play in ensuring quality education and equal opportunities to learning even in countries that lag behind because of limited resources.

Education system profiles unveiled
On 21 December 2011 UNESCO Bangkok unveiled its first batch of online Asia-Pacific “Education System Profiles”. The Profiles, launched by UNESCO Director, Mr Gwang-Jo Kim, provide readily accessible information and data on the education systems of 15 countries across the Asia Pacific region.

Open educational practices recognized through OPAL Awards
The winners of the OPAL Awards for quality and innovation through open educational practices were announced at a ceremony in Berlin, Germany on 2 December 2011. ICDE, the International Council for Open and Distance Education, took the lead in running the awards in this European Commission supported project.

Sri Lanka launches national IT literacy initiative
As part of the government’s effort to foster an IT literate society, the government launched its “e-diriya” national IT literacy initiative which aims to provide basic computer knowledge to 50,000 “samurddhi” recipients and school children.

Programmes & Projects

Khan Academy – Redefining learning and fostering changes in education
The Khan Academy is a non-for-profit organization that challenges the traditional mode of learning by providing an on-line learning platform for everyone including teachers, students or anyone who wish to refresh their memories on a specific topic.

SchoolNet SA is learning from experience
SchoolNet SouthAfrica aims to create communities of teachers using ICT to enhance teaching and learning. It concentrates on teacher development with a particular emphasis on ICT integration and on underserved schools.

Resources
Guidelines for Open Educational Resources (OER) in Higher Education
These guidelines published by the Commonwealth of Learning and UNESCO outline key issues and makes suggestions for integrating OER into higher education.

Pedagogical use of ICT: Successes and challenges from 100 + African schools  - 2nd edition
This book reports on key trends on the pedagogical integration of ICT in schools in Africa. The publication is partly written in French and English.

Technology adoption for use in instruction by secondary technology education teachers
This paper stresses that technology education teachers have substantially adopted technology for use in instruction, but they are not making the maximum use out of it.

Project management for development organizations
A series of courses designed to provide a broad skill base to do the multi-tasking necessary for planning, initiating, monitoring, and completing projects, especially in the development field.

explania – Explanations through animations
Watch hundreds of animated explanations, interactive tutorials, animations and instructional videos, and feel free to embed them on your own web page.

UNESCOplaces.org - Discover the most beautiful places in the world
This website gathers all of UNESCO’s World Heritage Sites (WHS) in one place – and more.

Highlight
Crescent Girls’ School – A FutureSchool@Singapore
By Lee Boon Keng, Chief Technology Architect for Learning, Crescent Girls’ School
Crescent Girls’ School is one of the premier public secondary schools in Singapore. The school distinguishes itself in its exemplary educational practices that empower students to be self-directed learners equipped with important skills required for the 21st century workforce. Crescent was one of the schools selected for the first phase of Singapore’s ICT Masterplan for Education in 1997. Since the launch of 1-to-1 computing with Tablet PCs in 2004, learning has become more dynamic with students having access to a wide variety of interactive digital media such as web 2.0 tools and in-house applications co-developed by teachers and industry partners, ensuring that the use of ICT lends itself to the holistic
development of the child. This innovative use of ICT for teaching and learning led to the school being selected in 2007 as a pioneer school in the FutureSchools@Singapore programme, as well as Mentor School in Microsoft Corporation’s Innovative Schools Programme.

Learning at Crescent goes beyond the confines of the classroom and of textbooks. At Crescent, there is a focus on learner-centric pedagogy. This is defined by three sets of key characteristics. Firstly, learning must be engaging, experiential and exciting. Secondly, it must be learner driven, which means that the student must be actively constructing knowledge through inquiry, working both independently and in collaboration with one another. Thirdly, it must be personalised as learners have different learning aptitudes, styles, interests and needs. Teachers leverage on ICT, recognising that technology is a very key enabler in the education process, and that it is a tool to facilitate the provision of a holistic education.

An example of Crescent’s holistic approach is the Secondary 1, 2 and 3 Integrated Curriculum. Each level has a theme with a key enduring understanding. Relevant topics in different subjects are taught in an integrated manner and in this way, students’ understanding is deepened. The school harnesses Interactive Digital Media (IDM) to foster collaborative learning, using various IDM tools to create lessons that engage students in knowledge acquisition, participation and creation.

Besides continuing to push the frontiers in the use of technology to transform learning, the school is also seeking to guide other schools in their ICT journey through the Crescent Academy for Digital age Learning (CrADLe).

It is Crescent’s hope that through the purposeful and innovative use of ICT, students are provided with a holistic education that will equip them with the skills needed in the 21st Century workforce.

**ICT breakthrough in Caraga Regional Science High School, Philippines**


Caraga Regional Science High School started with its humble beginning way back in 1996 with only 99 freshmen students. In 2000, the school topped the National Achievement Test and had sustained its outstanding academic performance for years.

In line with the thrust of the Millennium Development Plan and the Ten Point Agenda of the Philippine government and in its desire to realize the vision of ICT 4 E in the 21st century which is “Education for all Filipinos, Anytime, Anywhere”, the school promotes the use of ICT in achieving the EFA goals by 2015. The integration of ICT in the teaching-learning process catapulted the school to greater heights in the pursuit of academic excellence thereby, promoting the paradigm shift to a learner-centered environment.
The administrator believes that an ICT enabled institution upgrades the teachers’ competence and skills. The presence of internet resources is beneficial to teachers where they can download effective methods, strategies, simulations and multimedia resources necessary for more realistic delivery of lessons. Teachers are compelled instinctively to use the web 2.0 tools. Students are engaged into more demanding yet meaningful and motivating activities by which instruction brings life to concepts and processes and provides access to a world of information.

Likewise, parents are updated of the performance of their children through the different wikis and blogs of the class created by teachers.

Cognizant to the needs of our community, especially in saving our environment, investigative outputs of students become the bases for mining companies’ environmental rehabilitation programs.

To make ICT more effective and challenging on the part of the learners, teachers and stakeholders, the school has launched two engrossing projects, Project CORE and Project Share.

The school aspires for a better learning outcome not only in academic performance, but as well as in areas of competitions that would prepare our students for the life of work by equipping them with the basic tools to combat the global crisis of poverty.

With this aspiration and the collaborative efforts of the teachers and the PTA officers, the Project CORE has its defined objectives, i.e. sustaining excellence in academic performance; increasing retention rate; preventing SARDO (Students at Risk of Dropping Out); developing the students’ cognitive, affective and psychomotor domains. Students are grouped according to their skills and interest and academic performance. Those who have a grade of 85% and above will undertake the enrichment classes where they are given advance tasks with the aid of technological tools. While those who have a grade below 85% in the major subject areas and have difficulty in coping up with the lessons will undergo the reinforcement classes. This endeavour is scheduled every Friday of the week.

With the sixty-five (65) computer units donated by Intel Teach Philippines in 2007 and the Intel Teach CoL Grant released to DepEd Surigao City, school heads, teachers and students of the neighboring elementary and secondary schools of the division were trained.

Hence, the school opens the door to make all computer literate. The expertise of our teachers and students are maximized by training others to have a network of ICT experts. This program is handled by the Intel Master trainers.

With these practices, the school had participated in and garnered award both national competition, “One of the Outstanding Community of Learners and Outstanding Division ICT Implementer for two years – 2008 and 2011 and international competition, “The Gold Award and Silver Award during the 6th SEAMEO Congress Search for Young Scientist at Penang Malaysia, Finalist: ISEF Science Investigatory Project Illinois USA, Finalist 7th
Regional Congress Search for SEAMEO Young Scientist at Penang Malaysia, Presenter: 109th American Society for Microbiology Convention in Philadelphia, USA last 2009.

Recently, last November 14, 2011, the Accreditation Board of the Project Sterling Silver for Secondary Public Schools granted the school an average rating of 4.79 and an adjectival rating of EXCELLENT, the highest so far in the entire Caraga Region. All these are made possible with the integration of the ICT in the educational arena.

*Indeed, ICT has contributed much to education. It bridges the gap between the traditional culture and the culture of today’s learners. With ICT, there is a marked improvement in the quality of learning among students.*

Further information:

- Caraga Regional Science High School (Wikipedia)

Related links:

- Intel Education
- Intel Teach courses
- 15th UNESCO-APEID International Conference - Papers and Presentations

Previous issues of the e-newsletter:

- UNESCO "ICT in Education" Announcement e-newsletter

What do you think about this topic?

- Visit our on-line forum and share your views

Nguyen binh khiem primary school – Vietnam - "make each day at school an exciting day of the students!"

*By Nguyễn Minh Thiên Hoàng, Information and Education Curriculum Center, Department of Education and Training of Hochiminh city, Vietnam*
On December 7th, 2012, all the teachers and students of Nguyen Binh Khiem primary school, district 1, Hochiminh city, Vietnam, rejoiced that they had won the Gold award of Regional Intel Teach School Award.

This result is an affirmation that their exertion in technology integration in education is in the right direction, conformable with the world’s general trend of development. 12 years ago, when the school is rebuilt, all the teaching staff agreed that the 21st century will be the century of information technology. In order to build a modern environment of education, the role of information technology is imperative. So they proposed a long term development strategy with specific targets in periods of time and the plan of investment in developing professional skills, in order to bring the school to be one of the best primary schools of Vietnam in term of education quality and information integration in education. (See the vision document of Nguyen Binh Khiem primary school)

The first period (From 2000 to 2003): Building the infrastructure:
Although at that time, the price of a single computer was not cheap at all, the school tried its best to build two computer labs with 104 PCs in total. There were few teachers able to work with PC, therefore some courses needed to be opened to train other teachers on using computers. These courses were organized with the Computer Science teachers of the school - this helped other teachers feel comfortable to study because they only have to work with their workmates.

After these courses, our teachers were able to create lessons by using Microsoft Powerpoint. They used all available resources such as photos, video clips… This also formed a new requirement: The requirement of accessing more resources and analysing multimedia data.

The second period (From 2003 to 2006): Exploiting Internet resources and self study:
With broadband connection, teachers were able to get more resources from the internet for enriching their lesson plans. They also taught themselves in processing multimedia data by using software. Number of lesson plans created by Powerpoint increased quickly with higher quality.

The third period (From 2006 to 2010):
This is the most important period, which was marked as a turning point of the school, moving from Development by Needs to Professional Development. This started with an Intel Education course: “The Getting Started Course”.

The Intel Teach Getting Started Course is a course that not only helps teachers acquire technology literacy skills, but also helps them to develop 21st century teaching and learning approaches. After the course, teachers understood that technology integration in education is a must. As well, Intel Teach Elements Project–based Approaches helped teachers to use PBA in their teaching.

In this period, the school website has been built and immediately kept an important role in making the relationship between the school and students’ families.
The next period (From 2010 to 2015):
This is marked as the period of strong and fast development. An E-school (2.0 website) has been built and open new chances for E-learning: The Managing Board of the school uses this website to track all the school activities. Teachers use this website to upload their lessons for students, students use it to learn at home while parents use this website to help their children with their studies. Overall, it greatly improves the teachers’ efficiency of teaching.

Two more computer labs have been set up, which increased the number of PCs in school to more than two hundred. Library management is performed using PC and a wireless connection with 15 access points has been installed to facilitate students to access Internet wherever they want: from classes, from school yards, school canteen, or school garden.

Students are very confident in using ICT, they develop Mindmaps with Mindmap Manager, create presentations using Microsoft Powerpoint and produce movies. A lot of learning clubs have been established such as Robotic club (Making Robots), Fine Art clubs (Making paints and handicrafts) or Video clubs (Making video clips).

In those four periods, the most valuable changes are those in our mindsets: from traditional teaching to student-centered pedagogy with technology integration. Teachers of NBK primary school nowadays are proud of their teaching skills. They always keep in mind that they need to “Make each day at school an exciting day of the students!”

And after all of our effort, our students said: “Today, I’m proud of my school, tomorrow, I will make the school proud of me”.

Further information:
- Nguyen Binh Khiem primary school
- An E-school (2.0 website)
- Vision document of Nguyen Binh Khiem primary school

Related links:
- Intel Education
- Intel Teach courses
- 15th UNESCO-APEID International Conference - Papers and Presentations

Previous issues of the e-newsletter:
- UNESCO "ICT in Education" Announcement e-newsletter
News & Events

UNESCO Mobile Learning Week produces tangible results

A set of mobile learning guidelines, teacher training initiatives in four regions and a series of working papers, along with a budding community of practice are among the initiatives launched during the first UNESCO Mobile Learning Week (12-16 December).

Organized in partnership with Nokia, Mobile Learning Week was held at UNESCO’s headquarters in Paris. It comprised an international experts’ meeting followed by a symposium to address the use of mobile technologies in education.

The purpose of Mobile Learning Week was threefold:

Firstly, the event served as a launching pad for UNESCO’s work in the mobile learning arena to grow a global community of practice that can be mobilized in support of Education for All (EFA) goals. Mobile Learning Week was therefore designed to learn from participants’ ideas and insights on how best to integrate mobile learning within UNESCO’s strategies to expand education access, quality and equity.

Secondly, Mobile Learning Week served to guide UNESCO in developing policy guidelines to help national governments to take advantage of the educational opportunities offered by mobile technologies. The guidelines will be published in late 2012 and will contain recommendations on how to respond to the rapid changes in mobile technologies and their increasing influence on education systems. Open to debate and public scrutiny, the guidelines can be adapted and changed to suit local contexts.

The third goal of Mobile Learning Week was to explore how mobile technologies can be used to support teachers and their professional development. Building upon ideas and experiences exchanged during the event, programmes on teacher development through mobile learning will be developed during 2012 in four focus countries: Mexico, Pakistan, Nigeria and Senegal.

As part of the event, drafts were presented of the first ten UNESCO Working Papers on Mobile Learning, including regional reviews of policies in support of mobile learning and initiatives to support teachers through mobile technologies. The reports cover developments in the Middle East and Africa, Asia, Latin America, Europe and North America. The finalized working papers will be released in early 2012.

Further information:
• UNESCO Mobile Learning Week produces tangible results

Related links:

• First UNESCO Mobile Learning Week
• Mobile learning and life skills
• Driving female literacy through connectivity in Pakistan
• From Illiteracy to mCommunity, Jokko Initiative Empowers Women with mLearning
• The impact of a mobile phone literacy program on educational outcomes
• Mobiles and internet improve the livelihoods of the poorest
• Africa: Mobile phones revolutionizing education
• Mobile learning: Transforming the delivery of education and training
• UNESCO to help community media with mobile content production
• Mobile phones make literacy real
• Mobile learning: Small devices, big Issues

Previous issues of the e-newsletter:

• UNESCO "ICT in Education" Announcement e-newsletter

What do you think about this topic?

• Visit our on-line forum and share your views

UNESCO chief stresses need for innovation to ensure quality, equitable education
The Director-General of UNESCO tasked with promoting education recently underscored the role that information and communications technologies can play in ensuring quality education and equal opportunities to learning even in countries that lag behind because of limited resources.

“Progress is more than a question of money – it is all about matching. Matching capacity with needs,” Irina Bokova, the Director-General of UNESCO, told delegates at the Global Summit for Education Ministers under way in London.

“This means making the most of innovation, notably in technology. It means building innovative partnerships with the private sector, such as through the Global Alliance of Corporate Partners for Education that we are aiming to establish this year,” Ms. Bokova told the forum, whose theme is ‘Learning from the Best for a World of Change.’
She underlined the need to make education a “transformational power for human dignity,” as well as for social, economic and political change.

“In times of economic uncertainty, this message has never been so important,” Ms. Bokova added.

The younger generation required an education that equips them with modern skills and utilizes new technologies for the labour market, she said.

“Technology can be a powerful education multiplier – but, for this, it must be integrated into learning and accompanied by new teaching styles. In many countries, this calls for a profound shift towards more interactive, project-based learning,” she said.

She pointed out that UNESCO is working to improve the skills of teachers and to promote competency standards through its ‘Information and Communication Technology (ICT) Competency Framework for Teachers’ project, which sets guidelines to help educators develop skills to make the best use of technology for improved learning.

“Research shows that the success in using ICT in education depends largely on the ability of teachers to integrate these technologies into the teaching process,” she said, stressing that the UNESCO framework is a core part of its vision to provide global leadership for teacher training.

The framework, which can be downloaded from the UNESCO website, is collaboration between private sector partners, such as Cisco, Intel and Microsoft, as well the International Society for Technology in Education and experts from the Commonwealth of Learning.

“I am convinced public-private partnership is a new form of ‘civilian power’ that will help shape the 21st century,” she said.

She also stressed the need to make education build socially stable communities through the promotion of good citizenship and respect for human rights. She announced that UNESCO will next week launch an initiative with the United States on teaching respect for all – a new curriculum on anti-racism and tolerance.

On primary school enrolment, Ms. Bokova said that despite an impressive improvement since 2000, the world is still not on track to meet the goal of universal basic education by 2015.

There were 67 million children out of primary school in 2007, and a similar number of adolescents out of secondary school. An estimated 793 million adults across the world remain illiterate – two thirds of them women.

An additional 1.9 million teachers are needed to achieve universal primary education by 2015, she added.
Further information:

- UNESCO chief stresses need for innovation to ensure quality, equitable education

Related links:

- UNESCO ICT Competency Framework for Teachers – Version 2.0
- Promoting teachers competencies on integration of ICT in teaching and learning
- Time to move to competency-based continuing professional development
- The contextualization and implementation of the UNESCO Teacher Competency Framework in Guyana

Previous issues of the e-newsletter:

- UNESCO "ICT in Education" Announcement e-newsletter

What do you think about this topic?

- Visit our on-line forum and share your views

Education system profiles unveiled
On 21 December 2011 UNESCO Bangkok unveiled its first batch of online Asia-Pacific “Education System Profiles”.

The Education System Profiles, launched by UNESCO Director, Mr Gwang-Jo Kim, provide readily accessible information and data on the education systems of 15 countries across the Asia Pacific region.

According to Mr Kim, it is hoped that the Profiles will provide a tool to help identify the key challenges and priorities in education development across different countries of the region.

“While many descriptive documents can be found that summarise the structural elements of education systems, it is our hope that these profiles could go one step further – not only providing a point of reference for key statistics and systemic features, but also providing substantive analysis on development challenges and policy priorities.”
At present, the Education System Profiles cover 15 countries in the Asia-Pacific region, including Cambodia, Kazakhstan, Kiribati, Kyrgyz Republic, Lao PDR, Mongolia, Nepal, Pakistan, the Philippines, the Solomon Islands, Tajikistan, Thailand, Tuvalu, Vanuatu and Viet Nam. They remain online working documents with further refinement to come.

It is hoped that the profiles will in time span the entire Asia-Pacific region to reflect policy developments and circumstances at national levels.

“Providing Education System Profiles for the Asia-Pacific region will be a challenge and indeed, there is much to be done in the New Year, but we look forward to building a greater knowledge base on education systems in the region as we continue to support our Member States in their educational policy planning and reform”, asserted Mr. Kim at the launch.

The Education Policy and Reform (EPR) Unit of UNESCO Bangkok will continue to build on the Education System Profiles in 2012. They would like to especially acknowledge support from the Republic of Korea Funds-in-Trust (KFIT) for providing support for this initiative.

For more information, please contact: Mr Gwang-Chol Chang, Chief, EPR Unit (gc.chang@unesco.org) or Ms Kate Glazebrook (k.glazebrook@unesco.org).

Access the Education System Profiles:

- Education System Profiles

Related links:

- ICT for higher education: an overview of case studies from the Asia and Pacific region
- First large-scale survey of ICT in Europe’s schools under way
- Better policies for better use of ICT in Education
- Launch of the NESPAP Open Platform eLibrary
- Measuring ICT application in education: feedback and lessons from the SABER East Asia pilot

Previous issues of the e-newsletter:

- UNESCO "ICT in Education" Announcement e-newsletter

What do you think about this topic?

- Visit our on-line forum and share your views
Open educational practices recognized through OPAL Awards

The winners of the OPAL Awards for quality and innovation through open educational practices were announced at a ceremony in Berlin, Germany on 2 December 2011 following a rigorous adjudication process. ICDE, the International Council for Open and Distance Education, took the lead in running the awards in this European Commission supported project.

The OPAL Awards were coordinated by ICDE as part of the The Open Educational Quality Initiative, a consortium including UNESCO, ICDE, EFQUEL and several European universities working to promote open educational practices in higher and adult education. The OPAL Awards recognize excellence in OER policy, promotion and use, which have resulted in the improvement of quality and innovation in educational organizations. A grant was made available for each of the winning entries to make a video film describing their practices.

The winners and highly commended entries are as follows:

The Award for Bodies which Influence Policy
Winner: The Institute for the Study of Knowledge Management in Education (ISKME), USA
Since 2009, ISKME has trained over 1,500 teachers from 25 countries with focus on collaborative innovation and social learning using open curriculum and open teacher-led approaches. Their OER-focused programs are designed to empower teachers to take an active leadership role in educational resource reform, encourage collaboration, drive innovation and explore emerging economic models for sustaining high-quality learning content that is accessible by anyone. ISKME’s approach allows teachers to gain leadership and support to adapt and develop resources for their own needs, and then to share those resources with others.

The Award for Institutions
Winner: University of California, Irvine, USA
UCI Distance Learning Center (DLC) was officially started in August 2001 to develop and deliver online courses and programs for the University. Today, the DLC offers over 160 online courses per quarter. UCI began its OpenCourseWare initiative in November 2006 in order to be a part of the growing open educational resource and OCW movements on a global scale and to provide UC-quality courses and instructional materials to deserving students and teachers around the world, for free.

Highly commended: Acharya Narendra Dev College, University of Delhi, India
ANDC, established in 1991 is a constituent college of the University of Delhi specialising in basic and applied sciences. The college caters to students who are mostly from lower economic backgrounds, many of whom come from conservative societies and educational modes. ANDC is one of the very few colleges in the traditional University system in India that has committed to OER.
The Award for Learning contexts

Winner: Open Science Resources, represented by Ellinogermaniki Agogi – Research and Department, Greece
The Open Science Resources project suggests a coordinated solution at European level to harvest the potential of digital science education repositories and overcome the barriers such as: the lack of interoperability between repositories, the inefficiency of current content organization and metadata structures as well as multi-lingual issues. To implement the OSR vision, the project partners have brought together a balanced mix of high quality science museums and science centres, pedagogues, educational technologists, metadata experts, user groups and standardization bodies.

Highly commended: The LORO Project, Department of Languages, The Open University UK
LORO (Languages Open Resources Online) was launched in 2009, funded by JISC and the Open University to create a repository where the online teaching materials used by teachers at the Department of Languages could be stored and shared openly. Its function was closely linked to the efficient delivery of resources to all stakeholders but also to skills and professional development for language teachers. LORO was conceived as a tool for teachers and language teaching professionals, benefitting language learners indirectly through the enhancement in the quality and variety of resources used by language teachers at the institution.

Full details on the awards ceremony and the winners and highly commended entries, as well as interviews with the recipients can be found on the OPAL website.

Further information:

- Open educational practices recognized through OPAL Awards

Related links:

- Launch of the UNESCO Open Educational Resources Platform
- COL-UNESCO Basic Guide to OER
- UNESCO joins iTunes U
- Towards OER university: Free learning for all students worldwide
- The pedagogical enhancement of open education: An examination of problem-based learning
- 7 things you should know about open educational resources
- Open Educational Resources Center For California
- The impact of openness on bridging educational digital divides

Previous issues of the e-newsletter:
Sri Lanka launches national IT literacy initiative

*By Clarice Africa, FutureGov Magazine*

As part of the government’s effort to foster an IT literate society, the government launched its “e-diriya” national IT literacy initiative which aims to provide basic computer knowledge to 50,000 “samurddhi” recipients and school children.

According to Hambantota District MP, Namal Rajapaksa, it is imperative for the country to leverage its computer, internet, and telephone penetration rates in order to have a good foundation for IT literacy, especially in schools.

“IT now is regarded as an important tool in every sphere of the country’s development, because of this many take great interest in the use of IT as a tool,” he said.

Meanwhile, Professor P.W. Epasinghe, Chairman of the ICT Agency of Sri Lanka, pointed out that the widespread availability of ICT equipment such as computers and mobile phones should be accompanied by equally widespread availability of facilities to use them.

“Through the launch of “e-diriya”, we have taken steps to provide information technology knowledge to a segment of society that had not been covered before. From today we begin providing IT training to especially to 20,000 Samurddhi recipients in the first round.

I think that this simple computer knowledge will help them change their standard of living in a positive way. I believe that although the computer cannot satisfy the hunger of Samurddhi recipients it will at least be able to equip them with knowledge and strategy for setting them free from poverty”.

“That is why we have named this project “e-diriya”. The idea behind this is to fill the underprivileged group of people in our society with courage through IT. The purpose is to equip them with courage and strength to go forward in the world via computer knowledge,” Professor Epasinghe said.

Further information:

- Sri Lanka launches national IT literacy initiative
Related links:

- Rural schools connected to ICT in southern Sri Lanka
- Intel assists educators in the south to become more ICT friendly
- ICT for Education in South Asia: Computer labs for kids are not enough
- Teacher trainers from South Asia discussed media and information literacy

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- UNESCO "ICT in Education" Announcement e-newsletter

What do you think about this topic?

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Programmes & Projects

Khan Academy – Redefining learning and fostering changes in education
The Khan Academy is a non-for-profit organization that challenges the traditional mode of learning by providing an on-line learning platform for everyone including teachers, students or anyone who wish to refresh their memories on a specific topic.

The educational organization was created in 2006 by MIT graduate Salman Khan. The website supplies a free online collection of more than 2,400 micro lectures via video tutorials stored on YouTube with topics on mathematics, history, finance, physics, chemistry, biology, astronomy, economics and computer science.

Each video runs 10 minutes; tutorials are made with drawings that make the content more vivid. Offline versions of the videos have been distributed all over the world, including Asia, Latin America and Africa. The current focus of the mathematics and physics focus on pre-college level, however, Khan expressed in the future he would like to provide classes on virtually all subjects and create the world’s first free virtual on-line school.

The Khan Academy also provides a web-based exercise system that matches students’ performance and test on their abilities. The ultimate goal for Khan’s Academy is to completely transform the traditional learning using software to create tests, grade assignments, highlight the challenges of certain students, and encourage those doing well to help struggling classmates.
Khan Academy has created tremendous impact. It not only brings education back to the ‘hot-topic’ list, it transforms the way people think of education. Most important of all, Khan Academy harnesses the journey of learning rather than focusing on the outcome of learning. Today, Khan’s Academy is viewed more than 70,000 times per day.

Despite the appraisal, some people argue that Khan’s website is not sophisticated enough. Khan is clearly helping students master difficult and vital subjects. The role these sites can play in our nation’s schools is unclear. But one thing is for certain, it redefines learning and fosters changes in education.

Further information:

- Khan Academy

Related links:

- Implementing online or hybrid courses in a traditional university
- Microsoft Digital Literacy
- COL-UNESCO Basic Guide to OER
- Imagining future learning: Mapping major changes to education and training in 2025
- Teachtoday.com: Living with technology

Previous issues of the e-newsletter:

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SchoolNet SA is learning from experience

*By: Janet Thomson, Education Technology Debate*

SchoolNet SA is a not-for-profit NGO, operating in South Africa since 1997. In the early days we attempted to cover all aspects of ICT in schools by sourcing and providing hardware and
software as well as training teachers. Our mission has always been to create communities of teachers using ICT to enhance teaching and learning. These days we concentrate on teacher development with a particular emphasis on ICT integration and on underserved schools. These two areas often appear to be incompatible, as I will try to explain.

What we do

Our most supportive funders are Intel and Microsoft but we also have other partners such as Oracle, Vodacom, Commonwealth of Learning, SITA, Nokia, Multichoice, Peermont, Adobe, Uniforum, provincial departments of education, and a number of universities. We could claim that SchoolNet has trained vast volumes of teachers, which we have, but we do not like to fixate on numbers. We would prefer to consider how effective our initiatives have been. Hit-and-run interventions are not our style; we like to prolong our relationships with schools.

Sadly we often fall into the trap of chasing numbers to satisfy funding targets, sometimes losing contact with schools after training. This is the reason why we have recently embarked on a SchoolNet SA premium membership drive with the intention of engaging with individual teachers and encouraging them to stay in touch with each other. Our focus on social networking through our Facebook page, newsletter, blog and twitter (@SchoolNetSA) accounts all contribute to this aim.

The biggest challenge we face is in encouraging teachers to improve the way they teach. This applies to teachers across a range of schools. At the e-Learning Africa conference, Tom Power from the Open University UK said that the only way there could be any hope of changing existing pedagogies was to provide new classroom activities involving new technologies. This is a philosophy to which SchoolNet SA has always subscribed.

Our strategy for growing teachers into more advanced stages of ICT use is an incremental one. Teachers are often unable to make the leap from their own ICT literacy to its classroom application where they engage learners in the use of ICT in the curriculum. To combat this, we designed a range of courses to cover each stage of maturity with ICT, from basic literacy to project-based learning and the higher levels of innovation.

The 3 key pillars that uphold this strategy and that should be in place from the moment that technology is introduced to the school are leadership, technical support, and a culture of professional development. The Partners in Learning ICT Leadership for Education Managers course introduces school leaders and local ICT government officials to a range of crucial educational ICT issues.

The Partners in Learning Student Help Desk course is an effective course for computer clubs of learners. This is relevant to schools where there is no option for first-level troubleshooting other than costly companies which are even more expensive if the school is remote.

Schools that work hard at staff development find that the most effective method of sustaining teachers’ motivation in ICT integration is through peer coaching; pairs or small
groups of teachers planning lessons together and sparking off ideas has an instant and positive effect on the quality of teaching and learning.

SchoolNet SA is just beginning to venture into m-learning, training teachers to track students who are participating in the NOKIA MoMaths project using MXit and Moodle. We see a viral uptake of any new project using MXit – e.g. HIV 360 had 39 000 teenage users within a couple of months.

SchoolNet has always tried to contribute towards national ICT discourse and policy and we are grateful that South Africa does have in place the e-Education White Paper (2003) and the Guidelines for Teacher Training and Professional Development in ICT (2007). Implementation of these policies on the other hand has been slow.

**Lessons learned**

1. Educational Technology interventions often forget about the “educational” part and consider it to be completed once they have installed the technology. This results in teachers not being trained and consequently hardware remaining unused.
2. We must split training sessions and revisit schools to allow for a period of practice and self study before the trainer returns to the school to consolidate.
3. Teachers complain that training sessions are too short and that they do not have enough time for training or for practice.
4. Cascaded training, where multiple training of trainers takes place, does not work; it dilutes learning and quality is jeopardised. If a project requires a high degree of scale, trainers should be trained by a national master trainer and thereafter train directly in schools themselves.
5. We are not reaching the knowledge deepening level of the UNESCO Framework. Intel Teach project based courses are at this level, where the emphasis is on higher order thinking skills. Insufficient teachers are completing Intel courses; only two provinces have invested seriously in Intel Teach. If we study the TPACK theory (Technological Pedagogical Content Knowledge) it becomes clear that teachers in many of our schools have challenges in each of the 3 separate knowledge areas let alone in the 4 sections where these areas intersect.
6. Teachers are unaware of what is available. From the Gauteng Department of Education evaluation we conducted with SAIDE, it became evident that not only do teachers have little knowledge of what resources are available to them online, but they are unaware of the array of educational software provided on their own school networks. This is directly due to insufficient teacher professional development in initiatives that are technology driven.
7. Access for learners in high schools is reduced when schools decide to offer external exam subjects such as IT and CAT because these monopolise the computer rooms. Only schools with alternative access such as two computer rooms or a mobile lab should consider offering these subjects.
8. High school teachers often argue that they cannot integrate ICT because they have to complete their syllabus, instead of realising that ICT can greatly assist to achieve this.
9. The disconnect between teachers and learners is growing. Schools need to be connected and pedagogy has to adapt. Children are online and becoming more connected, living in an exciting world of communication and “instant” everything. Then in classrooms, teachers say, “open your books and turn to page …. “ A high dropout rate should not be a surprise. As the saying goes, “If children do not learn the way we teach then we must teach the way they learn.”

10. Beware of Interactive Whiteboards (IAW). IAW have proliferated in schools despite the expense and yet in many instances this has resulted in teaching methodology reverting back to being teacher-centred.

11. Sugata Mitra’s TED Talk, Child-driven Education, illustrates through the cognitive studies that he has conducted. that children learn more effectively through discourse in groups. Mitra takes “child-centred” one step further to become “child-driven”.

12. At SchoolNet we are sceptical of educational software that does not require 21st Century learning skills and wary that some m-learning projects use merely drill and kill content.

13. It is important to commence ICT initiatives with the school leadership because they have great influence over the future take-up of technology by teaching staff.

What we recommend

We recommend sustainable plans for staff development in schools; ICT planning that is focused on the teaching and learning needs of educators. Teachers require lifelong learning opportunities. Connectivity in schools has to be provided and at a reduced, or no cost, to the school.

We are seeing the value of android handheld and mobile devices with charging trolleys because these satisfy the need for learners to be involved, hands on and not just one learner at a time; they have to share the technology and share ideas, just as Mitra advocates.

Mobile phone use in schools has to be accepted. Teachers can collect second hand phones and allow working in groups to ensure that learners without phones are not excluded.

Obviously the one recommendation that SchoolNet is going to make time and time again is that there has to be greater investment in teacher development. The business community has to be strategically involved; they must specify the skills they require school leavers to have so that teaching is forced to adapt to developing those skills.

Further information:

- SchoolNet SA is Learning from Experience

Related links:

- First large-scale survey of ICT in Europe’s schools under way
Resources

Guidelines for Open Educational Resources (OER) in Higher Education

Open educational resources (OER) are materials used to support education that may be freely accessed, reused, modified and shared.

These guidelines published by the Commonwealth of Learning (COL) and UNESCO outline key issues and make suggestions for integrating OER into higher education.

Their purpose is to encourage decision makers in governments and institutions to invest in the systematic production, adaptation and use of OER and to bring them into the mainstream of higher education in order to improve the quality of curricula and teaching and to reduce costs.

In conjunction with this initiative, UNESCO and COL will co-organize the OER World Congress in June 2012. The Asia-Pacific Regional Seminar to support the Congress is planned to be held in Bangkok on 23-24 April, 2012.

Read the publication:

- Guidelines for Open Educational Resources (OER) in Higher Education

Related links:

- Launch of the UNESCO Open Educational Resources Platform
- COL-UNESCO Basic Guide to OER
• UNESCO joins iTunes U
• Towards OER university: Free learning for all students worldwide
• The pedagogical enhancement of open education: An examination of problem-based learning
• 7 things you should know about open educational resources
• Open Educational Resources Center For California
• The impact of openness on bridging educational digital divides

Previous issues of the e-newsletter:
• UNESCO "ICT in Education" Announcement e-newsletter

What do you think about this topic?
• Visit our on-line forum and discuss this topic

Pedagogical use of ICT: Successes and challenges from 100 + African schools - 2nd edition
This publication is drawn up as part of the Panafican Research Agenda on the Pedagogical Integration of ICTs (PanAf), an international research project which aims to better understand how the pedagogical integration of ICT can improve the quality of teaching and learning in Africa.
PanAf is therefore concerned with all initiatives, whether pioneering or not, for ICT in education, covering different educational levels (primary, secondary, post-secondary) and contexts (rural vs. urban areas, for example).

This research project involves national teams of African researchers in collecting and analyzing data on the Pedagogical Integration of ICTs in thirteen countries: Ghana, Gambia, Senegal, Central African Republic, Uganda, Mozambique, Mali, Kenya, Ivory Coast, Congo, Cameroon, South Africa and Zambia.

Through PanAf, the ambition of this book is simply to report on key trends of the pedagogical integration.

The book is partly written in French and English.

Read the publication:
• Pedagogical use of ICT: Successes and challenges from 100 + African schools - 2nd edition
Technology adoption for use in instruction by secondary technology education teachers

By Joe W. Kotrlik and Donna H. Redmann

We have come a long way from using just desktop PCs in the 1980s to using a wide variety of technology for instructional purposes such as the Internet, the iPod, blogging, laptop computers, podcasting, e-learning platforms (e.g., Moodle, Blackboard), interactive whiteboards with video-capture technology, streaming videos, and using iPod as a digital notebook. We have also moved from a local classroom to a global classroom via distance learning technology.

An example of a school system with a 21st century infrastructure is Saugus Union in California. Saugus Union has remained on the cutting edge of technology (THE 2006 innovators, 2006). Examples of their use of technology in instruction include PDAs and interactive whiteboards, podcast lesson reviews via students’ MP3 players, and broadcasts streamed via the Internet. A key component to their success has been technology specialists who deliver ongoing professional development. Saugus Union’s futuristic philosophy has allowed the district to improve communication and collaboration among students, staff, parents, and the community.

Unfortunately, this is not the norm. Not all school systems are operating with this innovative use of technology even though 99% of full-time teachers had access to computers or the Internet somewhere in their schools by 1999, according to a National Center for Education Statistics (NCES) study (Roward, 2000). Then, about the same time as the NCES...
report, Stanford University Professor Larry Cuban bemoaned the status of technology use in education by writing a book entitled, Oversold and Underused: Computers in the Classroom (2003).

Recently, writing in the Phi Delta Kappan, Allen (2008) discussed one of the issues addressed by a Nation at Risk, namely, that schools were not adequately preparing students to address the country’s needs for highly skilled workers in new and evolving fields. Allen implied that although education has spent large amounts of money on technology for instruction, perhaps education has not kept pace with the use of technology in schools over the last 25 years.

Read the full article:

- Technology adoption for use in instruction by secondary technology education teachers

Related links:

- ICT Transforming Education - A Regional Guide
- Time to move to competency-based continuing professional development
- UNESCO evaluation shows student achievement increases by combining professional learning, compelling interactive digital content and technology in the classroom
- Research project to focus on the role of technology in innovative teaching and learning

Previous issues of the e-newsletter:

- UNESCO "ICT in Education" Announcement e-newsletter

What do you think about this topic?

- Visit our on-line forum and discuss this topic

explania – Explanations through animations
Explania collects instructional / explanatory animated videos created by multimedia company Instruxion. Although the videos were made primarily for companies who want to
explain their product or service to a target audience, many of these clips are still relevant and useful to both teachers and students.

Find out how the human heart works or what Hepatitis C actually means. Know when offside, offside position, and offside offence occur in football. Get tips on how to choose a safe password on your computer. Some of the clips let you interact with the elements on screen, hence making it more interesting for the viewer.

Although it covers a wide range of topics (health, technology, work, software, sports), Explania has fewer videos than for example YouTube - but there are still a lot of videos that can be used in a school or classroom setting.

What’s more, these animations can be embedded readily into another website, say a teacher or a student’s blog. Expect a lot more educational video clips from Explania as it constantly builds up its collection of educational videos.

Further information:

- explania

Related links:

- Animated Science
- A 3D NASA exploration game
- Google Body browser – a 3D journey through your body
- Chinese and French students create extraordinary climate change videos

Previous issues of the e-newsletter:

- UNESCO "ICT in Education" Announcement e-newsletter

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UNESCOplaces.org - Discover the most beautiful places in the world
This website gathers all of UNESCO’s World Heritage Sites (WHS) in one place – and more.
The home page automatically shows a selection of World Heritage Sites nearest to your location. Click on “About” to learn about the latest count of World Heritage Sites, as well as the difference between a cultural WHS and a natural WHS. Click “Explore” and choose a WHS from a world map, or just type your desired site on the search bar.

Each UNESCO World Heritage Site has its own page, where you can find excellent photos and relevant information gathered in a single page. Check where in the globe a WHS is located via a maps facility. Scroll down to view thumbnails of nearby World Heritage Sites. You can also view the external links provided should you need additional information on a particular site.

UNESCOplaces.org also doubles as a trip adviser, as it gives you an estimate of the travel time to any of the World Heritage Sites from your location. Feeling adventurous? Just scroll down and click “Beam me up, Scotty!” and it will take you to the Hierapolis-Pamukkale, Ha Long Bay, or another World Heritage Site that you yet haven’t heard of and have been missing out on.

Further information:

- [UNESCOplaces.org](https://www.unescoplaces.org)

Related links:

- [Google and museums around the world unveil Art Project](https://www.google.com/museumartproject)
- [Spotlight on memory of the world heritage: An audiovisual window on the world](https://memoryunesco.org)
- [Encyclopedia of Life - An electronic page for each species of organism on earth](https://www.eol.org)
- [Photo archive of Asian cultures](https://www.asianartmuseum.org)
- [NASA World Wind](https://www.worldwind.nasa.gov)

Previous issues of the e-newsletter:

- [UNESCO "ICT in Education" Announcement e-newsletter](https://www.unesco.org)

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