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IN THIS ISSUE

FROM SEFI
SEFI AND EEDC AT THE 2013 GEDC CONFERENCE 2
SEFI at the 6th International Presidents’ Meeting of European Engineering Chambers & Organizations 3

FROM MEMBERS
MATHWORKS 3
HP 4

FROM PARTNERS
IFEES, GEDC, ASEE 5
EUA 6
IACEE 7
ASIIN 8

CALENDAR 9

INTERNATIONAL PRESS REVIEW & GENERAL NEWS
EU NEWS 10
TIMES HIGHER EDUCATION RANKING 12
PROMOTING TECHNOLOGY IN EDUCATION 13
HIGHER EDUCATION IN ENGLISH 14
INTERNATIONAL COLLABORATION - CHINA 14
GENDER AND ENGINEERING 15
MOOCS 16
SKILLS 16
STEM 17

REMINDER!!!
LAST CHANCE TO REGISTER FOR THE « HP INSTITUTE, DEDICATED SEFI MEMBERS’ WEB CONFERENCE »
MORE INFORMATION ON PAGE 4
From SEFI:
SEFI and EEDC at the 2013 GEDC Conference

The 2013 Annual Conference of the Global Engineering Deans Council was held in Chicago (Palmer House) on 20-23 October 2013 on the theme of “Online Digital Education and Transformed Faculty Roles”.

F. Côme, in her capacity of SEFI and EEDC Secretary General and recently elected as IFEES Vice President for Europe, attended the three-day event together with 230 deans and corporate top officers and CEOs from approximately 30 countries. The conference presented an opportunity to establish new contacts with deans from all over the world (a few of them being from Europe) and with companies not yet involved into the SEFI network, such as Total, Airbus, Boeing, Quanser etc. It was of course a good occasion to reinforce the cooperation and good relationships with partners and friends from several partner organizations outside Europe. The contacts with our colleagues from GEDC and IFEES were also reinforced as several informal meetings were held further to the regular conference programme.

The conference was articulated on a series of plenary sessions on “Engineering Education in a Global-Technology-Driven Environment” (with a plenary presentation given by Seeram Ramakrishna, National University of Singapore), on “Globalization of Engineering Education” (C.D. Moote, US National Academy of Engineering), on “Online, Open and Digital Education” (with Tae Eog Lee, Dean of Korean Advanced Institute of Science and Technology), of panel discussions on “The Impact of Globalization and Information Technology on Engineering Education”, on “Digital Education” (incl. MOOCS), on the “Global Aspects of Research”, … with also two parallel sessions on “New dean Mentoring” and on “Accreditation in Engineering Education”.

Another panel on “Engineering Education in a Globalised World” was moderated by SEFI Vice-President, Xavier Fouger (Dassault Systems) and Alaa Askmawy, Dean of American University of Dubai and host of the IFEES and GEDC Conferences 2014. The panelists were Satish Upda, Michigan State University, Michael Richey, Boeing USA, Sirin Tekinay, Dean Kadir Has University Istanbul (and EEDC member) and Janie Fouke, Nanyang Technological University Singapore, the closing session being moderated by Paul Peercy, Dean Emeritus College of Engineering, University of Wisconsin-Madison. So many top level presentations and contributions were given by other high profile experts and friends that their list would be too long to be presented herewith. F. Côme had the opportunity to report on the recent achievements of SEFI and EEDC to the audience.

All the presentations should be soon available on www.gedcouncil.org.

Participants of the main plenary

Prof. Tuncay Dogeroglu

From left: Profs. Fouger, Rajala, Fraser, Quadrado
From left: Profs. Borri, Ramakrishna, Hoyer
SEFI at the 6th International Presidents’ Meeting of European Engineering Chambers & Organizations

On October 11th, 2013, the 6th International Presidents’ Meeting of European Engineers’ Organizations took place in the European Parliament Office in Athens, hosted by the Technical Chamber of Greece. The special theme of this meeting was the 100th celebration of legislation on Engineering as Regulated Profession, serving the public interest, the safety and quality, building the growth and the welfare in Europe. SEFI was represented by its Vice President, Prof. Antonia Moropoulou, Vice Rector of the National Technical University of Athens. She presented the mission of SEFI and its strategic goals, interconnecting Engineering Education with employability, entrepreneurship and innovation. She also intervened in the Athens declaration that was announced after the meeting, regarding the need to strengthen European Higher Engineering in a sustainable direction enabling European societies and European states to face the crisis.

The text of the declaration is available on www.sefi.be

From Members

From Mathworks

New Report by MathWorks Shows Universities and Industry United on Extent of UK STEM Skills Gap

Nearly six in ten employers of science, technology, engineering and math (STEM) graduates surveyed think there is a skills gap in the UK, a new study by MathWorks in collaboration with YouGov shows. The “STEM Skills Gap Report” surveyed more than 300 employers and 24 of the country’s leading Russell Group academics and found that 59% of businesses and 79% of universities surveyed believe there aren’t enough skilled candidates leaving education to meet industry’s employment requirements. The survey also demonstrates a need for greater collaboration between academics and businesses. (...)

Key findings:
The extent of the skills gap:

- More than six in ten (61%) business leaders and 68% of academics who think there is a skills gap believe it will take over ten years to close.

- More than half of both groups (51% of industry and 53% of academics) believe investment in the teaching of STEM in Further Education and Higher Education is not as high as in other countries.

Industry and academia collaboration:

- Universities and businesses polled are united in a belief that the skills gap can be mitigated with greater collaboration between academia and industry. Over half (52%) of employers and almost two-thirds (64%) of academics included in our survey think that industry does not currently work closely enough with universities.

- Of academics who want industry to have more say in the STEM curriculum, all respondents want industry to provide workplace experience to students in STEM subjects. 82% would welcome guest experts from industry to give talks at schools and universities.

Different approaches to closing the gap:

- Whereas more than six in ten (61%) businesses surveyed think there needs to be more project-based learning in STEM subjects, to engage students in the investigation of science and real world engineering problems, only a third (34%) of academics polled think the same.

- While more than half (56%) of employers believe students cannot reach their potential in the area without project-based learning, this view is shared by just over a third (37%) of academics.

To read the full report, please visit http://www.mathworks.nl
From HP

“HP Institute, Dedicated SEFI member’s web conference” - Reminder!

SEFI along with our strategic partner HP are inviting innovative SEFI members to contribute and benefit from the EU Grand Coalition initiative to develop closer alignment between Industry and Academia.

**IT Skills Gap – new skills profile**

HP built a new academic certification program, HP Institute, from the ground up to address the growing IT expertise gap. Our leading CEOs/CIOs are experiencing increased difficulty in acquiring individuals that meet the needs of changing IT technologies and new skills profile. This new profile focuses on three main skills deficits: Business Context Awareness, End-to-end Technology Expertise and Hands-on Experience.

**Business Context Awareness:** It's not enough for IT professionals to have skills in their technical space, they need to know how and when to apply those skills to best meet business objectives.

**End-to-end Technology Expertise:** The ‘Specialist’ role (Storage specialist/Network specialist/etc) is going to become less important in the future – employers want IT professionals with a broad understanding of the whole solution and not to be “siloed” specialists in only one area.

**Hands on experience:** Experience means more confidence, lower onboarding time and increased productivity for a new employee to quickly become a valuable member of the team.

**HP Institute offerings (based on industry standards – powered by HP)**

The HP Institute provides a curriculum of training and hands-on experiences to prepare students to achieve an HP ATA (Accredited Technical Associate) certification. The IT Career Path includes certification covering Connected Devices, Networks, Servers & Storage and Cloud. The Business Career Path currently provides the industry’s first IT-focused business certification for students. Through this comprehensive program, students are able to learn all aspects of an IT solution and can architect end-to-end SMB level IT solutions.

To help support your initial interest and questions, Tuuli Sornikivi welcomes you to register for a dedicated SEFI member’s web meeting/conference 19th November 4 pm CET (this is the new date!). Please register your interest or record your questions by emailing: tuuli.sornikivi@hp.com and you will receive a calendar meeting invite with joining instructions to an online conference facilitated by Global Academic Programme leader Brian Beneda.

*For more detailed information, please visit the SEFI website.*

**HP Institute: Closing the IT Skills Gap**

Every generation has had an industry that changed the fabric of society. In the last 40 years, information technology (IT) has been that defining industry, driving unbelievable change in how we work and live. It is a connected world filled with great promise. However, for the 75 million unemployed young people in the world (23.4% youth unemployment Europe), the question is how can they tap into the promise of this digital age?

The irony is there are plenty of good jobs out there, especially in IT. For businesses today, technology is a vital part in reaching new customers, improving productivity, reducing costs, and innovating effectively. Companies are looking to adopt trending technologies such as social, mobility, big data, and cloud to keep from being outmaneuvered by those who do. As a result, the demand for employees with IT skills is increasing.

Recent research has found that:

1. The demand for cloud-ready IT workers will grow by 26 percent annually through 2015
2. More than half of CIOs are “very challenged” to find qualified staff to design, architect, and manage game-changing IT concepts like converged network infrastructures and cloud computing
3. The biggest reason managers fail to fill open cloud-related positions is because job seekers lack the training needed to work in a cloud-enabled world
Employers are seeking well-rounded individuals who possess IT expertise across the enterprise including operating systems, networks, servers, and storage. Breadth and depth of knowledge are important.

And, on top of the end-to-end technical skills, the new IT profile calls for a person who understands how IT supports the business and knows how to improve the business through better application of technology—aligning business objectives with IT.

For traditional education, keeping pace with technology and the needs of the labor market is very challenging which is why HP developed a certification program for academia to help educators effectively teach, apply, and validate relevant IT skills for the entire enterprise. For HP, we want to ensure that the over 1 billion customers we serve are able to implement the cutting-edge innovations in the industry. We want to work diligently with academia to develop the business-minded IT experts for today and the future.

With HP Institute, we offer the comprehensive course content geared for modern data centers based on open standards and real-world scenarios. The HP Accredited Technical (ATA) certifications are mapped to the e-Competence Framework to ensure employers understand the competence gained. HP ATA certification signifies productivity from day one with IT skills that reflect business savvy. Innovative course materials for the new IT profile.

For HP, to navigate this brave new world and take advantage of technology trends, our customers need well-rounded talent who can transform their business and innovate like never before. Join an industry leader to help close the IT skills gap by developing skills employers need, thereby, helping young people start careers in information technology with great opportunities to advance.

Visit HP Institute to learn more or contact us at: hpinstituteprogram@hp.com

From Partners

1st ICTIEE International Conference on Transformations in Engineering Education

The world needs outstanding engineering talent to address the challenges facing humanity. The vision of this International Conference on “Transformations in Engineering Education” (ICTIEE) is to bring together leaders of engineering education from across the world for “Sharing Best Practices of Transformations in Learning Outcomes at Engineering Institutions”. The Conference will be held at BVB College of Engineering and Technology (BVBCET), Hubli, Karnataka, India from January 16 to 18, 2014.

This college is one of several colleges in India, which has undergone significant transformations in recent years, thanks to the Indo-US collaboration for Engineering Education (IUCEE) (www.iucee.org).

IUCEE along with the International Federation of Engineering Education Societies (IFEES), the Global Engineering Deans Council (GEDC) and the American Society for Engineering Education (ASEE) are co-sponsors of this Conference. The conference is supported by TEQIP, a program of the Government of India.

The conference proceedings will include paper presentations, key note presentations and panel discussions. An IUCEE Summit and a IUCEE-GEDC Chapter meeting will convene in parallel with this Conference. We expect about 300 leaders of engineering education from across the world to share best practices at this conference.

Attention: The deadline for Paper submission has been extended to November 10, 2013.

More information on http://www.ictiee.org/index.html
From EUA

'Making sense of the MOOCs' - report from ACA-EUA Seminar in Brussels (10 October)

Around 150 participants, including representatives from higher education institutions and associations, public authorities, quality assurance agencies and the media, gathered (...) for the Academic Cooperation Association (ACA)-EUA Seminar "Making Sense of the MOOCs".

The event was designed to enable participants to discuss and find out more about the development and potential impact of Massive Open Online Courses (MOOCs), which have been developing rapidly and are creating much discussion and debate in Europe and further afield. Speakers at the event included representatives from HE institutions in Europe and the US, MOOC platforms and representatives from ACA and EUA.

While the initial development of MOOCs was largely concentrated in the US, there has recently been a sharp increase in the number of European HE institutions offering them. According to the European MOOC scorecard on the EC's Open Education Europa website there were more than 250 MOOCs across Europe at the end of August.

Some institutions in Europe have preferred to offer courses through platforms/activities initiated in the US such as Coursera, edX and Udacity. Others have joined the growing number of initiatives launched in Europe (such as Future Learn and Iversity), some of which have received public funding or government support (such as France Universite Numerique), or have launched their own MOOCs. In April, with the support of the European Commission, the European Association of Distance Teaching Universities also launched OpenupEd, described as the first pan-European MOOC initiative.

(...) It was clear from different presentations that there are a number of challenges and open questions with regard to the future development of MOOCs. While there is an expectation that MOOCs could contribute to improving the cost effectiveness of higher education, questions still remain about the development of sustainable economic model(s) for MOOCs platforms and universities given the costs in developing and producing such courses and making sure they will be up to date.

(...) Following this event, EUA will continue, on behalf of its membership, to monitor developments and undertake activities in this important area of MOOCs and e-learning. It is currently preparing a more detailed paper on MOOCs to update members and that will be published shortly on the EUA website/newsletter. The online survey, the second half of which is dedicated to Massive Open Online Courses (MOOCs) can be accessed here until 18 November.

More information on http://www.eua.be/

DEFINE project: call for expressions of interest to participate in focus groups

EUA will organise three focus groups with university practitioners during the first half of 2014 as part of the DEFINE project ("Designing strategies for efficient funding of higher education in Europe"). This EUA-led project analyses the impact of funding efficiency measures such as performance-based funding, mergers and concentration measures, as well as excellence schemes, on higher education institutions in Europe.

The call for expressions of interest, published this week, invites experts from higher education institutions across Europe who are experienced in these topics to participate in the three focus groups (maximum 20 people in a group) each tackling one of these funding efficiency measures.

The first focus group (on performance-based funding) will take place in Copenhagen, Denmark (19-20 February 2014); the second (mergers and other concentration measures) in Helsinki, Finland (28-29 April 2014); and the third (excellence schemes) in Erlangen, Germany (11-12 June 2014).
Their purpose is to identify good practice, challenges and pitfalls, as well as the impact of these three measures on the management and the activities of higher education institutions. Furthermore, the groups will give participants the opportunity to exchange their experience with peers and network, get access to first findings from the DEFINE project and directly contribute to the policy development at national and European level.

The results will feed into the final project publication and will also be discussed and presented to the higher education funding community at the 2nd EUA Funding Forum in autumn 2014.

More information on [http://www.eua.be/](http://www.eua.be/)

### Call for presentations for EUA Annual Conference 2014

EUA has published a call for presentations from EUA member institutions for three working groups during its next Annual Conference. The conference "Changing landscapes in learning and teaching" will take place at the Université Libre de Bruxelles (ULB) in Belgium from **3 to 4 April 2014**.

EUA invites proposals from university leadership and senior management (rectors, vice-rectors, directors of learning and teaching or academic affairs) at EUA member institutions to present the experience of their institutions in learning and teaching innovation during these working groups, which will take place on Friday 4 April.

The groups will explore three specific aspects of the changes that are taking place in learning and teaching: university learning and teaching in the digital age; the impact of the introduction of Bachelor and Master degrees across Europe and the impact of internationalisation and mobility on learning and teaching.

*More information on how to submit a proposal by 6 January 2014 is available on the [EUA website](http://www.eua.be/).*

### ACA-EUA-DAAD-EAIE Seminar on Euro-African cooperation in higher education, Brussels (13 December 2013)

On 13 December, the Academic Cooperation Association (ACA), together with EUA, the European Association for International Education (EAIE) and the German Academic Exchange Service (DAAD) will organise the one-day Policy seminar in Brussels entitled "For mutual gain: Euro-African cooperation in higher education".

The event will cover a number of issues such as: recent overall trends and developments in African higher education; internationalisation in African higher education and cooperation in higher education between Africa and Europe.

For decades, Africa has been viewed as the ‘problem child’ of this world. Higher education in Africa was no exception to this rule. It was perceived as under-resourced and, more important, seriously under-achieving. Not that the major challenges have disappeared overnight. But recent years have witnessed important change, at least in part of the vast continent’s higher education systems and institutions. This is one of the many good reasons to take a fresh and unbiased look, and to re-evaluate African higher education. This is exactly what the seminar For mutual gain: Euro-African cooperation in higher education is intended to do.

No. 40 in the ACA European Policy Seminar series, this event is special. It is co-organised by the European University Association (EUA), the European Association for International Education (EAIE) and the German Academic Exchange Service (DAAD). Together, the four organisations have created a rich and multi-faceted programme, with three main thematic orientations: Recent overall trends and developments in African higher education, internationalisation in African higher education and cooperation in higher education between Africa and Europe.

The seminar features as speakers some of the finest specialist on African higher education and on Euro-Africa collaboration. We are proud to announce presenters from the World Bank, the European Commission, and from universities across Europe. Moreover, we are especially proud that half of the speakers at this seminar are African academics. Thus, you will receive information and analysis from the “original source”.

*More information on the event and registration is available through the [ACA website](http://www.aca-net.org/)[ and EUA members benefit from the same reduced fee as ACA members.]*
From IACEE

IACEE Call for Papers deadline extended to November 22, 2013

The International Association for Continuing Engineering Education (IACEE) has extended the abstract submission deadline for the 14th World Conference’s Call for Papers June 24-27, 2014 at Stanford University. Short (100-150 word) paper abstracts submitted before November 22, 2013 will be considered.

IACEE conference committee is seeking original papers to enhance and foster discussions on issues changing education today. The conference tracks are:

**Innovation in Education** - Massive Open Online Courses (MOOCs), flipped classrooms, and blended/hybrid learning models are changing the learning experience. Explore the impact of innovation on continuing engineering education and discuss best practices for managing change and optimizing outcomes.

**Industry and University Collaboration** - Continuing engineering education creates a bridge between academia and industry. Through case studies or best practices, share the challenges in developing and maintaining successful industry-academia partnerships, and how these relationships maintain their effectiveness.

**Global Workforce of Tomorrow** - Today’s engineers need to commit to lifelong learning to succeed in a changing global economy and in work environments that are becoming more virtual and cross-cultural. How can universities, industry, public sector groups, and continuing engineering education organizations work together to meet these challenges?

All interested may join IACEE at Stanford University in June 2014 to explore innovative solutions for online and mobile education, examine lessons from academia and industry partnerships and get strategies to educate next generation learners.


or contact IACEE via email at [iacee2014@stanford.edu](mailto:iacee2014@stanford.edu)

From ASIIN

ASIIN Annual Conference 2013 “QM reloaded - Interlinking Internal and External Quality Assurance at Higher Education Institutions”

Online registration for the ASIIN Annual Conference 2013 that will take place on 12 and 13 December 2013 at the Le Méridien in Stuttgart is now possible.

The topic of this year’s conference is “QM reloaded - Interlinking Internal and External Quality Assurance at Higher Education Institutions”. The main questions to be discussed are: What do we mean by quality in higher education? What are suitable tools for making quality visible and transparent? Higher education institutions are increasingly developing distinctive profiles and presenting themselves on the respective national and international stage. Consequently, they need to create transparency on the quality of their services to a wide range of stakeholders at minimal cost. ASIIN responds to this need with its “model of connectable procedures” in internal and external quality assurance and enhancement in higher and further education.

The conference aims at representatives of the professions and economy, representatives of higher education institutions (HEI), representatives of ASIIN member organizations, peers and committee members of ASIIN e. V. and all others that are interested in the topic.

More information and registration on [http://www.asiin-ev.de](http://www.asiin-ev.de)
November 2013

2-4 Antigua, GT
ICBL International Conference (link)

6-9 Lexington, USA
16th Annual Colloquium on International Engineering Education (link)

7-11 Mannheim, DE
Conference on Engineering Education (link)

11-12 Budapest, HU
EIT awards 2013 (link)

18 Brussels, BE
European Commission is organising "Innovation in Higher Education (link)
SEFI will be represented by Françoise Côme

20-23 Minneapolis, USA
CIEE Annual Conference 2013 (link)

21-23 Gothenburg, SE
European Quality Assurance Forum (link)

25 Brussels, BE
SEFI Bureau Meeting

27 Warsaw, PL
"University-Business Cooperation – Driving Innovation and Growth" (link)

December 2013

4-6 Berlin, DE
ONLINE EDUCA BERLIN 2013 (link)

12-13 Stuttgart, DE
ASIIN Annual Conference 2013 (link)

13 Brussels, BE
ACA-EUA-DAAD-EAIE Seminar on Euro-African cooperation in higher education (link)

16 Brussels, BE
SEFI Administrative Council Meeting

17 Brussels, BE
ECED 2014 meeting, SEFI Headquarters

January 2014

6-9 Tampa, USA
IDEAL - Institute for the Development of Excellence in Assessment Leadership (link)

16-18 Hubli, IN
1st ICTIEE International Conference on Transformations in Engineering Education (link)

MARK THE DATES!!!
ECED 2014, VI European Convention for Engineering Deans, organised by SEFI and CESAER in cooperation with the Lund University Lund, 2-3 April 2014

Please find the complete list of our upcoming events on www.sefi.be.

The SEFI/ IFEES International Higher Engineering Education Events calendar

This calendar created by SEFI with the participation of IFEES is built on a Google calendar frame.

It provides useful details and links, and allows direct integration in your calendar.

The calendar is available directly through the SEFI homepage.
EU News

The new Erasmus+ programme will boost higher education staff mobility from 2014. But what is staff mobility?

(...) As the debate on internationalisation of higher education grows stronger, so does the interest in mobility not only of students, but also of staff. This is likely to intensify in the coming months, as the European Commission’s new Erasmus+ programme, starting in 2014, promises more opportunities and funding for higher education and teaching staff to study, train and work in another country. Indeed, higher education staff will account for a significant percentage of the 1 million beneficiaries of a mobility period funded by the programme between 2014 and 2020.

Staff mobility is seen as a vital and often cost-effective means of creating ‘internationalisation at home’ – enabling students to (in)directly experience another higher education culture on site. It is also widely believed that staff mobility has an additional value in acting as a catalyst for student mobility.

However, although higher education policy papers often contain positive statements on staff mobility, reality is complex. Information on what is already done in the field is difficult to find. The 2012 Bologna Process Implementation Report, for example, attempted to identify comparable European statistical data, but was only able to use information provided by the Erasmus staff exchange programme – an important support programme, but one that is able to provide only part of the picture of European staff mobility.

(...) The Eurydice report sets out to fill at least part of the knowledge gap. Its purpose is to provide information on specific country actions that support staff mobility. It is clear that these actions vary greatly from country to country – from very developed programmes (such as those in Germany and the Nordic countries) to much more limited and targeted actions.


University-Business Cooperation – Driving Innovation and Growth

The European Commission in cooperation with the Polish Ministry of Science and Higher Education are organising a Thematic Forum “University-Business Cooperation – Driving Innovation and Growth” in Warsaw, on 27th of November 2013.

This Thematic Forum on University-Business Cooperation offers a comprehensive view on how to bridge the gap between the sectors of higher education and of business, and to explore the advantages and value of a sustained closer cooperation. The priority of strengthening university-business cooperation in Poland is reflected in the legislative as well as practical perspective.

The recent reforms of science and higher education introduced specific measures for boosting entrepreneurship and science-industry partnerships. Several programmes have been launched to support entrepreneurial skills development and activities carried out jointly by industry and scientific players.

The meeting provides an opportunity to promote initiatives that will be available under the new EU mobility programmes Erasmus+ and Horizon 2020. University-Business cooperation will be one of the axis of support within the new EU financial perspective especially the funds for innovation and human capital development.

Good practices and topics raised during the meeting may contribute to elaboration of the new operational programmes. Representatives from both higher education institutions and companies across Europe are invited to share their experiences, to get feedback on the on-going cooperation activities and to develop fresh ideas together.

For more information, please send an email to EAC-UNIVERSITY-BUSINESS-COOPERATION@ec.europa.eu
Joining forces on apprenticeships

On 18 October, the European Alliance for Apprenticeships gathered in Brussels to discuss ways to improve and expand high quality apprenticeships across Europe.

Apprenticeships ease the transition of young people into jobs, providing the skills which employers need, and are seen as one of the keys to bringing down youth unemployment in Europe. The European Alliance for Apprenticeships initiative was launched in July as a way to mobilise stakeholders in the education, training and employment sectors to strengthen the supply, the quality and the image of apprenticeships across Europe.

Are you interested in contributing? There are many ways to get involved. So far, around 40 stakeholders, including social partners, chambers, education and training providers, businesses and youth organisations, have joined the Alliance. Many of them signed pledges with concrete commitments to take action and join up with relevant partners. Others are acting as ‘Ambassadors’ by contributing their experience of running apprenticeships in the business sector.

During the Education, Training and Youth Forum in Brussels, these pledgers and Ambassadors met to share experiences and discuss the way forward. Last week, EU Member States also signed a Council Declaration on the European Alliance for Apprenticeships and are now expected to lay out their concrete plans through pledges.

More information on http://ec.europa.eu

MEPs vote back the European Union’s research money

Hopes have risen that a significant cut to European Union research grants for 2014 can be avoided, following a vote in the European Parliament last week to restore money dropped from the budget by the council of EU government ministers earlier this year – although final agreement will not be reached until mid-November.

Last Wednesday the European Parliament voted overwhelmingly for an EU budget of €142.6 billion (US$197 billion) in commitments for 2014.

While this is some €8.1 billion less than in the current year, reflecting the general austerity approach taken by governments across Europe in recent years, the parliament did move to reverse cuts of €629 million proposed by the Council of Ministers in the summer.

The cuts were in areas that MEPs said were vital to boost the economy in the longer-term, such as the digital agenda, research, entrepreneurship and youth employment measures.

The parliament and the Council of Ministers have joint authority over the level of EU spending and any differences between them have to be settled through a conciliation process, which began last Thursday.

The process can last for 21 days. If agreement is reached the budget will come back to the parliament for a final vote in November and the EU’s final financing arrangements for next year can be tied up well before the year-end.

The signs are reasonably encouraging for a quick deal. The difference between the two sides is small – less than €1 billion. In previous years it has been several times greater than that.

In respect of research, moreover, both sides are on record as favouring a continued high level of investment.

(…) An amending budget for 2013 is still required, while negotiations over the multi-annual framework spending programme for 2014-20 may cast a forward shadow over proceedings.

More information on http://www.universityworldnews.com
Ranking

East Asian universities gain ground on US and UK – Times Higher Education ranking

The erosion of the United States and United Kingdom’s domination of global university league tables is continuing, according to analysts reviewing the 2013-14 Times Higher Education World University Rankings (…).

While the pace is slower than suggested when last year’s rankings were released, it is apparent that while universities in America and in London are holding their own, institutions in the UK’s regions and in continental Europe are losing out to competitors from Asia – and specifically from China, South Korea, Singapore and Japan.

The top 10 institutions remain unchanged from last year, although there has been some movement among them. While California Institute of Technology, or Caltech, again tops the table, Harvard displaces Stanford from equal second with Oxford.

Below the top three the order is Stanford (down from second), Massachusetts Institute of Technology, Princeton, Cambridge, University of California, Berkeley (up one place), Chicago (up one place) and Imperial College London (down two places).

Europe

THE analysts point to “alarming signs” across continental Europe, as the top universities in Germany, France, Switzerland, The Netherlands, Russia, Belgium, the Republic of Ireland and Austria all fall, while leading institutions in China, South Korea, Singapore and Japan make gains.

The Netherlands has 12 players, followed by Germany with 10 (down from 11 last year), France with eight, Switzerland with seven and Belgium with five (one more than last year). ETH Zürich – Swiss Federal Institute of Technology Zürich – the leading university outside the US and the UK, drops two places to 14; the University of Munich falls out of the top 50; and the pattern is reflected in Belgium, France, The Netherlands, Ireland and Austria.

United Kingdom

Overall, after signs of decline last year, the UK has held firm as a nation in the tables: it retains three of the world top 10 positions, seven of the top 50, 11 in the top 100 – up from 10 last year – 31 in the top 200 universities and 49 in the top 400. While 14 UK top 200 institutions fell this year, 14 also rose, while three retained their positions.

London now has four universities in the top 40 (up from three) – more than any other city – and six top 200 institutions – more than Japan, the world’s third largest economy (five), China, Sweden or South Korea. (…) But the results have raised concerns that power is draining from the UK regions, while what THE describes as the ‘golden triangle’ of London, Oxford and Cambridge prospers. (…)

Asia

Many universities in Asia improved their performance, with the University of Tokyo still Asia’s number one and up four places to 23. The National University of Singapore is second in the region (up from 29 to 26) while South Korea's Seoul National University moves into the top 50 for the first time (44), followed by the Korea Advanced Institute of Science and Technology (up from 68 to 56). Peking University in China creeps up one place to 45, and close rival Tsinghua University rises two places to joint 50. While the University of Hong Kong is one of the few leading East Asian institutions to fall in comparison with 2012-13 (down eight places to 43), the Hong Kong University of Science and Technology (57) and the Chinese University of Hong Kong (joint 109) both make significant gains.

Global

There are 26 countries in the world top 200 list – two more than last year due to Turkey, Spain and Norway rejoining the group with Brazil dropping out.
Eight countries now have only one top 200 representative: Austria, Finland, New Zealand, Norway, South Africa, Spain, Taiwan and Turkey.

Africa has only a single representative – the University of Cape Town (joint 126th, down from 113) – in the top 200 and three in the top 400, with the Witwatersrand in the 226-250 group and Stellenbosch between 301-350.

Oceania has eight universities in the top 200, led by Melbourne at 34 and including New Zealand's Auckland at 164. Australia has 19 universities in the top 400 and New Zealand five.

(…) Data for the rankings were provided by Thomson Reuters from its Global Institutional Profiles project, a multi-stage process that collects and validates factual data about academic institutional performance across a range of aspects and multiple disciplines.

More information on [http://www.universityworldnews.com](http://www.universityworldnews.com)
The full tables are available [here](http://www.universityworldnews.com)

**Promoting technology in education**

**Campus IT Officers Affirm the Instructional Integration of IT as Their Top Priority, Offer Mixed Reviews on IT Effectiveness and Outsourcing for Online Education**

New data from fall 2013 Campus Computing Survey reveal that CIOs and senior campus IT officers view instructional support and IT service issues as their top technology priorities over the next two-three years. The survey participants also offer a mixed view about the effectiveness of campus IT investments. And as a group, campus IT officers are not sanguine about MOOCs or outsourcing campus efforts to expand online programs as viable instructional strategies or as effective revenue strategies for their institutions.

**Campus IT Priorities**

Four-fifths (79 percent) of the CIOs and senior campus IT officers who participated in the fall 2013 survey report that “assisting faculty with the instructional integration of information technology” is a very important institutional IT priority over the next two-three years. Three-quarters (73 percent) also identify “providing adequate user support” and “leveraging IT resources to advance the student success/student completion agenda of my campus” as top priorities.

**MOOCs and Online Education**

CIOs and senior campus IT officers are not overly optimistic about MOOCs – massive, open, online, courses – as a viable strategy for instruction or for revenue. Just over half (53 percent) agree that MOOCs “offer an effective academic model for the effective delivery of online education” while less than a third (29 percent) view MOOCs as offering “a viable business model” for campuses to secure new revenue from online courses. Yet even as senior IT officers are not sanguine about MOOCs, which may be offered by a consortia elite institutions (edX, created by Harvard and MIT) or for-profit firms (such as Coursera and Udacity), the 2013 data reveal that a small but significant number of campuses are contracting with third party providers for various services (recruitment, curricular development, student services) to help develop or expand their online programs. (…)

**More Colleges Go Mobile**

The 2013 survey documents another year of solid gains in the proportion of colleges and universities that have activated mobile apps. Four-fifths (79 percent) of the campuses participating in this year’s survey have activated mobile apps as of fall 2013 or will do so in the coming academic year, compared to three-fifths (60 percent) in fall 2012, 42 percent in fall 2011, and 23 percent in fall 2010. Across sectors, private universities lead the move to mobile: 95 percent will be up on mobile apps by the end of the current academic year, followed by 93 percent of public universities, 85 percent of public four-year colleges, and approximately 70 percent of both private four-year institutions and community colleges. (…)

The 2013 Campus Computing Survey is based on survey data provided by senior campus IT officials, typically, the CIO, CTO, or other senior campus IT officer, representing 451 two- and four-year public and private/non-profit colleges and universities across the United States. (…)

More information on [www.campuscomputing.net](http://www.campuscomputing.net)
Shift to strategic international research collaboration

A shift is underway in China from making a mark globally as a research power, towards an increasingly strategic ‘innovation diplomacy’ that is shaping “the spread and intensity of its global research and innovation relationships”, according to a new study.

The report by NESTA, formerly the non-profit National Endowment for Science, Technology and the Arts in the United Kingdom, notes that “an ever-intensifying web of international connections has spread across every aspect of China’s innovation system – from joint academic research to technology transfer and licensing, foreign direct investment, mergers and acquisitions.

“As a result the Chinese system is densely connected to sources of expertise elsewhere.” In the 2000s China was intent on building up domestic research capacity, and there has been a dramatic rise in articles published in international journals. Now, alongside a continued supportive environment for home-grown research, the country is turning to a more sophisticated assessment of what the world has to offer.

There is a willingness “to buy expertise off the shelf”, according to China’s Absorptive State: Innovation and research in China, which was released on Monday. “China is in an absorptive state, increasingly adept at attracting and profiting from global knowledge and networks,” it said.

The country is “starting to become more selective about where it sources its knowledge and focusing on partners who can make a significant collaborative contribution”. “Time and again we see examples of highly targeted collaborations in research and innovation,” according to the NESTA report.

More information on: http://www.universityworldnews.com

International Collaboration

Shift to strategic international research collaboration

A new briefing paper published by IIE’s Center for Academic Mobility Research suggests that the number of English-taught Master’s Programs in Europe has increased significantly since 2011. The paper, English-Taught Master’s Programs in Europe: A 2013 Update, is an update of a report published by IIE in June 2011, and provides a data-driven look at the continued growth of master’s programs in Europe taught entirely or partially in English.

In recent years, European countries in which English is not the primary language of instruction have developed an increasing number of programs taught either fully or partly in English in order to serve domestic demand for higher education in English and to attract students from around the world.

The authors, Megan Brenn-White and Elias Faethe, examine statistics that they have obtained from MastersPortal.eu, an online directory and comprehensive source of information about postgraduate degree programs in Europe. The authors examine the growth of English-taught master’s programs in Europe, including the total number of programs offered by country and academic discipline, their duration, and data on prospective students.

According to the report, as of June 2013 the total number of English-taught programs in Europe was 6,609, a 42 percent increase since 2011. The top host countries for English-taught Master’s programs are: Netherlands, Germany, Sweden, France, and Spain.

More information on http://www.iie.org
The full report can be found here

Higher education in English

Euro rivals adopt English in fight for overseas students

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Gender and Engineering
Willetts ends ELQ rule for part-time engineering and tech degrees

Fee loans will be offered to students studying engineering and technology part time as second degrees in a bid to attract more women to the subjects.

David Willetts, the universities and science minister, made the announcement in a speech at the Conservative Party conference in Manchester, where he also unveiled £200 million of funding for science and engineering teaching facilities.

(…) Mr Willetts argued that UK science and engineering was key to making the nation competitive. (…) “Our aim is for Britain to be the best place in the world to do science,” Mr Willetts said. “That is the challenge Brian Cox has set, and Brian we are up for that.” But to achieve that we must invest long term and get the next generation doing science and engineering.”

Mr Willetts added that the two announcements were designed to boost the number of women taking such subjects. “We support the ambition of doubling the proportion of engineering degrees taken by women,”

(…) “We will extend fee loans to part-time students of engineering, technology and computer science who already have a degree in a different discipline,” Mr Willetts said.

Such a move will reverse, in that limited area, the last Labour government’s rules preventing students from accessing funding for second degrees (known as equivalent or lower qualifications, or ELQs).

(…) The Department for Business, Innovation and Skills estimates that relaxing the ELQ rule for part-time degrees in engineering, technology and computer science will lead to £5 million in extra fee loans being taken out by students in 2015-16.

More information on: www.timeshighereducation.co.uk

Athena SWAN gender equity charter spreads across sector

The mention of Athena SWAN at this year’s Conservative Party conference is a timely indicator of how far the once-tiny gender equity charter scheme has come and its growing influence within academia.

Having announced £200 million of new capital funding for teaching science, technology, engineering and mathematics subjects, David Willetts, the universities and science minister, said he expected to see “evidence of commitment to equality and diversity” furnished by those making bids for the cash.

“Some version of Athena SWAN” showing institutional strategies for achieving gender equity in STEM departments “will focus minds”, Mr. Willetts added.

It is just the latest milestone for a programme whose growth - in members, disciplines, influence and acceptance within the sector - in less than a decade has been remarkable. When it was launched at the Institute of Physics in June 2005, it involved just 10 universities, and its focus was increasing the number of women in STEM departments. This month, the University of Chester became its 93rd member, while 87 awards were made to individual departments and institutions in the latest of its biannual awards round alone.

The initiative - officially named the Athena SWAN Charter for Women in Science - is also expanding to cover the arts, humanities and social sciences, it was announced in July. A trial of the new charter, which will run in parallel with the STEM scheme, will take place at up to 30 institutions until spring 2014 - with the arts and science schemes likely to combine to form a single institutional award in future. (…)

More information on: http://www.timeshighereducation.co.uk
**Skills**

**Boosting skills essential for tackling joblessness and improving well-being, says OECD**

The low-skilled are more likely than others to be unemployed, have bad health and earn much less, according to the first OECD Survey of Adult Skills. Countries with greater inequality in skills proficiency also have higher income inequality.

The OECD Survey of Adult Skills is the new PISA for adults (otherwise known as PIAAC). The Survey measured the skills of 16 to 65-year-olds across 24 countries and looked at how literacy, numeracy and problem-solving is used at work. It provides clear evidence of how developing and using skills improves employment prospects and quality of life as well as boosting economic growth. It helps countries set meaningful targets benchmarked against the achievements of the world’s leading skills systems and to develop relevant policy responses.

The survey shows that high quality initial education is an important predictor for success in adult life. But countries must combine this with flexible, skills-oriented learning opportunities throughout life, in particular for working-age adults.

**MOOCs**

**MOOCs going mainstream? This may be the year**

Last school year, the term MOOC (massive open online course) skyrocketed into popularity as an important new experiment in higher education. This year may be the school year that the MOOC truly goes mainstream. This will mark the first year, for example, that it will be possible to receive a “super-cheap” master’s degree via MOOCs.

Now that Silicon Valley companies like Google are showing signs of jumping aboard the MOOC bandwagon, it could forever change the way we think about the college experience. Instead of graduating with a degree from a traditional four-year university, you may one day graduate with a degree from the University of Google.

Take, for example, last month’s announcement of a partnership among Google, Harvard and MIT to expand the edX educational initiative to create a broad educational platform for free online courses. Google’s goal, it appears, is to think about education the same way we think about software and operating systems.

If it’s possible to create open-source software, then it must be possible to create an open-source education. That means making a top-tier education widely available to anyone with an Internet connection, wherever they are in the world. You no longer have to attend Harvard to get a Harvard education.

(…) It’s hard to argue against an innovative concept that has been hailed as the savior of higher education, but there are still a number of questions to be answered before MOOCs are able to fulfil all of their early promise and truly bring down the cost of college tuition.

One of the hardest questions is how to extend the MOOC experience from the sciences and engineering to the humanities, where it’s much harder to grade and assess knowledge. And, speaking of grading, there’s still plenty of room for debate about how much students really learn online. Do they learn more sleeping through an early morning lecture in the classroom, or late at night, while they are interrupted every few minutes by emails, social media updates and text messages while watching courses online?

Despite these questions, it’s hard not to get starry-eyed by how MOOCs are transforming university professors into international rock stars. As Thomas Friedman noted in an article about MOOCs, a professor like Harvard’s Michael Sandel now can sell out a 14,000-seat amphitheater in South Korea for a lecture on “justice” and rack up 20 million views for his course videos in China. (Sandel was also one of the early pioneers on the Harvard-MIT edX platform) Google’s mission has always been to organize the world’s information and make it universally accessible. By pushing into the area of MOOCs and higher education, it may get its next big chance.

More information on: [http://www.washingtonpost.com](http://www.washingtonpost.com)
The results reveal the challenges some major economies face in boosting their skills levels. In reading, over one in five adults in Italy (27.7%), Spain (27.5%) and France (21.6%) perform at or below the most basic level, compared with one in twenty Japanese (4.9%) and one in ten Finns (10.6%).

Almost one in three adults in Italy (31.7%), Spain (30.6%) and the United States (28.7%) perform at or below the most basic level of numeracy, compared to around one in ten in Japan (8.2%), Finland (12.8%) and the Czech Republic (12.8%).

The Survey also reveals the extent of the “digital divide”, with millions failing to master even simple computer skills, such as using a computer mouse. This ranges from nearly one in four adults in Italy, Korea, Poland, the Slovak Republic and Spain to one in fourteen adults in the Netherlands, Norway and Sweden. (...)

More information on http://www.oecd.org

STEM

Why students study STEM

Exposure to math and science has a bigger impact on students’ intent to major in a science, technology, engineering or mathematics (STEM) field than does math achievement, according to a study published in the October issue of the American Educational Research Journal.

While math achievement is a significant indicator of whether students enrol in STEM majors (and was once thought to be the best predictor of future STEM entrance), early exposure to science and math courses has a greater influence on high school students’ interest in studying STEM fields, according to a study of nationally representative high school students entering college, “Why Students Choose STEM Majors: Motivation, High School Learning, and Post-secondary Context of Support.” However, the largest indicator of whether a student declared a major in a STEM field was their intent to do so.

“Through their exposure to math and science they have room for developing their interests and experiencing the wonders and joys of math and science,” said the study's author, Xueli Wang, an assistant professor of educational leadership and policy analysis at the University of Wisconsin at Madison. “It’s speaking to the holistic experience rather than the one-shot test score.”

But the exposure effect has a smaller positive impact on underrepresented minority students than on white and Asian students.

Underrepresented minorities are also more likely to be influenced by early math achievement than are white or Asian students. Early math achievement influences students’ belief that they can succeed in math, which, in turn, influences whether students choose to pursue STEM fields in college.

These findings, Wang said, highlight the need to close racial disparities in math achievement at an early age. (...)

The study also found some gender differences that affected whether students intended to study a STEM field in college. Male students reported more belief in their own math skills than female students with comparable achievements. The research suggested that improving female students’ confidence in their math skills could lead to stronger interest in STEM fields.

Several other indicators were discussed in the study – including initial postsecondary experiences such as interaction with faculty and academic advisers and receipt of financial aid – that affected whether a student majored in a STEM field.

More information on http://www.insidehighered.com

Read the study here
SEFI is the largest network of higher engineering education institutions (HEIs) and educators in Europe.

It is an international non-profit organisation created in 1973 to contribute to the development and improvement of HEE in Europe, to reinforce the position of the engineering professionals in society, to promote information about HEE and improve communication between teachers, researchers and students, to reinforce the university-business cooperation and to encourage the European dimension in higher engineering education.

Through its membership composed of HEIs, academic staff, students, related associations and companies, SEFI connects over 1 million students and 158000 academic staff members in 48 countries.

To reach its goals, SEFI implements diverse activities such as Annual Conferences, Ad hoc seminars/workshops organised by its thematic working groups and committees, SEFI organises the European Engineering Deans Conventions, publishes a series of Scientific publications (European Journal of Engineering Education) and Position Papers, is involved in European projects, cooperates with other major European and international associations and international bodies (European Commission, UNESCO, Council of Europe, OECD).

SEFI also participated in the creation of ENAEE, IFEES, EuroPace, IACEE and more recently of the Institute for the development of Engineering Academics, IIDEA, and of the European Engineering Deans Council, EEDC.

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SEFI’s corporate partners

SEFI’s corporate member

The SEFI newsletter contains information about SEFI’s recent activities as well as a summary of the latest stories in higher engineering education in Europe and worldwide. News@sefi is sent for free to SEFI members. All previous issues are available on www.sefi.be. "members only". All staff and students of an institution, an association or a company member of SEFI are entitled to receive free copies of the newsletter. So, in case you know somebody that is interested in a free copy, feel free to contact us.