ECDL FOUNDATION NEWSLETTER

HIGHLIGHTS OF THIS EDITION

Quds Open University Adopts ICDL as University Computer Curriculum Requirement - Palestine

IT Security Recommendations Presented at World Conference on Computers in Education - Poland

WELCOME TO THE JULY 2013 ISSUE OF THE ECDL FOUNDATION NEWSLETTER

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ECDL / ICDL IN ACTION AROUND THE WORLD

" Senior management – IT and non-IT – should jointly assess the strength of key business enablers

Source: Technology Focused Talent Makes Firms More Competitive – INSEAD Report (2013)

QUDS OPEN UNIVERSITY ADOPTS ICDL AS UNIVERSITY COMPUTER CURRICULUM REQUIREMENT – PALESTINE

The Academic Council of Quds Open University (QOU) in Palestine has recently passed a resolution that recognises ICDL as a substitute for the course 'Computer Science 0102' (CS 0102). This decision is effective as of the first semester of the 2013 – 2014 academic year. According to the new legislation, students can complete the ICDL programme instead of completing the course CS 0102.

It is worth noting that the course CS 0102 is a university requirement: all university students must now either successfully complete it or the ICDL certification programme. The number of QOU students is close to 70,000, which makes it by far the largest university in Palestine. QOU accommodates about 35% of the students enrolled in higher education in Palestine. It is interesting to note that about 65% of the student population at QOU is female.

AQAS, the ICDL National Operator in Palestine, and QOU signed a partnership agreement in January 2013 calling for the adoption of the ICDL at QOU and other higher education institutes.

CONCRETE IT SECURITY RECOMMENDATIONS PRESENTED AT WORLD CONFERENCE ON COMPUTERS IN EDUCATION – POLAND

The 10th edition of the 'World Conference on Computers in Education', which is an IFIP (International Federation for Information Processing) event, was hosted by the Nicolaus Copernicus University of Torun (Poland) earlier this month. The conference theme was: 'learning while we are connected'. One of the key aspects discussed during the conference was ICT Security in the education process. A session dedicated to this subject was moderated by the President of the Swiss
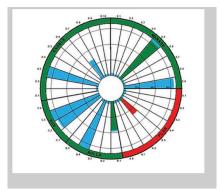
Informatics Society – Professor Bernhard Haemmerli. Session panellists, including Frank Mockler from ECDL Foundation, delivered five recommendations to improve ICT Security among educational stakeholders:

- Introduce ICT security competence to national regulations or guidelines referring to a teacher's qualification profile.

- Education in ICT Security should be mandatory at all levels of education (scholars, apprenticeship, secondary school, university).

- Implement recognised training programmes and certifications that benchmark the user's levels of ICT security skills and knowledge against a publicly expressed standard in the second and third tiers of national education systems.

- Promote security awareness on cyberspace to ensure a secure online environment for conducting scholar, business, governmental and other activities by strengthening collaboration amongst all stakeholders and policymakers.

- Seek the responsibility of all stakeholders, especially parents, for their duties toward a worldwide secure ICT and internet operation.

LINKING POLICY TO PRACTICE: MAPPING THE DIGITAL AGENDA FOR EUROPE

A new platform set up by the European Commission to gather inspiring, high-impact initiatives that help achieve the goals of the Digital Agenda for Europe, has been launched and includes a series of initiatives organised by ECDL National Operators. The map features, among others, a recent initiative on digital literacy for seniors led by ECDL Romania as well as another initiative to counteract digital exclusion in the Podlaskie province organised by ECDL Poland.

THE CEPIS E-COMPETENCE BENCHMARK TO TACKLE IT PROFESSIONALS' SKILLS MISMATCHES

According to recent estimates, up to 900,000 ICT vacancies could remain unfilled by 2015. To help current and future ICT professionals identify the competences they need for various ICT roles and career paths the Council of European Professional Informatics Societies (CEPIS) has developed a new free online interactive tool, the CEPIS e-Competence Benchmark. All participants receive a personal report to steer their professional development and facilitate their future training and education decisions. The CEPIS e-Competence Benchmark was launched in April in support of the European Commission's Grand Coalition for Digital Jobs, which aims to increase the supply of IT practitioners in Europe by 2015. It is powered by the European e-Competence Framework, the common language for ICT competences created by the CEN workshop on ICT skills. CEPIS is the representative body of national informatics associations across greater Europe which, developed the ECDL concept almost 20 years ago. Learn more about the CEPIS e-Competence Benchmark.

VARIETY OF NEW ACCREDITATION PARTNERS AND TEST CENTRES - LATIN AMERICA

ICDL Latinoamérica is pleased to announce the appointment of two new Accreditation Partners (AP), and two new Accredited Test Centres (ATC) in

Latin America. ICDL Latinoamérica has recently finalised arrangements with CORPECE (AP) (Ecuador), Tecmedia (AP), Andes Learning (ATC) and Virtual Cap (ATC), which will help to significantly develop the ICDL network in the region.

CORPECE is an NGO that has been operating in Ecuador since 2000. It is actively integrated into national and international activities in the areas of e-business, academic events and professional training, and in promoting initiatives to develop Ecuador's digital economy.

Tecmedia is a corporation from Costa Rica that has been working since 2007 with the government, universities, secondary schools and companies from different areas in Central America. Their main objective is to provide certified staff nationally to increase economic growth in Costa Rica.

Andes Learning is a SME from Chile, founded in 2004. They currently operate a training and testing facility in the centre of Santiago de Chile and they work nationwide with professionals, private sector companies, and the general public.

Virtual Cap is a Chilean SME that works in education, dealing with more than 40 educational institutions that are interested in certifying their professors and teachers. Currently, the Government of Chile is attempting to accredit teaching skills nationally - including ICT skills - so this is a golden opportunity for them.

VICE-PRESIDENTIAL VISIT FOR ICDL AT NATIONAL ICT SUMMIT – SURINAME

The Vice-President of Suriname was welcomed to the ICDL exhibition booth at the first formal national ICT Summit, held in Paramaribo, in June. The event was not only opened by the Vice-President but also the Chairman of the National Assembly was present – thus highlighting the importance of ICT for the government and for society in Suriname. ECDL Netherlands was one of the keynote speakers at the event, presenting on the topic: 'Improving companies' performance with ICT skills'. The event was an excellent opportunity to talk with partners currently operating in the region, and to approach new ones. The ICDL programme was offered as support to the Government of Suriname's ICT aims in education. Suriname is situated in South America, it has about 500,000 inhabitants, and the country's main language is Dutch.

UNIVERSITY OF CENTRAL ASIA – 'PEER TO PEER EDUCATION' PROJECT

In July 2013, the University of Central Asia (UCA) introduced a 'Peer to Peer Education' project as part of their efforts to increase the pass rate of ICDL at its 'Lyceum 61' school.

UCA selected three top ICDL students, aged 14, to deliver ICDL training to students in Grades 7 and 8. Of the nine students who took the certification exam, all students passed, with the lowest mark at 83 per cent. This is a significant increase in the ICDL pass rate: in 2012, only 16 of 700 students from the Lyceum 61 were awarded ICDL certificates.

Given the success of the 'Peer to Peer Education' project, UCA plans to expand this initiative to involve 200 new students in the ICDL programme next year.

The University of Central Asia was established in 2000 by an international treaty signed by the governments of Kazakhstan, the Kyrgyz Republic, and Tajikistan, and His Highness the Aga Khan. The University's School of

ICDL Latinoamérica

Professional and Continuing Education (SPCE) was launched in 2006 to serve the immediate needs of the communities where the campuses are being built, and to facilitate UCA's approach to reach the broadest spectrum of learners possible.

The School is Central Asia's first provider of post-secondary, short-cycle education with learning facilities in Khorog and Dushanbe, Tajikistan; Naryn and Bishkek, Kyrgyz Republic; Tekeli and Taldykorgan, Kazakhstan; and Faizabad, Afghanistan. SPCE gives young people and adults professional and vocational qualifications in a flexible learning format that improves employment and income generating opportunities.

WANGANUI'S DIGITAL LITERACY CHALLENGE – NEW ZEALAND

TechEx is a community technology exhibition held annually in Wanganui, New Zealand. The exhibition is an initiative of the Wanganui Digital Leaders Forum in partnership with local businesses and the Ministry of Business, Innovation and Employment, among others. The aim of TechEx is to teach the local community about the importance of technology and how it can be used to improve business and education.

2020 Communications Trust, a national umbrella initiative that delivers digital literacy initiatives - including ICDL - was in attendance at TechEx 2013, and had an ICT challenge for the local residents. During this challenge, participants' digital skills were put to the test using a series of sample online ICDL 'diagnostics'. ICDL modules such as Concepts of ICT, IT Security, and Spreadsheets were tested and teams went head-to-head for a chance to be named champion.

TechEx organisers described the challenge as one of the highlights of the event, which also included lifesaving robots, New Zealand Defence Forces vehicles and a retro gaming lounge. Participants ranged in age from 12 - 82 and apparently they know a thing or two about IT security!

The overall winner was Ake Ake Community Technology Centre, which received a prize worth over $7,000 (4,200euro), which included PCs and a printer. Individual winners received copies of Microsoft Office 2013 and the highest overall individual participant took home a Microsoft Surface Pro tablet.

EC CALL FOR TENDERS: E-LEADERSHIP FOR SMES AND E-SKILLS FOR JOBS CAMPAIGN 2014

The European Commission recently published two new calls for tenders related to digital skills. The first call is about providing start-ups and fast growing SMEs with relevant e-leadership skills and qualifications for entrepreneurs, managers and advanced ICT users that are nationally recognised. Tenders for this call can be submitted until 20 September. The second call concerns the organisation of a major communication and awareness-raising campaign in Europe on e-skills for jobs. The main goal is to promote the EU long-term e-skills strategy to fill digital skills shortages, gaps and mismatches, to disseminate experiences and best practice. This call for tender is open until 13 September.

ICDL CERTIFICATE-AWARDING CEREMONY AT LYNFIELD COLLEGE – NEW ZEALAND

During an awards ceremony on 18 June at Lynfield College ICDL certificates were presented to 27 students who had successfully completed the programme. It was very positive that the students were acknowledged in front

of their peers for their success.

The ICDL programme was first established at Lynfield College in 2004 at the Year 12 (age 16) level. In those days teachers had to print off the tests and mark them and send the results off to the New Zealand Computer Society (NZCS), the then ICDL National Operator in New Zealand. At that time, the students used paper-based training materials and practice exercises provided by Wintec, an ICDL courseware supplier. It wasn't until 2007 that Lynfield College moved to the automated testing system, which meant instant results for the students. The ICDL programme now sits at the Year 10 level (age 14), and the students complete the modules over a single year. Since 2007, the school has seen nearly 500 students complete the ICDL programme.

The students enjoy completing the skills-based assessments and are continually challenging themselves to score higher results with each exam. Lynfield College believes that the ICDL programme adds value to the school curriculum, as it develops the digital literacy skills that all people need. Additionally, as a result of completing the ICDL programme, most students gain the confidence and skills needed to tackle any new programme they come across.

FOR DISCUSSION

DIGITAL SKILLS AND EDUCATION

There was interesting news from the UK recently. A new framework for the English National Curriculum was announced by the Department for Education that will roll out in September 2014.

The overhauled curriculum replaces ICT with Computer Science, placing a big emphasis on programming. Children as young as five will be taught about algorithms and how to create and debug simple computer programmes.

There has not been a general consensus on the suitability of the curriculum. Microsoft, Google and Raspberry Pi were pleased with the heavy addition of programming, while The Corporate IT Forum warned there was too much focus on development and not enough on basic IT software.

Commenting on the new curriculum guidelines in an interview with Computing, Secretary of State for Education Michael Gove declared:

"No one knows precisely what skills children will need in the future."

It's an amusing statement because, only recently, two experts tried to define exactly those skills.
Frank Levy of MIT and Richard Murnane of Harvard released Dancing With Robots; Human Skills for Computerized Work to answer "the defining question of our time" (according to the introduction).

Focusing on North American interests, they ask how the country can ensure middle class prosperity in the face of globalisation and rapid technological advancements. The aim is to identify which job roles are future-proof, that will not be automated in 5 or 10 years.

They claim that the future "human" labour market will centre on three types of work: solving unstructured problems, working with new information, and carrying out non-routine manual tasks.

The bulk of the rest of the work will be done by computers. By predicting the future of work, they in turn define the 21st century skills that educators must

provide to the generation that will face a labour market crowded with digital competition.

The spread of computerised work is increasing the importance of education. According to the authors, the future success of the middle class will require giving children "the foundational skills needed to develop job-relevant knowledge and to learn efficiently over a lifetime."

Their guidelines for these skills include closing gaps between different children's cognitive and socio-emotional skills at an early age (4 or 5), ratifying common standards across all schools country-wide, and acknowledging that students will take different routes to these foundational skills, whether academia or career and technical education.

While they don't fully clarify what they consider "foundational skills" to be, the authors do define modern literacy:

"Today literacy includes conducting an Internet search efficiently and judging what small portion of the thousands of the responses to any query provides useful information. Literacy also includes the ability to make sense of the new information constantly encountered as a person faces new problems."

The American computer scientist and Internet pioneer Ivan Edward Sutherland was recently asked about digital literacy; whether he thought it meant teaching children how to create code as well as how to read and write. He replied: "Not necessary. Do kids need to learn to drive? Probably. But do they need to know how to repair an engine? No. Give people the opportunity to learn the skills they'll find useful."

Software developer and creator of Stack Overflow Jeff Atwood begged people not to learn to code on his blog. He says it is a misconception that the key skill of a developer is to write code, when in fact the skill is to solve problems. Solving unstructured problems is one of Levy and Murnane's pillars for future work. However, they don't correlate it exclusively with programming and neither do we.

As a foundation formed on the basis of digital literacy, we applaud every effort to better integrate education and technology. We're also champions of foundational skills, skills that are not industry-focused or sector-reliant. While we don't disagree with children learning code along the alphabet, we'd like this to be part of a wider education of basic skills that benefit every child and their future.

For further reading on this topic, see the ECDL Foundation position paper, 'Developing Appropriate Skills for the Future: Teaching the Right Technology Skills', featured in the 'International Research & Reports' section of this newsletter.

INTERNATIONAL RESEARCH AND REPORTS

ECDL FOUNDATION POSITION PAPER: 'DEVELOPING APPROPRIATE SKILLS FOR THE FUTURE: TEACHING THE RIGHT TECHNOLOGY SKILLS' (AUGUST 2013)

In certain countries there has been considerable recent debate around the development of appropriate ICT skills in schools. Some parties to the debate argue for the development of more industry-led skills, such as programming – at the expense of broad-based digital literacy skills. This position paper argues for a more complementary approach to ICT skills development.

SINGAPORE INSTITUTE FOR ADULT LEARNING/ICDL PRODUCTIVITY RESEARCH PROJECT (JULY 2013)

On average, a Singaporean working adult spends around two and a half hours (151 minutes) every week solving computer related problems. Popular office ICT applications can be a source of wasted time and decreased productivity even for those who work with them every day. After structured computer training with just one application, 26 minutes or 17% of the time, and real financial savings can be made for employers each year.

These are findings from the ICDL Singapore Productivity Research project conducted by the Institute for Adult Learning (IAL), based on the project participants' use of several ICDL productivity-based modules. In Singapore, ICDL standards are aligned against the Workforce Skills Qualifications Employability Skills (WSQ ES) Framework by the Workforce Development Agency.

TELEFÓNICA GLOBAL MILLENNIAL SURVEY: 'TODAY'S YOUNG ADULTS: THE LEADERS OF TOMORROW' (JUNE 2013)

More than 12,000 18-30 year-olds (the so-called 'Generation Y') were surveyed in 27 different countries about their views on subjects such as, their job prospects, their role in society, and the role of technology in the world – now and in the future.

ENHANCING DIGITAL LITERACY IS A PRIORITY FOR LOCAL AND REGIONAL AUTHORITIES IN THE EU (JULY 2013)

74% local and regional authorities in the European Union (EU) have identified the development of digital literacy, skills and inclusion as the most relevant aim of the Digital Agenda for Europe (DAE), according to a survey carried by the Committee of the Regions.