

IAU, founded in 1950, is the leading global association of higher education institutions and university associations. It has Member Institutions and Organisations in some 130 countries that come together for reflection and action on common concerns.

IAU partners with UNESCO and other international, regional and national bodies active in higher education. **It is committed to building a Worldwide Higher Education Community.**

IN FOCUS

Technology in Higher Education: Opportunities for Bridging Divides?

IAU 2018 CONFERENCE

Higher Education Partnerships for Societal Impact

MESSAGE FROM THE SECRETARY-GENERAL



In this issue of *IAU Horizons*, the editorial team has brought some changes to the way in which we report on IAU activities and projects. Instead of reporting on all that we do, we have decided to change the style and focus on a selection of projects per priority area. Information about other actions and initiatives are available in the IAU newsletter and on the website. We hope that you will appreciate this new approach.

In these pages, please discover the programme of the *IAU 2018 International Conference* and plan on attending. Registration is open, excellent speakers are confirmed, the Call for Case studies resulted in a very good selection of projects that we will have difficulty to select from. The Call for Posters is open. Higher Education Partnership is at the heart of all that the IAU offers and works on and we are pleased to see that it translates so constructively into a programme of high quality.

In the section on the IAU Thematic Priorities, you will first read about the expertise and global experience *LGEU* can bring to those in leadership positions in your institutions. The world changes rapidly and so do the tasks that universities are required to fulfil. The programme offers to understand better how to address the challenges and opportunities leaders have to face. Plan to attend the October edition, in Bucharest.

Next you can learn more about the aims and projected outcomes of the *5th IAU global Survey on internationalization*. Make sure your university takes part and share the Call to take the Survey with colleagues and partners. This Survey can be used as a tool to bring together stakeholders from different faculties and departments, involved in teaching and research, in staff and student mobility, it allows to review, take stock, and gather data needed to review your own internationalization strategy. The survey being completed by a good number of institutions will allow to understand trends and inform internationalization policy at national and global level. More services will also be derived from it.

The *role of higher education in addressing the goals set in the context of Agenda 2030* is firming up and is becoming better recognized and supported. IAU is taking a global lead in addressing the 17 SDGs. HESD (Higher Education and Research for Sustainable Development) Projects and in particular the IAU HESD Cluster is shaping up. Initial outcomes will be presented in Kuala Lumpur.

The work on the *role of technology in higher education* is developing fast. An Expert Advisory Group will be officially established during a meeting, which will be held in Bucharest at the end of May to shape the contours of the new statement in this field. Read the *In Focus* section to seize where universities are heading using technology in teaching, learning and research and follow us on the new thematic Blog to stay tuned on new developments in the field.

In addition to what you will find in these pages, I am pleased to report that the IAU Executive Committee (EC) met in Paris in April. It validated current projects and adopted future plans. In addition, as IAU wishes to firm up cooperation with UNESCO under the leadership of Ms. Audrey Azoulay, the EC Members met with UNESCO country delegations that are also represented on the IAU Administrative Board.

Finally, let me announce that on 4 May Professor Justin Thorens, former IAU President, former President of the University of Geneva and eminent lawyer received the *IAU President's Award* to recognize his outstanding contribution to IAU, in particular in the field of University Autonomy and Academic Freedom, two cornerstones of higher education often under severe threat.

Bonne lecture.

Hilligje van't Land

IAU Horizons 23.1 – Contents

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IAU UPCOMING EVENT

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Higher education partnerships for societal impact
Kuala Lumpur, Malaysia, 13-15 November 2018



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IAU UPCOMING EVENT

**IAU
2018**
INTERNATIONAL
CONFERENCE

HIGHER EDUCATION PARTNERSHIPS FOR SOCIETAL IMPACT

13-15 NOVEMBER IN KUALA LUMPUR, MALAYSIA

🕒 **Consult the programme and register at the early bird rate:**
www.etches.com/iau2018

IAU believes that higher education institutions (HEIs) play an important role in the development of societies. Universities are educating tomorrow's citizens, thought leaders, decision-makers, business leaders, innovators. Through research, new knowledge is constantly being generated. Gearing education and research towards addressing societal needs and challenges will help define and develop the solutions that are to be implemented to address the challenges the world faces today.

In the UNESCO publication, *Rethinking Education: Towards a global common good*, it is stressed that: "Given the need for sustainable development in an increasingly interdependent world, education and knowledge should be considered global common goods. Inspired by the value of solidarity grounded in our common humanity, the principle of knowledge and education as global common goods has implications for the roles and responsibilities of the diverse stakeholders."

Higher education is one such stakeholder and an important one. It can and should not operate in isolation; on the contrary, HE is a key driver for change and innovation in and for the societies in which it operates.

Higher education institutions engage with society and in a variety of ways. Partnerships with civil society, the private sector, the local authorities and decision-makers or between HEIs take on numerous forms and shapes. The kind of partnership developed and the way it is managed impact on the ways in which universities contribute to the development of their societies, as do the national context, the type of institution they are and the specific challenges they face.

By focusing the IAU 2018 International Conference on the theme *Higher education partnerships for societal impact*, the Association invites its members, the global higher education

communities, and their partners to reflect on and discuss their mandate and social responsibility, while presenting different forms of partnerships adopted around the world and for what societal impact. The conference will also be a venue to discuss the challenges and obstacles related to delivering on the third mission of universities.

In the plenary sessions, keynote speakers will address and discuss the topic and frame the discussions from a conceptual perspective; the three series of breakout sessions will include examples of HE partnerships aiming for societal impact. The break-out sessions will allow for discussion and exchange among peers and hopefully inspire new partnerships around the world.

IAU invites the higher education leaders and experts to join the conference, take part in the discussions, share ideas, get inspired by peers and develop new ways to ensure that HEIs can make a difference at the societal level.

CALL FOR POSTERS: HIGHER EDUCATION PARTNERSHIPS FOR SOCIETAL IMPACT

Your institution is involved in partnerships for societal impact and you wish to showcase your initiative during the conference, please consider preparing a poster to present your experience to the participants from around the world. Limited in number, the space will be allocated on a first-come, first-served basis.

Free for IAU Members

Non-Members: 500 €

Contact: Stefanie Mallow (s.mallow@iau-aiu.net)



PRELIMINARY PROGRAMME

TUESDAY 13 NOVEMBER 2018

Site visit at University of Malaya

Inaugural ceremony: Higher education partnerships for societal impact

Welcome Reception at the University of Malaya

WEDNESDAY 14 NOVEMBER 2018

Opening Ceremony

PLENARY SESSION I - The role of higher education: a global common good?

Breakout sessions – series I

I.a: Responsible research

I.b: Internationalization for societal impact

I.c: Case studies: community engagement

I.d: Living Values for Sustainable Partnerships and Societal Impact

Session by Magna Charta Observatory (MCO)

Breakout sessions – series II

II.a: Financing higher education for the global common good?

II.b: Digital transformation: higher education and society

II.c: Case studies: Private sector engagement

II.d: Regional Centres of Expertise on Education for Sustainable Development: Partnerships between campus and community

Session by United Nations University (UNU-IAS)

PLENARY SESSION II - Adapting to or shaping a transforming world?

THURSDAY 15 NOVEMBER 2018

PLENARY SESSION III: Social responsibility and engagement - the way forward

Breakout sessions – series II

III.a: Teaching and learning for societal impact

III.b: Sustainable Development through multi stakeholder collaboration

III.c: Case studies: informing policy development

III.d: Engagement and social commitment, from local to global initiatives

Session by Global University Network of Innovation (GUNI)

Conference closing

Music Recital at the University of Malaya



Message from the University of Malaya

Host and co-organiser of the IAU 2018 International Conference.

“**Malaysia, Truly Asia**” – the essence of which is largely encapsulated in Kuala Lumpur, the vibrant capital city of Malaysia. Kuala Lumpur is gearing up to host delegates from around the world at the IAU 2018 International Conference scheduled to take place from 13th – 15th November 2018. The city captures the uniqueness of the country's rich heritage and cultural diversity offering myriad experiences to its visitors. This makes it an excellent setting for the meeting of minds and a unique platform for delegates to connect with each other on the crucial and significant role of higher education in the 21st century.

With the theme, “Higher education partnerships for societal impact”, the IAU 2018 International Conference will lay emphasis on a variety of issues and themes pertaining to higher education partnerships globally and how they make an important contribution to society at large.

Malaysia's leading public university, the University of Malaya, established in the metropolitan area of the capital city, will play host to this year's IAU Conference. As a premier university, the University of Malaya's interest lies not only in creating new

knowledge and grooming future leaders, but also in engaging with various stakeholders in undertaking research and partnerships which are impactful and sustainable for the community.

On behalf of the University of Malaya, it gives me great pleasure to welcome you to Kuala Lumpur for the IAU 2018 International Conference this November. I have no doubt that this conference will offer all delegates enriching opportunities to engage in exciting and insightful discussions with academics, policy makers, and the industry amongst others. I believe the conference will provide thought-provoking discussions and practical solutions to address challenges faced by institutions of higher learning in enhancing partnerships for societal impact.

As the countdown to IAU 2018 International Conference begins, we eagerly await your participation for a memorable and fruitful experience in Kuala Lumpur. *Selamat datang ke Malaysia* (Welcome to Malaysia)!

Datuk ir. (Dr.) Abdul Rahim Hashim
Vice-Chancellor
University of Malaya

ABOUT UNIVERSITY OF MALAYA

University of Malaya (UM), Malaysia's oldest university, is situated on a 922 acre (373.12 hectare) campus in the south west of Kuala Lumpur, the capital of Malaysia.

It is a government funded, comprehensive, research intensive university. UM has more than 21,000 students with a 1:1 ratio of undergraduates. With an academic staff strength of more than 1,910 of whom 1,410 hold PhDs and 365 possess Professional qualifications, UM is able to cover almost all disciplines from the Arts, Sciences and Humanities. There are 17 faculties and 3 academic centres, 6 Research Clusters and more than 50 research centres. UM conducts multidisciplinary



research but our strength lies in the Life Sciences & Medicine, Engineering & Physical Science and Islamic & Social Sciences.

Join IAU in Kuala Lumpur, exchange with peers from around the world and be inspired by the excellent speakers lined up



JOHN THWAITES is a Professorial Fellow, Monash University and Chair of ClimateWorks Australia and the Monash Sustainable Development Institute. He is a

consultant at Maddocks Solicitors providing advice to the firm and its clients on climate change, water,

sustainability and corporate social responsibility. He is one of six Co-Chairs of the Leadership Council of the global Sustainable Development Solutions Network (SDSN). Launched by UN Secretary-General Ban Ki-moon in 2012, the Network provides expert advice and support on the development of the post-2015 UN Sustainable Development Goals.

John Thwaites is also among the authors of the publication: *Getting started with the SDGs in university: A guide for universities, higher education Institutions, and the academic sector.*



FRANCISCO MARMOLEJO is the Global Lead of Tertiary Education at the World Bank Group, where he also serves as Lead Education Specialist of India. In his capacity as the World

Bank's most senior official in tertiary education, he serves as the institutional focal point on the topic

of tertiary education and provides advice and support to country-level related projects that the Bank has in more than 60 countries. Previously, he served as founding Executive Director of the Consortium for North American Higher Education Collaboration (CONAHEC), a network of more than 160 higher education institutions primarily from Canada, the U.S. and Mexico, based at the University of Arizona (UA) in USA.



OUTI SNELLMAN is Vice-president, Organization of University of the Arctic and Director of International Relations, University of Lapland, Finland. During the

conference she will speak about her experience as Vice-President of the Organization of the University of the Arctic.

UArctic is a cooperative network of universities, colleges, research institutes and other organizations concerned with education and research in and about the North. UArctic builds and strengthens collective resources and collaborative infrastructure. Through cooperation in education, research and outreach, UArctic seeks to enhance human capacity in the North, promote viable communities and sustainable economies, and forge global partnerships.



ZAKRI ABDUL HAMID is Science Adviser to the Prime Minister of Malaysia since 2010. He is the founding Chair of the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) and a member of the UN Secretary-General's Scientific Advisory

Board. He sits on the Global Leadership Council of the Sustainable Development Solutions Network (SDSN). He has been appointed by the United Nations (UN) as the Co-Chairman of STI Advisory Board of the UN Economic and Social Commission for Asia and the Pacific (ESCAP). Recently appointed as IsDB Scientific Advisory Board. Nationally, he is responsible in positioning science as an underpinning for socio-economic development and using the tools of foresight to prepare Malaysia as an industrialised country in the near future.

SPONSORSHIP OPPORTUNITIES

Engage with higher education leaders from around the world. Become a sponsor of the IAU 2018 Conference.

Contact: Stefanie Mallow (s.mallow@iau-aiu.net)

IAU ACTIVITIES RELATED TO ITS STRATEGIC PRIORITIES



Values-based Leadership

It is essential that higher education institutions fully contribute to the development of sustainable & democratic societies. Leadership is a core aspect of quality higher education, vital in enabling institutions to respond to complex challenges and rapid societal change. Higher education leadership must be underpinned by values and responsibility. Leadership must be adaptable and constantly evolving to ensure always more equity.

Since its creation in 1950, the International Association of Universities (IAU), committed to *Building a Worldwide Higher Education Community*, has been fostering collaboration among higher education institutions, taking their interests and challenges as a primary concern to develop relevant policies and practices, while respecting diversity and promoting social responsibility. By maintaining the World Higher Education Database, by organizing international events, by conducting regular surveys on issues leading higher education debates, IAU has been collecting and sharing the expertise of both its Members and the larger higher education community in all its variety. The Association acts as a knowledge hub for higher education and research stakeholders interested in the strategic information that affects their activities.

IAU has been building on this boundless knowledge to make institutions' tasks easier in a complex landscape. Particular emphasis has been put on strengthening governance and management of institutions, which face numerous challenges in a rapidly changing sector. Institutions are multiplying, diversifying and transforming due to the combined effects of internal and external factors, often related to higher education fundamental values and purposes. The role of universities in society is subject to continuous questioning and the demands placed on their leaders are expanding.

LEADING GLOBALLY ENGAGED UNIVERSITIES (LGEU)

Leadership capacity development has thus become a strategic priority for IAU, who has made mutual learning and transfer of best practices the cornerstones for developing its activities. The Association has also developed targeted workshops and in 2015 launched a programme for leaders interested in what it means in practice to lead 'globally engaged' universities, in ways that seek to honour the values IAU is championing. The Leading Globally Engaged Universities (LGEU) programme presents an ambitious agenda including international perspectives into the strategic planning mix, through peer-to-peer dialogue and other



Team exercise, LGEU-2 in Dublin, Ireland, April 2016

activities that offer new opportunities for inter-institutional cooperation. It essentially aims at building up innovative forms of engagement, which IAU believes can contribute to shaping the landscape of higher education across nations.

The programme benefits participants, who assess their capacities for globally engaged leadership at individual and team levels, exploring what defines them as individuals in terms of values, behaviours and aspirations. Beyond this self-assessment, LGEU also has an impact on participants' institutions as it allows focusing on strategic and operational aspects of global engagement at institutional level. This includes casting a critical eye over institutional strategies, always considering the various conceptions of leadership models and their application across cultures and systems. IAU ultimately seeks to sustain an open space for constructive dialogue and collective knowledge around the core dimensions of 'values-based leadership' in a globally engaged higher education institution.

IAU strongly believes that a deeper understanding of global issues is necessary in order to lead better in local settings; that global engagement is a catalyst for meeting regional aspirations of development; and that inclusive internationalization requires new approaches to leadership.

LEADERSHIP TRAINING PROGRAMMES COMPARED

While IAU designed LGEU with an emphasis on these three key concepts, there is a growing number of other training programmes that also try to respond to the complex realities of higher education leadership. Yet, there is no single source of information about the existing programmes, nor has there been many studies on their impact. On behalf of the World Bank, IAU therefore produced an initial mapping of programmes. The aim of this exercise was first to describe briefly what is on offer and more importantly, to identify gaps that need to be filled. Another recent study was undertaken by the Boston College Center for International Higher Education, on behalf of the German Academic Exchange Service (DAAD) and German Rectors' Conference (HRK), to identify the major players offering management training schemes specifically in relation to international development cooperation efforts (i.e., for capacity-building in lower-income and emerging country contexts).

These two studies led to a few conclusions but also opened the door to more questions given the limited information available at a global level and the lacunae found where information did exist. Indeed, there is no clear typology for higher education leadership training programmes. Among the programmes identified, there is significant diversity in their key characteristics, including type of provider (funders, organizers and/or facilitators), the target audience and size of cohorts, the location, duration and frequency of the programme, and the "pedagogical approach" employed (programme curriculum, delivery mode).

Despite this apparent diversity, it has been noted that most programmes are delivered (or made possible) by and in high-income countries. Programmes tend to be short-term and small in terms of number of participants. They appear to cater to a fairly narrow target audience, not to combine decision-makers from outside the higher education institutions and, unlike IAU's programme LGEU, are infrequently international in terms of participants. There is little information available with regard to the gender of participants and no emphasis on seeking a balance in the cohort was found, despite the significant

representation of women in student enrolment and (at least early stage) among the faculty ranks globally.

The most striking finding is that the publicly available information does not offer insights into the processes for monitoring the long-term impact of programmes. Although few of them do develop short to middle-term measurement tools of the impact on participants, this assessment often rests on beneficiaries' or providers' testimonials. In addition, most programmes do not offer any kind of credential. When they do, it is merely to show attendance rather than completion of a given curriculum. As most of these programmes bear a significant cost, it would make sense that beneficiaries or funding organizations seek more evidence of the means used to track graduates' performance in the short-term and the impact on institutions in the longer term.

BRIDGING THE EXISTING GAPS

Given the rapid change in the higher education sector and the multiple demands on leaders, this multiplicity of professional development programmes is needed for training effective leaders. However, there are still too many obstacles standing in the way of more inclusiveness, transparency and broad-based participation in programmes that would offer clear evidence of long-term impact. For this reason, more investigation would be worthwhile to complete the current international mapping and to lay down better outlines of the high-quality, relevant, and equity-enhancing training mechanisms which higher education institutions and systems so greatly need, to forge not only skilled leaders for the future but also the strong values-based society that we want for tomorrow.

Sources

Higher Education Leadership and Management Training: Global Maps and Gaps, by Laura E. Rumbley, Hilligje van't Land, Juliette Becker - International Higher Education No 93: Spring 2018

Leading Globally Engaged Universities, by Robin Middlehurst, Tom Kennie

GET INVOLVED

Take part in the next session of

Leading Globally Engaged Universities!

It will be hosted from **14-19 October 2018**, by the prestigious National University of Political Studies and Public Administration, **Bucharest, Romania**.

LGEU is a capacity-building program for senior university leaders from all regions of the world. It provides participants with international perspectives, practical tools and a set of necessary leadership skills for an effective management



and the strategic development of their institution in different national contexts. The program combines engaged debate with structured peer-learning exercises and visits to local institutions.

Contact: Juliette Becker (j.becker@iau-aiu.net)



Internationalization

Internationalization of higher education is an inevitable process in the era of globalization and a deliberate strategy for improving quality and relevance. IAU focuses on the academic rationales, the equitable and collaborative nature of the process and aims to minimize the adverse effects of international interactions when these take place in highly unequal and diverse contexts among HEIs with different resources, needs and interests.

5th IAU GLOBAL SURVEY ON INTERNATIONALIZATION OF HIGHER EDUCATION

Continuing a tradition with support from key partners

Since 2003, IAU has conducted Global Surveys on Internationalization of Higher Education. Each IAU global survey report provides a unique analysis of global and regional level data on trends and developments in the field of international higher education and related policymaking. The Global Survey reports have become an invaluable resource for anyone working on or interested in internationalization of higher education.

The last edition of the Global Survey, the 4th one, was conducted in 2013, collecting data on the previous academic year and its report was published in 2014. 1 336 HEIs replied to the online questionnaire, from all world regions, with a preponderance of institutions coming from Europe (almost half of respondents).

The aim of the 5th edition of the Global Survey is to double the number of respondents (reach 3 000 replies) and to secure a better distribution among the different regions of the world. To reach this objective, IAU has signed agreements with different organisations, which support the Global Survey both financially and actively contributing to its development. The five main sponsors of the 5th edition of the Global Survey are:

- Agence universitaire de la Francophonie (AUF) helps disseminate the survey among institutions in Francophone countries; it will provide dedicated support for the translation of the final report into French.
- Académie de Recherche et d'Enseignement Supérieur (ARES) translated the questionnaire into French and contributes to its dissemination among Francophone institutions.
- German Academic Exchange Service (DAAD) distributes the survey in its extensive network of institutions in Germany and around the world.
- NAESA: Association of International Educators, will help increase the response rate particularly in the USA and North America.
- UNESCO provides support to IAU and helps foster greater global outreach.

The IAU is thankful to all sponsors for their support!

CONTRIBUTE TO THE 5th EDITION OF THE IAU GLOBAL SURVEY

Available in English, French and Spanish, make sure that your institution participates in the survey that monitors trends in this field and benefits from both the data collection process and the outcomes:
<https://iau-aiu.net/5th-Global-Survey>

>> **Deadline:** 30 June 2018

From the 4th to the 5th questionnaire

The questionnaire for the 5th edition was developed by improving the questionnaire of the 4th edition. IAU wishes to thank the Advisory Committee of 21 international internationalization experts for their work in the development of the questionnaire.

Structure of the Global Survey questionnaire:

- A) Institutional Information and Profile
- B) Internationalization as an Institutional priority
- C) Internationalization Policy and Activities
- D) Internationalization of research
- E) Human resources and staff development
- F) Student Mobility
- G) Internationalization of the curriculum/
Internationalization at Home

Each section investigates several topics (see table). For instance, section B inquires about the importance of internationalization for institutional leadership, the funding source, the benefits, risks, drivers and obstacles. Section C covers institutional internationalization policies, strategies and activities (including TNE, online and distance learning, joint and dual/double and multiple degrees). Section D concerns the internationalisation of research. Section E looks at what are the role and impact of internationalization in recruiting human resources and staff development. Section F concerns student mobility, both incoming and outgoing, and section G deals with Internationalization at Home both from a curricular and an extra-curricular perspective.

Some questions present in the 4th edition were kept to analyse the evolution of trends over the years, while some others were modified or added to take into account both new developments in the field of internationalization of higher education and changes that happened in society at large.

For instance, the findings of the 4th edition demonstrated that internationalization grew in importance for higher education institutions over the years; will this trend be kept in the 5th edition or will the 5th edition find that recent political developments of increasing nationalism and isolationism have an impact on internationalization?

Another example: in the findings of last edition, internationalization was being driven, to a large extent, by the most senior levels of leadership of the institutions. Would this top-down approach still be the case, or has internationalization become more embedded at institutions and is the result a more bottom-up approach?

Confirming previous trends or discovering new ones?

The comparison between the results of the 4th and 5th editions will help reply to questions such as:

- Will student learning and student mobility still be the most important activities undertaken by institutions?
- Will student knowledge improvement and appreciation of international issues remain the most significant expected benefit of internationalization?
- In terms of geographic priorities for internationalization, will an intra-regional focus remain strong or will a more inter-regional approach appear? Will Europe continue to be a high priority for internationalization in most other regions?
- Will equal access to international opportunities for all students and commodification and commercialization of higher education remain the most important risks to internationalization or will other new concerns take a more predominant place?

Top three ranked regional priorities for internationalization – regional results (n=798)

		Region of respondents					
		Africa	Asia & Pacific	Europe	Latin America & Caribbean	Middle East	North America
Geographic priority region	Africa	1					
	Asia & Pacific	3	1	2	3		1
	Europe	2	2	1	1	1	3
	Latin America & Caribbean				2		2
	Middle East					3	
	North America	3	3	3	1	2	

- Will funding of internationalization remain an issue?
- Will substantial regional differences in several areas such as perceived benefits and risks of internationalization persist or will the results of the 5th edition show an increase of homogenization among different regions of the world?

The above-mentioned questions are just a few examples of the topics that will be covered by the IAU Global Survey. IAU is convinced that these topics are of high interest to higher education institutions around the world and it is confident that they will reply to the questionnaire in large numbers, helping IAU – and the higher education community at large – drawing a clear picture of the present state of internationalization of higher education.

The results of the survey will be analysed during the autumn of 2018; the Report will be published in 2019. Results will be available for free in electronic format to all IAU members and the full report will be available for purchase from DUZ Academic Publisher. All institutions that respond to the questionnaire will be invited to participate for free in a webinar where the main results of the survey will be presented and discussed. IAU plans to disseminate the results of the survey not only through webinars but also by organising regional seminars around the world.

GET INVOLVED

Take part in one of the ISAS (2.0) services for Advancing Internationalization of Higher Education!



ISAS (2.0) consists of several different but complementary services designed for Higher Education Institutions (HEIs), individuals at HEIs, and national governments and organizations.

1. Advancing strategic internationalization at HEIs, the service designed for HEIs, consists of four separate strands, specifically designed to provide

advice to and support HEIs throughout their internationalization journey:

2. Planning and Strategy
3. Assessing Strategy and Monitoring Achievements
4. Enhancing a specific area of internationalization
5. Achieving Comprehensive Internationalization

At whatever point in the internationalization journey your institution is, if you need support and advice, there is an ISAS (2.0) service to support you. More information on the website:

<https://iau-aiu.net/Internationalization>

Contact: Giorgio Marinoni (g.marinoni@iau-aiu.net)



Higher Education and Research for Sustainable Development

Future well-being of humanity and the planet depends on successful resolution of the interconnected challenges of economic, social, cultural, and environmental sustainability. IAU's actions in support of the Agenda Transforming our world: the 2030 Agenda for Sustainable Development and related Sustainable Development Goals (SDGs) provides a good framework for university collaboration, in research, curriculum development and outreach.

CREATING SYNERGIES FOR THE SUSTAINABLE DEVELOPMENT GOALS

Over the last two years, since the resolution *Transforming our World: The Agenda 2030 for Sustainable Development* was adopted unanimously by the United Nations, many initiatives have been developed in the field of sustainable development. Unlike the previous Millennium Development Goals (MDGs), the Sustainable Development Goals (SDGs) are not only targeting developing countries but rather are a call for all nations to make sure we collectively put in place what is required to reach "the future we want" [1]. This new dynamic is reflected in the fact that governments both in the global north and in the global south include SD into their politics. All other sectors should get involved as well and not least higher education. IAU strongly advocates for higher education and research to take on a lead role. Without the SDGs will not be achieved. The role HESD plays should be acknowledged better [2].

IAU is part of many initiatives and joins forces with a variety of organizations that advocate for the role HE plays for the SDGs. In particular, IAU is part of the steering committee for the UNESCO Global Action Program for Education for Sustainable Development (GAP ESD), launched in Nagoya, in 2015. Two GAP can be highlighted: "Reorienting education and learning so that everyone has the opportunity to acquire the knowledge, skills, values and attitudes that empower them to contribute to a sustainable future; and strengthening education and learning in all agendas, programs and activities that promote sustainable development" [3]. Education for Sustainable Development (ESD), mentioned specifically in target 4.7, is considered as the key to a sustainable future.

HOW DO UNIVERSITIES AND HIGHER EDUCATION INSTITUTIONS CONTRIBUTE TO AGENDA 2030?

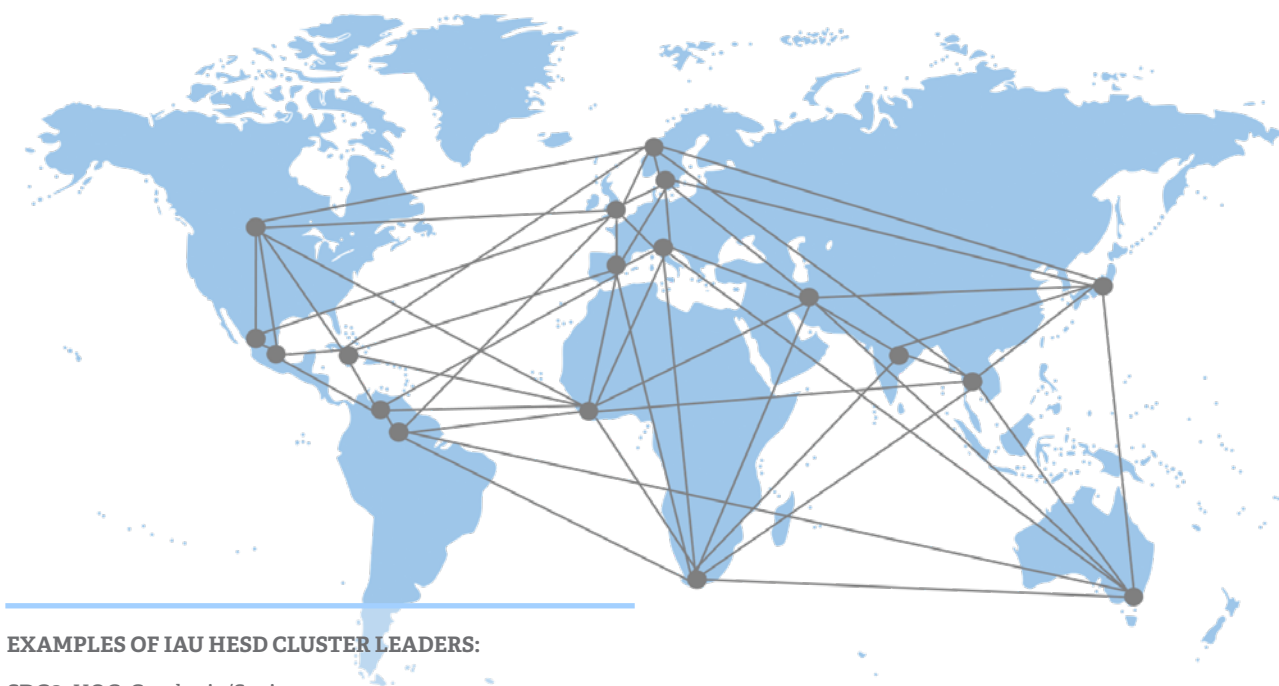
Universities and other Higher Education Institutions (HEIs), are mentioned more specifically again under SDG 4, yet they contribute to enhancing "Quality higher Education" by addressing all SDGs through teaching, research and campus initiatives. Some HEIs started sustainability offices, which mainly work on campus greening initiatives or on how to make the university itself "sustainable"; others started community

outreach programs, student initiatives or research groups. Sustainability is at times embedded in the curriculum and taken up at research level. Some HEIs have a clear environmental focus when it comes to SD, while others focus on economic and social sustainability. The *Global Survey on HESD* conducted by IAU in 2016 show how these fields of action are being developed. Since the launch of the Report, the global survey questionnaire has been used in Norway where it allowed to survey the 500 some participants of the SIU Internationalisation Conference, which outcomes were presented during the Conference and allowed to fuel the debates during the parallel workshops. Similarly, the questionnaire has been translated and adapted to the Spanish and Latin American context and circulated in Spain and Columbia. The outcomes of all surveys will allow to compare outcomes and issue new recommendation for engagement nationally and globally.

COOPERATION AT THE GLOBAL LEVEL: THE DEVELOPMENT OF THE IAU HESD CLUSTER

However, what is often still underdeveloped is true cooperation between institutions when it comes to SD, especially at the global level. There are numerous examples of national university networks focusing on SD [4], but almost none engage at a more global level. Over the years, IAU has developed extensive expertise in global networking and brings together universities from all regions of the globe. This strength is now used to develop the basis for a global Cluster on HESD. This Cluster will shape the work of IAU on HESD until the end of Agenda 2030 and beyond.

Universities address the SDGs in a variety of ways yet not always in a concerted and more strategic way at the level of the institution. Yet, the SDGs impact on and transform universities. The Cluster encourages a holistic approach to the SDGs, focusing specifically on the whole of institution approach. Peer-to-Peer learning at both disciplinary and interdisciplinary level will spark new ideas and creativity among the Members of the Cluster and encourage participating universities to step up their game towards a more sustainable future.



EXAMPLES OF IAU HESD CLUSTER LEADERS:

- SDG3:** UOC, Catalonia/Spain
- SDG6:** University of Tehran, Iran
- SDG8:** Gothenburg University (GU), Sweden
- SDG11:** Siam University, Thailand
- SDG14:** University of Bergen, Norway
- SDG17:** IAU, ACUP, UDUAL, Copernicus, Ascun

16 universities have been invited and/or have volunteered to become SDG leaders, each for one of the SDGs and agreed to help generate the synergies required to address the global sustainable development goals. SDG17 will be led by IAU and will involve university networks from around the world. The activities of the Cluster will be split into six two-year periods,

with each period to be marked by a specific goal for the Cluster leaders to achieve. This includes a publication, a mapping tool, the creation of a policy statement. Ultimately, the Cluster wants to be a voice for HE at the High-Level Political Forum, which informs the outcomes of the Agenda 2030. The next global Agenda, unlike the last two, should include and build more upon the expertise of HEIs from around the world.

[1] The Future we Want (Rio+20, 2012)

[2] Higher Education Paving the Way to Sustainable Development: A Global Perspective, 2017

[3] EAIE Winter Forum, 2017

[4] E.g. EAUC, Sustainability University Network Thailand, AASHE.

GET INVOLVED

➡ Contribute to IAU publication series on SDGs

Showcase your institutions HESD initiatives in the new IAU publication series about the SDGs. IAU will publish one publication per SDG. The next publication will target SDG4.

➡ Profile your institution on the HESD Portal

The Global Portal on HESD www.iau-hesd.net includes now more than 600 committed universities and over 500 actions. Join the movement and register your initiatives!

➡ Mobilise your community by using a personalised version of the IAU HESD Survey questionnaire.

➡ Become part of the IAU Cluster on HESD

IAU is developing a Cluster on Higher Education and Research for Sustainable Development (HESD). It is open to

IAU Member universities. The cluster will enhance knowledge sharing and development of expertise on SDGs.

➡ Consider applying for a Residency at the Bellagio Center in Italy

Since October 2016, IAU has been assisting the Rockefeller Foundation with the global outreach development of the Academic Writing Residency Programme in Bellagio Center. Twice a year, IAU encourages university leaders, researchers and professors worldwide to submit innovative projects promoting the development of society. Many academics connected with IAU have already taken a chance to carry out their projects and make connections. Seize this unique opportunity and get ready for the upcoming call in October 2018.

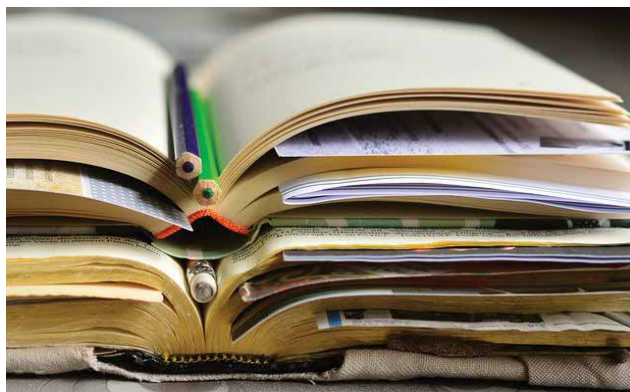
Contact: Stefanie Mallow (s.mallow@iau-aiu.net)



Technology in Higher Education

ICTs and their impact are ubiquitous in all aspects of higher education worldwide. Yet, for various reasons the inclusion of and the reflection on how best to use ICTs in all functions of higher education is uneven from region to region, from country to country, and among institutions. The aim of IAU's action in this area is, through collaboration and exchange, to embrace opportunities and discuss challenges and to pursue that the potential is made available to all.

LEVERAGING THE POTENTIAL OF DIGITAL TRANSFORMATION IN HIGHER EDUCATION



IAU will bring together IAU Members and experts to exchange and discuss ICTs and the role of digital transformation in higher education. This will take place via a series of distinct yet complementary activities steered towards the common goal of embracing this digital transformation in order to enhance the quality of, and to widen access to, higher education. This article will introduce two of the activities and IAU invites you to 'stay tuned' as more are underway.

Jointly define the standards and norms to support the digital transformation in higher education

The IAU policy statement '*Universities and Information and Communication Technologies (ICTs)*' was endorsed at the IAU General Conference in 2004. With the adoption of the IAU strategic plan 2016-2020, the theme was again adopted as a key priority for the Association. Taking into consideration the rapid development of technology and digital transformation, it was agreed that it is time to rethink and discuss the policy statement in order to adapt it to a rapidly changing context. The development of the policy statement will take place through an extensive stakeholder consultation. To oversee the process, IAU will establish an Expert Advisory Group composed of IAU board members and experts from different regions who have agreed to embark on this important task. Sponsored

and hosted by the National University of Political Studies and Public Administration (SNSPA) in Bucharest, Romania, IAU will officially launch the drafting process during an inception meeting taking place in May 2018. The main purpose of the meeting is to convene and to establish the Expert Advisory Group; initiate discussions regarding the outline of the statement as well as to establish a road-map leading to the final version of the statement; and planning for consultations amongst the different stakeholders – IAU Members, student representatives and national authorities. The core purpose of the statement is to embrace the digital transformation while outlining the key principles, values and conditions that need to underpin this transformation in order to open opportunities to all citizens of the world. The statement will be submitted for adoption at the next IAU General Conference, to take place in Dublin, Ireland, in 2020. With its Members, IAU wishes to take an active part in shaping the digital transformation in higher education.

New blog on '*The role of technology in higher education*'

IAU is pleased to focus on the role of the digital transformation in the 'In Focus' section in this magazine (page 18) devoted to the topic '*Technology in higher education: opportunities for bridging divides*'. Authors from different parts of the world have contributed to this issue, and with their interesting and very divergent perspectives, they provide a brief overview of many important aspects linked to this topic. As IAU desires to continue this exchange beyond the current issue of *IAU Horizons*, IAU is pleased to announce the launch of an IAU blog devoted to '*the role of technology in higher education*'; it provides an online platform for Members and experts to exchange on the topic. The aim of the blog is to provide a space for sharing innovative ideas and initiatives pursued in this field with a view to enhancing the quality of higher education and / or widening access to higher education. At the same time, the blog will also provide a space to voice concern about some of the obstacles, difficulties encountered or negative impacts generated and to discuss what are the barriers and the reasons behind these challenges. Most importantly it is a space that will allow voices from around the world, regardless of institutional and national contexts, to be heard. IAU hopes that this blog will be well received and encourages Members to engage with and contribute to its development and content. The blog is



also intended to be a tool for shedding light on this important topic and for discussing the effects of digital developments and opportunities from a global perspective.

IAU acknowledges the paradox of digital transformation: new ways of creating and disseminating knowledge, new structures for managing information and for engaging with civil society, new solutions for addressing societal challenges – while this potential creates great opportunities in some parts of the world, other parts remain disconnected and are missing out. Conscious of the risk of increasing rather than bridging divides, IAU believes that sharing perspectives from different parts of the world can contribute to creating increased awareness of the very different challenges encountered in different regions, countries and local contexts and support the need of collaboration and exchange in order to ensure that the potential of digital transformation is made available to all.

www.iau-tech.net

To be continued...

Regardless of the national and local contexts of IAU Members, there is not one institution around the world that is not impacted in some form by the digital transformation. Through the activities and initiatives launched, IAU wishes to contribute not only to embracing digital developments, but also to shaping transformation. IAU believes that higher education institutions can drive the developments in order to ensure that it is not merely commercial and financial interests that drive the developments, but that it is the leadership that envisions how the opportunities can be explored to improve the quality of higher education and to prepare students to participate in a rapidly changing society. IAU believes that higher education must be in the driving seat and should actively shape these new developments that are so intrinsically connected to the future of higher education. We sincerely hope that IAU Members will engage and join us on this journey!



GET INVOLVED

➡ Become part of the working group on ICTs and technology in higher education

IAU has several activities in the pipelines and is looking for representatives from Members who are interested in piloting activities and providing feedback on these initiatives. Get engaged, sign up and become part of the working group that will shape the activities of the Association.

➡ Contribute to the blog on the role of technology in higher education

Contribute to the IAU blog on digital transformation in higher education. You wish to showcase successful integration of technology in higher education, express your views and concerns about the development, share innovative ideas on how to use digital technology to improve higher education. Send your essay (max 800 words). Please include a photo,

short bio-note and the logo of your institution/organization. www.iau-tech.net

➡ Institutional site visits – Call for host institutions

IAU will soon launch a series of institutional site visits. The purpose of these visits is to create opportunities for exchanging among Members while meeting at a university that is very advanced in using digital technology to improve aspects of higher education. If you believe that your institution is a leader in this field and you wish to promote your institution and share your experience, consider hosting a site visit. Contact IAU to learn more.

Contact: Trine Jensen (t.jensen@iau-aiu.net)

IAU KNOWLEDGE HUB

New IAU publications

IAU Annual Report 2017



In January 2018 a hard copy of the IAU Annual Report 2017 was sent to the IAU Membership around the world. The report contains a succinct overview

of the activities and achievements of the past year. The online version of the report is available on the IAU website in the menu 'About IAU' <https://iau-aiu.net>

Higher Education Policy HEP 30/4 – December 2017



The last edition of HEP in 2017 was a thematic issue entitled *The Role of Higher Education in the Socio-Economic Development of Peripheral Regions*, and presents a set

of case studies of institutions and regions in two distinct national settings within the broader European context, namely Norway and the Czech Republic. Papers include a literature review and framework of analysis, the role of institutions in fostering industry clusters in peripheral regions, lifelong learning, cultural preconditions, and third mission.

Abstracts are available on <https://link.springer.com/journal/41307/30/4/page/1>.

HEP 31/1 – March 2018

The most recent edition of HEP contains a selection of articles looking at themes such as women in teaching in Sweden, a study of Kenyan graduates, quality assurance in Chile, challenges in Cambodia, academic mobility of Italian scientists, and the support for an Arab university in Israel. You can consult these abstracts on <https://link.springer.com/journal/41307/31/1/page/1>

SUBMIT A PAPER TO HEP

If you are interested in submitting a paper to HEP, please visit the online submission portal on <https://www.editorialmanager.com/hiep/default.aspx>; and you will find author instructions on <http://www.springer.com/education+%26+language/journal/41307>.

Internationalisation of Higher Education: a Handbook



Since Spring 2016 IAU acts as the Chair of the Editorial Board for the publication of this Handbook by DUZ Academic Publishers (DUZ

Verlags-und Medienhaus GmbH) based in Berlin, Germany. The first issue under IAU's coordination (issue 2/2016) was published in July 2016, and since then other five issues have been issued, the latest being issue 1/2018, published in April 2018. Released three times per year and including articles from all over the world, the Handbook offers practically oriented articles of interest to anyone

engaged in the internationalization of higher education. IAU Members benefit from a substantial discount on subscriptions to the hard copy and online versions. The handbook will soon undergo a major restyling, more information will be available in July 2018.

<https://www.handbook-internationalisation.com>

IAU Lynx

IAU monitors higher education developments worldwide and presents a series of links to new policies, initiatives and projects on various higher education topics on a monthly basis. Previously the information was disseminated as part of the IAU monthly newsletter, but in trying to improve and to make information even more accessible, it is now presented on the IAU website. Please visit the *IAU Lynx* on the IAU website under the menu 'Knowledge Hub' <https://iau-aiu.net>

International Bibliographic Database on Higher Education (HEDBIB)



With over 40,500 records, the International Bibliographic Database on Higher Education - HEDBIB, contains up to date information on publications on higher education systems, planning, policy, administration and evaluation. Links to full text electronic publications are provided where available. IAU Members benefit from HEDBIB's advanced access options: access to abstracts and to full-text articles of Higher Education Policy, the IAU's quarterly research journal, and access to tailor-made bibliographies on demand.

World Higher Education Database (WHED) – an essential tool to help fight fraud in Higher Education

The IAU WHED portal (www.whed.net) is the global higher education database developed and maintained by the International Association of Universities (IAU). It includes information about education systems, credentials and higher education institutions. IAU has gathered information about higher education institutions since its creation in 1950; the information has been made available through an open online portal since 2014.

The WHED is managed by a committed team in charge of updating information received by governing bodies and higher education institutions and complemented by official websites. IAU constantly checks governmental lists to ensure that the database only includes higher education institutions recognized by the national authorities. This time-consuming process is essential to guarantee the quality of the database.

Over the years, IAU has observed increased presence of degree mills and fraudulent institutions online. Websites of fraudulent institutions often imitate official university websites in order to blend in and appear professional, credible and attractive making it increasingly difficult to uncover at first glance. Typically, such institutions even refer to accreditation agencies which are very similar to recognized accreditation agencies but providing no proof of any 'official' status; or they refer to accreditation in a territory that has little or no regulation concerning the authorization and functioning of education providers as specified by EQAR (the European Quality Assurance Register for 'Higher Education'). In some cases, fraudulent institutions also claim that they are recognized by existing international organizations (e.g. "Accredited by UNESCO", "Recognized by the Council of Europe" "Accredited by IAU" etc.) although none of these organizations recognize or attribute any type of legitimacy to any higher education institution or programme.

Some of the key indications allowing to identify a fraudulent institutions include:

- they require immediate payment of fees and
- they are exclusively accessible online with no indication of physical address or referring only to a postbox.
- they tend to offer a very wide variety of fields of studies and the study program descriptions are often very succinct.

Recently an article from the BBC News reported that "Axact, which claims to be the "world's largest IT company", operates a network of hundreds of fake online universities run by agents from a Karachi call centre" [...] and that "more than 3,000 fake Axact qualifications were sold to UK-based buyers in 2013 and 2014, including master's degrees, doctorates and PhDs." [...] "In 2015, Axact sold more than 215,000 fake qualifications

globally, through approximately 350 fictitious high schools and universities, making \$51m (£37.5m) that year alone." (<http://www.bbc.com/news/uk-42579634>).

In an era where 'fake' information is on the rise, IAU is proud to continuously maintain its global database and to collaborate with national authorities and higher education institutions worldwide to provide authoritative information about recognized higher education institutions around the world. In spite of the heavy workload and never-ending mission to keep the database up to date, IAU is convinced that this effort is of utmost importance to the global higher education community. By providing access to this global database of higher education institutions recognized by the national authorities, IAU thus also provides a tool for verification of authenticity and thereby challenges the existence of fraudulent institutions.

Make sure that your institution is a Member of IAU to support this important work!

WHED JANUARY 2018

23,991 visitors (773 visitors per day)

20,706 new users

289,406 page views

135,695 queries on HEIs

186,719 clicks on a specific HEIs

📍 5 most consulted countries:

India
United Kingdom
Nigeria
United States
Pakistan

Partners and networking

Beyond the framework and more theoretical limits of the 4 key thematic priorities adapted in the IAU 2016-2020 strategic plan, IAU also works with a series of partners on issues of importance to the higher education community. IAU is pleased to highlight here two of these partnerships.

COUNCIL OF EUROPE PROJECT: FRAMEWORK FOR COMPETENCES FOR DEMOCRATIC CITIZENSHIP



Since 2014, IAU has been closely involved in the development of the framework for competences for democratic citizenship which resulted in the publication produced on behalf of and by the Council of Europe. The first phase of the project was devoted to the development of a conceptual model of the competences which citizens require to participate effectively in a culture of democracy. The document as published describes the model and the methods that were used to develop it. The document is aimed at readers who wish to understand the underlying assumptions and technical details of the model. Phase two of the project was devoted to the development of descriptors (i.e. statements or descriptions of what a person is able to do if they have mastered the various competences that are specified by the model), phase three to ascertaining what descriptors to assign to which levels of proficiency, and phase four to the production of supporting documentation. This documentation is addressed to educational practitioners and policy makers, and provide a description of the competence model. It explains how the model and the descriptors can be used to assist curriculum design, pedagogical design and the development of new forms of assessment (self-assessment or assessment by others). All documents form part of the Council of Europe reference framework of competences for democratic culture. The Reference framework is now published. Volume one of the Reference Framework contains the model of competences for democratic

culture that was unanimously approved by European ministers of education at their standing conference in Brussels in April 2016. Volume two lists the descriptors of the competences for democratic culture that are intended to help educators identify learning outcomes, achieved proficiency after a period of learning, and areas for further development. Volume three offers guidance on how the model of competences and the corresponding descriptors may be used in six education contexts. Together, these volumes offer educators a reference and a toolbox for



designing, implementing and evaluating educational interventions, in formal and non-formal settings. Since January a smaller expert group of which IAU forms part develops the next phase: the adaptation of the framework for its use in higher education. IAU Members will be invited to test it at a later stage.

Further information about the project: www.coe.int/competences

Contact: h.vantland@iau-aiu.net

QUALITY ASSURANCE IN HIGHER EDUCATION

IAU partners with CHEA, GICAQ and UNESCO and takes part in regional consultations on the role of quality assurance in higher education, both in Washington at CHEA Conference (in January) and in February 2018, in Switzerland host to the European regional Consultation. The Consultation was co-organised by UNESCO's Division for Policies and Lifelong Learning Systems and the Swiss Agency of Accreditation and Quality Assurance (AAQ). The next regional consultation will focus on Eastern Europe and takes place in Moscow on 23-24 April 2018. The results of all regional consultations will be brought to the UNESCO global conference on Quality Assurance in Higher Education, of which IAU is a partner, and will be held in Paris on 21-23 November 2018.

In preparation for the Conference, UNESCO and partners developed a draft Global Convention on the Recognition of Higher Education Qualifications. IAU is invited to participate in the consultation round concerning the Preliminary Draft of the said Global Convention. The future Convention is to be a "major step forward for the rights of applicants to have their higher education qualifications assessed by competent national authorities in a fair, transparent and non-discriminatory manner. It also will strengthen international cooperation in higher education and enhance trust in higher education systems and their quality assurance mechanisms, in line with the relevant United Nations Sustainable Development Goals."

For further information, please refer to the Global Convention webpage at <https://en.unesco.org/themes/higher-education/recognition-qualifications/global-convention>

IAU Membership News

NEW MEMBER INSTITUTIONS

Afghanistan

Kardan University
www.kardan.edu.af



Iraq

University of Zakho
uoz.edu.krd



Niger

Maryam Abacha American University of Niger
www.maaun.net



Sudan

University of Kassala
www.kassalauni.edu.sd



Turkey

Eastern Mediterranean University (*Rejoin*)
www.emu.edu.tr



NEW MEMBER ORGANIZATIONS

Colombia

ASCUN (Asociación Colombiana de Universidades)
www.ascun.org.co



NEW ASSOCIATES

Dorothy Davis, Australia

Juliette Torabian, France

NOT YET MEMBER?

JOIN THE GROWING GLOBAL HIGHER EDUCATION COMMUNITY NOW!

- ➡ The most representative association with more than 650 members in some 120 countries
- ➡ A UNESCO partner, uniquely positioned to collaborate with many international organizations
- ➡ A long history of promoting values of academic freedom, intercultural dialogue and global social responsibility



OPPORTUNITIES TO BE VISIBLE

- Host IAU international conferences & workshops
- Showcase your initiatives on the WHED, IAU website, IAU Lynx and specialized portals



ACCESS TO IAU KNOWLEDGE HUB

- World Higher Education Database (WHED)
- Peer-reviewed journal *Higher Education Policy*
- Magazine *IAU Horizons*
- And all other IAU publications



A GLOBAL NETWORK OF PEERS

- Rely on IAU extensive network to form new partnerships
- Attend IAU global events with a large audience of international experts
- Contribute to IAU working groups
- Get actively involved in IAU governance



ADVISORY & TRAINING SERVICES

- **ISAS 2.0:** Internationalization Strategies Advisory Service for institutions, individuals or national governments or organizations
- **LGEU** – Leading Globally Engaged Universities: the leadership development training program

More information on www.iau-aiu.net

Contact: j.becker@iau-aiu.net

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The views expressed in the articles published *IAU Horizons* are those of the authors and do not necessarily reflect the views of the International Association of Universities.

Do not hesitate to contact IAU in case you have questions or comments related to the articles in the ‘In Focus’ section.

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IN FOCUS

Technology in higher education: opportunities for bridging divides?

IAU IS PLEASED TO DEVOTE THIS ‘IN FOCUS’ TO REFLECTIONS ON THE ROLE OF TECHNOLOGY IN HIGHER EDUCATION. It is a topic that concerns all higher education institutions around the world in spite of their differences. IAU decided to focus on: *Opportunities offered by technology for bridging divides?* in order to give a special place to positive developments and initiatives around the world. Yet, the question mark is added to open up the discussions and also addressing the perpetual paradox which accompanies technological developments, namely the great potential to address societal challenges and the flip side of the coin the risk of creating or exacerbating inequalities around the world between those who benefit from the potential and those who do not.

Many of the authors underline that technology and ICTs are not a panacea for addressing social and economic disparities or to address all challenges of higher education, but they bring opportunities. It is about how the potential is leveraged and about the drivers and ambitions behind the developments.

It is likewise interesting to note how closely questions about the role of technology are linked to the understanding of human beings, their needs and capacities. While the technological developments are set out to continue developing at a rapid pace, IAU with the higher education community will pledge for a human centred approach to the use of technology and that developments are accompanied by policies and regulatory frameworks, norms and values to ensure that developments contribute to human developments.

The selection of articles also demonstrates that while all higher education institutions are concerned by the technological developments, the degree to which the potential can be leveraged at the institutional level depends to a large extent on external factors such as national and local infrastructures.

Please enjoy the articles gathered in this ‘In Focus’ that will take you on a tour around the world and provide important insights into the current situations and initiatives, reflections on the challenges ahead and, most importantly, into how the higher education community is already transforming and exploring opportunities in order to leverage the potential of technology to widening access to and improving the quality of higher education, and ultimately enhance human conditions.

IAU is pleased to announce that the discussions and exchange of views and perspectives will continue beyond this issue of *IAU Horizons* as IAU is launching a blog on this topic. All articles of this issue will also be made available on the blog to kick start discussions. Please contact IAU if you are interested in contributing an article for the blog and to fuel the exchange and discussion on this important topic.

01 Will the Real ICT Hub Please Stand Up?



by **Jason A. Laker, Ph.D.**, San José State University, California, USA

As fellow IAU members and other readers of Horizons may be aware, the Association is initiating a process of reviewing and revising its existing ICT statement to consider the present state and future directions of ICT within the Higher Education sector. Accordingly, the theme of this issue's In Focus section is, *"Technology in higher education: opportunities for bridging divides?"* Answering such a question requires us to deepen our inquiry and consider which divides require bridging, and who will be the beneficiaries of the opportunities being considered? In the case of ICT, the divides and bridges are both virtual and material. After all, information, ideas and other content are transmitted only when there is available, reliable and accessible infrastructure for sending and receiving it. However, the causes and remedies of the divides for which ICT might be a bridge have more to do with values and beliefs than with devices and technical capabilities.

ICT is not a panacea for addressing social and economic disparities, but it can certainly make a profound and positive difference. The so-called "Digital Divide" references the fact that – despite the dizzying pace of development of new devices, compression and transmission efficiencies, apps, software and storage solutions – many communities don't even have high-speed internet access. The typical explanation given for this disparity is a "lack of resources." However, this is arguably a polite way of saying "low priority." The truth is that it has been possible to widen access to ICT for quite a while, but the decisions about funding, implementing and maintaining such expansion have been tied to logics of financial investment and returns rather than equity and access. A related element is the belief that certain countries – particularly Western nations – have wealth and nearly universal access to advanced technologies while "developing" countries generally do not. This is not only reductionist, but such stereotypes exacerbate existing stratifications both between and within countries and communities around the world.

I live and work in San José, California, USA, part of the so-called Silicon Valley home of companies such as Facebook, Google, Apple, Yahoo, HP, Adobe, AMD, Cisco, Oracle, and Intel, to name a few. At a recent meeting of the local Rotary Club, a writer named Caity Cronkhite offered personal reflections on her experiences growing up in a rural community, Fountain County, Indiana (population 16,591, of whom 51% have access to high speed internet) and relocating to Santa Clara County, California, part of Silicon Valley (population 1.025 Million, of whom

"ICT is not a panacea for addressing social and economic disparities, but it can certainly make a profound and positive difference."

96.4% have access to high speed internet). She described her struggles as a younger person eager to pursue education and a successful career, the barriers and constraints associated with being born in a place where many still can't access the Internet or still utilize telephone lines and dial-up modems to reach it, and the coerced choice to leave (something that many can't do) so she could pursue her education and career.

In her remarks, Ms. Cronkhite connected such access to other social problems facing residents of Fountain County, Indiana versus Santa Clara County, California, two cases illustrating the Divide to be bridged. These include such issues as teen birth rates (41 per 1000 people vs 15 per 1000), household income (\$45,924 vs. \$117,352 USD/year), public school availability (3 vs 405), percentage of university graduates (14% vs. 49%), local hospitals (0 vs 15), and annual drug overdose deaths (14 per 1000 vs 8 per 1000). In her remarks, she argued that the presence or absence of high-speed internet and other advanced technologies have enormous impact on these various issues. Provision of online and hybrid educational programs for people who are bound by place, time or budget obviously require such technology, but so does academic preparation to be successful in most university-level programs more generally. Advanced technology and infrastructure also provides broader access to specialized medical care and facilitates the research leading to its development. ICT facilitates dissemination of health and nutrition information, finding potential mentors and collaborators for career and entrepreneurial endeavors, exploration of personal and career interests, generating and circulating solutions to manufacturing and agricultural challenges, establishing and maintaining diverse social connections, and informed democratic participation. But, if decisions about whether to install the necessary cables, servers or wireless transmission equipment is based on whether the users can pay their respective incremental costs, then little or nothing will change the present technological—and thus social—stratification.

IAU has as one of its priorities to "pursue that the potential of technology is fully harnessed to improve the quality of higher education and to increase access to knowledge and education for all." As such, two of the overall objectives are to "Advocate for equity and solidarity between and within higher education institutions in ICT matters" and "Promote the design of inclusive ICT strategies in HEIs by encouraging and facilitating networking and cooperation between HEIs, international, and national bodies." IAU member institutions and national HEI consortia have both the capacities and mission obligations to collaborate with each other, policy makers, and community partners in synergistic fashion, leveraging ICT as a strategic

enabler for achieving inclusive excellence at universal scale. In short, HEIs – rather than the Silicon Valleys of the world – are the ultimate conveners and initiators, making them the REAL ICT hubs of society. Will we step up at this critical moment and act like it?

02 Can technology solve the problems of higher education?



by **Asha Kanwar**, President & CEO and **Sanjaya Mishra**, Education Specialist, eLearning, Commonwealth of Learning, Canada

The short answer is yes. Can technology address the challenges faced by higher education? Has it increased access and bridged divides? Has technology led to improved outcomes? These are some of the most frequently asked questions that the Commonwealth of Learning (COL) has been asked in the last 30 years. Heads of Government created COL with the express mandate to use distance learning and technologies to increase access to quality education and training. COL believes that technology-mediated teaching and learning can transform lives, making access to education available to anyone, anytime, anywhere. However, the choice of technology must depend on whether it is appropriate, available and affordable. Technology by itself cannot be a panacea for all that ails higher education today but must be placed in an appropriate social, cultural and political context.

In 2012, there were 165 million tertiary education students globally, and it is estimated that the number will grow to 522 million by 2035. The gross enrolment ratio in higher education in 2015 is 30.6, while it is 8.5 in sub-Saharan Africa and 20.8 in South Asia. Projections based on data from International Institute for Applied Systems Analysis (IIASA) shows that most populous countries like China and India will have 14.16% and 17.02% of population with a degree by 2050. As more countries achieve universal secondary education, the demand for higher education will continue to escalate.

Brick and mortar institutions will not be able to absorb the surging demand. Alternative options will be required and technology will play a significant role in enabling institutions to expand. In the United States, 29.7% of all students enrolled in 2015 were taking at least one distance course. A recent

study on Open Universities in the Commonwealth revealed that there were over 4.4 million students in 27 open universities alone. In 2017, over 78 million learners were reached by over 9,400 massive open online courses (MOOCs) offered by over 800 universities. In terms of outcomes, research shows that there is 'no significant difference' in the learning outcomes of campus, distance or online learners.

The COL experience shows that to use technology effectively in teaching and learning, it is important to focus on: (i) policy, (ii) capacity, and (iii) appropriate technology. Integrating these three dimensions help universities to leverage the power of technology to increase access, improve quality and

“COL believes that technology-mediated teaching and learning can transform lives, making access to education available to anyone, anytime, anywhere. However, the choice of technology must depend on whether it is appropriate, available and affordable.”

sustainability. We have been supporting policy development for technology-enabled learning, capacity building for blended learning delivery as well as online delivery of programmes, including MOOCs. In the process of developing appropriate policy, we need to take into consideration the level of existing capacity and access to technology for both students and faculty. Findings from our surveys on higher education institutions show that students have access to technology, especially smartphones, but they spend huge sums of money in buying textbooks for learning. Higher education teachers are either not aware of relevant technologies and open educational resources (OER), or lack the capacity to use these to enhance the quality of learning. Based on these findings we promote the integration of OER in teaching and learning.

The rising cost of textbooks is a major problem for students, not only in developed countries but also in developing countries. In the USA, the price of textbooks has gone up by 87.5% since 2006 and an average student spends USD 1,250 per year on textbooks. According to a recent study in Canada, due to the prohibitive cost of textbooks, 54% of students in the Province of British Columbia (BC) study without, at least, one of their required textbooks, while 27% take fewer courses and 17% drop courses altogether. COL is making efforts to develop and support OER in advanced ICT skills such as media, web programming and mobile computing. In Antigua State College (ASC), the student use of open textbooks resulted in savings of approximately Eastern Caribbean dollar (ECD) 704 per student per year, and increased student learning outcomes by 5.5%. The use of open textbooks in all the courses at the ASC is estimated to result in student savings of ECD 904,640 per year. However, the OER movement should not just be seen as a means of saving

costs and improving outcomes but also opening up educational policy and practice. It must be harnessed in the interests of equity and inclusion so that no one is left behind.

Many higher education institutions around the world are taking steps to integrate technology and OER to improve access to quality learning opportunities for their students. Integration of technology in teaching and learning can clarify many of the doubts that we have about the effectiveness of technology. In higher education, we should ask the effectiveness of what we do daily in our classrooms, and question why we do what we do? Is there no other alternative before us to change the status quo? Recent developments in technology (such as artificial intelligence, robotics, blockchain) have far-reaching implications for higher education institutions in terms of curriculum, pedagogy and certification. Technology is here to stay. How can we harness the potential of technology to prepare our learners for the uncertainties that lie ahead? Are we bystanders, reluctant adopters or are we ahead of the game? The future of higher education will depend on our response today.

03 Technology in higher education: opportunities for bridging divides



by **Gard Titlestad**, *Secretary General, International Council for Open and Distance Education (ICDE)*



Universities in all regions of the world are providing online access to millions of students that would not have been included in quality higher education if left without the online opportunity. Examples are University of Maryland University College, USA, UNISA in South Africa, Open University, UK, Universitas Terbuka, Indonesia, to mention a few. Some started as online universities, like Open University Catalunya, Spain, the first online university in 1995. In the US, almost 40% of students take at least one course online. In Brazil, most federal universities collaborate under the umbrella of the ministry for Health, to provide continued education for almost 3 million health professionals. This would not be possible without an online approach. One of the main findings in a European funded project, IDEAL (Impact of Distance Education on Adult Learning), coordinated by ICDE (UNESCO Institute for Lifelong Learning, 2015), was that online education as the main mode of distance education fulfilled most adult learners' requirements for more flexible learning opportunities.

We are at the beginning of a new wave of innovation, a wave that so far has brought many new opportunities to higher education. A credo for this wave is "what can be digitized will be digitized". Artificial Intelligence (AI) and Cognitive Technologies (CT) are high profiled technologies that are rapidly emerging at the marketplace. In times where technology seems to be everywhere and in increasing speed to market, I find it relevant to remind of the often cited statement from one of the pioneers in technology enhanced learning, Tony Bates: "Good teaching may overcome a poor choice of technology but technology will never save bad teaching".

So, we are back to basics, what are the divides needed to be bridged, what are the problems to be solved?

Major changes seem to happen in the population aiming for higher education. Professor Mark Brown, Dublin City University (DCU) noted previously that, in Ireland, "the demand from part-time mature students for more online and flexible learning pathways continues to increase as people look to earn as they learn." In 2017, DCU alone accepted a record number of new registrations for online degree programmes. In my home country, Norway, more than 25% of the students are above 30.

We can already observe dramatic consequences from digital disruptions, automatization and job destructions. New competencies on higher education level are needed for the new jobs. New skills are needed to adapt the workforce to the massive innovation taking place.

"Higher education will have to respond to new and massive demands for continuing, informal, non-formal and formal educational needs to help transforming society and transforming lives."

Job-destruction and creation arising from automation and early AI require a fundamental change in lifelong learning. Higher education will have to respond to new and massive demands for continuing, informal, non-formal and formal educational needs to help transforming society and transforming lives. Online and technology enhanced provision will often be the best solution.

Estimates show that future student enrolment is set to more than double from now to 2030. This need requires taking the best from online and open in combination with campuses. The future is "blended". Open and Open Education Resources (OER) came together with the massification and democratization of higher education. Open and digitalisation makes a new vision reachable: For the first time in human history it is possible to achieve inclusive and equitable quality education and lifelong learning for all (Sustainable Development Goal 4, Education 2030).

The Education 2030 Framework for Action seeks to push for action in utilising these opportunities: “A well-established, properly-regulated tertiary education system supported by technology, Open Educational Resources (OERs) and distance education modalities can increase access, equity, quality and relevance, and narrow the gap between what is taught at tertiary education institutions and what economies and societies demand.” (Target 3, point 43.)

My focus is how technology enhanced solutions and OER can facilitate access to inclusive and equitable quality higher education and lifelong learning. However, other areas also have needs where technology enhanced solutions can help. To mention some of those ICDE is working on:

- Personalisation and quality enhancement: Learning analytics and big data.
- Employability: ePortfolio, Alternative Digital Credentialing.
- Internationalisation: Collaborative Online International Learning, COIL.

Online, open, flexible and technology enhanced solutions are not a quick fix for massive educational needs or failures of the educational system. Success requires committed strategies on all levels, long term investments and promotion of a culture for quality and a culture for innovation, in particular social innovation. When more than 100 leaders from education met in UNESCO 25 May 2017, the main conclusion was:

“SDG4, Education 2030 will not be met unless stakeholders, drawing on humanistic values, collaborate to lead the digital transformation of higher education – making online, open, flexible, and technology enhanced learning a part of the solution.” This conclusion is even more valid today.

For those entering the area, I can recommend the free, online open textbook by Tony Bates: “Teaching in a digital age” <https://www.tonybates.ca/teaching-in-a-digital-age/>

04 Technology in higher education – a “future” scenario



by **Dzulkifli Abdul Razak**, IAU
Immediate Past President, Malaysia

The discourse on technology of late is dominated by the so-called “4th Industrial Revolution” (4IR) made famous by the 2016 World Economic Forum in Davos. In Malaysia, there have been flurries of

“There must be ample room and space in HE for the naturally endowed intelligence to duly recognise the aspects of being human that machines are not privy to.”

activities across many sectors especially among academics and professionals. In fact, universities are instructed to come out with a corresponding “curriculum 4.0” to cope with the new technological development encompassing artificial intelligence, automation and the Internet of Things among others.

Unlike the announcement on Sustainable Development Goals that was officiated in New York around the same time in 2016, the 4IR seems to capture the interest of the policy makers overwhelmingly. Most seem intrigued in the way it was promoted as the next “big” thing without which one would be left behind, if not made redundant. It looks like the last point is most persuasive which can be very daunting in the context of (un)employment in particular.

This phenomenon however is not exactly new because every “industrial revolution” posed the same dilemma since the first one in the late 18th century. Yet the world continues to “function”, and some would even claim that it is now better than what it used to be, thanks to the “disruptions”.

The frenzy is somewhat reminiscent of the turn given the millennium scare attributed to the Y2K bug. It was perceived as another technology “threat” forewarned to create global upheavals if not properly handled. Arguably it was part of the 3rd Industrial Revolution scare although no one touted it that way.

Fortunately, when the new millennium came, it was business-as-usual, an anti-climax of sorts. Likewise, today we are staring at the 4IR not knowing what to expect yet again, with many opting to embrace it as a way out. In so doing, one recognises the many uncertainties that lay ahead leading to a number of dilemmas in HE. As suggested by the late Stephen Hawking to BBC: “The development of full artificial intelligence could spell the end of the human race.”

That said, many developing countries like Malaysia have no option but to play “catch up” framed on pre-set standards (curriculum 4.0?) so as not to be left behind. By failing to do so, they risk being cast aside as “redundant” and then what becomes of the ambition to be a “developed” nation? And being technologically advanced is often billed as an important criteria.

Malaysia has the Vision 2020 framework (1990-2020) that has to be translated into reality in the next two years. In devising the Vision three decades ago, the 4IR was hardly in the air,

although it can be fitted into the existing framework especially relating to science and technology. However, to do so at this late stage can be “messy” based on how the question is being fashioned. For example, a recent major Megatrends Forum that was held to sort this out framed it as “Cerebrum X Algorithm” where “X” is merely an acknowledgement of the way two factors interact depending on “how we treat technology”.

Paraphrasing this at a more macro level for HE can mean “Human X Machine,” and thus one is tempted to interpret it as interactions between two types of “intelligences” – the “natural” (primordial) and “synthetic” (artificial), in the broadest sense, respectively. It follows therefore that instead of depending on how we treat technology; the bias is to ask how we treat “humans”?

After all natural/primordial intelligence competencies are defined as inherent parts of being human, beyond just the cerebrum. It is known to deliver insights and foresights (like the 4IR) and inclusive of those that are “spiritually inspired”. It therefore is capable of journeying into self-discovery leading to transcendental self-awakening where conventional (secular) thinking can never reach, let alone understand.

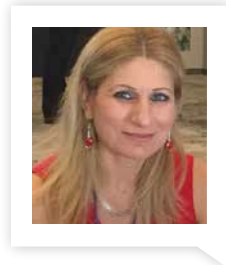
In other words, we need to be cautious to avoid the tendency to over concentrate on the “artificial” and totally ignoring the “imperatives” of being human as part of holistic education, particularly of human metaphysical experiences (some would call it spirituality or conscience) that technology has long made redundant.

In short, there must be ample room and space in HE for the naturally endowed intelligence to duly recognise the aspects of being human that machines are not privy to. This is just one of several possible challenges that must be anticipated when dealing with next technological megatrends in HE.

We must, ultimately, be “human” enough to courageously assert our humanity over a piece of technology that tends to dehumanise the human species as increasingly predicted by many “experts” in the field. It has to go pass the anatomical cerebrum, and its product – the algorithm. Machines, for all their algorithm and synthetic (super) intelligence can be a mismatch to the primal instinct upon which “human development” should be predicated and (re)oriented. This is to enable us (humans) to create our own “disruptions” for a more humane sustainable future that is now sorely obscure globally.

Otherwise we are back to the dehumanising set pattern of one-size-fits-all overlapping into the domain of machines known for their “efficiency” in the advent of “transhumans” – leading into an era which is even more daunting as the future scenario in HE.

05 Transforming Higher Education with Technology: Transcending Borders and Traversing Boundaries



by **Charoula Angeli**, Professor of Instructional Technology, Department of Education, University of Cyprus



We live in a world of fast political, social, economic, technological, and environmental change. At the same time, a transformative shift in the way innovation takes place is unfolding around the globe. According to Tapscott and Williams (2010), this shift, which is driven primarily by the Internet and the collaborative communities it affords, changes everything from the nature of science and invention, to the evolution of societies and economies. Investment in education, training, and professional development is essential to increase growth and competitiveness.

“It becomes imperative to rethink the role of higher education and the transformation it needs to undergo in order to meet the challenges of a fast changing society.”

Similarly, according to Ito and Howe (2016) advances in Internet technology and communication have created an explosive change in the very nature of innovation shifting the power dynamic from governments and large corporations to people with knowledge, skills, and innovative ideas. Unfortunately, *“European education and training systems continue to fall short in providing the right skills for employability, and are not working adequately with businesses or employers to bring the learning experience closer to the reality of the working environment”* (European Commission, 2012, p. 2). In line with Duderstadt (2017), the key strategic resource necessary for prosperity in this new age is knowledge creation – not knowledge consumption. Consequently, as society gradually becomes more knowledge-intensive, it becomes ever more dependent on social institutions that produce knowledge, such as, the university. Thus, it becomes imperative to rethink the role of higher education and the transformation it needs to undergo in order to meet the challenges of a fast changing society.

Not all societies are the same; some are more forward-thinking and cutting-edge than others. As a result, differences in technological development, infrastructure, and mindset

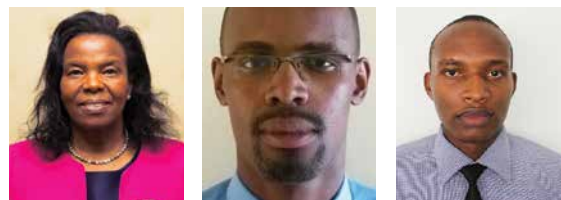
have created a number of divides in higher education related to the dissemination of academic expertise in research and teaching, invention of new research fields and programs of study, distribution of services, resources, and tools, and the establishment of strategic alliances and partnerships across and beyond borders and boundaries. The author herein argues that the digital transformation afforded by technology can provide opportunities for bridging the divides that currently exist in higher education at the local, national, and international levels.

Technology, can easily and effectively replace the old industrial model of education with a new model called collaborative knowledge production. Succinctly, the main idea here is to use technology to transcend borders and traverse boundaries so that universities can form strategic partnerships between them for the advancement of research as well as the development of flexible, adaptive, and innovative programs of study across different disciplines and institutional settings. While collaborative learning is not a new concept, today's technology has the potential to embrace novel collaboration models and open up new worlds for collaboration that change teaching and learning in higher education fundamentally (Kinnaman & Bleigh, 2004). In this context, however, transformation is not about the technology per se; it is about scaling up innovative collaborative learning partnerships in higher education through *communities of practice* across different cultures that will sustain and achieve economies of scale.

Communities of Practice (CoPs) are groups of people who share interests and work together to solve common problems through regular interaction (Wenger, 1998, 2006). A CoP has three illustrious elements, namely (a) a domain of interest and a commitment to the domain, (b) a community of members who engage in joint activities and discussions in order to help each other, share information, interact, and learn together, and (c) a shared practice. CoPs are found in different settings such as, in education, business, government, and professional associations. In higher education, CoPs can be used for designing and implementing educational experiences that ground learning in authentic practice through participation in communities around subject matters, as well as in connecting the experiences of students to actual practice through peripheral forms of participation in broader communities beyond the classroom walls. Undoubtedly, the Internet opens up the way to virtual or online CoPs through a multitude of Web 2.0 tools enabling universities to open themselves up to ideas outside their boundaries. This will open up opportunities for new research fields, collaborative programs of study, and learning opportunities for students to pursue on their own.

In conclusion, investing efforts for creating and sustaining online CoPs is pivotal as these online environments afford and offer new learning possibilities and open up multiple windows for enabling us to excel in a "brave new world" (Huxley, 1932). It is however important to point out that it is the openness of all of us to new ways of thinking and habits of mind that will allow us to sustain our partnerships in the online CoPs.

06 Technology in Higher Education: an Approach to Global Engagement



CLiG Centre for Innovative Leadership & Governance
Mentoring Leaders for Excellence

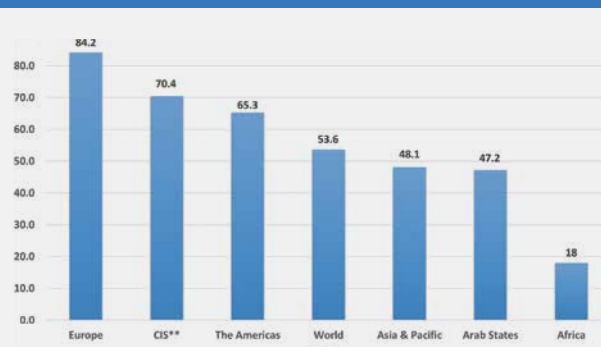
by **Olive M. Mugenda**, PhD, Executive Director and Founder, Centre for Innovative Leadership & Governance, Former Vice-Chancellor, Kenyatta University. Co-authors: **Andrew Kiiru** & **Stanley Kinoti**, Post Graduate Students, Kenyatta University, Kenya

Introduction

The evolution of higher education as a driver of innovation is becoming widely recognized as a catalyst for global engagement. Technological discoveries and innovation trends have shifted from exploration of new ideas to establishing ways in which countries can harmonize their integration. This means that technology in higher education plays an increasingly vital role in broadening Higher Education Institutions (HEIs) reach outside their countries. To keep this momentum, HEIs must critically assess their technological advancements in order to remove barriers that would otherwise limit global engagement. The integration of technology in higher education must acknowledge that faculty and students must be equipped with the necessary tools and skills to sparkle global collaboration.

Though HEIs have different approaches to global engagement, there are fundamental areas that they must encompass in their strategy. First, HEIs must collaborate with other institutions

Figure 1: Percentage of households with internet access for the year 2017



Note: ** Commonwealth of Independent States

Source: ITU World Telecommunication/ICT Indicators database:
<http://www.itu.int/en/ITU-D/Statistics/>

“This makes a case to revolutionize technology in institutions with the main objective being to support teaching and learning programs and increasing efficiency in the overall education systems.”

in the area of technology. Single actors in this area cannot succeed given the common agenda and need for networking with other Institutions with similar technological objectives. Secondly globalization generates technological risks and it is imperative that Institutions minimize risk by partnering for effective global collaboration. However, it is important for HEIs to consider government and Institutional regulations as a consideration for the formation of partnerships. Third, HEIs leaders must ensure commitment to the global engagement strategy as they advance technology. They must have specific strategies to address them first as institutions and then as partners.

Technology as driver for change in Higher Education

Higher education has many benefits such as enhancing financial security and creating avenues for enhancing career development. Higher Education also prepares the recipients to be mentally and emotionally prepared to mitigate around life challenges by being exposed to opportunities that they can exploit should they face adversities. The education attained also plays a key role in promoting the quality of life of individuals and their families through the increase of opportunities to enhance income, access health care and avoid poverty related misfortunes. Incorporating technological advancements into institutions of higher learning to support relevant systems promotes the learning processes in the institutions which in turn helps the learners to achieve the best and reap the highest benefits. This makes a case to revolutionize technology in institutions with the main objective being to support teaching and learning programs and increasing efficiency in the overall education systems.

The African Union has developed a *Continental Education Strategy for Africa* (CESA 2016 –2025), which reflects the Post-2015 Development Agenda. CESA 2016-2025 comprehensively documents the vision for education in Africa and the training systems in order to realize full potential in competencies, skills, innovation and creativity. This is with the aim of nurturing African core values that promote sustainable development at the national, sub-regional and continental levels. Continental education strategy for Africa, emphasizes regional cooperation, and that public – private partnerships should have the necessary human capital for sustainable development, so that they can become players in the knowledge economy. In a globalized world, international academic cooperation is increasingly important and must be driven by

technology. A key indicator of technology is the availability of Internet connection at the household and institutional level. Africa household connectivity (18.0%) is below the average percentage of the households connected to Internet in the world (53.6%). Africa, for example, must put strategies in place to reverse this trend. The following table shows the continental variations in this crucial technology indicator.

In an attempt to understand technology as a driver towards shaping international collaboration in higher education, a major concern is whether HEIs are effectively utilizing opportunities created by advancements in technology. The second concern is whether the Institutions are engaging the right people to identify these opportunities and use them to their advantage. There is also concern whether the Institutions are using technology to address the challenges they are facing.

Technological advancements in higher education particularly digital technologies have been key in expanding knowledge, but they have not succeeded in making knowledge accessible to everyone or addressing the challenges nor have they helped to bridge the digital and knowledge divide. To do this there is need for:

Change in Mindset: Institutions of learning need to acknowledge the relevance of technology in the education sector and put in place right systems that can support and uphold technological advancement. HEIs must engage communities and all stake holders in the effort to enhance technology adoption.

Teaching & Learning ICT: There is need to not only have ICT taught as a subject in HEIs but also incorporating into teaching of other subjects. Learning and teaching tools have to be aligned to the latest technological advancement for full realization of HE and global engagement.

Revisiting institutions frameworks to align with the national digitization strategies: Institutional framework have to be flexible in the sense that they can be revisited and revised to be up to date with upcoming trends in the various economic sectors. To advance technology, there has been a global agenda for digital transformation and institutions can align their frameworks and systems with such global agenda in order to capitalize on benefits linked to the digital transformation. Some of the key measures that institutions could take include focusing their efforts, including finances, towards implementation of policies in line with the digital transformation and creating an integrated policy framework.

Incorporating new and different learning designs: To encourage and promote a deeper and all-inclusive learning approach, institutions need to redesign their teaching approaches. This will create a platform for active and online learning approaches that could see educators and students work together in an interactive learning environment to come up with innovative technological solutions to real life

challenges. There are for example existing models in place where institutions can comfortably educate a huge number of students around the globe without being limited by student mobility issues. In addition, there is technology, which enables practical subjects to be taught even when there are limitations of equipment.

In conclusion, technology is a catalyst for global engagement but must be availed, used and shared strategically for it to be effective.

07 Digitalisation as powerful means for the Bologna Process in European higher education to meet its goals



by **Dominic Orr**, Senior Researcher at FiBS Research Institute for Economics of Education and Social Affairs, Berlin

The Bologna Process set out to establish a European Higher Education Area (EHEA) based on common objectives, standards and commitments. 20 years after its launch, the 48 signatory states

continue to implement reforms with the objective of making European higher education systems more inclusive, more competitive and to promote international mobility of students and staff. The Ministers responsible for higher education in the EHEA will be meeting on 24-25 May in Paris to discuss their programme of work until 2020. A major part of discussions will be how digitalisation can help to achieve the Bologna objectives.

The most recent wave of the EUROSTUDENT study published in March 2018 has again shown European higher education to be better at recruiting students from well-educated families (Hauschildt, Vögtle, & Gwosć, 2018). But the study also highlights that first-generation students (i.e. those whose parents have not graduated from higher education themselves) tend to enter higher education later, study in short programmes at universities of applied science and rely on paid employment. The same study also shows that this group of students tend to have less clear study intentions and more often doubt their choice of study programme.

The problem of inclusion is discussed within the context of the Bologna Process as the 'social dimension'. It is about raising aspirations of potential students, facilitating second chance routes into higher education and providing specific support to students to assure student success. This involves, in particular, finding effective forms of information, advice and guidance for learners and offering special bridging courses to take account

of diverse educational routes into higher education (Orr, Usher, Haj, Atherton, & Geanta, 2017).

The European project entitled 'Peer Learning for the Social Dimension' from 2015 found many examples of counselling and support offered to students [1]. Two of the key problems of this type of support are that: 1) it is difficult to reach those learners who need the support most, and 2) it is difficult to scale-up support in the context of limited resources. Digital initiatives can help overcome these constraints. New forms of communication through social media networks is one such avenue for improvement.

A study from the USA on helping first generation students fit in at university or college concludes that: "Social media can be part of the solution to the challenge of connecting older students to their two-year institutions. It can be both an engagement tool and a research tool." (Brenden, Deil-Amen, & Rios-Aguilar, 2015). A study from Bristol, reflecting use of social media for this purpose in the United Kingdom, had similar findings (Timmis, Yee, & Chereau, 2015). This approach is being taken further by the European STELA project (Successful Transition from secondary to higher Education by means of Learning Analytics), which aims to facilitate successful transition from secondary to higher education using

"Digitalisation should be viewed as a powerful means to meet existing challenges in higher education."

the technique of learning analytics to support the decision-making process of prospective students during this transitional period [2].

Another pathway to opening up higher education is to use new forms of recognition of prior learning. This can be done through universities or consortiums offering online learning in the form of MOOCs (Massive Open Online Courses) to new learner groups on the condition that learning through the MOOC will be recognised for entry and progression by higher education institutions (e.g. through awarded credit points). This is something the educational platform Kiron Open Higher Education has been working on for refugees on a large scale [3]. Another example of work on the recognition of MOOC-based learning is the MOONLITE project (Moocs for Social Inclusion – comparing institutional MOOC strategies) coordinated by the Spanish National Distance Education University (UNED) [4]. A recent study published by the European Association of Distance Teaching Universities (EADTU), as part of the MOONLITE project, demonstrates that a large majority of institutions participating in the survey (70%) believes that credits from MOOCs should be recognized in the formal study programmes of the MOOC provider as well as other higher education institutions (Jansen & Konings, 2017).



These European examples highlight how digitalisation is being harnessed to make higher education in the region more inclusive. They show that digitalisation should be viewed as a powerful means to meet existing challenges in higher education. To this aim, an author collective has taken the initiative to shape the debate in the Bologna Process and published a more detailed position paper with recommendations on harnessing the power of digitalisation. The paper was drafted by the authors of this article and has been supported by the Bertelsmann Foundation, Kiron Open Higher Education, the German Higher Education Forum for Digitalisation (HFD), the European Association of Distance Teaching Universities (EADTU), the Groningen Declaration Network (GDN) and FiBS Research Institute for the Economics of Education and Social Affairs. It is expected that many of the ideas expressed in the position paper will be discussed in the next phase of the Bologna Process running 2018 until 2020.

The position paper can be downloaded online (https://kiron.ngo/wp-content/uploads/2018/03/2018-03-09_Bologna-Digital_final.pdf) and discussed on twitter under the hashtag #BolognaDigital.

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“Realising the integration of ICT in higher education is ‘inevitable’, a growing number of HEIs in the Asia-Pacific region have been combining online and face-to-face modes of teaching and learning, i.e. blended learning, as a means to ensure quality knowledge transfer and construction through ICT.”

The rapid transformation of digital economies throughout Asia and the Pacific continues to challenge traditional higher education systems. Increasing demand for relevant education and training requires a rethink of how to promote the development of new skills throughout life [1]. Although the use of Information and Communications Technology (ICT) is not the panacea for all the challenges faced by higher education institutions (HEIs) in the region, ICT-enabled learning, is essential to promote quality education and accelerate progress to achieve Sustainable Development Goal 4 (SDG 4), also known as Education 2030. Realising the integration of ICT in higher education is ‘inevitable’, a growing number of HEIs in the Asia-Pacific region have been combining online and face-to-face modes of teaching and learning, i.e. blended learning, as a means to ensure quality knowledge transfer and construction through ICT. A specially developed strategic planning framework and accompanying self-assessment tool can enable each HEI to fashion a bespoke capacity building approach for blended learning.

08 Blended learning – Building local capacity to achieve SDG4 in Asia-Pacific



by **Tianchong Wang**, Research Associate at the Education University of Hong Kong and **Wesley Teter**, UNESCO Asia-Pacific Regional Bureau for Education, Bangkok, Thailand

Why Blended Learning for Quality Higher Education?

By harnessing the “strengths of each” mode of learning and incorporating new pedagogical possibilities of blended learning, quality may be achieved through improved learning outcomes. Possible improvements include actively engaging students and transcending the parameters of time, space, and interactivity that characterises traditional face-to-face classroom learning, which afford teachers opportunities to impart 21st Century Skills using more student-centred, active learning approaches, as well as foster learning communities that work in concert to construct knowledge via the processes of inquiry, reflection and discourse. Quality may also be achieved with increased access and flexibility for learners especially hard-to-reach learners, and improved cost-effectiveness of institutional governance. If done appropriately, HEIs can fulfil all of these ambitions simultaneously rather than just provide greater efficiencies of content dissemination.

Blended Learning for Quality Higher Education Requires Strategic Planning

The straightforward definition of the blended learning paradigm contrasts with its complexity of implication. There is some evidence suggesting that transformational uses of blended learning in the Asia-Pacific region are limited. In many cases, HEIs are often unable to effectively adapt their blended learning practices to suit a wide spectrum of contexts or cannot maintain these practices over a substantial length of time; in other words, they often suffer from scalability and sustainability limitations. Further, knowledge, experience and key lessons of what works, as well as how and why it works, are not integrated. Strategic planning empowers HEIs to reach consensus around the focal points of the concerned matter and the necessary measures that should be taken in a combined effort. The process will help to link political will, effective planning, and concerted resources – which are key elements suggested by the Qingdao Declaration for implementation [2].

A Holistic Approach of Blended Learning Strategic Planning

Featured in the book *Blended Learning for Quality Higher Education* [3] as a collaboration between The Education University of Hong Kong and UNESCO Bangkok, Lim and Wang (2016) [4] proposed a framework of blended learning strategic planning using a holistic approach and detailed how blended learning could be driven, supported and scaled up from different perspectives. The framework includes eight strategic dimensions: *vision and philosophy*; *curriculum*; *professional development*; *learning support*; *infrastructure, facilities, resources and support*; *policy and institutional structure*; *partnerships*; and *research and evaluation*. This work also took a close examination of lessons learned from case studies, particularly promising practices of HEI's adoption of blended learning in the region. By considering all the dimensions in the framework and gaining experiences from the promising practices, HEIs are more likely to formulate and implement coherent internal and external processes that optimise the learning potential of integrating blended learning into their programmes and courses.

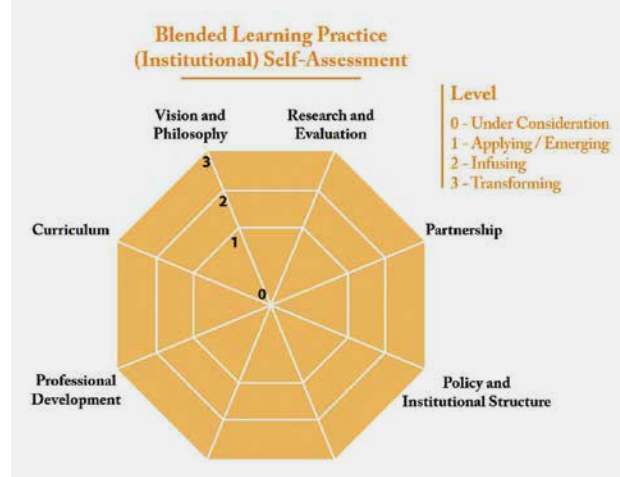
Graph 1: A holistic framework for building the blended learning capacity of HEIs



Blended Learning Strategic Planning in Action – Where Can We Start?

Harnessing the power of blended learning for quality higher education involves much more than introducing online-based ICT innovations. Moving towards a more promising institutional blended learning practice would require not only gaining shared understanding among HEI leaders and policymakers, but also reaching parity with accessible resources and human capital. Therefore, the scope and sequence of efforts have to be prioritised in the reality of many local contexts. Lim and Wang (2016)'s work took a step in this direction by developing a comprehensive self-assessment tool containing descriptors or indicators that HEIs can use to periodically benchmark their progress in each dimension of the strategic planning framework. Such a snapshot can be a useful reference for monitoring and steering growth to higher stages of institutional strategies supporting blended learning practices in an HEI.

Graph 2: A holistic framework for building the blended learning capacity of HEIs



Leveraging the Self-Assessment Tool in Practice

UNESCO Bangkok has engaged the Royal University of Phnom Penh (RUPP), Cambodia and University of Colombo, Sri Lanka in a two-year initiative to increase access to quality higher education by promoting ICT-driven innovation. The incorporation of blended learning has been one of the key approaches. The effort of capacity building in the two HEIs is based on the institutional assessment using Lim and Wang (2016)'s self-assessment tool. Consequently, these HEIs are working to localize their efforts and become more effective as innovative leaders in the development of blended learning in emerging economies in the wider Asia-Pacific region.

Supported by the International Development Research Centre (IDRC), Canada and The HEAD Foundation, Singapore, The Education University of Hong Kong has also worked on a project together with RUPP, University of Battambang (UBB) and

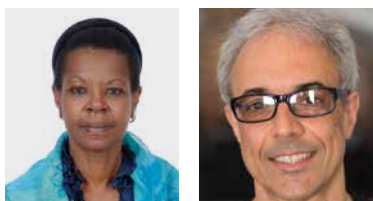
Svay Rieng University (SRU). Having UNESCO Bangkok and The Directorate General for Higher Education, Cambodia as partners, the ongoing project advocates the considerable potential of blended learning to reduce urban and rural disparities in education quality where it is adopted. Recognising that the effectiveness of blended learning can largely be determined by how it is implemented and supported, the project team and HEI leaders used the self-assessment tool to draw a portrait of and subsequently analyse the challenges and opportunities unique to each institution. This in turn resulted in the formation of possible strategies and future directions for synthesizing and strengthening urban-rural partnerships in planning and implementation, and sharing blended learning courses to help close quality gaps.

Looking Ahead

Challenges remain to promote blended learning as a tool for quality higher education. Many (if not most) courses throughout the Asia-Pacific region are inputs-driven, which means any mode of delivery, whether in-person or blended is not centred on the needs of individual learners. To make that transition, “time to learn and develop” new learning materials may be among the most important limitations. A related and fundamental factor is the importance of teaching performance overall, which may be undervalued, often at the expense of “high-impact” research [5].

Going forward, UNESCO Bangkok and partners will increase their focus on ICT-driven innovation in higher education to achieve SDG4. This includes higher education-related targets to “ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.” UNESCO looks forward to collaborating with IAU and other key stakeholders to explore diverse models of practice on how to accelerate progress and ensure inclusive access to quality higher education for all.

09 Transforming e-learning in a developing economy



by **Marlène Sam**, Director of International Relations and International Projects coordinator and **Patrick Attié**, Director, Ecole Supérieure d'Infotronique d'Haïti (ESIH), Haiti

In 1912, Haiti was the first island to introduce electricity in the Caribbean [1]. In 1995, the Haitian private sector introduced

“For the very first time, arose a general awareness to acknowledge the important role that both ICTs and higher education could play in the reconstruction by providing local solutions to locally complex issues.”

internet, giving birth to an ICT community that built a vibrant ecosystem in spite of major challenges and issues the 11 million islanders have been faced with, the most visible ones being political unrest, 7.2 earthquake, killer hurricanes, tropical storms, cholera outbreak, record brain drain, 90% of higher education facilities were destroyed in 2010. Briskly, for the very first time, arose a general awareness to acknowledge the important role that both ICTs and higher education could play in the reconstruction by providing local solutions to locally complex issues.

High expectations in respect of Technology and Higher education entail that they ensure the design and reinforcement of methods allowing the effective utilization of techniques. These expectations were clearly elaborated by Dr Evens Emmanuel, Chairman of the Haitian doctoral Collège, during the *Higher Education, Research and Development Week*, in summer 2017, citing the UNESCO report on Science of 1996, which highlighted the clear evidence that science, technology and economic development are closely related. Dr Emmanuel further elaborated on this theme: “It seems that Haitian government authorities finally understand that only higher education, science and research working along with the private sector, to deploy a local competitiveness system, can spearhead the country towards innovation, increased government revenue, jobs and wealth generation capable of improving livelihoods. This decision disposes of any unintentional or provisional character in such an endeavor.”

Based on the current demographic growth, the main challenge the Haitian education system is faced with is the satisfaction of ever increasing numbers of learners. Not merely linear but an exponential growth. Unleash access, leads to “massification”, and requires adaptation that is met with constraints given the meagre financial resources both HEDs and learners possess in a developing economy [2].

Ideally, on the supply side, massification of access ought to be sought concurrently with the “mutualisation” of resources by aggregating institutional offer to provide the following: a cost-effective solution that combines quality digital content; appropriate volume of resources; a state-of-the-art learning environment; innovative technological learning management tools; efficient tutorship, coaching, communication and evaluation devices and a nationwide network of strategic partners capable of providing proximity logistics to potentially expandable groups of disseminated learners.

On the demand side, massification of access entails the learners' (individual and collective) commitment to adopt transformative models such as distance learning or autonomy of apprenticeship; develop digital capabilities; time management and other 21st century skills to successfully integrate an essentially web-based learning community.

Reflexion, research and field experiences led the Ecole Supérieure d'Infotronique d'Haïti (ESIH) to come up with a solution taking into account supply and demand side constraints and anticipating some foreseeable developments such as:

- persistent infrastructure pitfalls conducive to the use of low energy consumption devices like tablets and backup mechanisms to mitigate the instability of connectivity and energy-related services. The mechanism also includes learning material storage on the device itself.
- lack of exposure to complex technological solutions of ordinary developing country learners to be mitigated by a hybrid type of learning formula including learners engagement by periodical classroom activities.
- scaling up challenge due to exponential growth of HEI student population which is anticipated by the use of artificial intelligence [3] to deploy an intelligent tutoring system minimizing the need for human tutoring. Consequently, while the enrolment growth is exponential, human tutoring needs' growth remains linear.
- use of existing open source content (other than MOOCs) whenever available which allows significantly reduced overall costs of the solution to the end user.
- a multi-institutional integrated ecosystem including student information systems (SIS) and learning management systems (LMS) at an affordable cost with local access to developers, training and maintenance.
- choice of a recognized international academic and administrative standard (i.e. the Bologna process) aimed at enhancing local mobility and transparency for international partners.
- Compiling world best practices, observing and scrutinizing experiences, ESIH concluded that parallel to the use of existing content, there also was need to acquire modern digital course development capabilities that can be mutualized by a majority of HEIs in order to guarantee local know-how and an economic model to ensure the sustainability of a locally developed customized technological platform.
- It seems there is no single technological structure tailored to the needs of every HED community and in the absence of a low cost and integrated higher education management

system, ESIH has felt compelled to design and develop a professional software packages generic enough to be used by several institutions, capable as well to address the specific issues encountered in the higher education ecosystems of poor countries. The name of this solution is THESS, which stands for Technologie Hybride pour l'Education, la Science et le Savoir / Hybrid technology for education, science and knowledge[4].

10 Technology in Higher Clinical Education



by **Daoud Al-Badriyeh**, Ph.D., Associate Professor of Pharmacoeconomics and Outcomes Research, and Chair of Technology and Learning Committee (TLC), and **Myriam Eljaam**, M.Sc., Teaching Assistant and co-Chair of TLC, Clinical and Pharmacy Practice, College of Pharmacy, Qatar University, Qatar.

In higher education, student clinicians, pharmacists and nurses are in need for active practice. Practice that helps acquire real-world clinical expertise and workplace experiences. The clinical workplace learning, however, is inherently challenging as the healthcare environment and, hence, the curricular emphasis are rapidly changing. The spreading opportunities of patient care from traditional hospitals to lesser controlled community and home care practices; the digitalized health knowledge and records; the increasingly significant cost-cutting and the humanistic and societal needs, while upholding patient safety and clinical benefits; have all dictated that clinical education needs to provide, in a short period of time, a boosted level of long-term learning that goes beyond simple knowledge, into the skills, values and behavioral needs of patient care. Such explosion in competencies, added to an explosion in available knowledge – with over 600,000 yearly medical articles in literature, creates an exceptional need for innovative education that is also technological, seeing a fast integrating technology into care systems and that younger health students are digital citizens and anticipating matching styles of education.

Common technologies in clinical education

Online-assisted learning is common, such as flipped classrooms and the online-activities. Mobile devices to access resources for learning and decision-making are now vital, especially with the recently announced heavy investments by the technology giants Apple and Google in healthcare applications. Patient

“Deans and academic administrators, therefore, need to push their colleges forward by inspiring faculty members and adjusting rewards to those who leap forward.”

simulations are extensively used as well, for various educational goals, and they are becoming more and more human. The social media is increasingly recognized as another important educational tool in clinical practices. This is used to share and develop knowledge, including via creating virtual communities of practice. Other forms of teaching technologies were also reported in literature as successful, such as digital games and the Google Glass, which were recently incorporated into medical curricula as essential teaching clinical tools.

Challenges of technology in clinical education

The challenges for universities in developing and implementing the kind of technologies described above in classes are, beyond the traditional challenges of added cost: the digital literacy and equity, integrating formal and informal learning, the very fast changing technology, or the risk of dependence, such as on mobiles. Special to the clinical education, challenges relate to the need for convinced and motivated faculty members. Reluctance by faculty members can be the result of three main concerns:

- i. While the use of handheld devices increases practitioners' access to resources, it may also reduce their connectivity with people or lead to what could be considered 'unprofessional'. The use of such devices among patients and co-workers needs to be sensible and within what is perceived as good manners. Also, the fact that devices have cameras and recorders, including access to social media, promotes worries by faculty members about trust and confidentiality with students.
- ii. With the online-based activities, learning is more and more being steered by the student, with the educator being now more of a guide. In clinical education, many argue that self-learning about a clinical condition cannot substitute the magic of hearing about it from experienced faculty members and practitioners, who hands-on managed it. It is therefore common in schools of clinical education that the online activities are mostly to augment class activities or to replace parts of the learning activities, but not to substitute them completely. Significant is the concern that online activities can be limited against the need for the increasingly important inter-professional education in health disciplines.
- iii. Faculty members in medical colleges are relatively highly busy, especially if in research universities. Assistant professors are rewarded on their teaching, publications,

and funds. Full professors are expected to increasingly also add university and community services. This is all added to being active practitioners in clinical settings. It is highly likely, therefore, that faculty members will not find or risk time to lead or implement new technologies into their classes.

Deans and academic administrators, therefore, need to push their colleges forward by inspiring faculty members and adjusting rewards to those who leap forward. In the College of Pharmacy at Qatar University, for example, a special Technology and Teaching Committee was organized. This initially worked to create an archive of teaching technologies, before it was expanded to facilitate the use of several non-didactic methods and technology tools, organize development sessions of recent technologies and methods, and conduct research to assess and share experiences about the use and outcomes of different technologies used, such as learning management systems and the virtual reality lab.

Overall, despite challenges, the traditional higher clinical education is being disrupted, and institutions are aggressively adjusting their curricula. While the value of this depends on content and drive, technology is surely not only altering how to administer medicine, but it is also altering how to learn it. This, nonetheless, is in infancy still, with the best utilization of the technology varying upon how it is combined with other learning approaches.

11 Digital research design



by **Ricardo Morais**, Assistant Professor of Management, Universidade Católica Portuguesa, Portugal



Research is one of the central missions of Higher Education Institutions

(HEIs). In fact, it is widely believed today, through notions such as 'publish or perish', that research improves other missions of HEIs such as education, knowledge transfer, and internationalisation. Such four missions have, in turn, been influenced by two major trends in recent decades: globalisation and digitalisation. Globalisation resulted in increased exchange of students, faculty and staff across borders as well as in new foreign-owned HEIs. It was thus primarily related with rising flows of people and capital, facilitated by transportation technology and infrastructure such as low cost aviation and modern airports.

Digitalisation, by contrast, is primarily concerned with knowledge flows across borders, enhanced by information and communication technologies (ICTs) such as personal computers and videoconferencing as well as infrastructure such as the

“The walls of physical space have thus been replaced by those of digital space. The former were geographic, whereas the latter are economic and only when open access is unavailable.”

Internet. The impact of digitalisation on HEIs is illustrated by the way research is conducted. Instead of physically searching for a journal article in the shelves of a library, researchers now look for the same article online by digitally browsing webpages in the hope of finding it available for free. The walls of physical space have thus been replaced by those of digital space. The former were geographic, whereas the latter are economic and only when open access is unavailable.

Searching for a journal article, however, is just one of the many tasks researchers can perform digitally. Nowadays, there are even research projects entirely devoted to the listing of the vast amount of digital research tools available online and offline (e.g. <https://101innovations.wordpress.com/>). Such a listing is in itself an ambitious endeavour since new research software is created daily. An equally relevant question is, therefore, what research tasks are not yet digitalised. One can think of isolated field work, but most likely researchers will carry their smart phones with them; or face-to-face interactions in HEIs, but most likely tablets and the Internet will also attend the meetings.

Such ubiquitous role of ICTs has inspired new concepts such as ‘digital immigrants’ and ‘digital natives’, depending on whether digital skills were acquired in adulthood or childhood. For HEIs, it means that digital literacy creates new generational gaps, namely between faculty and students, reversing once taken for granted hierarchies of knowledge.

In such a context, it is relevant to ask what digital research design means, in contrast to traditional research design, and what are the implications for HEIs. For the purposes of this paper, digital research design is defined as the process by which research software is used to conceive academic research. Such a definition emphasises the role of software rather than paper to think, and of screens rather than human eyes to interact. A cognitive and relational revolution that disrupts traditional ways of learning, teaching and supervising research in HEIs.

Such a revolution affects primarily doctoral researchers, given their corner stone role in the four missions of HEIs. In particular, they tend to contribute to education by teaching younger generations of students as well as to research by publishing with their supervisors. In addition, they may participate in knowledge transfer projects as well as in international exchange programmes. It is not surprising, therefore, that international higher education organisations such as the European University Association have recently created a Council for Doctoral Education, nor that its

10th Annual Meeting was entitled ‘Digitalisation’ (<http://www.eua.be/activities-services/events/event/2017/06/15/default-calendar/10th-eua-cde-annual-meeting>).

At the doctoral level, digital research design increasingly implies the use of online rather than offline research tools. Such web-based tools assist doctoral researchers in the design of a research project either as content providers or collaborative platforms. Content providers disseminate theoretical frameworks and related knowledge to help researchers think through a research project. Idea Puzzle (<https://www.ideapuzzle.com/>) and Sage Research Methods Project Planner (<http://methods.sagepub.com/project-planner>) illustrate this first approach to digital research design. Collaborative platforms, by contrast, are primarily interested in creating opportunities for networking and sharing online. Doctoral Net (<https://www.doctoralnet.com/>) and Form@doct (<https://formadoct.u-bretagne-normandie.fr/>) illustrate this second approach to digital research design.

The adoption of such tools in HEIs can nevertheless be problematic due to conflicting goals. In particular, digital research tools may question the legitimacy of HEIs to be the sole providers of knowledge, especially for academic research design. In this respect, it is important to ensure that such tools complement rather than replace traditional face-to-face classes of research methods and research skills as well as supervision sessions. One possible way to address this issue is to consider them as an opportunity for collective blended learning in HEIs rather than individual e-learning elsewhere.

In sum, digital research design is another reminder that digitalisation is a disruptive revolution which may lead to the creation of new positions in HEIs such as vice-rector for digitalisation, in addition to education, research, knowledge-transfer, and internationalisation. In other words, digitalisation may well be the fifth mission of HEIs.

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- [4] The THESS platform and portal (<http://thess.online>) were developed in 2015 thanks to a funding from the French Embassy in Haiti and the Agence Universitaire de la Francophonie (AUF).



SELECTED ANNOTATED LIST OF PUBLICATIONS RECEIVED AT IAU

British Universities in the Brexit Moment: Political, Economic and Cultural Implications

by Mike Finn, Bingley, UK: Emerald Publishing, 2018, 188 p. (*Great Debates in Higher Education*)
ISBN 978-1-78743-743-2

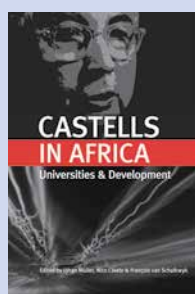


During the Brexit referendum, UK universities and academics strongly supported the 'Remain' campaign. This book analyses the impact of the decision to leave the European

Union on Britain's universities. The 'Brexit' question is situated in the context of recent developments in UK higher education marked by globalisation, expansion, marketisation, and rapid change. Examining the relationship UK universities had, and have, with the European Union, the author details how universities in the UK have become increasingly European, from student and staff mobility schemes such as Erasmus, to participation in the EU research and innovation funding programme Horizon 2020 and collaboration with European partner institutions. The book focuses on the implications for universities of leaving the European Union – economic, political and cultural, in terms of the relationship to staff and students, research and funding. The final chapter draws together these implications and assesses the opportunities that may be present for universities to reconstruct their futures.

Castells in Africa: Universities and Development

by Johan Miller, Nico Cloete, Francois Van Schalkwyk, Eds., Cape Town: African Minds, 2017, 248 p.
ISBN 978-1-929677-92-3



This book examines the pioneering work of the Sociologist Manuel Castells on higher education and development and the influence of his work today.

It documents Castells' intellectual footprint, highlights Castells' publications on the functions of universities in the African context and presents the main messages of his public lectures in South Africa and their influence on the country's policymakers. Several chapters are based on work by higher education scholars who have applied Castells' concepts to investigate the challenges faced by African universities and their role in knowledge production. Some of the chapters also analyse the lack of alignment between official government declarations about the importance of higher education and actual funding allocations in many Sub-Saharan African countries. The book also showcases the innovative work of HERANA, the Higher Education Research and Advocacy Network in Africa, which adapted Castells' framework to examine the evolution of Sub-Saharan African universities.

Challenges and Options: The Academic Profession in Europe

by Maria Machado-Taylor, Virgilio Meira Soares, Ulrich Teichler, Eds., Basel: Springer, 2017, 267 p. (*The Changing Academy – The Changing Academic Profession in*



International Comparative Perspective, 18)
ISBN 978-3-319-45843-4

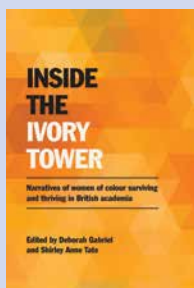
This book explores the various issues that have an impact on

academics' careers in European higher education. Divided into three parts, the first part of the book deals with the challenges and issues in higher education academic careers. It addresses the influence of European policies and changes, cultural differences in academics' preferences for teaching or research, the increasing inequality in academics working conditions, and the changing nature of academic strategy. The second part of the book analyses the findings of a national study on satisfaction of academics in Portuguese higher education. The third part offers a comparative analysis of a number of national European case studies, focusing on the changing relevance and increasing expectations around academic careers. The concluding chapter discusses whether the academic profession is merely an artificial term that has to do with a heterogeneous range of occupations, or if there are common elements of the academic profession across European Higher Education systems.

Inside the Ivory Tower: Narratives of Women of Colour Surviving and Thriving in British Academia

by Deborah Gabriel, Shirley Anne Tate, Eds., London: UCL Institute of Education Press, 2017, 152 p.
ISBN 978-1-85856-848-5

This book is centred on the perspectives, experiences and career trajectories of women of colour in British academia. The

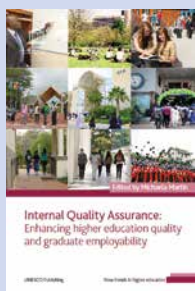


book examines how race and gender shapes the experiences of women of colour academics and reveals how racism and sexism manifests in day

to day experiences within faculties and departments, and how women of colour academics develop strategies for survival and success. Each chapter explores the contributors' experiences within different disciplines from sports to science to social work and at different levels – from associate lecturer to professor. All of the chapters include defining moments and turning points for each author deepening understanding of the issues at hand. It touches on common themes such as invisibility, hypervisibility, exclusion and belonging, and highlights intersectional experience.

Internal Quality Assurance: Enhancing Higher Education Quality and Graduate Employability

by Michaela Martín, Ed., Paris: IIEP, 2018, 289 p.
ISBN 978-92-803-1415-1



How do universities around the world evaluate and enhance the quality of education and research in their institutions? This book, based on the findings of the

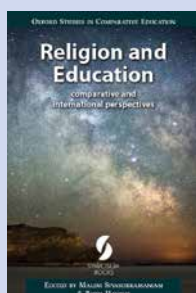
UNESCO IIEP research project on internal quality assurance, begins with a comparative overview of international trends. This reveals that a growing number of institutions worldwide are

adopting, or have already established, internal quality assurance. While IQA is often focused on teaching and learning, there are a variety of understandings of IQA, and there can be gaps in its development. Case studies in eight countries – Austria, Germany, Bahrain, South Africa, Chile, China, Kenya and Bangladesh – explore how IQA structures are developed within universities and how integrating innovative IQA tools and processes can support a 'quality culture' throughout the institution and improve graduate employability.

<http://unesdoc.unesco.org/images/0026/002613/261356e.pdf>

Religion and Education: Comparative and International Perspectives

by Malini Sivasubramaniam, Ruth Hayhoe, Eds, Oxford: Symposium Books, 2018, 388 p.
ISBN 978-1-910744-01-7



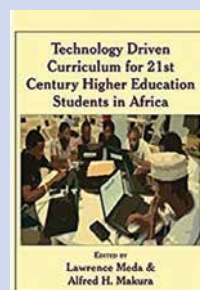
This book examines the role and impact of the major faith traditions at all levels of education. It presents global perspectives and case studies in

Bangladesh, Canada, China, Kenya, Korea, Haiti, India, Israel, Russia, Northern Ireland, Tajikistan, Thailand and Senegal. The book is structured into three thematic sections. Internationalisation / Globalising Religious Values explores the interaction between the global and the local and the contribution religious institutions make to the Sustainable Development Goals. Contributors look at the delivery of education to underserved populations; educational interventions for refugees; pluralism in the curriculum;

training of religious leaders and interfaith dialogue. The second section, Curriculum, Pedagogy and Leadership focuses on religious education in secondary schools. The third section investigates Religion in Policy Processes and Conflict Resolution, specifically the role of religious education in countering religious extremism and its contribution to citizenship and peace.

Technology Driven Curriculum for 21st Century Higher Education Students in Africa

by Lawrence Meda, Alfred H. Makura, Eds., Bamanda, Cameroon: Langaa Research & Publishing, 2017, 220 p.
ISBN 978-9956-762-47-7



This book is based on research in technology and curriculum in selected African countries. It presents case studies from Lesotho,

Namibia, Kenya, South Africa, Zimbabwe, Tanzania and Nigeria which confirm that educational technology is playing an increasingly important role in higher education teaching and curriculum across the continent. African Higher education institutions use educational technology to keep up with the needs of the 21st century students who want opportunities to be able to learn in real time, using opportunities for innovation made possible by information and communication technologies. The book examines student and staff perspectives on learning and teaching using technology; instructional technology across different disciplines; assessment and technology; gender and technology in the curriculum; the challenges



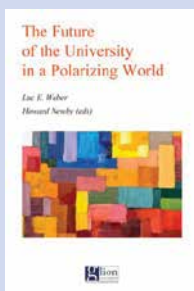
SELECTED ANNOTATED LIST OF PUBLICATIONS RECEIVED AT IAU

of technology and disability; and social media.

The Future of the University in a Polarizing World

by Luc E. Weber, Howard Newby, Eds., Geneva: Association Glion Colloquium, 2018, 219 p. (Glion Colloquium Series, v. 11)

ISBN 978-8399-2272-2

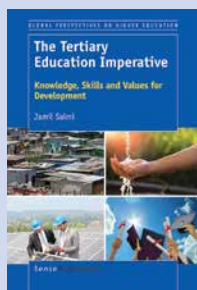


This book provides diverse perspectives on the challenges facing research universities in an increasingly uncertain future. It was developed from topics

discussed at the 11th Glion Colloquium, held in 2017. The contributors – Rectors and Presidents from universities around the world as well as leading researchers – discuss the impact of recent scientific and technological developments on universities. Specifically, they examine how the digital revolution has disrupted traditional approaches to learning and research and promoted new forms of learning, research and governance. While fresh approaches brought about by technological change have benefited many universities, the authors argue that with globalisation, these advances can inadvertently deepen the divide between universities that are able to adapt and benefit from these changes and those who are excluded.

The Tertiary Education Imperative: Knowledge, Skills and Values for Development

by Jamil Salmi, Rotterdam: Sense Publishers, 2017, 193 p. (Global Perspectives on Higher Education, v. 38)



ISBN 978-94-6351-126-1

This book considers in a comprehensive way the contribution of higher education to the Sustainable

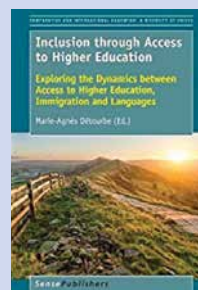
Development Goals. It examines how the higher education ecosystem is evolving at an increasingly rapid pace, influenced by uncertainty, complexity and disruption, such as changing demographics, global competition, political volatility, diminished public funding, greater private involvement, growing accountability demands and technology. Nevertheless, the book argues that the launch of the Sustainable Development Goals in 2015 has given renewed consideration to the importance of education for development and the urgency of putting in place viable financial strategies. Building on the author's international experience notably as the coordinator of the World Bank's tertiary education programme, the book proposes an analytical framework to understand the main factors behind successful reform strategies in higher education and for ensuring financial stability.

Classmark: INT-34 SAL Voici encore un livre pour remplir:

Inclusion through access to higher education: exploring the dynamics between access to higher education, immigration and languages

by Marie-Agnès Détourbe, Ed., Rotterdam: Sense Publishers, 2018, 164 p. ISBN 978-94-6351-225-1

This book examines the intersection between the increasing numbers of young migrants worldwide and their access to higher education. The first part of the

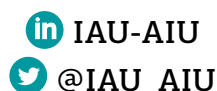


book explores how government policy impacts access.

In particular, tightened immigration rules make it harder for higher education institutions to

recruit international students. A study of refugees' access to higher education in France, Germany and Switzerland details national policies and how higher education institutions and associations have advocated for and, in some cases, implemented admission policies, support and programmes for refugees. The second part explores specific challenges raised by migrants' linguistic diversity. Case studies in Canada, France and a comparative European study highlight that language proficiency is not always sufficient for international students to integrate into higher education in a host country. The third part looks at the close links between access and social integration of international and migrant students, illustrated by studies of immigrant students in Japan, Chinese students in France and immigrant tech-worker spouses in the United States.

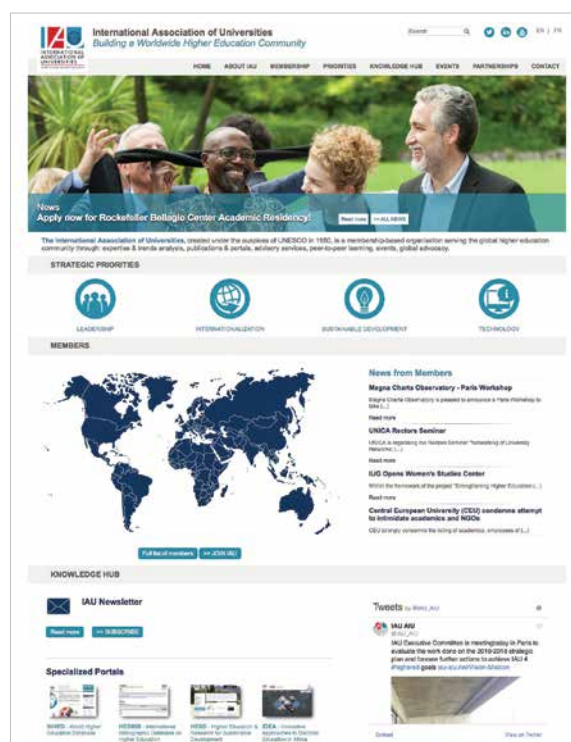
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INTERNATIONAL
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HIGHER EDUCATION
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FOR SOCIETAL IMPACT

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