IAU
Horizons

International Association of Universities (IAU), founded in 1950, is the leading global association of higher education institutions and university associations. It has over 600 Member Institutions and 30 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
Transforming Higher Education for the Future

IAU 2020 GENERAL CONFERENCE & 70th ANNIVERSARY
Values and Relevance of Higher Education to Future Society

INTERNATIONAL
ASSOCIATION OF
UNIVERSITIES
INTERNATIONAL UNIVERSITIES BUREAU

MESSAGE FROM
THE SECRETARY-GENERAL

Dear Members of the IAU,
Dear Members of the broader higher education community,

Welcome to the Vol 24.2 of your magazine. To be published in Puebla at the IAU 2019 International Conference, this issue is again rich in information and offers various opportunities for engagement.

You will read about the upcoming Conference – if you do not have the chance to attend, we invite you to follow the plenary discussions online on the Conference website www.etouches.com/iau2019. This event will focus on many different aspects of the current transformation of higher education and will offer a unique opportunity to shed new light on the landscape in Latin America.

The Conference will also mark the launch of the IAU General Conference year. This year will be particularly festive, as we will celebrate 70 years of achievements! Stay tuned to the many opportunities to get involved. You will be invited to share your views on the present and future of the Association in many different ways. In particular, we will seek your contributions to key publications on the future of the higher education sector and your inputs in the 2020-2024 Strategic Planning exercise. The Conference itself will elect the new IAU Governing body and we already bring your attention to the opportunity to run for election for the Administrative Board. The Conference programme will offer many opportunities to engage in sessions. Mark your Calendar and make sure you come to Dublin in November 2020!

Please read as well about new developments in the different IAU strategic priority areas of work: Leadership – new plans are underway for new sessions of the programme Leading Globally Engaged Universities (LGEU); *Internationalization of higher education* – the highlight this year is the publication of the 5th Global Survey on the Internationalization of Higher education. Members received the e-book of the Report for free; the print copy is also available for sale online. Sustainable development – highlight these past months was the beehive activity of the IAU global Cluster on HESD and the advocacy work on the importance of higher education as a stakeholder in Agenda 2030. Technology – learn about the outcomes of the Global Consultation and developments of the IAU Statement. We thank all those who contributed and hope that the outcomes are of use to the entire Membership.

I am very pleased as well to draw your attention to the impressive list of new Members. No other association is so diverse: 15 universities from 12 countries joined since the last *IAU Horizons* issue. We also welcome two university Associations, one Affiliate organization (page 14) and three eminent researchers as new Senior Fellows: Hans de Wit, USA, Stephen Sterling, UK, and Diana Iancu, Romania. Together we grow stronger and reinforce the position of IAU as *The Global Voice of Higher Education*.

Do not forget to take a look at our various new publications. In particular, the International Handbook of Universities is ready to be ordered. The associated WHED is in full development.

Finally, we have strengthened our advocacy efforts for the role for Higher education around the world. We accepted to speak at 36 different international Conferences in some 22 countries on all five continents. We continue to develop personalized services for Members and engage more fully with our partners; we will increase such engagement, with you and into the future. Make sure you follow our news through the IAU newsletter and the social media.

Happy reading,

Hilligje van't Land

IAU Horizons 24.1 – Contents

IAU Horizons is published twice a year in English, in paper and online. Please feel free to circulate widely and reproduce as you see fit as long as you cite the authors properly and refer to the International Association of Universities (IAU) and to the magazine in full. Please contact us at iau@iau-aiu.net. We look forward to receiving your comments and suggestions.

IAU EVENTS

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IAU STRATEGIC PRIORITIES

IAU KNOWLEDGE HUB

IN FOCUS:

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IAU EVENTS

PUEBLA, MEXICO SETS THE SCENE FOR THIS YEAR'S EVENTS

IAU 2019 International Conference

This year in Puebla, IAU members are gathering to discuss what are the essential dimensions when "**Transforming Higher Education for the Future**." The IAU Conference bring together leaders of higher education from around the world with expertise from different contexts, different fields of study and disciplines who are confronted with different opportunities and challenges. However, they all share a common passion for developing higher education to respond to the local demands while being part of a global community. The conference offers opportunities to exchange with peers, get inspired by innovative approaches and to be part of a vibrant community that carries the voice of higher education at the global level.

The programme includes speakers from over 30 countries and will cover major issues that influence the way higher education is transforming; from the financing of higher education, to the use of technology and its impact on teaching and learning; the critical tension between global engagement and the local mission of universities; or sustainable development through innovation in higher education. As a complement to the conference, the 'In Focus' section (page 13) is devoted to the theme of the conference where authors from different parts of the world share views on opportunities as well as challenges relating to the theme: *Transformations of higher education for the future*.

Global Meeting of Associations

Besides its annual conference, IAU is also holding a Global Meeting of Associations (GMA) every second year. This forum is a unique platform for leaders of higher education associations, networks and organizations, to come together and discuss current trends, opportunities and challenges related to higher education and to develop collaborative links across states and regions.

The GMA is also hosted by Benemérita Universidad Autónoma de Puebla (BUAP) and is co-organized with the Association of Universities of Latin America and the Caribbean (UDUAL).
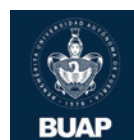
If you read the magazine in Puebla, Mexico, we wish you an excellent and stimulating conference. In case you cannot take part in this year's event, we hope that you will enjoy the contributions to the topic in the 'In Focus' section and we invite you to consult the speakers' presentations; these will be uploaded on the Conference website after the conference.

IAU would like to take this opportunity to thank this year's partners. First and foremost, we thank the Benemérita Universidad Autónoma de Puebla (BUAP) for ensuring a beautiful venue for Members and beyond to come together and exchange, learn and identify new ambitions and partnerships for the future. We also wish to thank the Association of Universities of Latin America and the Caribbean (UDUAL) for its outstanding contribution to the organization of the Global Meeting of Associations (GMA).

Learn more about next year's important event on the next page. For organizations and associations of higher education, please note that the next GMA will take place in Doha, Qatar in 2021; more information will be made available in due time.

⊖ Conference website:
www.etouches.com/iau2019

Celebrating 70 years of IAU !

an important opportunity to look forward and discuss the '**Relevance and Value of Higher Education to Future Society**" at troubled times where rapid societal transformations and unstable political environments where fundamental values of higher education such as academic freedom and institutional autonomy are challenged in many places of the world.

Make sure to save the dates for this important event to take place from **3-6 November 2020** in Dublin, Ireland. IAU Members have different opportunities to take an active part in the event:

IAU 16th GENERAL CONFERENCE
3-6 November 2020 in Dublin, Ireland

Every four years, IAU is holding the General Conference, which is the supreme decision-making body of the International Association of Universities (IAU). This is the Conference where IAU Members come together to set the vision for the next four years, to elect the next IAU President and the members of the Administrative Board. For these reasons, the General Conference is always a very important event in the life of the Association. Next year is a particularly important year because IAU will celebrate 70 years of international collaboration among higher education institutions around the world.

On 4-9 December 1950, representatives of 167 higher education institutions from 52 countries met in Nice for the first and founding General Conference to sign the constitution of the Association. The founding Members outlined an ambitious agenda for IAU, namely: *"To provide a centre of co-operation at the international level among the universities and similar institutions of higher education of all countries, as well as among organisations in the field of higher education generally, and to be an advocate for their concerns"*. Seventy years later, as we convene the 16th General Conference in Dublin, Ireland, the context has certainly changed, but the mandate of IAU remains as important as ever. This celebratory Conference will be hosted by University College Dublin (UCD).

IAU and UCD are thrilled to make this event a very special one with opportunities to look back at important milestones and accomplishments, and to recall important developments of the higher education landscape over the years. Yet, it is likewise

■ **Join the IAU Administrative Board and shape the future of your Association:**
Heads of Member Institutions and Organizations may consider becoming part of the leadership of the Association and stand for election to the Administrative Board (2020-2024). The Administrative Board meets once a year prior to the International Conference to debate the work of the association and to set the strategic direction to inform the Strategic Plan to be adopted during the General Conference. Get in touch to learn more about this opportunity
Contact: Nicholas Poulton (**n.poulton@iau-aiu.net**)

■ **Be part of the Conference programme:**
A call for proposals for Members who wish to take part in the Conference programme will open by February 2020. Stay tuned and make sure you are signed up for the IAU Newsletter to be updated regularly on all relevant news. IAU Members will be invited to present posters during the event; more information will follow in due time.
Contact: Trine Jensen (**t.jensen@iau-aiu.net**)

■ **Celebrate 70 years of international collaboration**
Whether your institution has been Member from the beginning or joined recently, we invite all Members to contribute to the 70 years celebrations by submitting statements about the importance of IAU and the role of your specific institution in relation to the different values and principles that the IAU seeks to uphold. Contact IAU to learn more about how your institution can gain visibility and take an active role in these celebrations.
Contact: Juliette Becker (**j.becker@iau-aiu.net**)

IAU ACTIVITIES RELATED TO ITS STRATEGIC PRIORITIES

Values-based Leadership

Connecting cultures and forging futures through global leadership development

Dr. **Tom Kennie**, *Leadership Development Consultant and Facilitator of the IAU LGEU Programme. tkennie@ranmore.co.uk*

Introduction

IAU Member institutions are, by implication, committed to playing a central role in promoting internationalisation. They are also typically engaged in addressing the impact of globalisation in their localities as major international knowledge producers and brokers across regions and sectors. This is also evident in their daily teaching, research, enterprise, outreach and increasingly collaborative internationalisation strategies. We have also seen a growing emphasis on a leadership role in the delivery of the UN Sustainable Development Goals – with the IAU very much at the vanguard of this important initiative.

The phenomenon of globalisation has also been a driver, which is leading to changing government and societal expectations of the role of universities; they must now be both local and global in their missions and activities. The increasing importance of internationalisation for regions, countries and higher education institutions (HEIs) is also clearly visible. Routinely in response to the IAU global surveys, more than 90% of the respondents from over 130 countries in every world region confirm that they either have or are developing a policy for internationalisation.

Over the past decade, this work on internationalisation has been moving from an operational, organic, somewhat transactional approach to one which is more strategic, planned and with the capacity to be transformational in impact. To deliver this has demanded a more purposeful and structured approach to strategy development, leadership and delivery of change and innovation. In addition, it has required a greater emphasis on wider engagement, which also builds the capacity and capability across the university. These underpinning foundations are central to successful, productive and sustainable transnational and cross-cultural university initiatives. None of it, however, is as straightforward as it sounds. New structures, mechanisms, work

processes, and ways of communicating are needed to challenge, stimulate and support individuals and groups to connect across cultures and forge different futures.

The evidence from IAU Global Surveys on the Internationalisation of Higher Education (the 5th IAU Global Survey Report is being launched as I write[1]) highlight that internationalisation initiatives are driven in large measure by the senior levels of university leadership. It was therefore timely and important for IAU to adopt leadership development as one of its four strategic priorities and place a particular focus on building the capacities of leaders through experience sharing.

A key initiative in this area is the 'Leading Globally Engaged Universities' (LGEU) programme.

The Leading Globally Engaged Universities (LGEU) Programme: A Transformative Cross Cultural Experience

Launched in 2015, LGEU has taken place in a range of countries. Each time the programme is hosted by a Member institution. The hosts so far have included:

Year	Location	Host University
2015	Kuala Lumpur, Malaysia	University of Malaya
2016	Dublin, Ireland	University College Dublin
2016	Medellin, Colombia	EAFIT University
2017	Gaborone, Botswana	University of Botswana
2018	Hamilton, Canada	McMaster University
2018	Bucharest, Romania	SNSPA
2019	Paris, France	ISIT

The programme is designed to build capacity by engaging a diverse range of leaders from across the globe. Central to the programme is peer-to-peer learning; individuals assess their own capabilities and their institutional strategies by sharing internationalisation developments across many other countries.

As can be seen below, the participants to date have been from all regions and encompass the full diversity of IAU.

The geographic location for the programme provides a chance to shine a light onto the local, global and institutional challenges

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1. *IAU 5th Global Survey: Internationalization of Higher Education : An Evolving Landscape –Locally and Globally,* by Giorgio Marinoni, IAU-DUZ Medienhaus, 2019, 256 pages

of that country while enabling delegates to reflect on their own institutional and national contexts. Workshop sessions and visits to institutions involve practical examples of strategies to address common internationalisation issues as well as opportunities to build networks and collaborative projects beyond the programme. LGEU is, more than other more generic leadership programmes, more closely focused on building specific individual insights and capabilities associated with 'leadership for global engagement in higher education'.

↘ Understanding the Global Landscape
Get a greater appreciation of the key trends shaping higher education and institutions and gain international perspectives on national/local challenges and opportunities

↘ Managing the Strategic Planning Process
Master the mechanisms that help implement your institutional mission, inform decision-making and provide structure for evaluating progress and taking corrective action

↘ Developing your Leadership Skills
Gain a better knowledge of your preferred style of leading and learn more about theory and innovative practices of institutional leadership, management and governance

↘ Creating and Managing Effective Teams
Improve your interpersonal management skills and explore the team leader's responsibilities and expectations in enhancing the innovative potential of diverse teams

↘ Building a Global Network of Peers
Create long-term partnerships, connect and share experiences with colleagues from all over the world and learn how they respond differently to common challenges

To provide new insights into different aspects of leadership in higher education, two diagnostic tools are used. One to explore teamwork and collaborative working, and a second with a particular focus on cross-cultural working and globally-engaged leadership.

This second leadership self-assessment diagnostic is designed both to help individuals review their effectiveness and impact in operating as a globally engaged leader and to identify key themes for future development. Globally engaged leadership can relate to institutional, professional and disciplinary roles and responsibilities at different levels and encompasses leadership activities that require engagement with others across geographic and cultural boundaries. The

diagnostic has been developed and validated by occupational psychologists working with higher education specialists each with wide experience of leadership and global engagement.[2]

So what are the benefits of participating?

Attending LGEU is a real opportunity to spend time reflecting, sharing and planning. Through this, the participant is enabled to:

- Identify relevant ideas and insights to inform strategic developments in one's institution;
- Obtain new data and information to help shape the medium to longer-term direction of one's internationalization activities;
- Gain new insights into the theory, and above all, practice of strategic level institutional leadership, management and governance; and
- Build a global network of colleagues as a springboard for future collaboration.

The programme is also of benefit to institutions. By engaging in this type of intensive leadership experience, institutional leaders bring back ideas and approaches, which can be adapted and implemented in their institution.

Conclusion

Globalisation is bringing a range of opportunities and challenges to all societies and universities are expected to play a central part in helping their communities to navigate these challenges successfully. A growing imperative in order to deliver on these expectations is to be able to engage transnationally in ways that connect cultures and spark creative ideas, networks and projects that address local and regional needs. Leaders of higher education institutions at all levels need to build their own capabilities and capacity to engage and lead transnational projects and programmes. Carefully designed leadership development opportunities, such as the LGEU that address the intellectual, relational and affective dimensions of global engagement, can assist in growing the capabilities and capacities needed to connect cultures and forge positive futures for our institutions and the purposes and people they serve.
Contact: Andreas Corcoran, IAU Deputy Secretary General a.corcoran@iau-aiu.net

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2. For further details: Middlehurst R and Kennie T. 2019. South America: Colombia: the evolution of critical leadership in higher education: A case study of transformation in the city of Medellin, Chapter 7 in Jameson J, International Perspectives on Leadership in Higher Education Critical Thinking for Global Challenges, pp 91-102.

Internationalization

Internationalization of higher education is an inevitable process in the era of globalization and a deliberate strategy for improving quality and relevance of higher education and research. 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.

CHANGING INTERNATIONALIZATION TO TRANSFORM HIGHER EDUCATION FOR THE FUTURE

Internationalization now occupies a high position in the agendas of universities around the world, and its importance goes beyond higher education, having a great impact on society itself. Internationalization has radically transformed higher education in the past 20-30 years. Many higher education institutions moved from being strictly national institutions, often monolingual and homogenous in terms of ethnic and cultural background of students and staff, and mainly catering to the needs of nation states, to globally oriented institutions, with a diverse student and staff population, offering programmes in different languages, and conducting research aimed at solving global issues.

Internationalization has changed in the last 20-30 years as rationales, objectives and priorities for institutions have changed and new actions and activities developed (e.g. dual/double and multiple degrees, joint degrees, transnational education, online and distance learning, MOOCs). There is no doubt that internationalization will continue to change in the future and that it will continue to transform higher education. The question is how.

Internationalization is and should remain an intentional process undertaken by the higher education institution. However, there are different external actors (national governments, businesses, students' families, etc.) influencing the process. There is no single model of internationalization around the world: the shape that internationalization of higher education takes depends on the national context as well as on the nature of the institution where it takes place. As every process, internationalization brings comes with benefits and risks and the knowledge of possible (unintended) negative consequences is extremely important in order to minimize them.

IAU promotes an inclusive, fair and ethical internationalization of higher education, which aims should be to improve the quality of teaching/learning and research for all students and staff, and which makes a positive contribution to society.

In order for IAU to reach the above-mentioned goal, knowing how internationalization is evolving is paramount. To this end, in 2018, IAU conducted its Global Survey on Internationalization of Higher Education, the 5th edition in a series of surveys that began in 2003. The IAU 5th Global Survey collected replies from 907 Higher Education Institutions (HEIs) from 126 countries around the world. The 2019 Report was published in September and is available online at www.tinyurl.com/IAUsurvey5.

In the previous edition of *IAU Horizons*, IAU presented the main results emerging from the analysis of the data, focusing on the importance of internationalization for the academic leadership and of the perceived benefits and risks of internationalization. This article will now look at the ways in which internationalization is changing, and reflect on how this can transform higher education in the future.

The picture emerging from the results of the IAU 5th Global Survey is one in which internationalization of higher education has a considerable importance and is widespread among HEIs around the world. However, the importance given to internationalization by HEIs is unequal; so is its level of progress within one institution over the years. This may result in growing inequality, which is reflected in the perception of risks both at institutional and at societal levels. HEIs are concerned about internationalization becoming accessible only to individuals who can afford it and benefiting some countries at the expense of others.

International cooperation and capacity building could be an effective tool to counterbalance the effects of excessive competition, but financing of internationalization, language competences and administrative hurdles, such as recognition of foreign diplomas and periods of study abroad are important obstacles to overcome.

A strategic approach to internationalization is becoming more common, but it is not well established in all HEIs. In fact, the existence of a policy or strategy for internationalization is becoming the norm. However, this is not enough if adequate structures and activities are not put in place and properly funded. On funding, the survey results send contradictory messages – on the one hand, funding for internationalization activities is increasing over time; on the other hand, HEIs report the lack of funds as a major obstacle and the allocation of specific budgets for internationalization does not seem to increase over time.

A more holistic approach to internationalization seems to emerge, with internationalization of research (at HEIs conducting research) and internationalization of the curriculum/at home being considered as priority areas. However, student mobility remains the most important activity and, as confirmed by the results, this benefits less than 5% of students. International staff are a minority and while HEIs seem to value international experience, they still consider it as a plus more than a requirement.

There are variations at the regional level, with North America being more often diverging from others in many areas. For instance, a clear regionalisation trend emerges in all regions of the world except North America.

Changes happening in the world are reflected in the way HEIs perceive internationalization, with North America being the region that most reflects these changes, both in terms of being affected by and responding to those. HEIs in North America are also the most advanced in the implementation of relatively new areas of internationalization such as TNE, on-line and distance learning or joint degrees.

Overall, the results of the IAU 5ᵗʰ Global Survey show that change is happening in internationalization, but not everywhere and not in the same manner. This is a worrisome signal, because it can create inequality that

is not only linked to the way in which internationalization is implemented, but also to who is taking part in the process. While unequal opportunities due to a narrow focus on student mobility can be counterbalanced by internationalizing the curriculum / internationalization at home, inequalities arising from disparities in the level of involvement in internationalization are more problematic. In fact, internationalization can be fair, ethical and inclusive at the institutional level but will not be at the societal level if it happens at a few institutions only.

In the end, the way internationalization changes and consequently transforms higher education, is mainly determined by higher education institutions themselves. It is therefore extremely important that all HEIs include in their internationalization vision a strategic approach which final goal is not only to improve their local reality but also to result in a positive contribution to society.

The IAU 5ᵗʰ Global Survey is available free of charge to IAU Members in its online version.
To order a copy of the print version, you will find more information on: https://iau-aiu.net/internationalization

GET INVOLVED

⇒ **Follow the example of other IAU member institutions, benefit from our ISAS (2.0) services for Advancing Internationalization of Higher Education!**

Toyo University in Japan undertook an *"Assessing Strategy and Monitoring Achievements"* service providing an external assessment of its internationalization strategy, activities and monitoring framework in place. This service enables the university to stimulate an internal process of critical self-analysis of the current strategy, inform immediate improvements and prepare for the future.

RUDN University, Russia and the **University of Bologna**, Italy, are undertaking *"Achieving Comprehensive Internationalization"*. This strand of service is available only to HEIs at an advanced development stage of internationalization. RUDN University and the University of Bologna might soon join **Cardiff Metropolitan University** in receiving the ISAS (2.0) Comprehensive Internationalisation learning badge.

Other ISAS (2.0) services are available to higher education institutions:

- "Planning and Strategy", which accompanies HEIs at an early development stage of internationalization in the process of creating an internationalization strategy;
- "Enhancing a specific area of internationalization", which allows HEIs to focus on a particular area of internationalization requiring special enhancing and monitoring efforts.

Whatever your stage in the internationalization journey, if your institution requires support and advice, there is an ISAS (2.0) service to suit your needs!

For more information, please contact Giorgio Marinoni at:
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 Transforming our world: the 2030 Agenda for Sustainable Development and related Sustainable Development Goals (SDGs) provide a framework for university collaboration, in research, curriculum development and outreach.

UNIVERSITIES POSITION THEMSELVES AT THE UNITED NATIONS HIGH LEVEL POLITICAL FORUM ON SUSTAINABLE DEVELOPMENT

Each year since 2016, the United Nations organizes the so-called *High Level Political Forum on Sustainable Development* (HLPF) at the UN, in New York. The aim of the HLPF is to review and monitor progress made towards the achievement of the Sustainable Development Goals (SDGs) and the 2030 Agenda aiming at transforming our world. This year was the fourth edition of the Forum and marks the end of the first circle of events reviewing all 17 development goals.

IAU and its delegation of Members at the 2019 High Level Political Forum on Sustainable Development in New York

As has been discussed many times by IAU, most recently in the previous volume of *IAU Horizons*, higher education is crucial for the achievement of the SDGs. It is therefore a step in the right direction that at this year's HLPF a number of governments highlighted in their statements the need for a better recognition and inclusion of higher education in Agenda 2030's achievements' mechanisms, and not only science as it has often been the case. One such statement was made by the representative of Belize during the New York SDG 4 review; the Belize representative spoke on behalf of the small islands developing states, and called for more support for tertiary and technical and vocational training in order to provide their secondary school graduates with more future opportunities and become up-to-date in technological advancements.

Today, more and more universities do include Agenda 2030 principles in their strategic plans and are aligning their goals with the SDGs. This came across as well in the 2019 IAU Global Survey on HESD; the Survey Report will be published in November. IAU counted more than 48 participating universities in this year's HLPF, many of which are member of the IAU. They did not only "attend" the HLPF; a large number of them also took an active role, by speaking at different kinds of events on different topics and by organising a very diverse set of side events. In many cases, speakers are invited in their researchers' capacity, rather than as higher education representatives.

In order to better draw attention to the important role higher education as a sector plays for the SDGs, IAU joined forces with the Association of Commonwealth Universities (ACU) and the Agence universitaire de la Francophonie (AUF). The three organisations drafted a joint statement, which was presented during the Higher Education Sustainability Initiative. In the statement, the associations call for a better inclusion and recognition of the higher education sector in the 2030 Agenda. The full statement is available on the following page.

For a full report on the activities organized and attended by IAU during the HLPF 2019 please visit our website.
https://iau-aiu.net/HESD

GET INVOLVED

- If you are interested in getting involved with IAU during HLPF 2020, please send an email to contact@iau-hesd.net;
- Learn more about how universities around the world engage with the 17 Sustainable Development Goals through the **IAU Global Cluster on HESD**;
- Read the first *IAU SDG Publication on Climate Change*; it is the first in the series of IAU SDG publications;

- Contribute to the *IAU SDG 5 Publication on: Gender Equality*! **Contact:** contact@iau-hesd.net
- Get involved in the IAU work and share your HESD initiatives with the broader higher education community via the **IAU Global Portal on HESD** : www.iau-hesd.net

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

STATEMENT BY IAU, ACU & AUF

"None of the 17 Sustainable Development Goals (SDGs) can be achieved without the contribution of higher education and research.

Through research, universities play a unique role in producing new knowledge and innovation to address global challenges and providing evidence for informed public policy.

Through teaching, universities develop generations of new leaders and skilled professionals who will drive social and economic development.

Through community engagement, universities work with a rich variety of stakeholders including governments, the private sector and civil society, to contribute towards local, national and global impact.

Higher education has a direct impact on the development of every country. The 2030 Agenda for Sustainable Development will not be achieved without partnerships that include universities.

Considering SDG 4 (Ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all) specifically:

- *Higher education is an essential component of a strong and sustainable education system.*
- *Universities strengthen education policy and practice at all levels, by training teachers and through educational research.*
- *Access to quality higher education continues to be an issue for women and girls, people with disabilities, those living in rural areas, people on lower incomes, indigenous people, and those affected by conflict (targets 4.3 and 4.5).*
- *Higher education develops the critical thinking and skills required by engaged citizens (target 4.7).*
- *Scholarships designed for development impact can also be used to promote equity and inclusion, reward merit, and deliver widespread access – especially to those from disadvantaged backgrounds – at the same time as addressing global challenges (target 4.B).*

As three global university networks together representing over 2,000 institutions, the Association of Commonwealth Universities (ACU), the Agence Universitaire de la Francophonie (AUF), and the International Association of Universities (IAU) call on:

The higher education sector to:
- *Take steps to provide equitable access to quality higher education for all, raising levels of attainment as well as access*
- *Adopt policies and practices which maximise their contribution to the 2030 Agenda across teaching, research, and community engagement, as well as through their own operations*
- *Incorporate education about and for sustainable development into undergraduate curricula, in support of SDG Target 4.7.*

The United Nations and its agencies to:
- *Respond to the need for strong higher education systems globally to achieve SDG 4*
- *Recognise the contribution of higher education to Agenda 2030 and all SDGs beyond SDG 4*
- *Provide platforms to engage the higher education sector as partners for development, building on the Higher Education Sustainability Initiative and UN Academic Impact Initiative.*

National governments to:
- *Take concerted action on and deliver well-planned long-term financial investment in SDG Targets 4.3 and 4.B*
- *Adopt a whole sector approach to the development of strong, equitable, quality education systems, recognising the contribution of higher education to SDG 4*
- *Engage universities as partners for national development across all 17 SDGs.*

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 to promote the opportunities and discuss the challenges and, through collaboration and exchange, to pursue that the potential is unlocked for all.

THE STATE OF DIGITAL TRANSFORMATIONS IN HIGHER EDUCATION

A global invitation to take part

There is no 'one size fits all' to digital transformation of higher education. However, while recognizing this diversity of context and priorities, IAU is seeking to distil the values and principles that can find a universal breeding ground and function as the ethical, aspiring and responsible backbone or compass to guide transformations and to underpin the digitalization of higher education and its impact on society. This is a very complex, yet exciting ambition translated into the development of a new IAU policy statement about higher education in the digital era.

It is far from a simple task, yet important to discuss, define and agree on a common set of principles and values that will shape digital transformations for the greater common good and grounded in an overarching aim of generating sustainable societies where technology can enhance human conditions rather than limit, threaten or replace human beings. One thing is clear in this complex exercise, humans must be at the centre of the digital transformations, as innovators, as decision-makers, as citizens and as users of the continuously increasing array of possibilities offered by technologies.

To inform the development of the statement, IAU carried out an Open Consultation on the current state of digital transformations and perceptions about the changes. Higher education institutions across the world were invited to take part through two separate consultations; IAU was very pleased to receive replies from more than 1,000 representatives from 127 countries. Particularly Africa, Europe and Middle East were active in this consultation and Asia and the Pacific also provided solid contributions. We saw some participation from Latin America and the Caribbean, but less so from North America, which meant that while we include the responses received from North America in the global data set, we were not able to consider it in the regional data breakdown.

Do new opportunities equal new inequalities?

Digital transformation and new technological developments engender new opportunities as to how we access, share information and knowledge, interact, and collaborate across borders. However, when exploring the opportunities and looking at the transformations taking place, it is important to recall that the conditions in which higher education institutions are operating are very diverse and while many of the questions show similarities in the responses across the regions, it was less the case in the question about the national internet infrastructure **(Fig 1.)**. There is a clear contrast between Europe and Africa where 39 % consider the internet infrastructure satisfactory

Figure 1. National Internet infrastructure
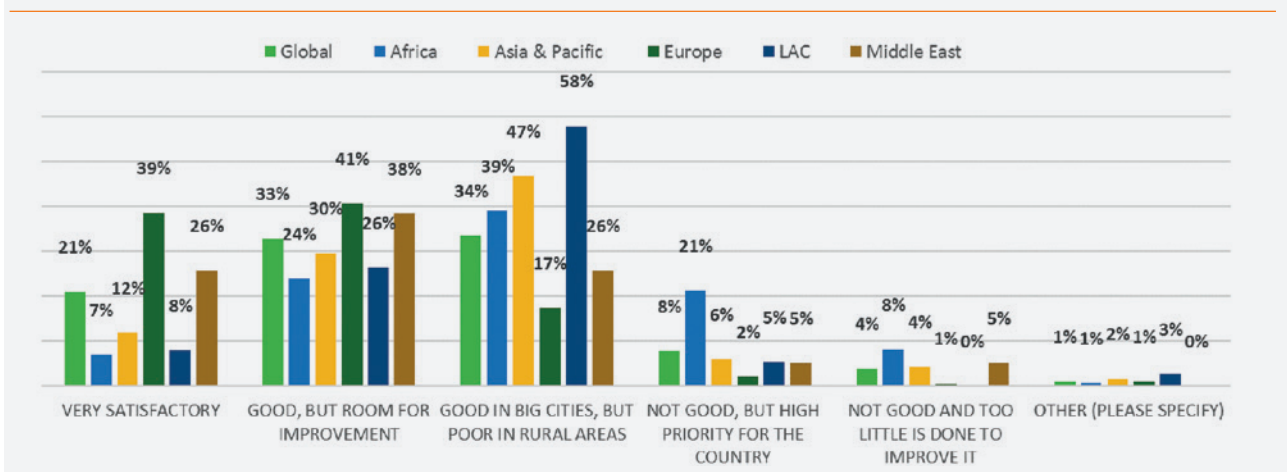
compared to only 7% in Africa. Only 20 % of the replies in Europe are on the negative side of the scale against 69 % for Africa. These results are maybe not surprising, yet important to underline because they demonstrate that the degree to which digital technology can be explored and leveraged is largely determined by the context in which you are operating and to what extent the population (whether student, faculty or staff) are familiar with the use of new technologies. It also means that when we discuss digital transformations at the global level, we bring together leaders that take access to high-speed internet for granted along with leaders who have to put access to stable electricity higher on the agenda than the speed of the internet. The main problem remains that access to data, information and knowledge is crucial for the choices that citizens make in their lives and the opportunities in society. This access is unequal and it is important to nurture the sense of shared responsibility in building capacities, sharing experiences across border in order to counter the digital divides to avoid that new technological developments imply exacerbated inequalities.

Key achievements and obstacles

The open consultation gathered a wealth of information which is available in the full report, but this section looks only at one aspect namely the key achievements and challenges.

Figure 2.

Key achievements	% of respondents
Improved governance of information (information management systems)	80 %
New learning pedagogies to improve the student experience and learning outcomes	72%
Improved research through new networks and international collaboration / Improved access to scientific knowledge	55 %/55%

The majority of respondents (80%) agrees that improved governance of information is the main achievement so far encompassing management systems for student and staff data as well as online library services etc. Only Africa is below the global average in this category with 70 %. In the global average 'New learning pedagogies enhance the student experience and the learning outcomes' was the second most selected option, but when considering the regional breakdown, the Middle East (81%) and Africa (70%) both identify 'Improved access to scientific knowledge' as the second most important achievement. 'Improved access to research through international collaboration' and 'improved access to scientific knowledge' shared a third place, but to be noted for the latter, it is mainly due to the Middle East, Africa as they are above the global average in this category. 'Increased access to HE' (50%) and 'the use of OERs in HE' (36%) are the two less selected categories although it is worth mentioning that for Latin America, the improved access to higher education is the third most selected option (76%).

In terms of the key challenges, the financial investments required is the most important challenge when considering the global average. However, looking at the data by region, it is interesting to note that Europe has the highest score in this category (82%) whereas Asia and the Pacific (48%) and the Middle East (56%) are below the global average. Africa on the other hand has identified 'Unreliable internet and local infrastructure' as the most important challenge (80%).

The organizational culture is an important obstacle for change and inclusion of new technologies as it appears as the second most important challenge. Whether it concerns digital transformations or other areas, the human aspect of organizational changes often take time so in a time where technology is developing at an increasingly rapid pace, change management becomes an increasingly important dimension. Unreliable internet (35%) is the third most important challenge but as mentioned earlier, this is particularly due to the responses from Africa (80 %) and to some extent Latin America and the Caribbean (LAC) 46%) are above the global average (35%).

Figure 3.

Key challenges	% of respondents
Financial investments and maintenance required to explore new opportunities	70 %
University culture is slow to change or adapt to new technologies	47 %
Unreliable internet and local infrastructure prevent us from benefiting from online opportunities	35 %

This shows that technology has provided a new type of infrastructure to handle and process data and has given rise to new teaching pedagogies that enhance the learning experiences, improved opportunities for conducting research and gaining access to scientific knowledge. However, an important precondition to leverage digital opportunities remains the national internet infrastructure. When this condition is in place, the main obstacles reported by higher education institutions are the financial investments required as well as changing the culture embedded in the institutions to change and adapt to new opportunities and technologies.

The consultation also included a series of questions about perceptions of the changes and although some of the questions divided the respondents, the great majority of respondents agree that higher education has an important role to play to shape the digital transformation, not only in higher education but in society.

Find the full report on the consultation on: https://iau-aiu.net/Technology

IAU STRATEGIC PRIORITIES

11

IAU KNOWLEDGE HUB

New IAU publications

The International Handbook of Universities (IHU)

The *International Handbook of Universities* presents authoritative information about higher education systems and institutions. It includes more than 18,400 higher education institutions that offer at least a 4-year degree or a 4-year professional diploma in 196 countries and territories. The 29th edition is for the first time released in e-format and in print on demand and IAU Members benefit of an advantageous discount. Contact: centre@iau-aiu.net.

IAU 5th Global Survey report

IAU is pleased to release the 5th IAU Global Survey Report which compares data with previous findings, monitors changes and captures new emerging trends. This edition provides a holistic description of internationalization around the world at a given moment in time. Based on input from 907 HEIs in 126 different countries, the IAU 5th Global Survey Report is the most geographically comprehensive collection and analysis of primary data on internationalization of higher education. Published by DUZ Academic Publishing, it is available for purchase at: https://iau-aiu.net/internationalization

"Internationalisation of Higher Education – Developments in the

European Higher Education Area and Worldwide"

This publication provides a broad coverage of issues pertaining to internationalisation such as governance, leadership and management; funding at national and supranational levels; internationalisation strategies and activities; access, mobility, student success and lifelong learning. It is published four times a year and is available both in printed and online versions. Get your welcome offer – 50% off for a campus license as an IAU Member – here: https://www.handbook-internationalisation.com/en/preise-und-bestellung/

HEP 32/2 – June 2019

September's edition of HEP presents us with several articles on higher education in Asia: China's soft power in South East Asia via international branch campuses, emerging private higher education in Vietnam, quality assurance in Taiwan, the impact of TNE in in China, and the potential of Pakistani universities for combatting terrorism. Other papers look at academic freedom and world-class universities, organisational restructuring, institutional initiatives for creating interdisciplinary research in Latin America, and the realities of free higher education. The full list of contents can be viewed online on https://link.springer.com/journal/41307/32/3

HEP 32/3 – September 2019

The second edition of HEP, released in June, brings together a collection of papers looking at mobility amongst migrant faculty in Singapore, international scholarship in the SD agenda, the well-being of early-career researchers in Sweden, the impact of the teaching excellence framework on academic identity in the UK and mergers in European higher education, amongst others. The full list of contents can be viewed online on https://link.springer.com/journal/41307/32/2

Higher Education and SDG 13: Climate Action Through Universitsy Teaching, Research and Community Engagement
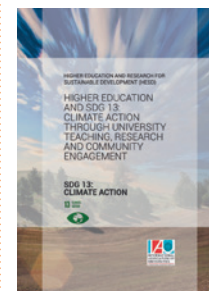
IAU has gathered 15 concrete examples of meaningful initiatives towards climate action, undertaken by higher education institutions and organizations, from Uganda to Malaysia, from Peru to Japan. Given the current climate crisis and growing concerns about the state of the planet, this publication highlights the important role higher education has around the world and that many universities are taking this responsibility very seriously. This publication is the first of a series dedicated to Member institutions' contribution to the United Nations 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals. The second such publication will be on SDG 5: *Gender Equality.* To get involved and submit a paper, please contact: contact@iau-hesd.net.

New feature:
THE GLOBAL WHED ID

World
Higher Education
Database

The IAU World Higher Education Database (WHED) provides authoritative information on over 19,000 higher education institutions (HEIs) from 196 countries and territories. It also includes a mapping and description of the key characteristics of each higher education system and their credentials. Managed by IAU in collaboration with UNESCO since 1950, this database is recognized globally as a reference data source by national higher education authorities, governmental agencies and national academic bodies.

IAU is pleased to announce the launch of the Global WHED ID, a new feature that uniquely identifies each higher education institution registered in the WHED. The purpose of the identifier is to ease access to information on accredited higher education institutions across the global higher education community.

IAU updates the WHED on an ongoing basis. The information on education systems, credentials and institutions is based on information, which the IAU WHED team procures directly from the national authorities or from our accredited partners, such as ENIC-NARIC *(European Network of Information Centres – National Academic Information Centres)*. Information is also sought from additional verified resources, such as official websites of national authorities.

As a result, the WHED portal currently lists HEIs that are duly accredited or recognized by their respective national authority (for example, ministries, accreditation councils etc.). The constant and rapid development of the higher education landscape triggered discussions with key stakeholders, among them UNESCO and Agence Universitaire de la Francophonie (AUF), on the need to facilitate the identification of higher education institutions. This led to the development of the IAU WHED Identifier.

This project gained additional momentum in connection with the drafting process of the UNESCO *Global Convention on the recognition of higher education qualifications*[3], to be submitted for adoption at the UNESCO General Conference in November 2019[4] (IAU took part in the drafting sessions). The Global Convention aims to increase transparency in the higher education landscape at the global level, and to enhance orientation through the ever-expanding field of higher education, by providing a standard for the listings of accredited HE institutions. The **unique identifier** assigned to each of these institutions listed in the IAU WHED will serve

as a reference number for each institution and thus increase access, speed and the reliability of information and overall administrative certainty.

IAU is pleased to announce that the WHED Global ID is now publically available on our WHED portal and can be used by all stakeholders, whether they be higher education experts, researchers, accreditation officers, international student officers, UN agencies, or HR administrators, to name but a few.

The new development serves several major goals that are dear to the Association:

- Foster transparency of higher education on a global scale;
- Make available information on higher education systems and the list of nationally accredited higher education institutions to all;
- Help facilitate communication within the global higher education community;
- Address the needs of Higher Education stakeholders seeking to identify accredited HE institutions and gather information on them;
- Increase access, speed and the reliability of information;
- Provide better overall administrative certainty;
- Finally yet importantly, it aims at combating fraud in higher education.

UNESCO, the AUF (Agence Universitaire de la Francophonie) and ACU (Association of Commonwealth Universities) and the ENIC-NARIC are among the partners who supports the development of this Global ID for higher education institutions and discussions are ongoing with other partners on all continents.

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3. https://en.unesco.org/themes/higher-education/recognition-qualifications/global-convention
4. https://en.unesco.org/generalconference/40

WHED, the world of higher education at your fingertips
www.whed.net

IAU Membership News

NEW MEMBER INSTITUTIONS

BAHRAIN
Royal College of Surgeons in Ireland – Medical
University of Bahrain
www.rcsi-mub.com

BURKINA FASO
Institut Africain de Santé Publique
www.iasp-bf.org

CONGO (DEMOCRATIC REPUBLIC)
University of Goma
www.universitedegoma.org

COTE D'IVOIRE
International University of Grand-Bassam
www.iugb.edu.ci

FRANCE
Université de Panthéon-Sorbonne (Paris 1)
www.pantheonsorbonne.fr

INDIA
Birla Institute of Management Technology
www.bimtech.ac.in

INDIA
Sathyabama Institute of Science
and Technology
www.sathyabama.ac.in

IRAQ
Madenat Al-Elem University College
www.en.mauc.edu.iq

IRAQ
University of Diyala
www.uodiyala.edu.iq

ITALY
University of Brescia
en.unibs.it

ITALY
University of Macerata
www.unimc.it

PAKISTAN
University of Lahore
www.uol.edu.pk

SAUDI ARABIA
Almaarefa University
www.um.edu.sa/en

SLOVENIA
Alma Mater Europaea
www.almamater.si

SRI LANKA
Wayamba University of Sri Lanka
www.wyb.ac.lk

NEW MEMBER ORGANIZATIONS

Associação das Universidades de Língua
Portuguesa (AULP)
www.aulp.org

Universities Caribbean
(website in progress)

NEW AFFILIATES

Academic Cooperation Association (ACA)
www.aca-secretariat.be

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IAU KNOWLEDGE HUB

IN FOCUS
Transforming Higher Education for the Future

Each year IAU convenes Members and beyond at its annual International Conference, and this year the theme is *'Transforming Higher Education for the Future'.* In line with this broader theme, we have dedicated this 'In Focus' section to related sub-topics to offer additional perspectives that inform the conference deliberations. This also allows us to extend the reflections, debate beyond the conference and reach out to the full IAU Membership worldwide, including those who will not be able to join us this year in Puebla, Mexico.

Transformation of higher education is an ongoing process. However, the current pace of societal changes is unprecedented and translate in economic, environmental, cultural and technological disruptive transformations. The new world order calls for an urgent need to create sustainable societies. Although higher education is governed at the national level, many of the current challenges also have to be addressed at the global level as we live in an increasingly interconnected world.

Acknowledging the complex world in which higher education is operating, IAU wishes to discuss the important contribution of higher education to shaping these societal developments but also emphasize on the type of higher education we need and want for the future.

Higher education has an essential role to play in proposing concrete solutions and fostering debate on the ethical and social dimension of the transformations taking place around the world. Research carried out within higher education can inform decision-makers; through its community engagement, higher education can propose inclusive and innovative solutions to address societal challenges. On a global level, we can exchange and learn from other experiences and practices, with a common objective of advancing higher education and sustainable societies.

Against this backdrop, we invited 10 authors to present their reflections, concerns and visions for the future of higher education.
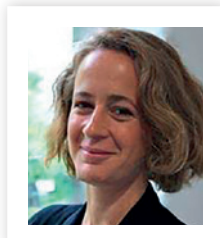
In the first papers, the authors give their views on the key issues at stake in the construction **of the future of our universities**, imagining what our societies will prospectively look like tomorrow. The following article discusses more specifically how the changing landscape of **higher education financing** is also having an impact on the way higher education will develop in the future. In light of the **rapid technological shifts**, several authors then present their opinion on the major repercussions the current developments have on higher education. Finally, we close the series with articles on the relevance of higher education to sustainable development, providing various examples of **universities' social responsibility** and engagement with society.

We hope that you will enjoy this thought-provoking series of papers, which covers different aspects of the transformation higher education is already undergoing. It also puts into perspective some of the underlying systems, approaches and issues that would potentially need to be addressed to ensure that higher education remains relevant and valuable to society in the future.

IN FOCUS

01 Transforming Universities for the Future

by **Keri Facer**, *Zennström Professor of Climate Change Leadership, Uppsala University*

We live in interesting times. Let's consider just a few of the complex issues the world is facing today: a set of economic structures demonstrably failing to 'recover' from financial crises. Democratic practices creaking in the face of social media. Artificial intelligence reshaping the nature of work. Mass migration and poverty caused by war, violence and environmental erosion. The beginning of an era of digital and bio-augmentation challenging core conceptions of what it means to be human. And alongside all of this, the gradual accretion of carbon in the atmosphere that is already producing climate disruption, extreme weather and significant impacts on infrastructures, livelihoods and food and water supply.

How then, should universities 'transform for the future' as this conference asks us? How can and should they anticipate the worlds emerging from these changes?

One response is to treat the world outside as somehow separate from the university – to say that our job is not to fix the world's problems, but to pursue the research and scholarship that is important to us, defined by our academic disciplines, and to be governed by our academic autonomy. To do so, however, is to ignore the fact that the technological, environmental and economic changes we are witnessing are not external to us – they change who our students will see themselves to be, they change the conditions and values of the countries in which we operate and the governments with whom we work, they create research problems of profound complexity for us to work on. While not driven instrumentally by these conditions, we nonetheless need to make them objects of our concern if we wish to maintain our role as educators and as scholars.

A second response, however, which would see us hastily brushing up our marketing campaigns claiming that universities will 'address global challenges' and develop students as 'change agents', is equally problematic. We need to acknowledge that the growth in universities over the last 70 years has run alongside many of the radical changes that we are now seeking to understand and respond to. As student enrolments have gone up, so has biosphere degradation, methane emissions, carbon emissions and economic inequalities. As journal papers have increased exponentially, so have economic inequalities and student debt. The last thirty years have seen universities around the world repositioned as instruments of the economy, rather than as servants of knowledge and the public good. Our well-educated students have gone on to lead businesses, governments and organisations that have presided over ecological decline. In other words, while universities have increased their reach and power, while (some of) the population may have become more highly qualified, we have not, as a species, become wiser. And in this process, universities have not proven to be caped crusaders coming to the rescue but deeply flawed institutions intimately embedded in the world and its problems.

Despite this, the university remains both symbolically and materially powerful. We are proud to be part of institutions governed by a commitment to search for truth, to seek wisdom, to hold power to account, even as we don't always achieve these aspirations. Universities are also globally important as landowners, as employers, as key anchor institutions in local communities. They are responsible for important scholarship that helps to understand the world, from the workings of forest mycelium to the implications of world bank economic instruments. If this were not the case, dictators around the world would not seek to stifle scholarship, persecute scholars and close universities.

Universities, then, are both flawed and powerful. Deeply implicated in many of the problems we face but with a latent potential to act as midwives to a transformed world. To fulfil this potential, three questions need to be addressed with courage and honesty:

First, as material and economic institutions: how are our land, buildings, materials and wealth being used? What purposes are they serving? Whose purposes are they serving? To what extent are university investments and resources contributing to or undermining the role of the university to serve the public good, to build resilience and strength in adversity for our communities? Asking these questions opens up the possibility for universities to act as powerful anchor institutions in their communities – for social justice and for environmental benefits.

Second, as intellectual scholarly institutions: what knowledge counts in a changing world? While our climate scientists have played an important role in raising the alarm on global warming, they have done so alongside others – indigenous peoples and often impoverished communities whose lived experiences provide a different wisdom gained from living with fragile ecosystems. Is it time for the enlightenment breach to be recognised, for the epistemicide characterised by the colonial university to be addressed, for new encounters to be built between academic and other knowledges. How can universities recognise the many forms in which wisdom appears?

Finally, as educational institutions: how do we initiate and induct our students into a changing world? How do we enable them to confront not only their own materiality as one species on a finite planet, but to steward their technological capabilities and talents with responsibility and care? How do we create the conditions by which they can, in Hannah Arendt's terms, learn the task of 'renewing a common world'?

Only by answering these questions with honesty and courage and beginning to make the structural changes needed when we take the answers seriously, can we initiate a process of transformation that will be adequate to the sorts of futures we may soon inhabit.

02 Transforming the University

by **Roberto Escalante**, *Secretary General, Association of Universities of Latin America and the Caribbean and IAU Administrative Board Member*

Transforming the university is an unavoidable current issue. However, it is also a very difficult and complex endeavour.

The traditional university was founded with the idea of transmitting knowledge (teaching); producing new knowledge (research), and transferring it to others (extension). Moreover, these tasks were organised in such a way that specialisation by type of science was thought to be the best path to comply with such activities. To train the best engineers, lawyers, medical doctors and so on by themselves was considered as the best model to obtain the most refined knowledge to solve problems. Unidisciplinary universities were the model to follow.

Today, such an institutional architecture does not seem to be good enough to satisfy the relationship between knowledge creation and problems to be solved. Topics as challenging as climate change, for example, cannot be tackled with scientific rigor and policy efficiency if we accept that ecologists alone are the ones who have to be in charge of its solution. Climate change is an ecological problem but it is also a social and economic issue that requires the combined expertise of ecologists, sociologists, economists, engineers, lawyers, biologists, mathematicians, statisticians and the rest. In other words, inexistent professions need to be created. Water anthropologists, archaeologists of the cosmos, historians of the climate are some examples of professions that are nowadays sought but there are no universities that can offer them. Traditional universities are lagging behind economic and social needs. Change is urgently demanded. Otherwise, universities run the risk of being considered, as they are already, towers of Babel, where privileged individuals discuss among themselves issues that they only understand without clear social benefits emerging from their debates. In many parts of the globe, universities are increasingly considered to be a costly organisation with low returns in terms of societal benefits.

As said above, what is at stake is the epistemology on which universities have been built over centuries. What is then the alternative to be developed? What type of university does society deserve and demand? What are the new institutional arrangements to embark upon? What characteristics should university people (lecturers, researchers, administrative staff) have to be useful? What role should technology play to help universities to produce knowledge that is more connected with their social and economic context? All these questions require careful analysis and intelligent proposals, which at the end, makes transforming universities a productive exercise.

A new university is needed. We all agree on that. Some emphasise that what is required is that universities serve the economy in a very interconnected way. This means, for example, that industries dictate the structure of new careers and that lecturers and researchers work and use the most sophisticated technology available to solve economic issues. In other words, universities have to make science that only creates wealth. Moreover, they argue that minimum costs schemes should be implemented e.g., virtual training should be prioritised. Alternative approaches favour the development of new university principles and the introduction of institutional arrangements, which should result in the training of individuals, as citizens who are highly connected with society and its needs.

Several issues have to be put on the table. Let us examine some of them. Multidisciplinary and transdisciplinary practices have proved to be not as effective as expected. In many cases, despite the fact that multidisciplinary research groups are organised, one discipline ends up dictating the recipes and policies to be put into practice. One crystal clear example is climate change where economic instruments have been favoured as the most efficient. We now know that despite the fact that such an economic approach is useful, it is only one aspect, as important as it can be, of the climate change challenge. What is required is that careers are designed in such a way that an integrated training is achieved.

Another issue is related to the role universities should play. Up to now, in most universities, the main activity (teaching) has been conceived as transmission of information. That objective is inadequate and ineffective. Today technology provides instruments, which are much more effective than humans in transmitting information. Machines have more capacity to stock and process information and are capable of making it available at any time. What universities have to do is to train people to have competences to analyse, criticize and solve problems. It is crucial to mould critical minds. This issue connects directly with another critical topic, which is technology.

Technology applied to education has made incredible progress. Nowadays we do not only have internet at our disposal, which is extremely important, or social networks. Artificial intelligence, machine learning and big data are technological developments, which will, and are producing knowledge in a way and at a speed never seen before. One rapid conclusion at which some specialists have reached and proposed is that universities should be equipped with the best technology

available in order to ensure modernity and pertinence. The recipe is: more technology – better university.

Such a proposal is wrong. Knowledge is a social process on which technology can play an important role, but only that. What we need is to engage universities with their context and from there decide what kind of technology is appropriate to tackle the challenges they confront. Not every technology is useful to the variety of contexts universities face.

To summarise, traditional universities need to be transformed. They should abandon the idea of transmitting information. Something different is required now. Critical minds are more important. Information is better provided by technology. At the same time, technology is not the key to modernity. It is only an instrument. Universities comprise people equipped with the best minds to transform reality and solve problems. That is what transforming universities must be about.

04 From the Fourth Industrial Revolution to Lifelong Learning: The Challenge for African Higher Education

by **Paul Tiyambe Zeleza**, *Professor of the Humanities and Social Sciences and Vice Chancellor, United States International University-Africa, Nairobi, Kenya*

Higher education is undergoing complex, contradictory, and rapid changes. Four key transformations can be identified, namely, digital disruptions, rising demands for public service and engagement, unbundling of the degree, and escalating imperatives for lifelong learning.

As with any major social phenomena and process, the 4th Industrial Revolution has its detractors, cheerleaders, and fence sitters. The term often refers to the emergence of quantum computing, artificial intelligence, internet of things, machine learning, data analytics, big data, robotics, biotechnology, nanotechnology, and the convergence of the digital, biological, and physical domains of life.

What does the revolution entail for Africa? During the 1st Industrial Revolution of the mid-18th century the continent paid a huge price through the Atlantic slave trade that laid the foundations of the industrial economies of Euroamerica. Under the 2nd Industrial Revolution of the late 19th century Africa was colonized. The 3rd Industrial Revolution that emerged in the

second half of the 20th century coincided with the tightening clutches of neo-colonialism for Africa. What is and will be the nature of Africa's levels of participation in the 4th Industrial Revolution—as a player or pawn as in the other 3 revolutions?

In the education sector, universities are urged to help drive the 4th Industrial Revolution by pushing the boundaries of their triple mission of teaching and learning, research and scholarship, public service and engagement. Much attention focuses on curricula reform, the need to develop "future-readiness" curricula that prepares students holistically for the skills of both today and tomorrow; curricula that integrates the liberal arts and the sciences, digital literacy and intercultural literacy, technical competencies and ethical values; curricula that fosters self-directed and personalized learning.

It is often argued that the digitalization of the economy and social life spawned by the 4th Industrial Revolution, will continue transforming the nature of work as old industries are disrupted and new ones emerge. In a world of rapidly changing occupations, the hybridization of skills, competencies, and literacies together with lifelong learning will become assets. Routine tasks will be more prone to automation than highly skilled non-routine jobs. Successful universities will include those that impart academic and experiential learning to both traditional students and older students seeking retraining.

The need to strengthen interdisciplinary and experiential teaching and learning, career services centers, and retraining programs for older students on college campuses is likely to grow. So will partnerships between universities and employers as both seek to enhance students' employability skills and reduce the much-bemoaned mismatches between graduates and the labor market. The roles of career centers and services will need to expand in response to pressures for better integration of curricula programs, co-curricula activities, community engagement, and career preparedness and placement.

The rising expectations for public engagement and service manifests itself in three ways. First, demands for mutually beneficial university-society relationships and the social impact of universities are increasing. Second, the question of graduate employability will become more pressing for universities to address. Pressure will increase on both universities and employers to close the widely bemoaned gap between college and jobs, between graduate qualifications and the needs of the labor market. Third, is the growth of public-private partnerships. As financial and political pressures mount, and higher education institutions seek to focus on their core academic functions many universities have been outsourcing more and more services.

The third major transformation that universities need to pay attention to centers on their core business as providers of degrees. As more employers focus on experience and skills in hiring, and as the mismatch between graduates and employability persists or even intensifies, traditional degrees

will increasingly become less dominant as a signal of job readiness, and universities will lose their monopoly over certification as alternative credentialing systems emerge. Increasing pressures for life for lifelong learning will lead to the unbundling of the degree into project-based degrees, hybrid baccalaureate and master's degrees, 'microdegrees', and badges. Students will increasingly stack their credentials of degrees and certificates that they will use to differentiate them in the job market.

The imperatives of the digitalized economy and society for continuous reskilling and upskilling entail lifelong and lifewide learning. The curricula and teaching for lifelong learning must be inclusive, innovative, intersectional, and interdisciplinary. It entails identifying and developing the intersections of markets, places, people, and programs; and helping illuminate the powerful intersections of learning, life, and work. Universities need to develop more agile admission systems by smarter segmentation of prospective student markets (e.g., flexible admission by age group and academic program); some are exploring lifelong enrollment for students e.g., National University of Singapore).

African universities must ask themselves how prepared they are for the digital disruptions, development of new and transformational modes of public service and engagement, the emergence and proliferation of new credentialing systems, and the demands of lifelong learning.

03 The Matthew Effect versus the Luke Effect? Excellence Schemes in European Higher Education
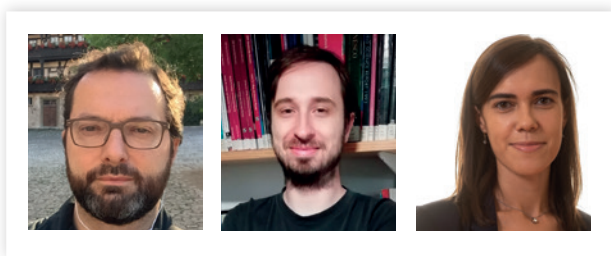
by **Pedro Teixeira** [a,b,e], **Ricardo Biscaia** [a,c], **Vera Rocha** [a,d,e], [a] CIPES, [b] FEP – University of Porto, [c] University of Aveiro, [d] Copenhagen Business School, INO, [e] IZA

1. Introduction

The concept of excellence has been pervading higher education (HE) debates, namely regarding teaching and research. Almost every regulatory and policy body is worried about "excellence", and the use of this term is relatively widespread in HE policy documents. Hence, in recent years there has been a growing discussion about the possibility of using funding mechanisms to recognize and promote excellence in HE and we have observed a growing number of funding programs, at the national and international levels, with that label supported by government sources. These large-scale initiatives awarded significant public funding, on a competitive basis, with the goal of developing or shaping wider institutional strategies.[5]

Excellence schemes became originally visible in Asia in the late 1990s (Hou et al., 2012). China launched an excellence program (the "985 Project") that started in 1998, with the main goal of bringing 10 Chinese universities into global rankings, even though at most 49 universities were targeted by this funding (see Xuefei, 2006 and Jian-Ping, 2006). [6] In South Korea, the "Brain 21" Program (started in 1999) funded 67 universities aiming at "cultivating global leaders" (Shin, 2009). Motivated by those experiences, some other programs in Asia appeared, including the Japanese "COE" (started in 2002), which targeted at least 30 universities and focused on the "recruitment" of international students. Mention could also be made to the Taiwan "5-year 50 billion" program, which started in 2006 for 12 universities, and intended to place one of the Taiwanese universities in the World's top 100 (Hou et al., 2012). This has eventually become visible in Europe, with prominent initiatives emerging in several countries, whose results will be briefly analysed in this text.

2. Analysing Excellence Schemes in European Higher Education

2.1 Positive Outcomes

Overall, the assessment of these excellence schemes indicates an increased external visibility of the HE system, which was translated into a stronger attraction of international students and high-quality staff. Moreover, there was the reputational advantage experienced by some universities with the "excellence" label. Many institutions used in their advertising and marketing strategies the fact that they were selected as an "excellent" institution. It was also identified an increase of the institutions' ability to obtain extra funding – other than the funding obtained through the excellence scheme – creating a cumulative positive effect in funding for those institutions that were awarded.

Another of the perceived benefits has been an increased collaboration between the HEIs and industry in a few countries, especially in those cases where this was explicitly mentioned as an objective of the program. The implementation of these schemes seems to have also enhanced the interaction between both actors and to increase the awareness of governments about HEIs' challenges. In particular, governments seemed to become increasingly aware of the funding problems and the

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5. This rising policy visibility of the concept of excellence relates to the also increasingly used term of World Class University (WCU), as those initiatives often involve the creation of WCUs, even if this is not always explicitly expressed (Altbach, 2004). For more on this concept, see Salmi, (2009; 2011).

6. This program succeeded the "211 Program", which was launched in 1993.

challenges faced by universities after the implementation of such schemes.

One of the most positive changes coming from the excellence schemes was that it has led institutions to craft strategies according to their own strengths and weaknesses, and has pushed them to a process of self-examination that provoked positive changes in the system. Even those institutions that were not selected for funding have pursued institutional changes that were associated with the "excellence" label, carried out some of the projects that were not funded by the scheme with their own funding. Linkages between different actors in the system (between different HEIs and between HEIs and firms) were preserved even after the rejection of some of the proposals. Thus, not only those awarded with excellence funding seemed to have benefited with such experience, as there were positive contagion effects across the system.

2.2 Negative Outcomes and Criticisms

The most relevant and expected negative effect coming from these excellence schemes was a greater sense of inequality. Firstly, important differences have been identified between the institutions being funded and those being left out of the funding scheme. This meant the emergence or consolidation of a two-tier system of higher education in those countries. Moreover, this perceived inequality is believed to be self-reinforcing, since those institutions that were not selected were considered to struggle to compete with the institutions that have been allocated extra funding, namely regarding subsequent rounds and other competitive funding sources. Another type of inequality concerned the regional level. The excellence scheme tended to produce an unequal distribution of funds between regions, due to the fact that the best institutions were concentrated in a few locations.

Another major issue of discussion in these schemes was the fear of increasing dependency and interference of HEIs from the governments. These concerns were expressed in particular in federal countries (e.g. Germany) due to the interaction and possible tensions between regional and national levels. Furthermore, some actors have expressed the concern that through excellence schemes, national governments could have a significant impact in the research agenda. This was perceived as a loss of autonomy for HEIs participating in these schemes, which tended to become more reactive to externally led priorities.

Another criticism was the resulting bureaucratic work from this type of programs. The additional bureaucratic burden was not only due to the selection process, but also to the institutional evaluation of the schemes, after the acceptance of the initial proposals.

A final, not less important, concern referred to the lack of diversity that excellence schemes could foster. Even though

institutions were differentiated by different projects and proposals that were elaborated, and by the award or not of the Excellence status, some have expressed concerns about potential institutional isomorphism and a decrease in system's institutional diversity (Flink et al., 2012). Regarding the allocation of funds to the HEIs, and given their financial autonomy, it was feared by some respondents that some institutions could have been using the money to fund other departments that were not initially regarded as excellent, compromising the effectiveness of funds diverted to less performative departments and areas.

3. Concluding remarks – Matthew versus Luke Effects

In recent decades, European higher education has been pervaded by a growing emphasis on excellence. This background has contributed to the emergence of programs that focus attention and resources in a small number of institutions, with the so-called excellence programs being a prime example of that trend.

Regarding the expected impacts on performativity and attractiveness, there are mixed results. On the positive side, mention is often made to the positive effects in the performance and visibility of HEIs, especially (but not exclusively) to those that were selected for special funding. This may be also the result of the increasing implementation, at the institutional level, of merit-based evaluation for both academics and researchers, and an increase in their strategic thinking and redefinition of priorities, strengths, and weaknesses. Moreover, the "excellence label" may have contributed to enhance institutional attractiveness, especially at the international level. The competitive stimulus has also contributed to some positive effects even among those HEIs that were not selected for special funding. On the other hand, the impact on those selected institutions seems to have been more limited that it was expected, which may have something to do with the aforementioned limited resources vis-à-vis the initial expectations and the rhetoric associated with those programs.

These mixed results can be contributing to what we could call the Luke Effect. According to a well-known passage of the Gospel of Luke: "From everyone who has been given much, much will be demanded; and from the one who has been entrusted with much, much more will be asked". (Luke, 12: 48). Hence, those institutions that have benefited from significant allocations of resources will also be expected to deliver significantly, notably according to externally defined criteria (that they do not always fully control in their definition or implementation). Thus, after a while, they may be facing a very demanding context regarding their more advantageous situation and a potential social and political backlash. If, on the one hand, there may be reinforcing advantages benefiting those selected by the so-called excellence programs, on the other hand, these HEIs should also be prepared to face a more

demanding accountability context, especially given the scarce resources and the financial constraints faced by governments and higher education systems. These developments may become particularly significant in shaping an atmosphere of growing differentiation and stratification in European higher education, in which funding mechanisms are likely to play a pivotal role.

REFERENCES

Altbach, P. G. (2004). The Costs and Benefits of World-Class Universities. *Academe*, 90 (1), 20-23.

Flink, T., Rogge, J-C., Roßmann, S. and Simon D. (2012). Angleichung statt Vielfalt: Deutsche Universitäten auf der Suche nach Profil. WZBrief Bildung 22.

Hou, A., Ince, M. and Chiang C. (2012). A reassessment of Asian Pacific Excellence Programs in Higher Education: The Taiwan Experience. *Scientometrics*, 92, 23-42.

Jian-Ping L. (2006). Raising Investment Efficiency of Large Scale Instrument and Equipment on the "985 Project". *Experimental Technology and Management*, 2006-03.

Pollitt, C. and Bouckaert, G. (2011). *Public Management Reform*, Oxford, Oxford University Press

Salmi, J. (2009). *The Challenge of Establishing World-Class Universities*. World Bank, Washington DC.

Salmi, J. (2011). The Road to Academic Excellence: Lessons of Experience. In *The Road of Academic Excellence: The Making of World-Class Research Universities*. Altbach, P. and Salmi, J. (Eds).

Shin, J-C. (2009). Building World-class Research University: The Brain Korea 21 project. *Higher Education*, 58, 669-688.

Xuefei, C. (2006). Ideal Orientation Policy-Making: Analysis on "985 Project" Policy Process. *Peking University Education Review*, 2006-01.

05 Smart Machines Can Enhance Higher Education

by **Diana G. Oblinger**, *Ph.D., President Emeritus, EDUCAUSE*

Introduction

"Smart machines" (e.g., artificial intelligence (AI), robotics) have catalyzed a wave of innovation that will touch virtually all careers, from manual labor to knowledge work. Education will be a critical component of how society manages the massive changes these technologies represent for our work and our economies.

Smart machines can take on many human tasks, but rather than replacing people, smart machines *augment* human capabilities. Machine-generated insights (e.g., from data or visualizations) can add to our understanding. Mechanical capabilities, (e.g., robots with great precision or the ability to withstand extreme conditions) allow us to do more. As smart machines extend our intelligence, professional roles shift. Humans are "promoted," with higher-order tasks replacing those that were automated.

Smart machines are affecting higher education, as well. Chatbots respond to student queries. Machine learning helps researchers speed discoveries. Blockchain keeps digital diplomas secure. Predictive analytics helps identify students whose success might be at risk. While there are many challenges to implementing such technology, a greater challenge is for higher education to anticipate what it means to be a knowledge worker in a world of smart machines[7]. The implications will impact the delivery of education as well as its *substance*.

Delivery of Higher Education

Professions in the future will require education for life. Professionals need education—and re-education—over a span of 40 or more years. As technologies such as AI and robotics become integrated into professional work at all levels, professionals must learn new approaches, use new tools and collaborate with new people (and machines) in order to do new things. These ways of working mean we must constantly acquire needed skills and competencies through degree programs, short-courses or bootcamps. However, there will not necessarily be sufficient time to go back to college.

Higher education can adopt new-ways-of-learning designed around a different use of time. What if we accepted the notion that learning can come in all sizes? A degree, a certificate or a course *(macro-learning)* may be the best way to learn an emerging field, domain or system, while *micro-learning*, short bursts of information, interspersed with practice and repetition, can help people master skills or new information. Documented learning gains in this format can be 84% greater[8] in a traditional course. As we move through our careers, we will need cycles of macro-learning punctuated with frequent doses of micro-learning that fit into the "the flow of life[9]." Higher education can adapt its current delivery model to integrate micro-learning and other forms of "short learning" in its existing curricular structures.

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7. https://er.educause.edu/articles/2018/8/smart-machines-and-human-expertise-challenges-for-higher-education

8. https://www.xprize.org/prizes/adult-literacy/teams/cell_ed

9. http://www.universityworldnews.com/article.php?story=20181031131435226

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Substance of Higher Education

In a world of technological abundance, digital skills will be required in all disciplines. For example, human-machine collaborations involving algorithms, robots or visualizations allow us to gain unique insights. Collaborative innovation platforms bring together problem-solvers with diverse areas of expertise on a large scale to make new discoveries. These *collaborative* ways of working (whether with other humans or machines) contrast with higher education's traditional teaching methodologies that focus on the *individual*. Higher education is challenged to expand the tools and techniques used to build student expertise to include more collaborative as well as "man-machine" methodologies.
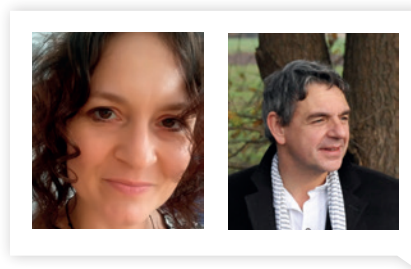
As machines do more, core competencies such as problem-solving, cross-functional collaboration and teamwork become more important. Skills such as creative thinking are being developed using "man-machine" combinations[10] (e.g., AI and chatbots) pioneered in fields such as computational psychometrics. Cross-disciplinary skills, such as problem-solving or creative thinking, are the foundation of the jobs of the future.

Integrating data and a deep understanding of its use—almost as a second language—will become a curricular imperative because smart machines develop new knowledge by "feeding" on data. Compiling large datasets is a prerequisite to the use of AI, for example. Poor data or insufficient data will result in faulty or biased conclusions. Future professionals who are increasingly reliant on AI, machine learning and analytics will need to know how to gather and analyze large datasets as well as how to interpret the results. Data is a critical element of virtually all professions. Higher education should consider the critical role data have in our disciplines and curricula[11].

Closing

When thinking of higher education technology it is easy to focus on its use for campus operations or online learning. But the power of today's technologies lies in their "combinatorial" capabilities— the things they can do in combination with people. The future focus for technology in higher education will be on how it allows us to collaborate with others, to augment our capabilities with "smart machines" and to work with data. Technology will change both the delivery of education and its substance, allowing higher education to adapt to the needs of the next generation.

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10. https://www.ecampusnews.com/2019/07/18/assessments-role-in-higher-eds-digital-transformation/

11. https://www.ecampusnews.com/2018/08/02/what-will-ai-and-robotics-mean-for-higher-education/

06 Regional youth reporting, societal engagement and the role of academic research

by **Margit Stein** *and* **Detlev Lindau-Bank**, *University of Vechta*

For more than 10 years Margit Stein has been researching on "Youth and rural areas". Starting with a representative study (Stein 2013) for the state of Lower Saxony, whose results showed that young people in rural areas differ significantly from young people in urban areas in terms of leisure and everyday life, value orientation and social commitment.

Thus, for young people, the orientation towards the values and political attitudes, which are lived in the so-called Propinquity-groups (sports clubs, volunteer fire department, …), is particularly important. Young people use the Internet more often to care for their social contacts than young people in the city.

As rural infrastructure is regionally diverse, however, Margit Stein and Detlev Lindau Bank have created regional youth reports for local communities in rural areas to trace the diversity of lifestyles among young people, as well as to support municipalities in social policy decision-making by designing and implementing regional youth reports.

For example: The district of Vechta is regarded as an economic boom region and faces the challenge of attracting skilled workers to companies and keeping young people in the district accordingly. This question was pursued with a multi-methodical research strategy in which young people were not only questioned, but were brought together in the context of future workshops and group discussions with representatives of companies, politics and administration in order to develop future strategies.

For the city of Diepholz, a town with a rural structure on the outskirts, the focus was on the question of reasonable and achievable leisure activities for young people. For this youth report, a research design was chosen in which the social environment was researched together with young people. For example, using a so-called needle method, young people have

identified places where they often spend time, which scare them or which find them particularly appealing. The result was a map that was used for discussions with social and urban planners as well as educational professionals to jointly develop offers for leisure activities for young people.

We are currently preparing a youth report for a small municipality (with 700 young people aged 12-18). Central to this report is the question of the attractiveness of the region as a place of life. Together with the young people, the possibilities of sustainable living in the sense of well-being, sense of security, accessibility of important places and meaningful leisure time activities should be explored. This research project is being implemented as service learning at the University of Vechta with students who live partly in this community themselves, thus enabling an interior perspective. As part of an audit, the results will be discussed with the participating young people, the students and members of the political committees.

In this respect, regional youth reports not only contribute to the justification of social and educational policy decisions, but also use and promote the social engagement of young people for the future of their life.

That's why Margit Stein and Detlev Lindau-Bank founded the research focus Ruraktik in 2018 as a science of the didactic concepts and methods of formal, non-formal and informal education in rural living environments. Ruraktik is interdisciplinary and based on findings of educational science, psychology, sociology, cultural studies. The word Ruraktik is the fusion of rural (rural, village) and didactics. The aim of the Ruraktik is to meet the future challenges of rural areas and the so-called Agriculture 4.0 with an adequate education offer. In this sense academic research is a contribution to the societal engagement of young people and young adults.

REFERENCES

**Stein, M.** (2013). Youth in rural areas: The rural youth study 2010. Bad Heilbrunn: Klinkhardt

Stein, M. (2013). Jugend in ländlichen Räumen: Die Landjugendstudie 2010. Bad Heilbrunn: Klinkhardt)

Stein, M. & Lindau Bank, D. (2014). Children and teenagers in the countryside. From the situation to life-world view. Child and youth protection in science and practice. 59 (2), 43-47 (Stein, M. & Lindau-Bank, D. (2014). Kinder und Jugendliche auf dem Land. Von der Lebenslagen- zur Lebensweltbetrachtung. Kinder- und Jugendschutz in Wissenschaft und Praxis. 59 (2), 43-47)

Scherak, L., Lindau-Bank, L. & Stein, M. (2018). Regional strategies to increase the attractiveness of rural areas among young people – the example of the Vechta district. In: Stein, M. & Scherak, L. (eds.). Compendium youth in rural areas. Bad Heilbrunn: Klinkhardt, pp. 154-172.

07 ACE-STEM : An Other-Centred Approach
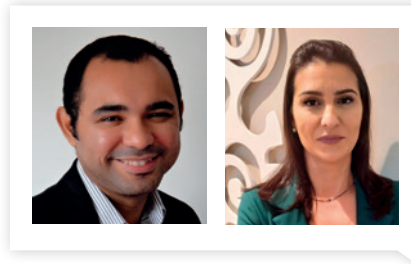
by **Edson Prestes**, *Professor, Informatics Institute, Federal University of Rio Grande do Sul* and **Flávia Farina**, *Associate Professor, Geodesy Department, Institute of Geosciences, Federal University of Rio Grande do Sul*

A lot of debate has been centred on how to prepare the next generation for the age of automation. It is important that people should have a strong background in Science, Technology, Engineering, Mathematics (STEM), but they also should develop soft skills such as collaboration, creativity, critical thinking, emotional intelligence to have a good life in the future where machines will automatise many jobs' activities. Although this debate is progressing well, in our opinion, it is still incomplete. But what is missing? To answer this question, we need to reflect upon what is happening in the world.

Are you aware about the human rights violations produced by technology? We can easily find examples of systems violating our privacy [1] and, consequently, our right to a private life; providing unequal opportunities based on gender [2], violating the right for gender equality; degrading or having the potential to degrade the environment [3], violating the right to a decent standard of living; discriminating against minorities [4], violating access to justice and the right to a fair trial; and, so forth [5].

In general, these violations are caused by people that have strong STEM-based backgrounds. Thus, if we, as a global community, push only the adoption of STEM-based methodology to the curricula, we will have more people working in STEM fields and consequently an amplification of the current problems we are facing in the world. Similarly, the development of soft skills is important, but we need to think beyond the challenges posed by job automation.

Some people argue that regulations are the solution for human rights related problems. But there are others connected by technology that are difficult to track and regulate. The

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proliferation of hate speeche [6] raises a red flag that we should take really take notice of. People are losing their ability to interact with and consider others as human beings who must be valued and respected for their own sake, and be treated ethically. In fact, we are not so far from a new wave of objectification of people, a new kind of *I/it* relationship that dominated the racial segregation in the 1950s to 1960s. This poses a huge danger to all the advances we have had in terms of human rights and it threatens the development and use of technology for good.

Thus, we need to redirect our effort to change the course of the society. One of the solutions is to incorporate Ethics in all educational levels and in technological development. In this sense, the *IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems* has played a fundamental role. Recently, it produced one of the most important documents on this topic called *Ethically Aligned Design* [7] that discusses ethical considerations in the development of autonomous and intelligent systems so that they are advanced for the benefit of humanity. Another remarkable effort is the one led by the United Nations Secretary-General's High-Level Panel on Digital Cooperation. This panel produced the report *The Age of Digital Interdependence* [8] that discusses how to strengthen cooperation at a global level in the digital realm to ensure a safe and inclusive digital future for everyone.

In all these efforts, an explicit component is to put humans in the center of all technological development, i.e., to understand others needs, values and principles. Based on this, we argue that the very first component missing in the STEM-based debate is Empathy. Empathy goes beyond Ethics. It is essential to understand the perspectives of others in any kind of context and, therefore, it must be stimulated from childhood. Initiatives like Roots of Empathy [9] have shown very successful results in minimising violence in elementary schools through the promotion of empathy. However, empathy alone is not enough. Therefore, the second and third components which are missing are Compassion and Altruism. They are intrinsically interrelated. Although Compassion may come from Empathy, it does not depend on empathy to be experienced [10]. Compassion comes with the desire to act in order to minimize a suffering. The action itself is Altruism. Discussing Empathy, Compassion and Altruism seems to be very abstract, however, several initiatives [11][12] have shown how to implement them in real world problems through competitions focused on humanitarian problems. They show how to apply compassion to stimulate understanding and the will to act in favor of disadvantaged and underserved groups.

Moving education from a self-centred to other-centred approach is essential to prepare the next generation for the future. Therefore, our education must be expanded and based on what we call ACE-STEM, i.e., STEM with Altruism, Compassion and Empathy – an approach to not only guarantee a good job in the age of automation, but to guarantee a better and humanised future for all.

REFERENCES

[1] **Virginia Eubanks**, Automating Inequality: How High-Tech Tools Profile, Police, and Punish. New York: St. Martin's Press, 2018.

[2] **J. Dastin**, "Amazon scraps secret AI recruiting tool that showed bias against women," Reuters, 2018. [Online]. Available: https://www.reuters.com/article/usamazon comjobsautomationinsight/amazon scrapssecretairecruitingtoolthatshowed biasagainstwomenidUSKCN1MK08G

[3] Inside Ecology, "Environmental implications of blockchain," 2018. [Online]. https:// insideecology.com/2018/06/15/blockchain andtheenvironment/

[4] **J. Angwin, J. Larson, S. Mattu, and L. Kirchner,** "Machine bias: There's software used across the country to predict future criminals. And it's biased against blacks," Pro Publica, 2016. [Online]. Available: https://www. propublica.org/article/machinebiasrisk assessmentsincriminalsentencing

[5] Rathenau Instituut, "Human rights in the robot age: Challenges arising from the use of robotics, artificial intelligence, and virtual and augmented reality," 2017. [Online]. Available: https://www.rathenau.nl/en/digitale samenleving/humanrightsrobotage

[6] Hate Speech on Social Media: Global Comparisons, Council on Foreign Relations. Available: https://www.cfr.org/backgrounder/hate-speech-social-media-global-comparisons

[7] Ethically Aligned Design, First Edition. The IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems. Available: https://ethicsinaction.ieee.org

[8] The Age of Digital Interdependence. United Nations. Available : https://digitalcooperation.org

[9] Roots of Empathy. https://rootsofempathy.org

[10] Paul Bloom. Just Babies: The Origins of Good and Evil. Broadway Book. 2014

[11] IEEE Robotics and Automation Society Special Interest Group. http://www.ieee-ras.org/ras-sight

[12] Arab Youth Center. http://opportunities.arabyouthcenter.org

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08 From Ivory Tower to Tree of Life: Leading the World through University Self-Transformation

by **Dr. Roger Auguste Petry**, *Associate Professor of Philosophy, Luther College at the University of Regina, Canada & Co-coordinator, RCE Saskatchewan and* **Dr Rose Chepchirchir Ramkat**, *Africa Center of Excellence in Phytochemicals, Textile and Renewable Energy (ACE II-PTRE), Moi University, Kenya*

"Each member [of society] must be ever attentive to his social surroundings – he must avoid shutting himself up in his own peculiar character as a philosopher in his ivory tower."[12]

These cautionary words from the early 20th century disparage isolationist universities—and perhaps their deeper philosophical roots in Plato's *Academy*—while affirming the need for broad social engagement. Yet might the "peculiar character" of universities as autonomous, self-reflective scholarly communities be just what the world now needs? Can universities lead a broad social change, one embracing more sustainable livelihoods, through new scholarly methods and examples of self-transformation? This would mean taking on the social role scholars have played in the past, whether in forming the early humanist colleges that lead to the rise of town and city administrations in Europe or pioneering the scientific discoveries central to the industrial revolution.

Our systematic attention to our surroundings, whether as scholars or global citizens, is demanded by the pursuit of the 17 UN Sustainable Development Goals (SDGs). The landmark release of *Our Common Future* on sustainable development in 1987 sharpened our focus on social and ecological limits and existing development patterns producing poverty and degraded environments. We now face new limits: limited (and rapidly shrinking) carbon budgets, the institutional limits needed for sustaining just governments, and, if Thomas Picketty is right, economic limits on wealth concentration for markets to be fair and functional.

Since *Our Common Future*, universities have learned a great deal about how to do community-engaged scholarship. Sustainable

12. From Frederick Rothwell and Cloudesley Shovell Henry Brereton's 1911 work *H. L. Bergson's Laughter*.

lifestyles and livelihoods build on the strengths of local knowledge and cultures, traditional and existing livelihood patterns, and ecosystem processes. Universities generate place-based knowledge by engaging with indigenous communities, pioneering new qualitative methods, generating grounded theories, and developing appropriate technologies. Higher Education institutions have shifted to become increasingly learner-centric, with an emphasis on creative and critical thinking, development of key capabilities and competencies, and lifelong learning. Student internships allow for co-creation of ideas, products, and services with diverse stakeholders. A focus on solving societal challenges, particularly those needed for long-term sustainability, have led to changes in curricula that incorporate locally relevant case studies along with interdisciplinary, transdisciplinary, and multidisciplinary approaches to teaching and knowledge creation. New global scholarly institutions, such as Regional Centres of Expertise on Education for Sustainable Development (RCEs), help advance these activities.

All this community engagement has chipped away at the ivory tower, making it more porous and enabling greater society participation. At the same time, however, the wider community is increasingly buffeted by powerful political and economic forces with vested interests that prevent locally appropriate societal strategies aimed at long-term sustainable development. Rather than evidence-based policies, partisan leaders increasingly seek out evidence to support predetermined policies. The politics of fear and a general hopelessness are immobilizing communities at the very moment we need broad changes in lifestyles and livelihoods.

In the face of these pressures, the university's traditional isolation can here be transformed into a strength. For example, if society is politically unable to apply sufficient carbon taxes (despite being economically and ecological warranted to avert climate crisis), universities can self-impose such taxes through their internal accounting systems, incentivizing new behaviours while reallocating revenues to more sustainable practices. Universities can also take what they have learned from three decades of community-engaged scholarship to transform *their own communities* (both as individual organizations and as a sector) in cross-cutting, holistic ways. Not only are universities self-governing communities, but university accountabilities are congruent with sustainable development. Ethical commitments of sustainable development to future generations parallel long-term time horizons of university research, long-term "returns" on teaching investments in students, and long-term social obligations of universities to preserve knowledge. Sustainable development's priority emphasis on the poor and vulnerable mirror university accountabilities to economically poor and increasingly indebted students. Environmental sustainability is supportive of scholars, whose methods and discoveries are historically grounded in studies of nature.

Universities are towns (and often small cities) in their own right. Their self-transformation for sustainability should lead

to organizational self-sufficiency and greater institutional freedoms. As transformed living laboratories, universities can provide concrete examples of sustainable livelihood paths leading to greater abundance. These hopeful counter-examples can be advanced through university teaching, campus life, and existing community relationships.

Where have many universities begun with these self-transformations? A university's production and consumption systems (the focus of SDG 12) sustain the material life of a scholarly community. These also reflect the wider society in which a university is embedded, and act as root causes of many sustainability problems. However, if universities intentionally and sustainably integrate the production and consumption of energy, food, equipment, and other material use within a campus's own walls (or in collaboration with other universities having shared commitments) profound and optimal innovations could be generated.[13] Using experience in these living laboratories individual graduates could then model the autonomous and sustainable livelihoods their wider societies rightfully deserve.

09 On track for a sustainable future?

by **Stephen Sterling**, *Emeritus Professor, Sustainable Earth Institute, University of Plymouth, and* **Stephen Martin***, Visiting Professor, University of the West of England*

Will universities offer the intellectual leadership needed to shift our civilisation off its self-destructive course and on track for a sustainable future? Obviously they can, if they so choose. I can't see it coming from anywhere else. – Sara Parkin, 2013, p18 (1)

13. For examples see the *Inaugural Conference for the IAU Cluster on Sustainable Development Goal #12* "Advancing Responsible Consumption and Production in Higher Education" at https://www.luthercollege.edu/university/alumni-friends/events/iau-sustainable-development-goal-12-inaugural-conference

Here is a bold but simple question. Is your university making a positive or negative net difference to the prospects of current and future generations? That is, as far as you know – or can know?

There is now perhaps no more important question that a higher education institution could ask itself. This is because we are living through a watershed moment in human history, where mounting evidence indicates that the window is worryingly small to prevent a chaotic future and possible societal breakdown this century (2). But are universities worldwide sufficiently reading the signs of the times? And how far are they addressing the concomitant call from growing numbers of students who want their institutions to take sustainable development seriously in everything they do, and to ensure that what they are taught has an appropriate sustainability focus?

Through a burgeoning public awareness of the seriousness and volatility of our collective situation, all institutions – government, business, international agencies, faith groups, NGOs, universities and schools – are coming under increasing scrutiny as regards their response to our times of accelerating climate and ecological crisis, political instability and economic turmoil.

Back in 1992, at the time of the Rio Earth Summit, Agenda 21 chapter 36 advocated 'reorienting education towards sustainable development'. Some decades later, higher education has still only partially responded to this call, and yet meantime the agenda has moved on beyond this initial challenge. Firstly, with the advent of the UN Sustainable Development Goals (SDGs) in 2015. As demonstrated through the IAU network, leading universities are increasingly addressing the SDG framework through their research and curriculum programmes. However, it is vital to recognise that the agenda has shifted and intensified again, as a series of authoritative international reports over the past year – beginning with the 2018 IPCC report (3) and WWF biodiversity loss report (4) – have underlined the precariousness of societies facing the full effects of climatic change and ecological decline in the near future.

Meanwhile, economists are predicting that biophysical limits will inevitably usher in a post-growth world characterized by relocalisation, profound hazards and discontinuities for both human and natural systems (Crownshaw et al 2018,1) (5) and that this is 'an increasingly real and pertinent prospect for the global community and deserves explicit treatment in all spheres of society'.

A report and model from the Stockholm Resilience Centre (SRC), (6) shows that attempting to achieve the SDGs using conventional growth policies would make it virtually impossible to reduce the speed of global warming and environmental degradation. Only 10 of the 17 SDGs would be achieved by 2030, and 8 of the 9 biophysical 'Safe Planetary Boundaries' (identified earlier by SRC) would be exceeded beyond their safe zone. The research team tested three other scenarios

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and the only pathway that met all virtually goals was the one that implemented systemic transformational change. Yet this requires breaking out of conventional modes of thinking and practice.

The message from such reports is that the socio-cultural and economic trajectories that have been the norm for the past half-century and more have to change radically if we are to assure the future. This of course invites profound questions about the purpose, role and impact of universities as centres of learning, research and innovation.

UNESCO has for many years championed sustainability education including and since the UN Decade of Education for Sustainable Development (ESD) (2005-2014). A current framework document on the future of ESD *Towards achieving the SDGs (ESD for 2030)* (7) to be launched at a global conference next June notes that achieving the SDGs requires 'a profound transformation in the way we live, think and act' (p3). This being so, then as UNESCO-based authors have written (8):

… in order to act as a driver for change, education itself needs to change, to become transformative, to change values and behaviours. (Leicht, Combes, Byun, Agbedahin 2018, p29).

In our experience, this requires university communities to become systemic learning organisations themselves whereby second-order and third-order (epistemic/paradigmatic) learning occurs within education systems and amongst policymakers and practitioners. This allows, exemplifies and accelerates the current shift from the old model of university as 'ivory tower' towards an adaptive, innovating, and co-evolutionary engagement relationship with community and society. In this transformative model, the constraining effects of the standardising global testing culture, and of a solely economistic rationale, need to be explicitly critiqued and circumvented in favour of a higher purpose and role aligned to addressing the immense challenge and possibility of securing social and ecological wellbeing in our troubled times. In the context of a likely post-growth world, 'education will be subject to vastly different priorities compared with the current model' according to Crownshaw et al. (2018,14). They suggest two key aims need to be pursued:

'improving holistic, transdisciplinary education cognizant of ecological limits, and averting deleterious behaviors towards the environment that risk further reducing carrying capacity. This is particularly true for… Economics, Business, Finance, and Law, which currently lack such considerations and will need to incorporate the complex interrelations between human economic activities and the biosphere in order to remain relevant in a constrained future.'

Against the backdrop of global threats, complexity and wicked problems which are likely to dominate graduates' lives, there are distinct signs in some parts of the sector of a willingness and energy to re-think policy and practice accordingly. Beyond whole institutional strategies, there is growing interest in what has been termed 'critical engagement' – evidenced by such approaches as anticipative education, education for ecological and community regeneration, education for resilience, service learning, action research, participative and experiential pedagogies, co-creative and collaborative inquiry, transdisciplinary and interdisciplinary engagement, innovative research on ecologically sound technologies, the nurturing of sustainability competencies, and an open-ended and provisional approach to knowledge. Whether these kinds of shifts are sufficiently widespread, systemically embedded and deeply rooted to warrant the appellation 'transformative' cannot yet be known, but a new – if as yet minority – pathway for higher education is being pioneered in the process.

Meanwhile, pressure mounts. In the UK, a new grouping https://www.transitionlab.earth/ has developed an open letter (currently with over 600 signatories) which will be sent to all university senior managements this autumn asking that universities should be transformed into 'action-oriented institutions' to address the twin problems of climate and ecological crisis. As the climate justice movement says, 'the time is now'.

REFERENCES

1. Parkin, S. 'Foreword' in Sterling, S, Maxey, L and Luna, H (2013) The Sustainable University – progress and prospects, Abingdon: Routledge. http://www.routledge.com/books/details/9780415627740/#description

2. Laybourn-Langton L., Rankin, L. and Baxter, D. (2019) *This Is a Crisis: Facing Up to the Age of Environmental Breakdown,* Institute for Public Policy Research (IPPR), 2019. http://www.ippr.org/research/publications/age-of-environmental-breakdown

3. International Panel on Climate Change (IPCC), (2018), *Global Warming of 1.5°C. Summary for Policymakers.* IPCC, Switzerland, 2018. https://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf

4. Grooten M, and Almond REA (eds.) (2018) *Living Planet Report—2018: Aiming Higher*, World Wildlife Fund, Gland, Switzerland,2018. https://c402277.ssl.cf1.rackcdn.com/publications/1187/files/original/LPR2018_Full_Report_Spreads.pdf

5. Crownshaw, T., Morgan, C., Adams, A., Sers, M., dos Santos, N., Damiano, A., Gilbert, L., Haage, G., Greenford, D. (2018), 'Over the horizon: Exploring the conditions of a post-growth world', *The Anthropocene Review*, 1 –25.

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6. Randers, J., Rockström, J., Stoknes, P.E., Golüke, U., Collste, D., Cornell, S. (2018) *Transformation is feasible – How to achieve the Sustainable Development Goals within Planetary Boundaries*. A report to the Club of Rome from Stockholm Resilience Centre and BI Norwegian Business School.
https://www.stockholmresilience.org/publications/artiklar/2018-10-17-transformation-is-feasible---how-to-achieve-the-sustainable--development-goals-within-planetary-boundaries.html

7. UNESCO Executive Board, (2019) SDG 4 – *Education 2030 Part II: Education for Sustainable Development Beyond 2019*, UNESCO, Paris.
https://unesdoc.unesco.org/ark:/48223/pf0000366797.locale=en

8. Leicht, A.,Heiss, J., and Byun, W., (2018), Introduction, in Leicht, A.,Heiss, J., and Byun, W., *Issues and Trends in Education for Sustainable Development*, UNESCO Publishing, Paris.

by **Orlando Sáenz**, *Coordinator of the Alliance of Ibero-American Networks of Universities for Sustainability and the Environment (ARIUSA), Coordinator of the Observatory of Sustainability in Higher Education in Latin America and the Caribbean (OSES-ALC) and member of the Expert group on SDGs and Higher Education of the Global University Network for Innovation (GUNi).*

10 From environmental commitment to the contribution to the Sustainable Development Goals: A challenge to Universities in Latin America and the Caribbean

The institutionalisation of the environmental commitment of universities in Latin America and the Caribbean has an extensive history of over 40 years. The study *Panorama of Environmental Studies in Higher Education of Latin America* presents a record of the progress in the first phase of this process. This study was conducted in 1977 by the International Center of Training in Environmental Sciences that collected information from 12 Latin American countries.

In 1984, the Environmental Training Network for Latin America and the Caribbean (ETN-LAC) developed the *Assessment of the Incorporation of the Environmental Dimension in Higher Education in Latin America and the Caribbean*, based on information provided by 166 higher education institutions (HEIs) in 18 Latin American and Caribbean countries. In general, the ETN-LAC study showed that, in the mid-1980s, universities and other HEIs in the region were already developing multiple environmental activities in their teaching, research and extension programmes.

In the first year of the new millennium, the III Ibero-American Congress of Environmental Education (CIEA) was held in Caracas, Venezuela, with an important effort to assess the progress of environmental education in the region. Ten of the thirteen national reports presented at this event included a section specifically dedicated to universities and other HEIs. The conclusions of the third CIEA recognised the advancement of environmental education in the regional HEIs.

The book *Higher Education in the World 4. Higher Education´s Commitment to Sustainability: from Understanding to Action*, published in 2012 by the Global University Network for Innovation (GUNi), enabled the importance of that development in Latin America and the Caribbean, compared to other regions of the world to be seen. The article *Higher Education, Environment and Sustainability in Latin America and the Caribbean* presents a range of experiences related to training, research, outreach and environmental management, within 30 universities in 13 Latin American countries.

Unfortunately, in the first decade of this century, the level of knowledge about the greening process of the universities in the region was just at the level of the larger picture. The few publications of this period moved between records or reflections on experiences in particular universities and reports on the state or major trends at regional and national scales.

To overcome these limitations, in December 2012 the Alliance of Ibero-American Networks of Universities for Sustainability and the Environment (ARIUSA) approved an *Agenda for Sustainability in Universities* to develop in three stages. The first phase focused on the identification of indicators, the second on several national assessments and the last on the design of an information system on the environmental commitment of regional HEIs.

As an output of this collective work, in 2018 a group of universities and networks of ARIUSA created the *Observatory of Sustainability in Higher Education in Latin America and the Caribbean* (OSES-ALC)[14]. Its mission is to investigate and promote the processes by which universities and

14. See https://oses-alc.net/es/

Figure. Average percentages in Latin America and the Caribbean
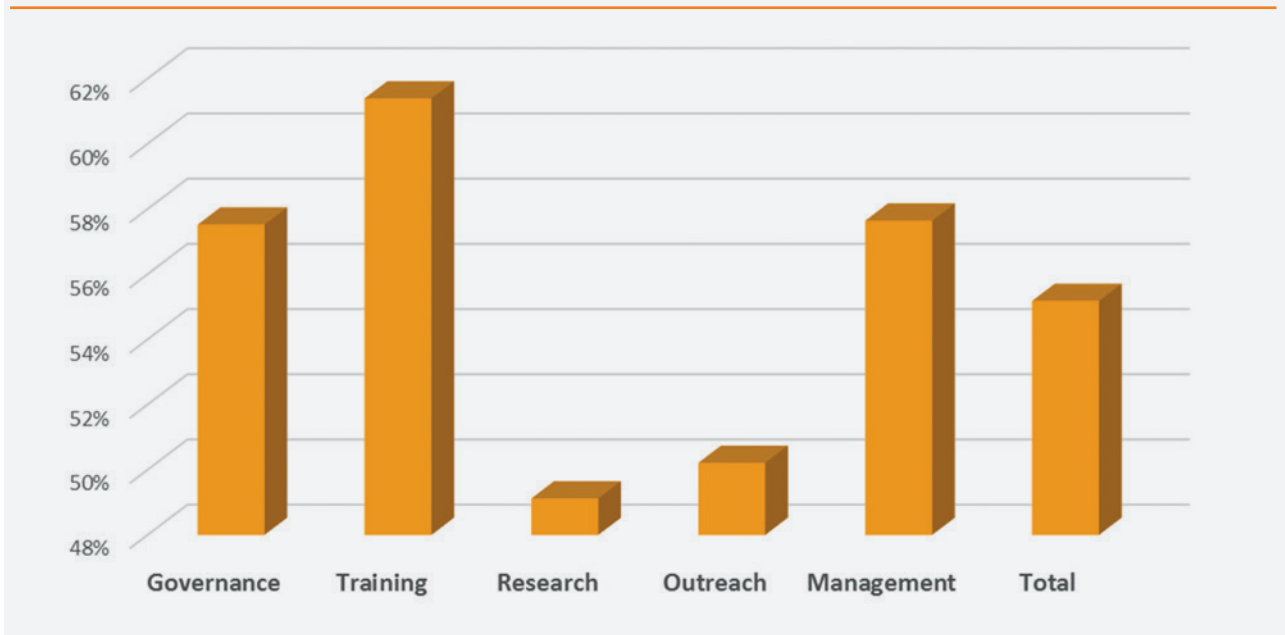
other HEIs in the region assume their commitment to environmental sustainability.

In its initial phase, the OSES-ALC platform offers a form of 25 basic questions organised into five fields of university activity: a) Government and participation; b) Teaching and training; c) Research and technology; d) Outreach or social projection; e) Management and planning. This form can be filled out by any interested university through the platform of the observatory. To date, 331 higher education institutions, from 11 countries in Latin America and the Caribbean, have answered the survey.

The analysis of the information demonstrates that these HEIs have reached a significant level in the institutionalization of their environmental commitment. At the end of July 2019, the average of the general progression is 55.2%.

However, the level of progress is slightly different in each of the five fields of university activity. [15]The biggest advance is located in the area of "Teaching and training", with 61.4%. A little lower and with the same level of progress (57.5%) are the fields of "Government and participation" and "Management and planning" of the campus. Areas with lower degrees of progress are "Outreach or social projection" with 50.2% and "Research and technology" with 49.1%.

The next stage in the OSES-ALC will focus on the design of a survey to assess the degree of knowledge, commitment and contribution of the universities to the Sustainable Development Goals (SDGs). A first point of reference for this task will be the Global Survey on Higher Education and Research for Sustainable Development, developed by the International Association of Universities (IAU)[16].

After several decades of work by universities in Latin America and the Caribbean to advance in their environmental commitment, the 2030 Agenda adopted by the United Nations poses them a new challenge: to contribute to the achievement of ESD in each country and in the entire region.
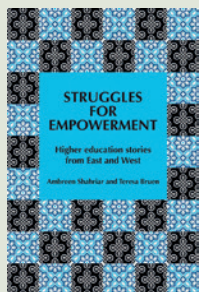
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15. See https://oses-alc.net/es/promedios-regionales

16. See https://iau-aiu.net/2nd-IAU-Survey-on-HESD

SELECTED ANNOTATED LIST OF PUBLICATIONS RECEIVED AT IAU

Struggles for empowerment: higher education stories from East and West

*Ambreen Shariar, Teresa Bruen. London: UCL IOE Press, 2019. 140 p. ISBN 978-1-8585-6896-6*

This book is based on research studies conducted in two rural provinces – Sindh in Pakistan, and Connaught in Ireland – of students who have struggled to undertake studies in higher education. The 11 students whose stories are shared in this ethnographic study all descend from economically poor rural families and reveal patterns of similarity across 4,000 miles that connect both groups. The students' narratives are situated within complex social differentiation, where class, gender, religion, language and the rural-urban dichotomy are particularly visible. Seeking to understand why some are able to persevere with studies against such odds, the authors draw on Bourdieu's theories of social and cultural capital, habitus, field and symbolic violence to analyse the students' personal narratives. Their study reveals that while these two provinces may appear on the surface to be entirely disparate, profound social and economic inequality in each leads students to experience similar obstacles, although these are surmounted in different ways to attain higher education.

Embedding service learning in European higher education: developing a culture of civic engagement

Pilar Aramburuzabala, Lorraine McIlrath, Héctor Opazo, Eds. Abingdon, New York: Routledge, 2019. 249 p. ISBN 978-1-138-08974-7
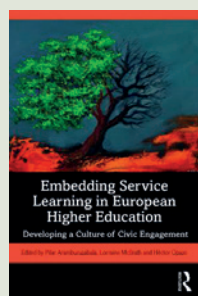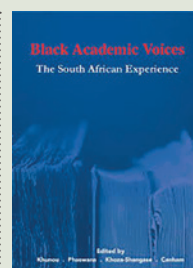
This book comprehensively explores the growth of service learning as a pedagogical approach that develops civic engagement within higher education. It describes and assesses the most recent developments and the context of service learning in European higher education. Based on the 'Europe Engage: Developing a Culture of Civic Engagement through Service Learning in Europe' a multinational project (2014-2017), it maps the extent of service learning in Europe, providing findings from two Europe-wide surveys which identify trends and analyses good practices using quality indicators. A range of diverse practices and examples across 12 European countries are detailed. Five case studies in particular from Spain, Ireland, Italy, Lithuania/Croatia and a pan-European reflection illuminate different approaches to service learning. The book concludes with an examination of common transnational considerations and the nature of mainstreaming service learning within higher education in the future.

Black academic voices: the South African experience

Grace Khunou, Edith Phaswana, Katijah Khoza-Shangase, Hugo Canham. Cape Town: HSRC Press, 2019. 226 p. ISBN 978-0-7969-2459-9

This book captures the personal accounts of black academics at South African universities in the context of the ongoing debate for transformation and decolonisation in South African higher education post-1994.

The book is in three parts: the misrepresentation of black bodies; the heterogenous black experience; and affirmation of self through empowering and inspiration of the other. The chapter contributors, from different institutions and from diverse academic specialisations, capture the diversity of black academic experiences and views in biographical form. They explore their trajectories as students and as members of faculty in historically white universities where being black is often a challenge and illustrates how subtle and at times overt exclusion continue to be part of the everyday experiences of black academics. The autobiographical format enables a rich and multifaceted analysis of black academics' identities. The book also shows how difficulties in the academy can potentially lead to new ways of teaching as a way of empowering academics as well as their students.

The local mission of higher education: principles and practice

Sjur Bergan, Ira Harkavy, Ronaldo Munck, Eds. Dublin: Glasnevin, 2019. 152 p. – ISBN 978-1-908689-36-8

This book examines the ways in which universities express their local civic mission. It builds on contributions to the 2018 meeting of the Anchor Institutions Taskforce in Dublin, organised by the Council of Europe. Starting from the premise that higher education
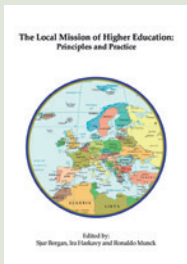
institutions need to be anchored in their local communities, it provides a rich mosaic of case studies in European countries – Greece, Iceland, Ireland, Poland, the Czech Republic, Sweden, Hungary – as well as the USA and South Africa. The book links the democratic and local mission of higher education and a chapter by Pam Fredman, IAU President, argues that global, national and local roles of higher education institutions are complementary rather than in competition or mutually exclusive. A chapter on the specific case of the Central European University examines how international universities can be anchor universities and describes how the university continued to act both locally and globally despite attacks by the national government.

Evaluating equity and widening participation in higher education

*Penny Jane Burke, Annette Hayton, Jacqueline Stevenson, Eds. London: UCL IOE Press, 2018. 172 p.
ISBN 978-1-85856-703-7*
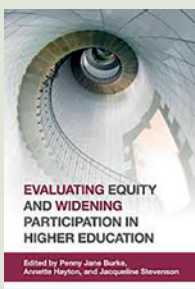
This book examines key debates in researching and evaluating equity initiatives in the UK which have been introduced in the past 15 years to address inequalities in higher education participation. The research offers a diverse selection of case studies and methodological approaches

to evaluation, including : how do inequalities continue to play out in the selection of admissions to high status degrees in the fields of medicine, dentistry and law?; the potentially transformative nature of university participation by examining experiences of mothers from low-income backgrounds undertaking part-time university study; The interaction between gender, race, faith and cultural identity are further analysed within the context of admissions and student retention on a Postgraduate Certificate of Education teacher education course within a large university. The final chapter provides personal reflections on a qualitative study undertaken to evaluate barriers faced by refugees in attempting to access higher education and how they can be supported.

Handbook on the politics of higher education

Brendan Cantwell, Hamish Coates, Roger King, Eds. Cheltenham: Edward Elgar Publishing, 2018. – ISBN 978-1-78643-501-9

The Handbook brings together contributions by experts from Europe, North America and Asia. It includes five sections: 1. examines the University, State and Society and includes an analysis of the tensions in policy making arising from disharmony between those who control institutions and those who finance them. 2. focuses on the political economy and global governance and discusses recent changes in the global political context. 3. looks at planning

and financial resources, providing international comparisons of higher education funding. 4. examines the challenge of regulating and understanding quality, changing regulatory approaches, and emerging models for the regulation of higher education in Asia. 5. looks at the politics of stakeholder interests. The chapters examine stakeholder organisations and multi-level governance of higher education; the implications of neoliberalism of academic staff roles; university and industry collaboration; gender politics with respect to academic work; and student politics.

Sexual assault prevention on college campuses

Matt J. Gray, Christina M. Hassija, Sarah E. Steinmetz. Abingdon, New York: Routledge, 2017. 130 p.
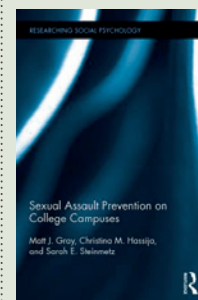
Sexual assault continues to be an issue of great concern at higher education institutions despite attention to reducing rates of assault and an increased presence in the institutional and public discourse. This book concentrates on the United States and begins by detailing the results of studies, which show the prevalence of sexual assault and the consequences to the victim and to the institution. It then provides an evaluation of prevention and education programmes put into place within institutions. Programming has been historically directed towards women by providing them with information about how to keep themselves safe rather than

confronting a climate conducive to sexual violence. The authors depict in detail recent empirically supported projects among men and women to support survivors and to combat climates conducive to sexual violence.

Higher education and the future of graduate employability: a connectedness learning approach

Ruth Bridgstock, Neil Tippett, Eds. Cheltenham: Edward Elgar Publishing, 2019. 278 p. – ISBN 978-1-78897-260-4
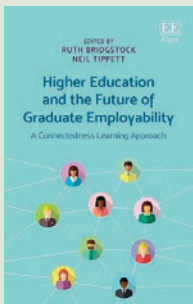
Starting from the premise that learning and career development happen optimally through collaboration and social relationships, this book explores socially connected and networked perspectives to learning and teaching in HE. With 10 empirical case studies of educational practice, set within Australian universities, the book argues that HEIs have placed themselves at a disadvantage in learning and teaching by limiting interactions that prevent multidisciplinary and cross-functional collaboration, and embeddedness into wider industry and community networks. The book offers new strategies and pedagogic approaches that can support learners to build and maintain social connections for participation in life and work and demonstrates how universities can forge effective partnerships internally as well as with industry and community partners to ensure the relevance of university learning.

Education at a glance 2019: OECD indicators

Organisation for Economic Cooperation and Development [OECD], Paris: OECD Publishing, 2019. 520 p. Online ISBN 978-9-2644-3527-8

This publication provides data on the structure, finances and performance of education systems across OECD countries and a number of partner economies. Key information is detailed on the output of educational institutions; the impact of learning across countries; access, participation and progression in education; the financial resources invested in education; and the learning environment. The 2019 edition includes a focus on higher education with new indicators on completion rates, doctoral graduates and their labour market outcomes, and on admission systems, as well as a dedicated chapter on Sustainable Development Goal 4.
URL: https://read.oecd-ilibrary.org/education/education-at-a-glance-2019_f8d7880d-en#page3

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