ICT-Based Mentorship in Science, Technology, and Engineering in the Middle East

Presented by Dr. George Atkinson
Science and Technology Adviser
United States Department of State

LINC explores the societal impact of education facilitated by the tools of virtual communication. Two complementary themes, one general and one specific, will be discussed:

1) a rationale that links science and technology to the formulation and implementation of US foreign policy;
2) an application of a virtual education tool to assist a state emerging from conflict toward a stable and prosperous society.

The revolution based on information technology has been pervasive throughout the global community, but in different ways. In some cases, it underlies dramatic advances in prosperity, while in other cases, in which information is transferred across borders without control, it has engendered concerns over security. So many of the remarkable opportunities presented by advances in rapid international communication are accompanied by serious challenges to traditional societal institutions, cultural mores, and governance. Education can address and transcend these challenges by fostering the principles of meritocracy as epitomized by the scientific research process. The LINC program demonstrates some of the linkages available to enhance learning throughout the world, especially in developing countries. When viewed from the perspective of scientific understanding and technological advances so representative of the developed world, the enhanced educational opportunities provided by programs such as LINC often have significant impact on foreign policy decisions. A recent example involving the Iraqi Virtual Science Library will be discussed.

Community of Inquiry Model for E-Learning

Presented by Reuven Aviv
Chais Research Center and the Department of Computer Science
Open University of Israel

In this talk, we describe one of the leading conceptual frameworks for the usage of computer-based communication in an e-learning environment: the Community of Inquiry Model. The model consists of three elements essential to education: cognitive presence, teaching presence and social presence. Cognitive presence is the extent to which the participants in the e-learning are able to construct meaning. Social presence is the ability of the participants to project their personal characteristics into the community, and teaching presence consists of the design of the educational experience and facilitation of the discourse. We will present the theoretical foundation for the model, as laid down by Garrison, Anderson and Archer, and several empirical studies that established the existence of these elements, the conditions for their emergence, and the students' perceptions supporting these ideas. We will conclude by presenting several suggestions of "good practices" to implement the model in an e-learning context.

http://www-e.openu.ac.il/

http://www.openu.ac.il/research_center_eng/

An Examination of E-Learning Initiatives in Developing Countries: Special Focus on a Pilot Project in Ethiopia

Presented by Beyane, Berhanu
University of Hamburg and
The Association to Support E-Learning and E-Healthcare in Developing Countries (ASELEH)

The paper highlights the role of ICT infrastructure, the educational organization (curricula design, accreditation, and other supporting services) and the learning society (culture, language, indigenous knowledge, readiness and acceptance, etc.) in promoting E-Learning in developing countries in general, and in Ethiopia in particular. The discussion focuses on one case study, a pilot E-Learning project in Ethiopia initiated by the Association to Support E-Learning and E-Healthcare in Developing Countries (ASELEH). ASELEH is an international, non-governmental registered charitable organization established to promote ICT-supported education and training as well as ICT-supported healthcare services in developing countries in cooperation with organizations supporting/promoting similar objectives.

http://www.aseleh.org/eng/index.php

The E-Learning Initiatives to Achieve Poverty Reduction and Support Economic Development in Lao People's Democratic Republic

Presented by Ms. Sisavanh BOUPHA
Deputy Director General
Department of Science and Technology
Lao People's Democratic Republic

This paper will highlight the important issues of e-learning as a key to technological and capabilities upgrading in a country at the early stage of development. The paper will also identify links between e-learning and economic issues that would help developing economies cope with the challenges posed by globalization and also help those economies look more closely into the future of sustainable development. The case study presented will demonstrate what a major adjustment it is to encourage and promote this new kind of e-learning. This adjustment requires urgent policies, additional research, new regulations and considerable investment in order to discover the ways to tackle poverty and support economic development in the long run.

E-Learning System at Inha University

In-Joo Chin
College of Engineering
Inha University

Inha University has recognized early on the importance of distance learning, and it is now implementing the campus-wide, on-line education service by utilizing its advanced telecommunication infrastructure. Since Inha joined in 1988 the fourteen university consortium devoted to distance education in Korea, it began to offer web-based, on-line courses mainly to supplement the regular classroom teaching. These on-line courses have been steadily expanding, and in 2003 to meet the global competition, Inha University launched its own system called "Inha e-Learning System." Currently, about 19% of general elective courses, 4% of general required courses, and about 1.5% of major courses are offered on-line. The quality of on-line courses is closely monitored jointly by the Academic Affairs office and the Center for Teaching, Learning and Technology with the support of the Computing Center.

http://www.inha.ac.kr/english/

HIGHER EDUCATION AS A STAKEHOLDER IN ICT FOR DEVELOPMENT[1]

Presented by Royal D. Colle
Communication Department
Cornell University

Higher education has a mixed record in supporting the potential of the newest information and communication technologies for development _ especially those technologies associated with the digital world. Major documents related to using information technologies for reaching the Millennium Development Goals are largely silent about a significant role for universities. That silence results, in part, from a perception in some parts of the world that universities are irrelevant to their surroundings. Why is there a disconnect between this perception of irrelevance and the extraordinary record of higher education's role in "virtual universities" and its technical contributions to the digital revolution? This talk explores the logical and mutually beneficial _ though unconsummated _ connections between universities and institutions using ICTs for development.

http://www.comm.cornell.edu/

iLabs: Carrying Out Experiments across the Digital Divide through the Internet

Presented by Jesus del Alamo
Professor and MacVicar Faculty Fellow
Department of Electrical Engineering and Computer Science, and
Steven Lerman
Director of the Center for Educational Computing Initiatives (CECI)
MIT

We are investigating unique issues associated with disseminating access to online laboratores ("iLabs") across the digital divide. iLabs allow students around the world to carry out real experiments remotely through a simple web browser. The iLab project at MIT has demonstrated the pedagogical value of online laboratories in several engineering disciplines. We envision a future in which students, as part of their coursework in a given subject, will seamlessly access multiple laboratories located around the world and perform experiments that collectively do not exist in a single academic institution today. Our educational experiments over the last several years have demonstrated the agility of accessing iLabs from anywhere in the world. A significant exception to this is developing countries which are connected to the global internet through thin satellite connections and who have scarce and less than state-of-the-art computing resources. Developing countries face the additional challenges of limited exposure to computers on the part of students and faculty and a lesser awareness of the computer as a general-purpose engineering tool. In a partnership founded by the Carnegie Corporation of New York, MIT, Obafemi Awolowo University (Ile-Ife, Nigeria), Makerere University (Kampala, Uganda) and University of Dar es Salaam (Tanzania) are working towards identifying and developing effective solutions to the barriers that prevent the broad utilization of iLabs in developing countries. At LINC we will present progress along the three threads of this collaboration: the use of MIT's iLabs from sub-Sahara Africa; the development of new iLabs of local design in Africa; and the exchange of staff and students to facilitate working as a cross-country team that spans the digital divide.

http://www-mtl.mit.edu/~alamo/index.html

The UNCTAD Virtual Institute on Trade and Development: Building National Trade Policy Capacity with Universities

Presented by Fröhler, Peter
United Nations Conference on Trade and Development (UNCTAD)

The presentation will explain the rationale and background of the Virtual Institute, list the actors and beneficiaries, elaborate their roles both with respect to rights and obligations, give an account of activities undertaken and progress achieved and highlight future plans and strategies.

http://www.unctad.org/

The MIT-China OCW Initiative: Adaptation, Implementation, and Dissemination of MIT OpenCourseWare with Partners in China

Presented by Sean Gilbert
Director of Project Development & Training for the
MIT-China Program and the MISTI Singapore Forum

The MIT International Science and Technology Initiatives (MISTI) prepares MIT students to take leadership roles as global professionals by combining an MIT education with language and cultural training and "hands on" experience. A new, exciting development in MISTI is its MIT-China OCW initiative: "Adaptation, Implementation, and Dissemination of MIT OpenCourseWare with Partners in China." This project is creating a community of teachers and learners from both MIT and host institutions in China with the goal of implementing course material provided by OCW into the specific

academic context of Chinese universities. This brief update on the project will include a review of our activities at Qinghai, Tsinghua, and Xi'an Jiaotong universities and Dalian University of Technology, the challenges and successes of OCW adaptation at these universities, and the early lessons that can be transferred to other parts of the world.

http://mit.edu/mit-china/

EduVision E-Learning System: the Mbita Pilot Project in Kenya

Presented by Matthew Herren and Maciej Sudra
EduVision

In the Kenyan village of Mbita, the sixty students and three teachers of class 5 had their textbooks replaced with an ICT platform for the distribution of curriculum content, called the EduVision E-Learning System. The students and teachers went about their normal curriculum much as any other primary school in Kenya, except in the place of textbooks, they used handheld computers running a customized Linux operating system and EduVision's software. The software development continued throughout the project, taking into account feedback and suggestions from the teachers and students. At MIT LINC 2005, EduVision's Matthew Herren and Maciej Sudra will talk about the technology that powers their platform, the outcomes of the Mbita Pilot and the future of EduVision and its technology.

http://www.eduvision.or.ke/

Enhancing Human, Identity and Social Capitals of Rural Teachers through E-Learning – Experience of Living Knowledge Communities in China

Philip K F Hui, PhD
Living Knowledge Communities
Hong Kong

China has set for itself the goal of building a well-off society (xiaokang) in an all-rounded way. China's progress report of its Millennium Development Goals (MDGs) shows that it is likely to achieve most of its MDGs. Two of these goals merit particular attention. The first, to be achieved by the year 2005, is that of equal access to primary and secondary education for boys and girls. The second, to be achieved by the year 2015, is that of all Chinese children completing a full course of primary schooling. The increase in the quantity of and improvement in the quality of schoolteachers, and particularly those in the rural areas of China, are crucial to the achievement of these goals. Owing to the scarcity of trained teachers relative to the country's demand for them, it is schools in the cities in China that have their pick of trained teachers first. Consequently, it is substitute teachers, those who have had little or no prior training in teaching whatsoever, who are teaching in the poverty-stricken areas of China. Living Knowledge Communities (LiKeCom), a recently established NGO based in Hong Kong, has begun providing professional development programmes for schoolteachers teaching in villages in China, and cultivating communities of practices for these teachers, linking them with teachers teaching in cities inside and outside of China.

A Look at a Number of e-Learning Initiatives in the Middle East: Problems and Solutions

Presented by Said Hammad
Department of Computer Science
Princess Sumaya University for Technology
Contributors: Saleh Al-Saleem and Abdel-Elah Al-Ayyoub
Faculty of Computer Studies
Arab Open University

The education sector receives a high priority and the major share of allocated budget spending in almost all of the Arab countries. E-learning is often seen as the new method of education delivery in both k-12 and higher education. In this talk we review a number of e-learning initiatives that stem from this philosophy. We also introduce some of the grand scale e-learning projects in many Arab countries in general, and in Jordan and Saudi Arabia in particular. Actual implementations have faced many problems, and we review some of the problems that we personally faced and how we were able to solve some of these problems. We give our assessment on how E-learning is progressing and its future prospects in our context.

http://www.nerc.gov.jo/prince_sumaya_univ..htm
http://www.arabou.org/

Assisting African Universities to Intensify Their Contributions to National Development: One Foundation's Approach

Presented by Andrea Johnson
International Development Program
Carnegie Corporation

This presentation will examine the strategy of one foundation to help a few African universities reposition themselves to contribute significantly to the development of their countries; how information and communication technology for teaching and research features in the strategy; and how the foundation relates to a unique funding partnership.

www.carnegie.org/

Bridging the Digital Gap and Establishing a Harmonious Society through ICT: A Case Study of the Education Poverty Alleviation Project of Tsinghua University

Presented by Feiyu Kang
Executive Deputy Dean
School of Continuing Education, Tsinghua University
Beijing, China

This paper will briefly explain the background of current developments in poverty alleviation in China. Our main research focuses on the expansion and development of education poverty alleviation projects undertaken by Tsinghua University, through technical support of ICT, the establishment of learning centers, training courses, and human resources. The Education Poverty Alleviation Project was actualized through Tsinghua University's Modern Distance Education Platform. Tsinghua University has set up 100 learning centers to deliver educational resources via internet and satellite, and has tried to meet the demands of a variety of people in rural and poor areas. Tsinghua's Poverty Alleviation Project has aided China's western areas in understanding international communication channels, and has brought attention and support from abroad. This paper will review the poverty alleviation demonstration works and analyze the implementation and results of poverty reduction for a "Learning Countryside." Finally, there will be a discussion of our experiences, some key problems, and prospective plans that are now being addressed in the Education Poverty Alleviation Project at Tsinghua University.

http:/166.111.18.8/tsinghua/english/about_sce/about_sce.htm

The E-LANE Project: Reinforcing e-Learning in Latin America

Presented by Carlos Delgado Kloos
Dept. Ingeniería Telemática
Universidad Carlos III de Madrid
Madrid, Spain

E-LANE (European-Latin American New Education) is a project funded by the European Commission through the @LIS Programme (Alliance for the Information Society) with the participation of five institutions from Europe (U Carlos III de Madrid, acting as a coordinator, Telefónica I+D, INT, Trinity College of Dublin and U. Reading) and five institutions from Latin America (ITESM, U Galileo, U Cauca, U Chile, U Campinas). The objective of E-Lane is the implementation of e-learning demonstrators in Latin America. To this end, an e-learning platform has been developed, content has been produced (both for digital literacy and for life-long learning), and a methodology has been defined. Now that this three-year project is half-way through, this talk will present the advances achieved so far, the main decisions and successes, along with the hindering factors that have arisen.

http://www.e-lane.org

Distance Learning: Quality Education or 2nd Rate?

Presented by Naveed A. Malik, Rector
Pakistan Virtual University

Modern Distance Learning offerings from valid institutions offer good quality education, but still suffer from a perception of being second rate. Some fly-by-night institutions that offer "degrees by

mail" further compound the issue by being lumped with mainstream distance learning institutions. Although the process of content development in most of these institutions is well documented with extensive quality controls, it is very hard to shake this negative perception. By incorporating well known academics with acknowledged credentials in the content development process and then using the same professors in presenting the courses on broadcast television, the Virtual University of Pakistan has, to some extent, been able to overcome this negative perceptions associated with distance learning institutions. It is suggested that distance learning efforts should involve "stars" both at the individual level as well as at the institutional level. Once these "stars" are associated with distance learning, the acceptability of distance learning offerings will increase and these programs would hopefully become socio-economic enablers, which is their biggest promise.

www.vu.edu.pk

ADAPTATION AND USE OF MIT OCW IN DEVELOPING COUNTRIES

Presented by Anne H. Margulies, Executive Director
MIT OpenCourseWare

Available at http://ocw.mit.edu, MIT OpenCourseWare is a large-scale, Web-based publication of the educational materials from virtually all of the MIT faculty's courses. This unique initiative enables the open sharing of the MIT faculty's teaching materials with educators, enrolled students, and self-learners around the world. MIT OCW provides users with open access to the syllabi, lecture notes, course calendars, problem sets and solutions, exams, reading lists, even a selection of video lectures, from more than 1250 MIT courses representing 34 academic disciplines and all five of MIT's schools. The initiative will include materials from approximately 1800 courses by the year 2007. Truly a global initiative, the MIT OCW site has received users from more than 215 countries, territories, and city-states since the launch of the pilot site on September 30, 2002. Materials have already been translated into at least 10 different languages. However, for people in the developing world, we have found there are five barriers to use for the MIT OCW Web site: Awareness, Access, Language, Culture, and Academic Context. To surmount these obstacles, MIT OCW has undertaken a wide variety of external outreach activities, including awareness-building with international partners, creation of more than 60 mirror sites around the globe, translation partnerships, and the fostering of other "OpenCourseWare" initiatives at universities around the globe.

http://ocw.mit.edu

Integrating e-Learning into the US e-Health Environment through Standards

Presented by Ross Martin, D. MD, MHA
Director of Business Technology
Pfizer Inc.

The US federal government has increasingly focused on health information technology (HIT) standards as a means for driving adoption of electronic medical records and electronic prescribing in order to improve the quality of patient care, reduce medical errors and reduce the cost of healthcare

delivery. Many of these standards are international in their scope, including some of the healthcare-specific e-Learning standards that are in early development. How can e-Learning standards be made a central component of the US efforts to create a nationwide health information network (NHIN)? What opportunities are there to expand the benefits of these activities beyond the borders of the US? What lessons can be drawn from the experiences of other countries as they undertake similar efforts?

www.rossmartinmd.com

The Great Internet Bandwidth Conundrum

Presented by Cliff Missen, Director
The WiderNet Project
University of Iowa

Advocates of open information and education have thrived on the World Wide Web, where millions of individuals and organizations have made billions of digital documents freely available to Internauts. While this same information is desperately needed in the developing world, Internet access is relatively rare and expensive in the world's poorest countries, meaning only an elite few have ready access to the world's largest library. The eGranary Digital Library, developed by the University of Iowa's WiderNet Project, provides millions of digital educational resources to institutions lacking adequate Internet access. Through a process of garnering permissions, copying Web sites, and delivering them to intranet Web servers INSIDE our partner institutions in developing countries, the eGranary Digital Library delivers millions of multimedia documents that can be instantly accessed by patrons over their local area networks at no cost. For institutions in the developing world struggling to establish an Internet link - or straining to find a sustainable way to maintain or increase their current Internet bandwidth - the eGranary Digital Library can play a critical role in any bandwidth management strategy. With installations in more than 50 educational institutions, clinics, and hospitals in Africa, Bangladesh and Haiti, the eGranary Digital Library provides lightning-fast access to educational materials including video, audio, books, journals, and Web sites, even where no Internet access exists.

http://www.widernet.org/

OpenCourseWares Beyond MIT

Presented by Shigeru Miyagawa
Linguistics Department
MIT

Thanks to the enormous effort of a large number of people committed to the vision of OpenCourseWare, MIT OCW is now one of the most well-known projects that MIT has ever undertaken. This year, it has surpassed the halfway point in its commitment to make available for free on the web the teaching materials from virtually all courses at MIT. With the MIT OCW firmly established, we have begun to address issues related to MIT OCW. First, we are starting to see opencoursewares being launched at other universities. I will speak in particular about the successful start of opencoursewares among the top national and private universities in Japan (www.jocw.jp).

Second, there are efforts under way to address issues of access. A variety of MIT people are looking at problems of access for areas such as Sub-Saharan Africa.

http://web.mit.edu/linguistics/www/miyagawa.home.html

The Will to Move Forward

Presented by Alex (Sandy) Pentland
Director of Human Dynamics Research Group
Media Laboratory
MIT

Abdul Kalam, President of India, once remarked to me that `We have enough water, we have enough money, what we don't have is the collective will to move forward'. What he meant is that the main limitation for development is often information...especially transparency of operations, accountability for transactions, and the voice of the people...rather than physical scarcity. To address this need, my focus has been on using mobile wireless technology to supply these basics in the areas of commerce, healthcare, and governance.

http://hd.media.mit.edu/

Project GLOBE : Excellence in Education for Physicians Working in Primary Health Care Services

Presented by Pablo A. Pulido M., MD
Pan-american Federation of Associations of Medical Schools (PAFAMS)
Caracas, Venezuela

Generalist physicians provide most of the first line care to the world's population. Yet there is a need for better access by these physicians to quality continuing medical education and professional development opportunities in order to help them maintain their competence to practice. New systems of thinking are needed to maximize such opportunities in a cost-effective, product-oriented way. The Project GLOBE initiative is a new worldwide partnership aimed at improving the capability and competence of generalist doctors (with an emphasis on GPs and FPs) to deliver health and medical care of the highest possible quality within their own countries and practice settings. A Steering Committee of international leaders in medical education, general practice, and family medicine, as well as information technology, was convened in March 2005 and has developed an initial assessment of the needs and ways to enhance the competence of GP's, FP's and health systems in a group of pilot countries around the world. Task forces are working in four areas: 1) GP/FP educational and professional development needs and demands from selected pilot countries, based on a methodology and protocol for assessment; 2) Effective methods, tools and resources that will be applicable to deliver CME-CPD globally or regionally; 3) An assessment on currently available core-curricula and learning experiences for the education of generalist physicians based in the needed competencies; and 4) The development of a consensus declaration of the need for such an initiative to foster a call for strategic unified action.

http://www.fepafem.org/

Using Blended Learning to Strengthen Management and Leadership across The Globe

Presented by Jennifer Stavrou Rodine
Director of Electronic Products
Management Sciences for Health (MSH)

Management Sciences for Health uses innovative blended learning approaches to create effective, accessible programs for health managers in the developing world. In the past three years, 100 teams of health managers in Africa, Asia, Latin America and the Caribbean participated in two such programs: the Virtual Leadership Development Program and The Art of Crafting a Business Plan for Social Return on Investment. This presentation will cover some of the most effective elements of blended learning programs, including: the importance of finding the right delivery method; the role of using materials in multiple formats in low access areas; enrolling teams rather than individuals in programs; designing programs in which participants develop a product; and the critical role of high-quality facilitation.

www.msh.org

UNDERSTANDING ACCESS TO DIGITAL RESEARCH RESOURCES IN DEVELOPING COUNTRIES: THE CASE OF 'THE ESSENTIAL ELECTRONIC AGRICULTURAL LIBRARY'

Presented by Raul Roman
Annenberg Research Network on International Communication
Annenberg School for Communication
University of Southern California

This presentation will introduce preliminary results from the evaluation of The Essential Electronic Agricultural Library (TEEAL). TEEAL is a project sponsored by Cornell University and the Rockefeller Foundation with the objective of providing researchers in low-income countries digital access to leading agriculture and development journals, which they cannot otherwise afford. This presentation will explore what kinds of factors determine effective access to digital science-based knowledge resources in developing country contexts. The analyses presented are based on data collected from 1500 TEEAL users in fifteen countries in Africa, South East Asia, and Latin America.

http://arnic.info/

E-Medicine In Action

Presented by Sean Rowland
Executive Chairman of Hibernia College

Dr. Rowland will discuss background, development and delivery of the new Masters Degree program in Pharmaceutical medicine. This innovative e-learning graduate degree has been developed by the Pfizer Corporation in conjunction with Hibernia College. Participants come from 23 countries around the world and participate in a blended learning approach which will be discussed by Dr. Rowland. Pfizer personnel and Hibernia College met at the LINC 2004 conference.

www.hiberniacollege.net/

Use of E-Learning for Health Care Education

Presented by Robert Rubin, MD and Honorio Silva, MD
Harvard-MIT Division of Health Sciences Technology, Boston, MA, and
Science and Medical Advocacy Group, Pfizer Inc, New York, NY

The past decade has witnessed remarkable advances in biology and medicine, offering hope for millions of people with heretofore untreatable diseases. However, these unprecedented opportunities are also posing severe challenges, if the promise of the scientific advances is to be realized. There is a shortage worldwide of skilled clinical investigators and a shortage of new training programs to educate these investigators. Distance learning has a unique role to play in this effort: 1. Teaching modules, particularly those that emphasize case studies and decision making can have a major impact on the level of knowledge in a given clinical area or for a particular problem; 2. Ethical approaches, ranging from the functioning of oversight committees and data safety monitoring boards to the solving of particular dilemmas can be facilitated; 3. The appearance of new diseases such as SARS, avian influenza and others, with the potential for worldwide impact, can result in the need for rapid dissemination of knowledge; 4. Information about new therapies can likewise be widely disseminated in the same manner; 5. Certification and the formation of international networks can be facilitated by the linkage of like-minded individuals through distance learning techniques. In sum, distance learning techniques can provide the tools needed to deal with both the opportunities and challenges posed by this new era of molecular medicine and globalization of both disease and its therapy.

http://www.figrandrounds.org/fi/eng/instructors/dr_rubin.html
www.pfizer.com/

e-Learning for Chilean Teachers

Presented by Jaime Sánchez
Department of Computer Science
University of Chile

This study presents the results of e-Learning experiences for training urban and rural teachers in Chile. We describe the design, implementation, and evaluation of e-Learning courses for learning educational uses of computers and technology integration into curriculum. We describe and analyze our experience and results concerning the use of e-Learning platforms and pertinent educational models for training teachers to help them learn how to integrate information and communication technologies into their everyday curriculum practices. To implement these initiatives, we designed a circular model for e-Learning that involves five stages and procedures that learners follow during

virtual communication and interaction such as: realizing, approaching, conceptualizing, structuring, and applying. We describe these processes and illustrate them with case studies. Finally, according to our experience in training teachers through e-Learning strategies we present a proposal to design and implement e-Learning courses for Chilean teachers in urban and rural settings.

www.uchile.cl/

Use of OpenCourseWare: Opportunities and Challenges (Focus on the Experience of the French University)

Presented by Mohamed-Nabil Sabry
Director of the Center for R&D and International Cooperation
French University of Egypt

Tertiary education completion ratio has a high impact on GDP per capita. A substantial increase in enrolment can be achieved by distance education. The main obstacle is the scarcity of educational resources. MIT OpenCourseWare is distinguished by its comprehensiveness in different engineering domains, which is a crucial factor. Adding more modularity and "editability" would increase its benefits to course developers.

www.ufe-eg.org

E-Learning: Challenges and Breakthroughs in the Middle East

Presented by Milad Sebaaly
Founder and CEO of Universal Knowledge Solutions
United Arab Emirates

This presentation tackles the issues encountered when implementing e-learning solutions in the Arab world through a number of case studies in university, K-12 and corporate education. It opens with a review of general challenges resulting from the existing cultural, technological and educational background, as well as the avenues for change and the role played by technology in particular. A thorough analysis of e-learning implementations follows, covering issues and transformations involved as well as critical factors for success in designing e-learning solutions and building effective learning environments. E-school case studies include Al Mawakeb School in the UAE and the American Creativity Academy in Kuwait. Case studies for higher education solutions include the E-Learning Center of Excellence at the Gulf University for Science and Technology in Kuwait; the Knowledge Factory in the UAE, a joint venture between Universal Knowledge Solutions and the American University in Dubai; the Knowledge Factory in Beirut, a joint venture between Universal Knowledge Solutions and the Lebanese University; the E-College of Total Quality Management in Dubai, UAE; the Hashemite E -University in Jordan; the JSS Online Academy in Dubai, UAE; and the Syrian Virtual University. Case studies for lifelong learning and corporate training include the Ohio University Middle East Center; the Kuwait Petroleum Corporation Online Institute; and the Abu Dhabi Water and Electricity Authority Online Institute.

www.uks.ae

Creatively Diverse Teams

Presented by Douglass J. Wilde
Design Division, Mechanical Engineering
Stanford University

A simplified method is presented for forming learning teams of three or four high school students based on their individual styles of creativity estimated by responses to the Myers-Briggs Type Indicator (MBTI) personality questionnaire. The number of creative styles is maximized on these "creative" teams. This is a simplification of a more advanced approach using scores that has led to a tripling of national awards to Stanford University design teams. The simplified method does not use scores, only broad preferences, making it easy for a teacher to form "creative" teams on a spreadsheet. The simple method taps the same creative modes as the advanced approach, although not the other characteristics exploited by the advanced procedure. Since these other characteristics are not well developed in adolescents anyway, the more advanced method is less justified in high school. The advanced method has been used recently to form tri-national design teams of college students from the Republic of Korea, China and Japan.

http://soe.stanford.edu/