ISSN 1499-90X

Multimedia Information & Technology

Volume 37 Number 1 February 2011

Connect without wires Digital library masters in Estonia eLectures in Australia Mastering image management Mobile learning in Nigeria

welcome



This issue features a special focus on developments in education and libraries from Australia to Estonia and Saudi Arabia. We also have a host of

excellent articles from the UK plus our index of 2010 articles and reviews.

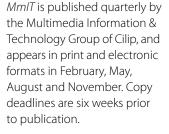
Warm regards,

Thie

Catherine Dhanjal, Managing Editor

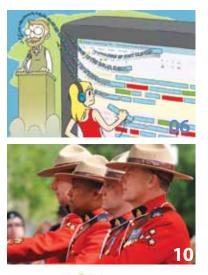
From time to time, MmIT offers space to suppliers who are developing and marketing products of potential interest to information services. Neither the journal nor the MMIT Group endorse any of the services covered in these pages. Articles published reflect the opinions of the authors and are not necessarily those of the editorial board or MMIT Group. While every reasonable effort is made to ensure that the contents of the articles, editorial and advertising are accurate, no responsibility can be accepted by the editorial board or MMIT Group for errors, misrepresentations or any resulting effects. Acceptance of an advertisement does not imply endorsement of the advertiser's product(s) by the editorial board or MMIT.

We are sending a communication to each of our Group members in the post this month to encourage you to renew your Group membership, to reiterate the benefits the Group offers and also to encourage you to register your email address with Cilip so that we can email updates to you in the future.



Advertising, subscriptions and online access, contact the Managing Editor + 44 (0) 1883 650434 / 07941 669925 catherine.dhanjal@theansweruk.com

Editorial Board Anthony Hugh Thompson (Chair); Alun Jenkins (Finance Manager); Catherine Dhanjal (Managing Editor); Kevin Curran; Kate Lomax; and Olwen Terris









26

contents

News

New iPad app explores why the net matters; national public union catalogue update; joint German & British WW1 archives	3
Reviews	
Book review: The Future of Archives and Recordkeeping	4
Product review: Audio Notetaker	6
Product review: Trulink wireless	8
International focus	
Skype for information literacy teaching in Canada	10
elearning in Nigeria and Saudi Arabia	13
eLectures in Australian HE	16
Digital library programme crosses three countries	18
Features	
Bodleian develops website to complement physical exhibition	21
Expert's view on image management for librarians	24
Overcoming digital format obsolescence	26
Information literacy for PhD students	30
2010 index	32
Technology roundup Advanced search tips; historical news with Google News Archive	35
and finally Coming soon; cartoon	36

Learning technologies: advances in the Middle East and Africa



Bob Little reports on two remarkable developments involving learning technologies that are taking place in the Middle East and Africa

Scientists tell us that Africa is the cradle of human civilisation, while the Middle East has played a prominent part in engaging in, and fostering, international trade

for centuries, as well as being a major focus for at least three major world religions. These two areas of the world can now add a further claim to fame in that Saudi Arabia and Nigeria are at the forefront of the application of the latest in learning technology. Both of these are taking place in the higher education sector but both have far wider implications and applications.

In the case of Nigeria, one of its most prominent universities is bypassing desktop and laptop computers as a delivery mechanism for elearning materials. Instead, it is opting to send these elearning materials, along with assessment tests, to students' mobile phones. Its reasoning is that more students have mobile phones than have access to (reliable) computers and today's mobiles have the capacity to deliver sophisticated, multimedia-based learning materials.

In Saudi Arabia, a national project is providing a concerted – as well as highly efficient and effective – structure, based around a learning content management system (LCMS), digital repository (DR) and allied learning management systems (LMSs), to collect, store and deliver elearning materials to all its higher education and, indeed, some other students.

Saudi treasure chest of learning

The national project in Saudi Arabia is the largest learning content digital marketplace implementation in the Arabic

world. Known as the Maknaz – or 'Treasure Chest' – Project, it is being masterminded by Saudi Arabia's National Center for eLearning and Distance Education (NCEL).

there was a need to consolidate the elearning content and materials within HE in Saudi Arabia

NCEL was established as a national plan for the utilisation of information technology and as an advancement in the field of elearning and distance learning. The centre is dedicated to providing technical support in elearning and its related infrastructure, skilled consultancy, e-content methodologies with the best approaches and practices along with the provision of change management.

Established by a decree of The Custodian of The Two Holy Mosques, King Abdullah bin Abdulaziz Al-Saud, which recommends the implementation of elearning and distance learning and all their prospective applications in higher education, NCEL provides technical support as well as the tools and means necessary for the development of elearning content.

In particular, NCEL has been given the task of refining the three pillars of education — teachers, educational content and learners — in order to stimulate cultural advancement in Saudi Arabia. Although this process has begun with higher education, it aims to instill the importance of learning as a general cultural principle for various members of the community.

Before the advent of NCEL, many universities in Saudi Arabia had invested in establishing their own digital repositories where users could store contents and where other users at the same university could access and re-use this content. However, until the Maknaz Project, it was not possible to share any of this content among all the university's DRs or between universities' DRs.

Moreover, many universities in the country had invested individually in developing new learning content. However,

such individual efforts had led to the development of redundant content - since some of this content included material on topics which were common to other universities' learning content. Sometimes, universities had developed content which was an exact duplicate of content developed by another institution. In addition, there



were also some new universities which did not have a budget that would allow them to establish their own repositories or develop their own elearning content.

the online repository has been designed to protect the cultural sensitivities of its target audience... Islamic culture and values

Clearly, there was a need to consolidate the elearning content and materials within the higher education sector in Saudi Arabia. Not only would this reduce duplication of content and make the generation of learning content more effective and efficient but it would allow more learners across the Kingdom to access the learning materials that they needed. Based on these needs, NCEL's objective is to design learning tools and services to achieve the grand cultural goals for higher education of the Kingdom of Saudi Arabia.

This vision and mission paved the way for NCEL to develop and provide state-of-the-art technical solutions such as the unique National Digital Repository and LCMS supporting the design, development and distribution of elearning content within the Kingdom and, ultimately, beyond.

In implementing the National Repository Project, NCEL has been working closely with eXact learning solutions, and with UKS, eXact learning solutions' partner in the Middle East. UKS, the Middle East's leading learning solutions enabler, is a subsidiary of Al Tanmiya Holding, a conglomerate committed

features

to the development of human capital in the corporate and academic worlds.

> Well-known for both its thought and technical leadership in the field of learning technologies, eXact learning solutions — formerly known as Giunti Labs — offers



a wide range of tools and services for content development, content management and content delivery, covering: content management and digital repository platforms; mobile learning technologies; consulting and professional services, and multi-language bespoke learning content production. The company has over 15 years of experience and more than 100 customers worldwide, focusing on technological innovations which allow enterprises to improve their organisational performance, and achieve significant reductions in business costs.

the digital marketplace is now interoperating with Moodle, Sakai, Blackboard, and Jusur, a national VLE solution

Maknaz, which supports 22 national universities in Saudi Arabia, provides a secure online platform for faculty members, university students and the general public to share and access a wide range of educational materials. The online repository, based on the HarvestRoad Hive DR technology, offers both Arabic and English interfaces and has been designed to protect the cultural sensitivities of its target audiences, taking into consideration the need to fit within Islamic culture and values.

Maknaz has created an advanced pedagogical environment supported by up-to-date technologies, educational innovations and interactive high guality learning objects to enhance current classroom practices. It is integrated with all NCEL's internal repositories, including Qanatech and the Saudi Digital Library (SDL) as well as with a network of over 36 international repositories, making it possible for Maknaz users to search for contents across all these repositories.

NCEL's manager for Planning & PMO, Abdullah Al Mogheerah, explained, "The Maknaz project provides a complete solution for the implementation, customisation, maintenance and support of a reliable and effective online learning environment, including all the required hardware for sustaining a highly sophisticated environment supporting 22 leading national universities."

Fabrizio Cardinali, CEO of eXact learning solutions North America, commented, "The Maknaz Project is an electronic environment which provides support to higher education institutions. It uses our eXact LCMS and Harvestroad Hive DR infrastructures to provide a nationwide digital marketplace within the Kingdom of Saudi Arabia which aims to enrich the curriculum and the learning objects of digital courses through the storage, retrieval and reuse of educational modules, which have been designed according to the latest international standards.

"This digital marketplace is now interoperating with Moodle, Sakai, Blackboard, and Jusur — a national VLE solution developed by NCEL — along with a set of Web2 portals to deliver high value content and learning experiences to students in Saudi Arabia. Its ability to integrate with other LMSs allows users to publish their work in Maknaz and to have the same material visible and accessible through all the integrated LMSs."

helping to widen formal and non-formal education to cover all citizens, teachers and learners

He added, "Academics and students use the HarvestRoad Hive DR to share and access a wide array of educational materials. The eXact LCMS and other collaboration tools are used to facilitate the production and management of online learning contents."

The Maknaz Project aims to encourage specialists to participate by adding new units, or developing former ones. It also aims to extend its activities to the existing participating universities in Saudi Arabia, as well as the external

community, both in Saudi Arabia and internationally.

Cardinali added, "Through the implementation of the eXact LCMS, NCEL can rely less on outsourcing learning content production and concentrate more on developing its internal resources to meet the demands and expectations of its customer base. The eXact LCMS also facilitates the process



of creating learning objects that meet customer needs and expectations."

Now that it is using the latest technology, NCEL can concentrate on the educational content framework design, as well as facilitating mechanisms for electronic access, and methods of interaction. This results in the comprehensive enrichment and integration of the various components of the educational material.

Students can make use of Maknaz to access a diverse range of scholarly material, providing a new, cost-free resource that is highly accessible. NCEL foresees a future in which the educational electronic infrastructure will spread over all parts of the Kingdom of Saudi Arabia, widening the umbrella of formal and non-formal education to cover all citizens, teachers and learners.

Most faculty members in Saudi Arabian universities publish their academic work to contribute to the theoretical development of their respective disciplines. This is also a means of achieving professional recognition and career advancement. Maknaz addresses the specific needs of faculty members in Saudi Arabia because it provides the widest possible dissemination for each scholarly work. Aside from publishing work by faculty members, Maknaz also serves as a gateway to access various materials that academics can use in their classroom teaching.

Nigerian students tap into mobiles for learning

At the same time, in Nigeria, staff and students at The University of Ibadan have been discovering the educational and administrative benefits of delivering learning materials international focus: elearning in Saudi Arabia and Nigeria

features

via mobile phones, bypassing 'traditional' approaches to elearning. According to the university, making these learning materials available via mobile phones produces a number of benefits for students, teachers and administrators, including:

• the ease with which tests, guizzes and surveys can be distributed and the results gathered and analysed

 potentially continuous interaction in real time between the teacher and student, as well as among students, via the forum and chat room options

erratic and inadequate power supplies... unreliable internet... but 80m in Nigeria have mobile phones

 the ease with which notifications of events, deadlines, timetables and exam timetables can be sent to each student books can be accessed via mobile phone at some ten to 15 percent of the cost of supplying hard copies.

As a result, the University of Ibadan is keen on extending these resources to students of other universities in Nigeria and, indeed, to those in other African countries.

Faced with the increasing need to prepare its students via remotely-accessed elearning for the examinations that will determine their future career paths, the University of Ibadan has partnered with teaching and testing specialist, the Educational Advancement Center (EAC), along with eXact learning solutions. Expanding the 'traditional' idea of delivering elearning via computers, eXact learning solutions has developed a system that delivers the required learning materials via mobile phones seamlessly from its LCMS infrastructure.

"Apart from providing an outstanding learning tool to



students, the University of Ibadan is providing a cost effective communication tool on campus - which can be tracked," said Muyiwa Bamabose, the CEO of EAC. "In addition, we'll be improving the overall quality of education in Nigeria and, possibly, Africa."

Carin Martell. of eXact learning solutions, explained, "In Nigeria — and, indeed, in other parts of Africa some people are 'technology shy'; others can't afford a computer, and many more can't even find one to use. Moreover, erratic and inadequate power supplies, allied to unreliable and inadequate internet



annually, prepares over 300 'A' level students for the Cambridge and London General Certificate of Education, some 80 students for the JAMB University Matriculation Examination, and some 60 students for the American Scholastic Aptitude Test (SAT) eXact learning solutions is transforming 'standard computerised learning material' into materials that have

facilities, contribute to inefficiencies when it comes to using computers to deliver elearning.

today's mobile phones have the computing power of a mid-1990s personal computer

"On the other hand, 1.5 billion people all over the world — and some 80 million people in Nigeria — have mobile phones. In effect, these are powerful computers which provide an ideal delivery mechanism for learning materials," she added.

Today's mobile phones have the computing power of a mid-1990s personal computer (PC) while consuming only onehundredth of the energy. The simplest, voice-only phones have more complex and powerful chips than did the 1969 onboard computer that landed a spaceship on the Moon.

"Educators may see mobile phones as a distraction to learning, yet these are pocket-sized computers that are nearly always 'on', and that means that they can deliver learning materials anywhere, as and when required," Martell continued. "Moreover, because of their design, mobile phones are automatically able to handle audio, pictures and video of good guality, thereby creating powerful tutorial materials." So, in conjunction with EAC – an organisation which,

been specially adapted to be delivered via mobile phone. "This not only makes it easier to deliver the learning

materials to the University of Ibadan's students as and when needed, but it also makes the management of that learning easier, more efficient and more effective," said Martell. "Student activities can be monitored – in terms of who has studied which learning materials sent - and the results copied to teachers, administrators and parents, as necessary, via email or SMS," she added. "In addition, the University can send tests, guizzes and surveys as a broadcast to as many students as necessary at the same cost as sending them to just one student – and the results are collated automatically."

The National Center for e-Learning and Distance Education www.elc.edu.sa/portal/

University of Ibadan http://ui.edu.ng/

Educational Advancement Center www.eacibadan.com/ eXact learning solutions www.exact-learning.com

For over 20 years, Bob Little has specialised in writing about, and commentating on, corporate learning - especially elearning and technology-related subjects. His work has been published in the UK, Continental Europe, the USA and Australia. You can contact Bob via bob.little@boblittlepr.com

coming soon...

Greek and international search engines

Cloud computing
Mobile apps for Canadian public libraries
Reading lists in VLEs
News
Reviews
Technology roundup

Please update us!

We have sent a communication to each of our MMIT Group members this month which outlines what the Group offers members, and asks you to ensure that your current email address is registered with Cilip Membership so that we can keep you abreast of developments.



Your articles, photographs, reviews, thoughts and suggestions for the journal are always welcome, just contact Catherine Dhanjal on catherine.dhanjal@theansweruk.com or call 01883 650434.





If undelivered please return to *MmIT*, 1 Yew Tree Cottages, Woldingham, Caterham, Surrey, CR3 7EA, UK