Highlight

Learning beyond the classroom
The majority of learning takes place outside the classroom. How can educators take advantage of this reality through anywhere, anytime learning solutions, such as iPads, smart phones, eReaders and laptops?

News & Events

Regional seminar on the impact of the economic crisis on higher education and the use of ICT in universities to be held in Bangkok on 30 June - 2 July 2010
This regional seminar, co-organized by UNESCO and the Office of the Higher Education Commission in Thailand, will present the research findings of two studies on the impact of the economic crisis on higher education and the use of ICT in universities; and discuss recommendations and potential action plans.

UN rolls out action plan to expand global broadband access
The United Nations telecommunications agency’s quadrennial development conference wrapped up on 4 June 2010 with participants adopting a plan of action to promote the global development of information and communication technology (ICT) networks and services.

Singapore invests 610 million US$ in ICT infrastructure for schools
As part of its continuing series of Masterplans for ICT in Education, the Singaporean Ministry of Education (MOE) has committed a sum of approximately 610 million US$ to supplying ICT for its schools over the next eight years.

EVOKE - a ten-week crash course in changing the world - will be relaunched 2011
With support from the Korean Trust Fund on ICT for Development, participants from around the world answered the urgent call to innovation in this online, multi-player game designed for African youth. The next season will start in 2011.

eINDIA 2010 conference
The 6th eINDIA 2010 will take place from the 4th to the 6th of August, 2010 at Hyderabad, India.

Programmes & Projects

Young people in Bangladesh show their world through photos
This UNICEF project aimed to inspire young people to tell their stories using photography as a tool, and to introduce them to a new mode of expression.

Resources

What happens when *all* children and teachers have their own laptops
This article introduces to the case of the South American country of Uruguay, where under Plan Ceibal all primary school teachers and students in government schools have their own free laptops; and describes the challenges and implications.

7 things you should know about open educational resources
This brief focuses on open educational resources and explains what they are, where they are going, and why they matter to teaching and learning.
ICTs in school education - Outsourced versus integrated approach
A study of two large scale ‘ICTs in School Education’ programs of two neighbouring states of India brings out some interesting insights.

#movemeon: Using Twitter to make a difference
An eBook with a difference, #movemeon is a collection of 140-character pearls of wisdom from educators using the social networking service, Twitter. From behaviour management to interaction with colleagues, you will find practical advice and ideas contributed by classroom practitioners!

Creating surveys and polls using Urtak
Urtak is a free web based polling application, where you can create unlimited online polls and questionnaires.

Highlight
Learning beyond the classroom
She has music blasting from her MP3 player almost every waking minute. She spends over seven hours a day on entertainment media. She checks her phone every ten minutes for updates from friends via messages and tweets. She is the average student.

Surrounded by portable devices which keep them in constant contact with their family, friends and the world, students today absorb, interact with and create content outside of the classroom more than they do inside it.

Lingnan University in Hong Kong recently surveyed 783 freshmen in their first week. 62 per cent had phones that could access the internet. 49 per cent of them use SMS several times a day. Nearly 70 per cent of them take photos with their mobile phones at least once a week. “Students carry mobile phones everywhere they go and use them all the time,” observes Dr David Kennedy, Director and Associate Professor, Teaching and Learning Centre of Lingnan University. “We should leverage the technologies and applications in these devices and take advantage of the skills students already possess by building activities and resources around the devices they have 24/7.”

Portable devices, like the mobile phone, can make learning more individualised, adds Dr Kennedy. In ongoing research funded by a Hong Kong General Research Fund grant, he is working with language instructors to develop a blended learning environment that incorporates the use of iPhones and more recently, the iPad. “In these new courses, students will be asked to use the technologies in mobile phones as an integral part of their language learning – taking photos, creating voice notes, recording interviews and presentations, and reflecting on the activities and what they have learned. Students will then present what they have done, uploading their content into an ePortfolio for sharing and feedback. Such activities will enable each student to contextualise their learning experiences, providing a unique highly personalised experience. Using these strategies, you get much better student engagement compared
to what can happen in a conventional classroom, where students get uniform or similar tasks,” Kennedy says.

According to Tom Joseph, Director of Asia Pacific Education Programmes, Autodesk, mobile devices open new learning avenues. “Conventional learning opportunities are bound by the faculty and students in the classroom. If a group of students is struggling with a problem, the discussion is limited to the minds within the classroom. But when each student is connected to the web and a global community anytime and anywhere, they can get thousands of ideas on how to solve the problem. And this collaboration can take place in real-time across the globe,” he explains. Besides enhancing learning, mobile phones have become the best channel to reach students. The library at Hong Kong University implemented a system which sends a text message to the student when the book on loan is overdue. The system reduced the amount of money due to late returns by 90 per cent. Several platforms have now been developed by educational institutions, which allow faculty to send text messages from an interface similar to an email programme.

Learning on mobile devices has its challenges. One is the battery life of these portable devices. “Users will be running more processor- and energy-demanding tasks such as listening to podcasts, watching a movie, recording media files and sharing large files. Looking at the current devices in the market, users still need to manage the battery life very carefully. Two of the most popular devices, the iPhone and the newly launched iPad, for instance, have expected battery lives of just 10 hours,” notes Kennedy, but experience has shown that students are very skilled at battery management.

If students are more engaged and learn better outside the classroom, will physical campuses be a curiosity of the past for the next generation? Steve Ryan, Director, Centre for Learning Technology, The London School of Economics and Political Science, United Kingdom, does not think so. “The death of the university campus is overstated. There are huge opportunities in online learning but there will always be a value in meeting face-to-face. The rich experience of gathering in campus and learning together is hard to quantify,” he believes. Dr Kennedy concurs, stating that “students value enormously the relationships that develop in a face-to-face class, but mobile learning offers opportunities to increased collaboration and communication outside their classes”.

“Integration will be the future of mobile learning where an integrated network of hardware and solutions will connect all parts of the organisation so that the user will be able to access information remotely and interactively. HP is transforming learning towards student-centered, personalised learning environments by leveraging technology in an affordable and sustainable way to create new possibilities for technology to have a meaningful impact on people, businesses, governments and society,” says Ng Tian Chong, Vice President & General Manager, Personal Systems Group, South East Asia, Taiwan & Korea, HP.

The generation has integrated these mobile technologies into their lives. The ball is in the educators’ court as to whether they can leverage these devices for learning purposes.
News & Events

Regional seminar on the impact of the economic crisis on higher education and the use of ICT in universities to be held in Bangkok

Bangkok, 30 June - 2 July 2010

Knowledge is power and governments all over the world are eager to develop knowledge-based societies in their countries. Higher education is perceived to be a driving force of the economy and ICT is a powerful tool to help increase the reach and quality of education. Unfortunately, the recent economic crisis has raised concerns about a slowdown in the progress made in higher education development.

In response to these concerns, UNESCO has conducted two research studies to examine the impact of the economic crisis on higher education and investigate the use of ICT in universities in selected countries: Australia, China, Hong Kong SAR, India, Indonesia, Japan, Korea, Malaysia, New Zealand, the Philippines, Singapore and Thailand.
A regional seminar, co-organized by UNESCO and the Office of the Higher Education Commission in Thailand, will present the research findings and discuss recommendations and potential action plans.

The regional seminar, to be held at the Queen’s Park Imperial Hotel, Bangkok, from 30 June - 2 July 2010, will include higher education institution administrators, academics, researchers, policy makers, government officials and representatives from international organizations.


Further information:

- [ICT for Accessible, Effective and Efficient Higher Education Project](#)

Related links:

- [Keeping pace with a changing world](#)
- [The impact of the economic crisis on ICT and ICT-related employment](#)
- [Twenty eight European companies make a commitment to bring more women into technology industries](#)
- [ICT gender gap: stereotyped thinking continues to impact females’ choice for tech careers](#)
- [The employability of university IT graduates](#)

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- [UNESCO "ICT in Education" Announcement e-newsletter](#)

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**UN rolls out action plan to expand global broadband access**
The United Nations telecommunications agency’s quadrennial development conference wrapped up on 4 June 2010 with participants adopting a plan of action to promote the
global development of information and communication technology (ICT) networks and services.

“Broad access to telecommunications and ICTs is essential for the world’s collective economic, social and cultural development, and the building of a global Information Society,” says the Hyderabad Action Plan, reached at the end of the World Telecommunication Development Conference, which was hosted by the UN International Telecommunications Union (ITU) and held in the Indian city.

“This access brings new opportunities for interaction amongst people, for sharing of the world’s knowledge resources and expertise, for transforming people’s lives, and for contributing to the global development agenda,” it added.

The Plan identified five key areas through which to promote the equitable and sustainable development of telecommunication and ICT networks worldwide, including cybersecurity and capacity-building.

“The increasing role of ICT in the life of the common man cannot be overemphasized,” said P. J. Thomas, Chairman of the three-week meeting and Secretary of the Department of Telecommunications of the Indian Government.

Participants pledged to promote affordable access to ICTs in a bid to foster sustainable development, focusing on the least developed countries and nations with special needs. They also recognized new opportunities for the use of ICTs to improve e-government services, such as healthcare, and towards efforts to alleviate poverty, especially among poor and marginalized populations.

The ITU announced earlier this year that the number of individual mobile cellular subscriptions is likely to top 5 billion this year.

“Yet the digital divide remains, particularly where accessibility to broadband services and the Internet is concerned,” Hamadoun Touré, ITU Secretary-General, said at the close of the Hyderabad meeting.

“This broadband divide must be addressed by governments and industry as a priority if we are to fully utilize the capacity of ICTs to meet the Millennium Development Goals [MDGs],” he said, referring to the eight targets with a 2015 deadline.

Nearly 1,000 people attended the meeting in Hyderabad, drawing representatives from 138 countries and dozens of companies and both regional and international organizations.

**Further information:**

- [Hyderabad Action Plan agreed at ITU World Telecommunication Development Conference](#)
Related links:

- UN urges improved access to information technology in hospitals, schools
- IFAP Annual World Report 2009 available online
- High-speed internet gap between rich and poor widening, UN official warns
- Background paper for identifying the best practice of ICT implementations in Asia and the Pacific

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- UNESCO "ICT in Education" Announcement e-newsletter

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**Singapore invests 610US$ million in ICT infrastructure for schools**

The Singaporean Ministry of Education (MOE) has committed approximately 610US$ million to supplying ICT for its schools over the next 8 years. The MOE has awarded the tender for Standard ICT Operating Environment (SOE) for Schools to National Computer Systems Pte Ltd (NSC) with a subscription of around 120 000 seats. Each seat will comprise a computing device, network connectivity and support services for all Government and Government-Aided schools. The seats will cater to 40 000 teachers and administrative staff and 500 000 students.

The SOE for Schools programme supports the third Masterplan for ICT in Education to further enhance learning and teaching. It constitutes the second phase of the overall Government-wide SOE initiative, focusing on the unique ICT needs of schools. Over the next two years, the programme aims to establish a common ICT infrastructure environment for schools, standardising the management of devices and the work environment. Schools will be able to subscribe to the services on a per user per month basis. With school-wide wireless connectivity, students will be able to use portable computing devices and access media-rich and interactive digital resources for learning opportunities beyond their classrooms.

The implementation of SOE for Schools programme in pilot schools will begin in early 2011, following the setup of the central infrastructure, processes, and governance of the programme. The rest of the schools will be transited in phases by the end of 2012.
The standardisation of the ICT operating environment and aggregation of demand will lead to greater operational efficiency and cost savings for the schools as a whole.

**Further information:**

- MOE Awards Tender for Standard Operating Environment (SOE) for Schools

**Related links:**

- Singapore schools go high-tech
- A “smarter” Thailand through ICT - Target to boost ICT literacy and computer use
- India launches a new scheme on ICT in Education, minister says

**Previous issues of the **e-newsletter**:**

- UNESCO "ICT in Education" Announcement e-newsletter

**What do you think about this topic?**

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**EVOKE - a ten-week crash course in changing the world - will be relaunched 2011**

With support from the Korean Trust Fund on ICT for Development, participants from around the world answered the urgent call to innovation in this online, multi-player game designed for African youth.

May 2010 marked the successful end of the first season of the new social innovation challenge, Evoke: A Crash Course in Changing the World. With funding from the Korean Trust Fund on ICT for Development, participants from around the world answered the urgent call to innovation in this online, multi-player game. This alternate reality platform connected groups of students, professionals, and industry innovators across cultures and distances to work towards the common goal of creatively solving some of the world’s most critical social, environmental, and political challenges.

Each week, Evoke 'agents' were charged to work together on missions and quests, playing to the strengths and interests of each agent. Missions included empowering women, crisis networking, and ensuring food security. Agents had just a few days to learn about these areas and come up with solutions. Using blog, photo, and video
posts, agents shared their research and ideas with others in the Evoke network, cooperating and building relationships to successfully conclude their quests.

Although Evoke was originally designed for African teenagers, it was open to everyone. Word of mouth spread like wildfire and soon Evoke was teaming with teenagers, school classes, teachers, college students and even development professionals from all over the world, honing their skills in entrepreneurship, innovation, and networking.

18,500 agents from over 150 countries took part in more than 30,000 missions and quests. According to one gamerunner, Nathaniel Fruchter, “As of the writing of this, we currently have roughly nineteen thousand members with about 10-20% of them categorized as truly active. For an ARG [Alternate Reality Game], a game, a community—that’s unprecedented.”

Agents competed for prizes by creating their own Evokations, proposals for projects to begin when the Evoke season ends. The agents with the best ideas will get exclusive online mentorships with social innovators and business leaders, seed funding to start their own social projects, and travel scholarships to the Evoke Summit in Washington, DC. Evoke and the World Bank Institute also have partnered with GlobalGiving to give top innovators the chance to gain online visibility and generate funds.

Evoke opened new gateways for dialogues among players and professionals. The result was not just great conversations and new links, but real-world effects. “Two individuals who probably would have otherwise never connected had an impact on each other’s lives – with a very tangible result,” wrote another gamerunner, Josh Judkins, in reference to an urban farm that resulted from online collaboration.

The creative and self-reliant Evoke community even generated its own standards of participation and ethics, making this a venture in civil society formation as well as in social innovation.

Stay tuned for the next season of Evoke, scheduled to launch in 2011.

Further information:

- Evoke

Related links:

- EVOKE - a ten-week crash course in changing the world - will be relaunched 2011
- The Quest Atlantis project
Previous issues of the e-newsletter:

- UNESCO "ICT in Education" Announcement e-newsletter

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**eINDIA 2010 conference**
The 6th eINDIA 2010 will take place from the 4th to the 6th of August, 2010 at Hyderabad, India.

eINDIA 2010 is a platform for knowledge sharing in different domains of ICT for development (ICT policy, infrastructure, innovation, commercialization, market opportunities, capacity building, best practices and so on) and facilitates multi-stakeholder partnerships and networking among governments, industry, academia and civil society organisations of different countries, including the host country- India.

The objective is to bring together ICT experts, practitioners, business leaders and stakeholders of the region onto one platform, through keynote addresses, paper presentations, thematic workshops and exhibitions.

The conference and exhibition is being organised by Centre for Science, Development and Media Studies (CSDMS) and Elets Technomedia Pvt Ltd and has the Ministry of Communications and Information Technology as its co-organiser.

eINDIA 2010, through its six seminal conferences, will focus on six emerging application domains of ICT for Development - e-Government, ICT in Education, ICT and Agriculture, and ICT enabled Health services. The six conferences - namely:

- eGov India
- digital LEARNING India
- eHealth India
- eAgriculture India
- Indian Telecentre Forum
- municipalIT India

Moreover, the conference will also host the eINDIA 2010 Awards. These awards have been instituted with the primary aim of felicitating and acknowledging unique and innovative initiatives in the use of Information and Communication Technology (ICT) for Development. They aim at promoting the most innovative initiatives in the domain of ICTs for Development and to spread awareness about the role of ICTs in addressing social concerns. Individual participants, government organisations, non-governmental organisations (NGOs), private institutions and enterprises, in India and abroad, who
have transformed social development opportunities into sustainable social enterprises through innovative use of ICTs, are invited to participate.

For more information about the conference please refer to the following link: http://www.eindia.net.in/2010/index.asp

Programmes & Projects
Young people in Bangladesh show their world through photos
As of three months ago, Rubaiya Akhter Shimu had never used a camera. Today, she is explaining the power of photography to a crowd of hundreds at the launch of a photo exhibition including several of her works.

Rubaiya, 14, is one of 30 Bangladeshi teenagers who received five days of intensive training in basic photography as part of joint initiative between UNICEF, the European Commission and Patshala, the South Asian Institute of Photography. Each student was given a camera to take photos for a week.

While taking photographs in her local district, Rubaiya heard a woman crying inside a house. She went in and took a photo of the woman being beaten by her husband.

“In the evening, the husband came to my house accompanied by elderly people of the village. He asked me to delete the picture. He also promised me that he will never beat his wife again. I realised then how a picture can tell the story of a society,” says Rubaiya.

The project aimed to inspire these young people to tell their stories using photography as a tool, and to introduce them to a new mode of expression. The result is a collection of striking and moving images that expressed the beauty and tragedy of their lives, and pointing at wider issues in the Bangladeshi society.

The launch of the exhibition at the Dhaka Sheraton Hotel was part of the celebration of the 20th anniversary of the Convention on the Rights of the Child (CRC).

Ambassador and Head of the Delegation of the European Commission to Bangladesh, Dr. Stefan Frowein, told the audience that the daily reality for many children is still in sharp contrast to the standards set in the CRC.

“Millions of children still lack the chance for quality education, proper health and social care. There are still many victims of the worst forms of child labour, sexual exploitation and violent abuse,” he said.

Most of the young photographers decided to reflect these complex societal issues.

Shuktara, 17, focused on child labour because many children work in a cement business across the road from her house.

“Children are our next generation of leaders. If they are deprived of their rights... they
will not be able to lead us,” she said.

Like many trainees, Shuktara had some difficulty gaining access to her subjects, particularly as a woman entering a male-dominated arena. Overcoming this challenge helped build her self confidence and assertiveness.

“These adolescents are very thoughtful about their society,” said one of the photography teachers. “They are so desperate to take great photographs that capture the struggle they themselves or other children face.”

For Florida, one of the young students, the decision of what to photograph was simple. Florida and her family know all too well the prejudice faced by the disabled — her father and two sisters have dwarfism. “I hope my photos will help to sensitize people in Bangladesh about disability,” said Florida.

Florida’s sister, Tajmohal, had a normal growth rate during her infancy, but at three years of age, her growth was stunted. To help support the family, Tajmohal works as a tailor and embroiderer, making less than two dollars a day.

The exhibition called ‘Do you see my world?’ is now touring the districts of Jamalpur, Chapainawabganj and Barguna, where the photos were taken. There will also be a mobile exhibition on the back of rickshaws and bullock carts, allowing remote villages to see the photographs. The photos have also been published in a book to raise awareness of the issues these young people face in their daily life.

Authors: Casey McCarthy and Sophie McNamara, UNICEF

Further information:

- Young people in Bangladesh show their world through photos

Related links:

- Photo contest 2010 on promoting gender equality in education
- Youth promotion through ICT – The Chawama Youth Project
- Photo archive of Asian cultures
- Pictures tell a thousand words - Photography project highlights hardships of neglected community
- Multimedia training videos

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Resources
What happens when *all* children and teachers have their own laptops
What happens when *all* children and teachers have their own laptops -- this is usually phrased as a question, but a few places are allowing us to begin to reformulate this into a declarative sentence. One such place is the state of Maine in the northeastern United States; another is the South American country of Uruguay, where under Plan Ceibal all primary school teachers and students in government schools now have their own free laptops.

Alicia Casas de Barrán, the director of the National Archives of Uruguay, spoke at the World Bank about what is actually happening under Plan Ceibal. Through various examples, she highlighted the fact that many of the 'externalities' resulting from this ambitious initiative may in fact be central to its eventual value to Uruguayan society.

Here’s one such example: Ms. Casas, whose institution is not officially associated with Plan Ceibal, quickly saw the potential to capitalize on her country’s massive investments in connectivity and laptops for teachers and students to open up access to the national archives in ways not previously possible. Recognizing that laptops and wifi present an entirely new distribution channel for the services of the archives, and that the education system would need lots of new content in digital formats if it wanted to make full use of its large investments in technology infrastructure, the national archives approached the ministry of education to see how it might be able to help out. The result was an effort that the archives funded itself, digitizing key documents and images from the nation's heritage; one of the signature consequences of this effort has been the inclusion of digitized versions of primary documents from the nation’s history into 5th and 6th grade curricula for use on the laptops.

This is not the first time that the archives have collaborated with the ministry of education on education content. (Indeed, this is part of its remit, as it is in many other countries.) But, in contrast to past efforts, today’s effort isn’t only about one-way dissemination of content. I asked Ms. Casas how much feedback she received from students five years ago about items in the national archives. Her laughing answer: "None". Under Plan Ceibal, she and her staff are now receiving lots of feedback directly from students about the suitability of various resources, and especially about how they could be presented in ways more suitable for children, few of whom have ever set foot in the archives building itself.

The One Laptop Per Child initiative, whose green and white laptops are now ubiquitous in Uruguayan schools as a result of Plan Ceibal, likes to bill itself as an 'education project’. (I'll leave it to others to debate the merits of that assertion, a popular pastime in some corners of the Internet.) Plan Ceibal, on the other hand, does
not see itself as an ‘education project’ per se, but rather as a project to help transform larger society, with the education system as just the initial vector through which the project hopes to infect all of Uruguay with a new level of ‘connectedness’.

Investments in computers for all Uruguayan students merely to allow them to access documents in the national archives would (obviously) be much too expensive. However, as the ongoing work of the national archives demonstrates, once that infrastructure is place, small additional investments can yield some interesting (and in some cases, unexpected) results. Many examples in this regard are emerging in Uruguay -- add them up, and you see some very interesting, non-traditional ‘results’, many of which were not foreseen by Plan Ceibal proponents when the program was being initially planned.

Casas compared the effect of Plan Ceibal to that of ‘a wind blowing into the classrooms of Uruguay’. She noted that, in many ways, the ‘hidden curriculum in many Uruguayan schools has been discipline’, and the widespread availability of laptops for all students in schools is challenging this. When I am asked to describe what I saw on my last visit to Uruguayan schools in December, I usually respond with one word: "chaos". I did not mean this (necessarily) in a negative sense, but rather to note that, when all children have laptops and when teachers are given the freedom to explore with those students how best to use them, some of the traditional ways of organizing and managing a classroom are greatly challenged.

How can you measure such changes? Looking to a traditional measure -- standardized test scores -- may not provide much insight. But this does not mean that such changes do not have value. If other places are any guide, the disruption that accompanies a large scale introduction of laptops has the potential to actually negatively impact test scores in Uruguay, at least in the short run. This is not to downplay the risks that Uruguay is incurring here: If this ‘chaos’ and disruption last for an extended period of time, there will no doubt be a serious reconsideration of the path the education system is on.

The challenge -- in Uruguay and elsewhere -- is in how to measure such changes. This challenge is complicated by the fact that many positive changes that result from such investments are not foreseen by policymakers in the planning stages, and so data are not collected against which such changes can be measured and assessed until it is, from an evaluation standpoint, perhaps ‘too late’. This is not to say that attempts to evaluate such impacts are to be dissuaded, nor that (as some people would have you believe) this type of evaluation work is impossible. Nor is it to imply that we should abandon the use of traditional measurement practices and tools -- far from it! (Even most critics who complain about such things note that, at least in the short- to medium-term, this would be impractical.) That said, large-scale investments like Plan Ceibal in many ways challenge the way we have evaluated such investments in the education sector in the past; the audacious scale and vast use of public monies under Plan Ceibal in some ways compel us to be creative (and perhaps even audacious) in how we set up relevant and useful monitoring and evaluation schemes. As one policymaker in Uruguay put it to me: "We have jumped off a cliff with Ceibal. If we want to land safely, and end up in a new place that seemed impossible to reach before, we need to be serious about how we learn from our experience here and make any
corrections that are necessary." Rigorous evaluation of Uruguay's flight into the unknown will therefore be central to the eventual outcomes and impacts of this bold program.

There is no telling to what extent the lessons from the emerging Uruguayan experience will be relevant to other parts of the world. The country's rather unique social contract, which results in one of the least inequitable income distributions in Latin America, its small size and largely urban nature -- these and other attributes should give us pause if we try to simply extrapolate the lessons from Uruguay to create models that are then simply dropped into other places.

But the lessons that are emerging are fascinating -- and other countries considering large-scale investments in computers and other ICT devices for their education systems would do well to monitor Plan Ceibal closely.

Author: Michael Trucano, Worldbank

Further information:

- What happens when *all* children and teachers have their own laptops

Related links:

- EduTech - A World Bank Blog on ICT use in Education
- 10 Global Trends in ICT and Education
- The Wireless School Connectivity Project
- Desktop virtualization as means of providing low-cost computers for schools
- Africa: Mobile phones revolutionizing education

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7 things you should know about open educational resources

What is it?
Open educational resources (OER) are any resources available at little or no cost that can be used for teaching, learning, or research. The term can include textbooks,
course readings, and other learning content; simulations, games, and other learning applications; syllabi, quizzes, and assessment tools; and virtually any other material that can be used for educational purposes. OER typically refers to electronic resources, including those in multimedia formats, and such materials are generally released under a Creative Commons or similar license that supports open or nearly open use of the content. OER can originate from colleges and universities, libraries, archival organizations, government agencies, commercial organizations such as publishers, or faculty or other individuals who develop educational resources they are willing to share.

How does it work?
The term OER generally refers only to digital resources and, as such, tends to focus on usage in online or hybrid learning environments, though electronic content can certainly be used in face-to-face environments as well. Each resource is issued under a license that spells out how it can be used: Some materials may only be used in their original form; in other cases, learning resources can be modified, remixed, and redistributed. OER are typically found in collections or repositories. These can be offerings from a single institution, such as when a college or university makes available online the resources from its courses, or they can be collections of materials gathered from individuals or departments from a wide range of separate institutions. Instructors and individual learners can download OER and use them in formal or informal learning situations, and one of the hallmarks of OER is their flexibility—many are modular in nature, allowing them to be used in novel combinations to suit particular learning activities. Because open resources are so malleable, they can be adapted to keep pace not only with new technologies but also with changes to academic disciplines and teaching methods. Depending on the resource, these updates might be made by the creator or by users of the resource.

Who’s doing it?
One of the longest-running and highest-profile OER initiatives is the OpenCourseWare project from MIT, which began in 2002 and today features all of the course materials from roughly 2,000 MIT courses. The OpenCourseWare model has been replicated by dozens of colleges and universities around the world, which are putting full course materials online for anyone to use. Having access to an institution’s course resources is not intended to be equivalent to taking a course at that institution, but users can take advantage of that access to supplement or direct their own learning. Other OER efforts include Connexions, which was begun at Rice University, and the Open learning Initiative from Carnegie Mellon, as well as the University of the people and even iTunes U. Although OER projects use different models for how they function, all endorse the notion that teaching, learning, and research are improved when educational resources are more open and more accessible.

Why is it significant?
Educational resources developed in an open environment can be vetted and improved by a broad community of educators, resulting in materials that represent what the educational community sees as most valuable. By providing educators with new access to educational material, open resources have the potential to spur pedagogical innovation, introducing new alternatives for effective teaching. OER have the potential to expose students and instructors to the long tail of content, most of which never
finds its way into widespread educational use. Moreover, learning resources that can be modified and reused promote collaboration and participation—two key elements of a Web 2.0 approach to teaching and learning. The resources required to develop high-quality learning materials and activities for a full complement of courses can be prohibitive for many institutions and instructors. By distributing the costs over a larger number of users, OER brings a greater range of tools within reach of more users. OER can also lower the costs for students to obtain educational content. OER and online or hybrid learning are natural partners in efforts that take advantage of—and prompt—developments in educational technology that facilitate new media, new formats, and new means of distribution.

What are the downsides?
Like all educational resources, the quality of OER can be uneven and depends largely on their sources. Some OER are simply ineffective at presenting content in a valuable manner, and not all OER collections have a feedback mechanism by which users can share their evaluations about the quality of a resource. The value of educational resources tends to decrease without periodic updating, and many open resources are not kept current. Even within an OER repository that is operated and sanctioned by a respected institution, individual resources might not be held to the same standard of quality as the institution’s other offerings. The flipside of the flexibility of open resources is that many need to be adapted for use in a departmental or institutional context to meet local requirements or needs. Some open resources do not comply with accessibility requirements for users with disabilities. Whenever content is shared, and especially when it can be modified, questions arise over intellectual property and copyright concerns. In some cases, faculty resistance to opening their resources can be an obstacle.

Where is it going?
The abundance of OER can leave users spending a long time searching for a resource that fits their needs, and the volume of OER will only increase. OER repositories and the tools to search for and filter resources will need to build out their capacities and capabilities to help instructors and individual learners navigate the growing sea of open content. part of this process is evaluating the credibility of individual resources or collections, and new mechanisms are likely to emerge to facilitate this. To some extent, partnerships (with certain publishers, for example) have begun to fill this role, allowing faculty members to choose from lists of reviewed (or “approved”) open resources; other means of assessing the quality of OER will surely be developed. Even when a resource is deemed accurate and effective, resources might need to meet even higher standards to be included in for-credit courses. What organization will have the authority to sanction a resource or a collection of resources for degree- or certification-granting programs?

What are the implications for teaching and learning?
Few disagree that the infusion of OER into higher education is likely to have far-reaching effects on the character of teaching and learning, though the nature of that change is the subject of some debate. One of the more radical viewpoints is that the OER movement will lead to a future in which all of the components of an education will be available online for free and that learners will have the opportunity to construct a course of study—though it might not be called a “degree”—from the wide and
growing pool of open content. Others envision a less disruptive future for OER, suggesting that the model for higher education will persist in a form not wholly different from what it is today, but enhanced with high quality, open, digital content. Regardless, OER will expand access to educational resources to more learners, more of the time. In particular, adult learners, students who work full time, and other nontraditional students stand to benefit from open resources because they are available for independent, self-directed study. Open resources are one way to address the rising costs of education, and they also have the potential to facilitate new styles of teaching and learning. Giving faculty the ability to pick and choose the individual resources they want to use—and to modify those resources and “assemble” them in unique ways—promises greater diversity of learning environments.

Source: Educause

Further information:

- 7 things you should know about open educational resources [pdf]

Related links:

- Educause
- Open Educational Resources Center For California
- Open Educational Resources: Conversations in Cyberspace
- The impact of openness on bridging educational digital divides
- Why give knowledge away for free? The case for open educational resources
- Open Training Platform to become a hub for Cyber Network for Learning Languages
- Reflections on sustaining Open Educational Resources: an institutional case study
- UNESCO Open Training Platform turns one year old

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
**ICTs in school education - Outsourced versus integrated approach**

A study of two large scale ‘ICTs in School Education’ programs of two neighboring states of India brings out some interesting insights. The integrated model followed in Kerala state’s IT@Schools program, where the accent is on developing systemic in-house capabilities anchored around the role of school teachers, has shown considerable success. This has been in terms of much higher level of teacher engagement, integration of computer learning with regular learning processes, greater per-learner availability of computers, significant cost efficiencies and development of teacher networks and collaborative content creation processes, which support teacher professional development. All of these together have lead to the overall strengthening of the education system and better learning outcomes.

The alternative model of ‘outsourcing’ or ‘BOOT’ employed by the Mahiti Sindhu program in the state of Karnataka, where private vendors were paid to run the program, does not show such positive outcomes. Funds were spent on vendor payments instead of building in-house capacities and hence the system itself did not benefit from the program outlays, and is largely unable to meaningfully sustain the program beyond the BOOT period. Such outsourcing also seems to build more-or-less permanent dependencies of the public education system on private players, which can significantly distort its pedagogical structures in inimical ways.

The implications of this study for policy are critical. The IT@School model has demonstrated the advantages of developing comprehensive and end-to-end in-house capabilities in ICT education. However, if due to some contextual reasons, it is at all found necessary to consider some degree of outsourcing, such decisions need to clearly distinguish between non-core processes such as procurement, installation and maintenance of hardware, and core activities with direct pedagogical implications like content and software, teacher training and learning processes, and limit outsourcing to the former.

Author: Gurumurthy Kasinathan, ITforChange

**Read the study:**

- [ICTs in school education - Outsourced versus integrated approach (pdf)](#)

**Related links:**

- [ITforChange](#)
- [ICT for Education in South Asia: Computer labs for kids are not enough](#)
- [The 21st Century Classroom – Alfie Kohn](#)
- [Creating the next generation of educators](#)
- [A new ICT maturity model for education institutions in developing countries](#)

**Previous issues of the e-newsletter:**

- [UNESCO "ICT in Education" Announcement e-newsletter](#)
What do you think about this topic?

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#movemeon: Using Twitter to make a difference
The brainchild of educator Doug Belshaw, #movemeon is a testament to the power of social networking to produce something worthwhile.

Calling upon educators in the Twitter community to contribute tweets, #movemeon is a compilation of tips, ideas, and suggestions to teachers about teaching. Each piece of advice is no longer than 140 characters—the character limit of a tweet.

Covering topics such as student discipline, improving ones teaching, and how to deal with technology in the class, the advice given in this book is brief, but often insightful. Providing advice on how to conduct oneself in both daily ("keep your sense of humour, and be prepared to admit if you get it wrong") and specific ("'Don't be so childish!' doesn't really work with a six-year-old") situations, #movemeon ranges from the humorous ("Don’t split your trousers at school. Do it outside the post office on the way home, like I did tonight") to the serious ("ALWAYS follow through on any warning").

Available as a free download or in paperback for purchase, #movemeon is an easy, entertaining, but fulfilling read. With the Twitter population estimated to be around 19 million users, it is good to see someone using this huge online presence to create something for the benefit of all.

Read the publication:

- #movemeon

Related links:

- Twitter - A Teaching and Learning Tool
- Sciencefeed: Share and discuss your opinions about research, scientific conferences, and science headlines
- A study of the effective use of social software by further and higher education in the UK to support student learning and engagement

Previous issues of the e-newsletter:

- UNESCO "ICT in Education" Announcement e-newsletter

What do you think about this topic?
Creating surveys and polls using Urtak
Urtak is a free web based polling application, where you can create unlimited online polls and questionnaires. It is incredibly easy to get started: you just need an e-mail address to register to become a member. Once you are a member, you are free to make as many surveys as you would like, and can even add questions to other people’s surveys.

On Urtak, you can only ask yes/no questions. This makes creating surveys particularly simple. Just type in the yes/no questions or statements that you would like a response to, provide instructions, and give a title to your survey. A short tutorial on how to create questionnaires on Urtak can be found here.

Anyone who visits the Urtak site can see your poll, whether they are registered or not, and can subsequently answer your questions. Once a question is answered (yes/no/don’t care), a pie chart showing the percentages of other people’s answers appears. As the creator of the poll, you are able to see the percentage breakdown of all your questions, and organize them according to how you would like to view and analyse them.

Urtak, though simplistic, would make a great teaching and learning tool. As taken from Nik Peachey’s blog, there are any ways to incorporate this in the classroom:

- For class/online surveys and get students to analyse and write up the results
- To find out what things teachers do in class that students enjoy or understand, or just to get general feedback
- To test comprehension on studied texts
- To set web research tasks by asking questions and getting students to search the web to find answers/find out if statements are true
- To create debate and explore attitudes by giving students the poll before they come in to class to get them thinking about topics to discuss in class.
- To create their own reading tasks by getting them to produce questions in a poll based around a text, then they can answer each other’s questions.

This list is not exhaustive; it is just a couple of suggestions to help you get started. Go to Urtak today, and find out the numerous other ways that you can use it to enhance the learning environment in your class!

Further information:

- Urtak

Related links:
• Creating Social Polls and Questionnaires Using Urtak (Nik’s Learning Technology Blog)
• New classroom learning technologies

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