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Bulletin

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Unlocking potential

Bulletin

The Bulletin is the magazine of the Association of Commonwealth Universities – the membership organisation and representative body for universities of the Commonwealth.

The Association of Commonwealth Universities Woburn House 20-24 Tavistock Square London WC1H 9HF United Kingdom Tel: +44 (0)20 7380 6700

bulletin@acu.ac.uk www.acu.ac.uk/bulletin

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In this issue of the Bulletin, higher education's contribution to a safer, fairer, and healthier world shines out on every page: at a member institution in Pakistan, a lecturer is using folklore and poetry to teach students about inclusivity and pluralism; researchers at a university in the UK are exploring the impact of climate change on farmers in sub-Saharan Africa; and a former student of our annual Summer School is on the implementation team of a nationwide drone delivery system in Rwanda, which is crossing impassable mountains and washed-out roads to bring life-saving medical supplies to remote locations.

The role of universities in advancing and achieving the Sustainable Development Goals (SDGs) was in the spotlight last month at an event held as part of the UN's High-level Political Forum on Sustainable Development. I was honoured to join a panel of university leaders to discuss how higher education institutions worldwide are integrating the SDGs into their teaching, research, outreach and practice, and to highlight their role as key drivers of sustainable development.

As well as sharing examples from our diverse network, the event was a chance to highlight the ACU's own work to advance the SDGs: our Commonwealth Climate Resilience Network, for example, enables universities to pool resources and share expertise and experience of coping with natural disasters. Our world-class international scholarship operations are widening access to quality education and creating skilled and globally-aware graduates. And our 'Respect and understanding' campaign illustrates how university campuses can offer a model for peaceful and inclusive societies. Unsurprisingly, the vision and ambition laid out in the SDGs, and the international approach they espouse, has a deep resonance for the ACU. They embody not only our belief in the value of higher education to society, but also the conviction that collective action can move the world forward. A vital part of our work in the years to come must be supporting our members as they work towards these ambitious targets, while advocating at the highest level for their power to deliver lasting positive change.

The work of our thriving network of universities across the globe continues to inspire and awe us, and we are keen to ensure it has the platform it deserves. For this reason, we are excited to announce the launch of a new magazine, which will replace the Bulletin in its current form.

This new title will celebrate the extraordinary and diverse work of Commonwealth universities, and the rich variety of knowledge and expertise on offer. Each issue will be themed around a specific topic, carefully chosen to reflect the distinctive character of the Commonwealth and its unique mix of countries and cultures, with our first issue launching early in 2019. In the meantime, please make sure you're signed up to receive SyntHEsis, our monthly newsletter, for news and opportunities from the ACU and beyond. Email us at **membership@acu.ac.uk** to subscribe.

Dr Joanna Newman is Chief Executive and Secretary General of the ACU.

Soft power, public diplomacy, and Commonwealth Scholarships

International academic mobility – such as the schemes and awards promoted and managed by the ACU – can be a powerful tool in building international relations and goodwill. But how does this work in practice? **Faye Taylor** reports.

In his opening remarks to the Commonwealth Heads of Government Meeting in April, and as his first act as Commonwealth Youth Ambassador, Prince Harry announced the launch of the Queen Elizabeth Commonwealth Scholarships – a scheme enabling talented young people to study at leading universities in low and middle income countries of the Commonwealth.

The 150 scholarships, which will be managed by the ACU, aim to widen collaboration across the Commonwealth, creating new dynamics and new directions in international study. But the story doesn't end there. At the ACU, we are working hard to ensure these opportunities can be both sustained and expanded to benefit generations to come.

Far-reaching impact

Much has been written about the virtues of international academic experience – for the individual, their university, and for home and host nations alike. And no one knows these benefits better than the ACU. As custodians of the Commonwealth Scholarship and Fellowship Plan, and through our management of the UK government's three main scholarship schemes (Chevening, Commonwealth Scholarships, and Marshall), it is our great privilege to hear about the transformational impact of these experiences on a near-daily basis.

And we're not the only ones. Across the world, national governments are increasingly wise to the far-reaching rewards of investing in inward and outward student mobility: the power of such programmes to build human capital, promote employability and economic returns, broaden perspectives and networks, and develop diplomatic relations and 'soft power'.

As international tensions abound, it is worth delving more deeply into this final category. Why is international academic mobility such a powerful tool in public diplomacy and how does it work in practice?

Positive associations and reputational gains

It begins at an individual level. Every student who travels to another country to study will learn more about that country and its culture, often forging enduring networks of friends and colleagues. But how do these positive experiences translate into what we might call 'soft power'?

A 2014 survey of CSFP alumni found that up to 92% of Commonwealth Scholars return to live in the region in which they grew up. These returnees go on to become decision-makers and influencers in their home countries – leading political and



educational systems, business, and civil society. But they also remain ambassadors for the host countries in which they've lived and studied. Crucially, this means they are often more inclined to connect and collaborate with these nations in the future thanks to the positive associations, cultural understanding, and personal links created through their scholarship experience.

There are also ongoing diplomatic links in the most direct sense: 25% of CSFP alumni reported having held public office in their home countries, and 45% of respondents claimed they had been able to influence government policy in their specialist areas.

These powerful advantages were explored in a 2017 study titled Soft power today, undertaken by the University of Edinburgh on behalf of the British Council. The study concluded that soft power is partly achieved through the movement of students, and argued that 'promoting a nation's culture and political ideals on the global stage brings significant economic and strategic advantages'.

Soft power was found to have had a statistically significant impact on foreign investment in the UK, and on Britain's overall international influence: a 1% increase in the number of countries reached by UK cultural and educational initiatives was calculated to increase investment in the UK by \pounds 1.3 billion.



This impact was arguably evident in a recent roll call of senior Malaysian businessmen who have invested in high-profile property development in London. Many of these major investors studied at UK universities – including Cambridge, Kingston, LSE, Oxford, Nottingham, and Strathclyde. Familiarity with UK business and culture is very likely to have contributed to their confidence in the UK as an attractive investment destination.

These sorts of enduring ties were also the focus of a recent speech by the British High Commissioner to Singapore, Scott Wightman, who highlighted that more than half of all cabinet ministers for the governments of both Singapore and Brunei had studied in the UK. Similarly, the UK's strong performance in the 2018 Soft Power 30 index – an annual ranking, which includes higher education and international student data among its metrics – was in large part due to a strong and internationalised university sector.

Beyond bilateral

While all of these bilateral connections contribute to a stronger and better networked Commonwealth, the CSFP also offers a unique multilateral framework for building diplomatic relations. The connections facilitated by the CSFP's endowment fund is a fascinating lens through which to view this.

Created and owned by Commonwealth governments, this central pot of funding ensures that Commonwealth Scholarships are not only available to, but also *tenable* within, low and middle income countries. In this, it recognises the quality of education right across the Commonwealth and the rich diversity of knowledge and expertise available.

Crucially, the endowment fund enables *all* Commonwealth countries to reap the benefits of outward and inward mobility, including those that might not otherwise be in a position to offer scholarships themselves. In doing so, it creates unique dynamics in international study – Malawian students studying in Bangladesh, Sri Lankan students in Botswana, Canadians in Tanzania, and so on.

Each time a Commonwealth Scholar is placed, a new bond is forged – not just for the individual, but for all the countries involved. Each scholar gives the high commissions and governments of their host and home countries a new reason to connect, and to exchange ideas and priorities in education, human capacity, and development.

These multiple intra-Commonwealth links can only serve to reinforce a sense of what it means to be part of the Commonwealth, with universities at its heart. Every new bond helps to promote a vibrant and integrated international community of knowledge and ideas, built around shared values.

This notion may be growing in popularity beyond the Commonwealth. President Macron of France, for example, spoke recently of his vision for new 'European universities' – close collaborations between European institutions that would enable flexible movement of students between participating campuses. The aim would be to create a fully 'European' experience for students and encourage European integration in higher education based around shared cultural values.

In our context, we have the Commonwealth Charter to draw on -16 values and aspirations to which all nations of the

Commonwealth must commit, and which include such fundamental principles as democracy, human rights, and the rule of law.

Looking ahead

The more we know about what an asset international experience can be – for individuals, their host nations, and the countries to which they return – the more important it is to ensure that such opportunities are made available as widely as possible. While we can be very proud of the countries already offering awards through the CSFP – including the Commonwealth Scholarship Commission in the UK, which has administered the majority of awards to date – there is great potential for growth.

The case for expanding the CSFP – in terms of numbers but also, crucially, its geographic reach – was one we were proud to make at the 20th Conference of Commonwealth Education Ministers (CCEM) in Fiji earlier this year. Ministers were urged to reaffirm their commitment to this prestigious scheme, and to actively support its growth through the CSFP endowment fund. Ministers endorsed the expansion, as well as the renaming of the scheme to the Queen Elizabeth Commonwealth Scholarships from 2019, in recognition of Her Majesty's commitment to Commonwealth youth.

An expanded endowment fund will enable more countries to plug into a network of Commonwealth academic mobility and benefit from the diplomatic links which accompany it. In turn, more universities will benefit from academic mobility – not only hosting talented students within their institutions, but also enabling their own students to reap the profound benefits of international experience. A much expanded fund could support split-site PhDs and other award modalities to further encourage 'brain circulation' and collaboration between institutions.

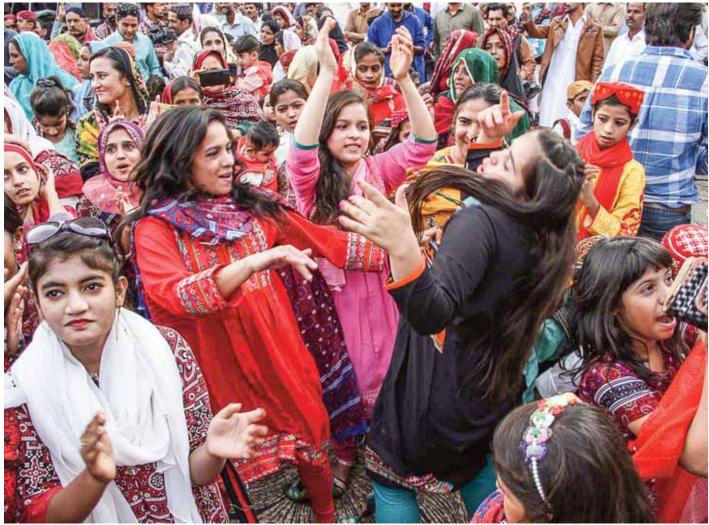
For this reason, we hope that ACU members all across the Commonwealth will support the growth of this fund by making the case to their individual governments. By contributing to this vital fund, governments can help to secure a safer, fairer, healthier, and more tolerant future for generations to come. It is a compelling case, and we look forward to your support in making sure it is heard.

Dr Faye Taylor is Head of Strategic Partnerships at the ACU, where she is responsible for the development of the Commonwealth Scholarship and Fellowship Plan.

Visit **www.acu.ac.uk/commonwealth-scholarships** to find out more

Sindh studies: an experiment in peaceful plurality

The ACU's 'Respect and understanding' initiative seeks to share and showcase the ways in which Commonwealth universities promote tolerance and openness between people of diverse faiths, beliefs, and cultures. Among the case studies we received was **Ghazala Rahman Rafiq**'s fascinating account of teaching Sindh studies to undergraduates, and how the region's ancient tradition of celebrating pluralism has inspired her students.



Sindhi people celebrate the rich culture of the province on Sindhi Cultural Day (Karachi, 2017)

Six years ago, at my institution in Karachi in the Pakistani province of Sindh, I began to teach a course titled 'Sindh Studies' to undergraduates in the social science faculty. While the course sought to explore many aspects of this ancient province and culture, from its geology to its politics, I was keen that my students – Muslims, Hindus, Christians, and Sikhs – learned about Sindh's ancient tradition of celebrating pluralism, inclusiveness, reverence, and love.

My students and I live in a multicultural, multi-ethnic, and multilingual country. Though Islam and Urdu are Pakistan's official religion and language respectively, we are deeply influenced by the rich array of cultures and languages that form our collective heritage. These influences may not be acknowledged formally or academically, yet they continue to inform us, subconsciously and powerfully.

Using Sindhi folklore, literature, and anthropology, I teach my students about the pluralistic and inclusive sensibility that characterises Sindhi culture – a sensibility at risk of being swallowed up within the dark shadows of fundamentalism and nationalism.

Flourish the entire universe!

The first time I taught about Sindh's philosophy, I noticed that the class began to listen intently, curious and captivated by the work of Sindh's poet-saints. Their interest inspired me to weave into every class a poem or a story that would be meaningful for them.

One of the poet-saints to whom I often refer is Sindh's favourite, Shah Abdul Latif (1689-1752). His cannon comprises thirty surs or chapters. Each chapter consists of many baits or verses and is underpinned by several *dastaan* or legends.

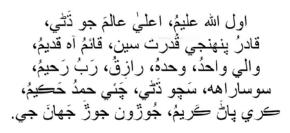
One of the verses most often repeated is from Latif's 'Sur Sarang' or 'Chapter on Rain'.

O My Lord! Bestow prosperity upon Sindh, O Friend! You Beloved! Flourish the entire universe!

Here, the poet's prayer for the wellbeing of his homeland, Sindh, is extended to include the whole universe. The students understand that the Sindhi way is fundamentally generous: one cannot ask for prosperity for oneself alone. One has to include all mankind.

Joining the joints of the universe

As we begin each class with the following verse, from Sur Kalyan (Chapter on Peace), I encourage the students to pay attention to the classical language they are hearing. It is abounding in rhythm and replete with magical alliteration:



First Allah, omniscient, supreme lord of the universe, Uncreated, by his own nature, standing since infinity, Owner, alone, oneness, feeder, sustainer, merciful, So praise the true owner, utter the hymn of the healer, The benevolent one himself, joined the joints of the universe

The rich sounds of 17th century Sindhi are freely interpreted by the students who also sing the words. Although all these undergraduate students carry smartphones and enjoy strolling around in fashionable malls in the university's neighbourhood, a good number arrive early to class so as not to miss the first few minutes of mystical poetry and meditation before they explore other aspects of Sindh studies.

We discuss how Vedic, Jain and Buddhist influences may have coexisted in the Sindhi psyche for thousands of years, and the discussion often turns to what we might call 'essential' or universal human values – mutual respect, reverence for all life, inclusivity, and harmlessness. These, in Sindh, may be termed as Sindhiyath or 'being Sindhi' – or as one student put it, 'just being a compassionate human'.

All great philosophies uphold a reverence for life, and students inspired by the life of Prophet Muhammad (peace be upon him), often comment that one of his teachings was to treat 'even enemies' with respect. This type of sharing is a helpful feature of the class and demonstrates that students of 21st century Sindh realise that they too must tread extra softly in the milieu of tensions that exist in the modern world.

Flocking they fly, never pulling apart

In order to encourage students to appreciate the richness of their own diversity, I invite them to tell stories in and about their mother tongue or home language. They soon discover that dozens of languages, dialects, and ethnicities exist in the group, and that these languages carry and convey hundreds, if not thousands, of years of culture.

Through an exercise called 'othering', students find that they often feel uncomfortable expressing themselves in their native language. Yet when they perceive that others experience the same issue, they seem to develop greater compassion towards their classmates who are 'different'. By mid-term, most of the class has moved beyond mere tolerance to embracing 'the other' as a part of themselves.

I also speak of Sindhiyath as something beyond 'politeness in practice', driven by a need to have a convenient and superficially peaceful atmosphere, but rather as a self-motivated and authentic peace that comes from a holistic acceptance of all others, however different.

The poet Shah Latif is also renowned for his wanderings throughout Greater Sindh and his observations of its wildlife. The following is another verse popular among my students:

وَڳَرُ ڪَيو وَتنِ، پرت نهَ ڇِنن پاڻَ ۾، پَسو پَکيئڙَن، ماڻَهئان ميٺُ گهڻو.

Flocking they fly, never pulling apart, Look! The birds have more love than people.

The woodcutter's tale

My students also enjoy hearing a folk tale about a woodcutter who went in search of wood for fuel so that his wife could cook their food. He respected the innate but unwritten Sindhi law of harmlessness, which includes never cutting down a living tree, and wandered far into the forest before he found a dried and dead-looking tree whose branches he could cut.

The woodcutter swung his axe and struck one of its limbs, but was horrified to see sap oozing out. Ashamed that he had injured a living tree, he took off his turban and tore it into two strips. With one, he bandaged the gash on the limb of the tree. Then he struck his own leg with the axe and covered his wound with the other strip of cloth. The woodcutter went home and told his wife that he vowed never to return to that part of the forest until the tree had forgiven him and healed itself. The students love this story and its intense affirmation of nonviolence in all aspects of life. It offers a contrast to the demands of a 'rational' global mindset, which, as one student said, tells you that you cannot survive if you 'use your heart instead of your brain'. Sadly, reports of violence and oppression are becoming more commonplace, and I am always in search of more ways to teach my students about Sindh's beautiful soul that lies deep within her soil and in the nature of her rural people.

The fire they lit, I cannot live without them

Sindhi scholars and folklorists attribute the Gandhian philosophy of ahimsa (in Sindhi: ahinsa) – a philosophy of nonviolence and respect for all living things – to Sindh and to its Indus valley civilisation. The Indus civilisation is thought to have flourished for 700 years without armour, weapons, war, or mass killing. (Unlike virtually all other civilisations, no archaeological evidence has been found to suggest these existed.)

These centuries of peaceful coexistence among Hindus, Jains, Muslims, and Sikhs gave rise to a large body of literature that celebrates pluralism. In a verse from Sur Ramkali, for example, Shah Latif says the following:

نُوري ۽ ناري، جوڳيئڙا جهانَ ۾، ٻَرِي جِن ٻاري، آئُون نه جيئندي اُن ري.

The Nuris and the Naris, yogis in the world, The fire they lit, I cannot live without them.

Here, Latif is thought to refer to two kinds of yogis or ascetics: Nuri and Nari. The Nuris are those who have reached their goal and have become 'illuminated' or absorbed in the divine light. Others – known as Naris – are still on the journey to their goal or 'still burning in the fire of love'. However, it is in the last line that Latif says something remarkable: 'I cannot live without them'. Given that the yogis belong to the Hindu tradition, my students ask why Latif, a Muslim, loves them so much and stresses his need of their company?

The answer lies in Sindhis' ancient tendency to be essentially and completely syncretic in their behaviour. Syncretism, as we know, is the combining of different beliefs, while blending the practices of various schools of thought. Does Latif's verse hint of an amalgamated philosophy that does not discriminate between religions when it comes to universal sources of spiritual knowledge?

The Sindh tradition of universalism – a concept which emphasises the universal principles of most religions and an inclusive acceptance of others – seems to my students to be not only the opposite of fundamentalism or dogmatism but something rare and liberating that they can sense, but not for now articulate.

Perhaps a semester of 16 weeks is not enough to grasp what fully blossomed sages take a lifetime to learn. But it is my hope that these examples of Sindhi literature and culture will stir my students to seek and uphold higher values of human interrelations than the ones they may experience in today's wider world.

All poetic translations - from Sindhi to English - are the author's own.

Dr Ghazala Rahman Rafiq is Director of the Sindh Abhyas Academy at Shaheed Zulfikar Ali Bhutto Institute of Science and Technology, Pakistan.

How do universities of the Commonwealth promote respect, tolerance, and understanding among their students, staff and communities? Visit **www.acu.ac.uk/respect** to find out more.



Resilience building in the Anthropocene

ACU Fellowships support academic mobility in the Commonwealth and enable international collaboration on research projects. Here, **Opha Pauline Dube** explains the focus of her fellowship at the University of Oxford: the Anthropocene and its impact on the world's most vulnerable countries.

In 2016, an expert group at the International Geological Congress in Cape Town called for a new geological epoch to be formally declared; an epoch in which human activity had become the dominant force shaping our planet: the Anthropocene.

I first came across the term while working with a group of scientists in Bangladesh on the needs of the world's least developed countries (LDCs) – low-income nations that confront major structural impediments to sustainable development. Crucially, these countries are also the world's most vulnerable – both economically and environmentally.

The scale of such vulnerability is a potent source of worldwide insecurity, given the unprecedented levels of global interconnectedness. For example, the epicentre of the 2016 Ebola outbreak was located in three African LDCs: Guinea, Liberia, and Sierra Leone, and presented a major threat to the global health

system. But how does the concept of the Anthropocene help us better understand such vulnerabilities, and could it even provide a platform for action?

My ACU Fellowship at the University of Oxford's Environmental Change Institute was a chance not only to explore these questions further but also to share my own research on the impact of climate change on the developing world.

Meet the Anthropocene

The Anthropocene is a transdisciplinary concept, linking geological and socioecological systems. As such, it offers a potentially powerful framework: one which, unlike previous paradigms, captures the complex dynamics within human systems across the globe – and their relationship to natural systems – in a holistic way.

Unlike previous geological epochs, which were driven by large natural systems over a long time span, the Anthropocene has resulted from the political, technological, economical, and cultural activities of one species – human beings. Moreover, as climate scientists such as Will Steffen and colleagues have pointed out, the degree of change is its defining factor. It is now evident that all components of the Earth's system bear signs of human influence – whether in the upper atmosphere, the depths of the oceans, and even geophysical processes such as earthquakes.

The geological significance of the Anthropocene is perhaps particularly well illustrated by the term 'technofossils'. This refers to a whole new geological layer made up of manmade materials such as plastics, concrete, metals, and the byproducts of fossil fuel combustion. At the same time, we have witnessed a marked rise in greenhouse gas concentrations in ice cores, and large global shifts and extinction in biological systems.

A new equilibrium

The notion of 'socioecological systems' – strong interlinkages between ecological resources and the social structures that evolve



in harnessing these resources – is used to reflect on the extensive interrelationships between humans and nature that make this period unique in the history of planet Earth.

Underlying this paradigm is a self-reinforcing system of heightened demand for resources, population growth, and the fearless competition for wealth accumulation that drives the global economy. This, however, breeds uncertainty. We witness power asymmetries and tussles for control, economic instability, and persistent inequality and poverty in the midst of prosperity and plenty.

So, how can sustainability be achieved in this new equilibrium? While we acknowledge that humans are transforming the planet to the detriment of life-sustaining resources and systems, many hope that this transformative power has the potential to be turned around and committed to sustainability.

Mitigating human impact and inequality

The ambition of the 2015 Paris Agreement – to keep rises in global temperature well below two degrees Celsius above preindustrial levels – captures the essence of the Anthropocene epoch. First, the evidence that climate change is the result of broader human activity that has accelerated since industrialisation, altering the functioning of the Earth's systems and resulting in a rise in global surface temperature. And second, the ambition to 'pursue efforts to limit global warming even further'.

This latter point – and other similar interventions – may give the potentially harmful impression that humans can now alter



aspects of the Earth's systems as desired. (For example, suggestions that solar radiation geo-engineering might offer a potential 'solution' to global warming.) The need for these interventions to be properly assessed and understood is a genuine concern in an unequal Anthropocene world, where there exists the potential for the consequences of such interventions on vulnerable regions to be downplayed by dominant groups. It is clear that mitigation plans need in-depth assessment to make sure they do not deepen inequality, injustice and poverty, and otherwise constrain sustainable development.

A more positive aspect of Anthropocene society, however, is the extent of global connectivity. This offers rapid communication and international platforms and networks that serve as watchdogs, providing the checks and balances required in the governance of issues of such global magnitude.

A role for universities

Astrophysicist and author Adam Frank noted that: 'you can't solve a problem until you understand it'. By integrating the three pillars of sustainable development – economic, social and environmental – across the globe and over time, the concept of the Anthropocene may provide a useful lens through which to view global challenges and understand how economic prosperity has given rise to a global loss in resilience.

The concept, however, remains relatively unknown within large sections of global society, and particularly in vulnerable regions. For others, often within the dominant and wealthy sections of Anthropocene society, the term may even be considered a challenge to their competitive edge, evoking protectionist tendencies expressed by denial and rejection of the term.

The real threat, of course, lies in the continued erosion of our planet's life-sustaining capabilities. As such, universities around the world have an important role to play in promoting greater engagement with the concept of the Anthropocene and humanity's self-destructive and ongoing impact on the Earth.

International collaboration between universities will also be key, as global solutions require a convergence of diverse social groups. As noted by Stanford Professor Gabrielle Hecht in 2018: 'If the Anthropocene is to have real value as a category of thought and a call to action, it must federate people and places, not just disciplines'.

Dr Opha Pauline Dube is Associate Professor in the Department of Environmental Science at the University of Botswana. She was awarded an ACU Fellowship to visit the Environmental Change Institute at the University of Oxford, UK.

ACU Fellowships support academic mobility in the Commonwealth and enable international collaboration on research projects. Applications for the next round will open in 2019 – visit **www.acu.ac.uk/fellowships** to find out more.

Drones deliver: saving lives in Rwanda

The ACU's annual Summer School brings students from across the Commonwealth together for a week of workshops, lectures, field trips, and group work. As this year's participants gather at the Chinese University of Hong Kong, former Summer School student **Israel Bimpe** tells us about his work to develop the world's first nationwide drone delivery system in Rwanda, bringing vital medical supplies to remote locations.

In my early years at university, I felt a shift happening in the world. New and completely different ways to address common health issues were emerging, largely driven by new technologies, alongside multidisciplinary approaches to solving societal challenges. This motivated me to start engaging with various international platforms – including the ACU's 2016 Summer School in Rwanda – to develop a more multidisciplinary mindset and find novel approaches to global problems.

Fast forward to today and I am on the national implementation team of Zipline – a California-based company that designs and manufactures drones to deliver blood and medical products to the last mile. Together with 30 other young Rwandans, I run the world's first and only drone delivery system to operate at a national scale, flying over impassable mountains and washed-out roads to deliver directly to clinics in Rwanda's remotest locations.

Contributing to the development of such an innovative solution in healthcare logistics, and ensuring access to life-saving medical products, has been both frightening and extremely exciting. But it has also been a great success. We have cut down the delivery time for life-saving medical supplies from three hours to less than 20 minutes and, in doing so, have had a major impact on the lives of patients who would otherwise be forced to wait or be transferred elsewhere for care.

As well as vaccines and other supplies, Zipline has delivered more than 5,500 units of blood over the past year alone. This is already helping to reduce maternal deaths – a quarter of which are the result of blood loss during childbirth – as well as cases of malaria-induced anaemia.

Adapting solutions to local needs

For those of us interested in the use of drones in healthcare and humanitarian interventions, an initial challenge was to link up drone manufacturers with healthcare organisations and NGOs. Healthcare providers and agencies were undoubtably facing challenges that drones could solve, but they lacked a clear understanding of how to integrate them into their operations. Meanwhile, drone manufacturers and developers were shelving their products for retail.

By learning more about the drone industry, I developed a greater understanding of how innovation must be contextualised to local needs. Zipline understood this and had begun designing, manufacturing, and operating their own drones. As opposed to those manufactured elsewhere, these were purpose-built solutions and an exact fit for the challenge in hand. While hospitals and healthcare organisations did not have the capacity to run delivery operations themselves, Zipline positioned itself to focus on logistics, allowing the health system to focus on providing care.

Innovation comes from curiosity

As a pharmacist, my current responsibilities are non-traditional. I am in charge of ensuring Zipline is well integrated into Rwanda's national health system, complies with the national aviation regulations, and remains a pillar of the technology ecosystem. This requires a combination of pharmacy skills, an interest in new technologies and, crucially, an open mind to learn and explore beyond my usual scope.

This spirit of enquiry is built not by remaining confined within the walls of your area of study, but by seeking out platforms like the ACU Summer School, where I learned about other ways in which my skills could be used and could interact with like-minded individuals from a variety of backgrounds and cultures.



The world has advanced to equip young people with the capacity to drive reform, if we are given the chance to play a part as actors, not just as beneficiaries.



Zipline has delivered more than 5,500 units of blood over the past year alone

The need for young people to explore beyond boundaries was something I also championed in my role as President of the International Pharmaceutical Students Federation. Engaging with multiple platforms – particularly where diverse perspectives and ideas can be shared – can spark the curiosity to ask questions, find solutions, and collaborate to solve pertinent challenges.

One such platform is the Global Shapers Community – an initiative of the World Economic Forum – which has mobilised a grassroots network of young people to drive dialogue, action, and change. With close to 400 city-based hubs in 156 countries, teams of Shapers in each city self-organise to create projects that address the needs of their community.



Catalysts for collaboration

Rwanda's achievement – becoming the first country with a nationwide drone delivery system – is based in part on our government's belief that citizens must be within 45 minutes of healthcare services. But there is also a wider ambition: to fast-track Rwanda's development, positioning the country as a hub for emerging technologies on the African continent. Being a young person in a country with such ambitions meant I had a great opportunity to explore how best I could contribute to these goals, and Zipline provided the perfect fit.

However, these opportunities should not be limited to those of us in countries building favourable ecosystems. Young people understand more than any other generation the need to change the narrative and transform healthcare. The state of the world has advanced to equip young people with the capacity to drive the needed reforms, if we are given the chance to play a part as actors, not just as beneficiaries.

Youth-oriented platforms – such as student-led associations, networks, and summer schools – should position themselves as incubators of innovative solutions to address global challenges, bringing their members together to act as a catalyst for collaboration at local, regional, and global levels.

Israel Bimpe is on the National Implementation Team of Zipline, Rwanda.

The ACU Summer School brings students from across the Commonwealth together to explore global challenges. The event is hosted by a different member institution each year and has so far taken place in Botswana, Cameroon, Canada, Hong Kong, Malaysia, Rwanda, and the UK. Find out more at **www.acu.ac.uk/summer-school**

Noticeboard

ACU Summer School explores sustainable cities

This year's ACU Summer School took place at the Chinese University of Hong Kong, where 45 students from 19 countries explored the design, construction, and concept of sustainable communities. The programme was developed by senior academics from the university's wellestablished urban studies department, and included lectures, workshops, and site visits to explore the challenges and opportunities inherent in urbanisation. Find out more at **www.acu.ac.uk/summer-school**



ACU Summer School students visit Mapopo Community Farm, a local resource threatened by property development. Mapopo's farmers take kitchen waste from local residents and businesses, supplying them with fresh fruit and vegetables in return.



Apply now for an ACU gender workshop grant

The ACU's gender workshop grants help member universities to promote gender equality on campus by funding training and awareness-raising workshops in this area. Last year saw ten grants awarded to universities in Bangladesh, Guyana, India, Nigeria, Malta, Mozambique, and Pakistan. Workshops can focus on a range of topics, including gender mainstreaming, sexual harassment on campus, increasing the number of women in leadership roles, and the introduction of gender policies and practices. Visit **www.acu.ac.uk/gender** to find out more and apply.

ACU Measures 2018 – open for benchmarking

The latest performance data on university management across the Commonwealth is now available on the ACU's online benchmarking platform – ACU Measures. ACU Measures is a unique opportunity for member institutions to benchmark their performance in key areas of university management. Rather than seeking to rank institutions, this online exercise helps universities to compare and contrast their practices and policies, supporting senior university management in decision-making and strategic planning.

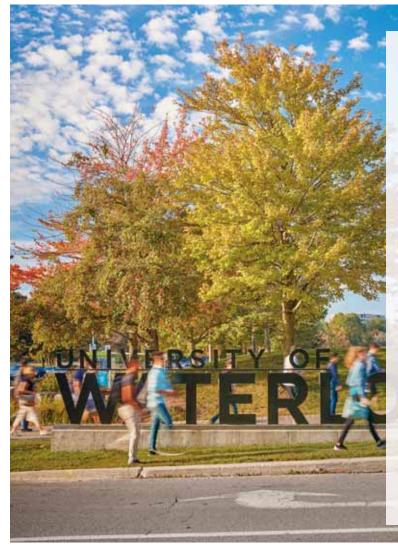
Data is collected online each year between February and May, and is available for benchmarking year-round. ACU members can enjoy this service free of charge – visit **www.acu.ac.uk/measures** to take part.



Take part in our new Global Summer School Grants scheme

New travel grants from the ACU have this year enabled 15 students from member universities to take part in international summer schools around the Commonwealth. The Global Summer School Grants enable UK undergraduates to participate in the diverse range of summer programmes on offer at ACU member institutions internationally, and are aimed at students who would not otherwise have the chance to take part in such opportunities abroad.

In 2018, grants were awarded to attend summer schools at Kyambogo University in Uganda, Lovely Professional University in India, Stellenbosch University in South Africa, the University of Alberta in Canada, the University of Ibadan in Nigeria, and the University of Malaya in Malaysia. If your institution runs an international summer school outside the UK and would like to take part in the scheme next year, or if you are from a UK member university and would like your students to participate, email **summerschool@acu.ac.uk** to find out more.



Register now for the ACU's international conference for university HR professionals

From 23-26 September 2018, the University of Waterloo in Canada will play host to the ACU's biennial conference for HR professionals working in higher education.

The event – this year titled 'Universities of the future: global perspectives for HR' – is a unique opportunity for university HR professionals to come together with international colleagues to find shared solutions to common challenges. With speakers from Australia, Canada, India, Jamaica, Kenya, New Zealand, and the UK, the conference has four key strands:

- HR in a digital age
- HR as a strategic partner
- Leadership and capacity building
- HR operational excellence

Confirmed speakers include global tertiary education expert Dr Jamil Salmi; Professor Peter Rathjen, Vice-Chancellor of the University of Adelaide and former Vice-Chancellor of the University of Tasmania; and leading motivational speaker and specialist in personal productivity, Mike Lipkin. Find out more and register at **www.acu.ac.uk/canada-2018**

How to create the entrepreneurs of tomorrow

Later this year, the University of Waterloo in Canada will play host to the ACU's biennial conference for university HR professionals, bringing delegates from all over the world together to find shared solutions to common challenges. As part of a packed programme, delegates will discover how the university is preparing its students for the fast-changing world of work through an innovative entrepreneurship programme. **Feridun Hamdullahpur** tells us more.



We live in a world of change and disruption. These are inevitabilities that we all face. As universities, educators, and centres of innovation, it is vital that we prepare our students not only to adapt to change but also to be the change-makers who will shape our society and the new economy.

If universities are to equip young people to meet the challenges of this ever-shifting world, they must look beyond the technical skills needed to promote prosperity, and find innovative ways to develop creativity and resilience in their students. These attributes are needed if we are to instil in our students an entrepreneurial spirit – one that enables them to push boundaries and create the future, instead of simply reacting to it.

Launching Velocity

Ten years ago, the University of Waterloo set out to harness the spirit of entrepreneurship within our students, launching what would later become Canada's most productive startup incubator: Velocity.

Velocity introduces students to entrepreneurship and provides the coaching, space, equipment, and supportive environment they need to build a sustainable, thriving business of their own. But it is more than that. It is a huge magnet that attracts students who want to create, who are not afraid to try something new, and who want to make a lasting impact on the world.

Velocity is an integral part of our campus and we dedicate 15

full-time employees and nearly 40,000 square feet of space to support it. We do this because, in our experience, taking a holistic and experiential approach to education better prepares our graduates for the world's changing landscape. Learning and knowledge development are not exclusive to classrooms or laboratories. By tapping directly into our students' inherent entrepreneurial spirit, we not only provide them with knowledge but also offer our country new and valuable resources.

Creating a culture of innovation

Since it was created, Velocity has helped launch more than 300 companies. These, in turn, have created 2,000 new jobs and attracted CA\$750 million in private investment. We have also received millions in donations from entrepreneurs who got their start here.

While not all of our students will build their own company, Velocity helps a segment of them achieve their dreams and inspires an entire community of students, faculty, and staff to bring a culture of innovation and entrepreneurship to everything they do.

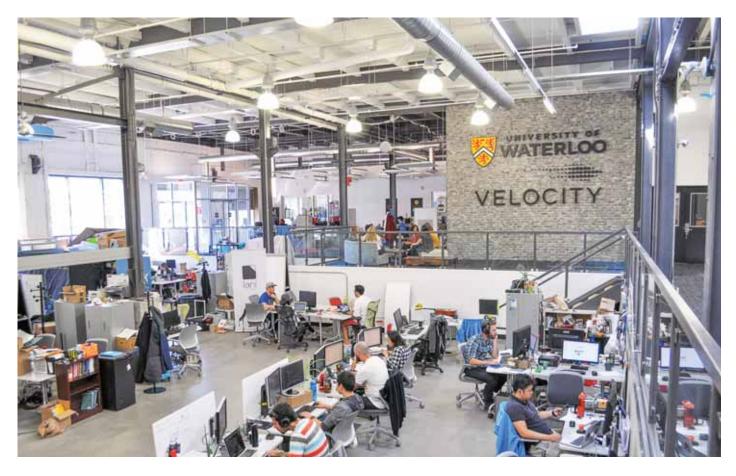
This mixture of entrepreneurship and innovation has benefited our campus culture, our curriculum, and our community. It creates work-ready graduates and spurs economic development – both crucial roles for any university today. As well as economic opportunities, Velocity has also helped to build the reputation of our region as a leader in innovation and technology.

But we couldn't have done it alone – and I doubt that any one institution could. On campus, the support we've received from faculties, central administration, students and staff has gone a long way to making Velocity successful.

Off campus, we've engaged with every level of government and sought support from venture capitalists and corporations willing to take risks on startups. Along the way, we have greatly benefited from the knowledge of other incubators and accelerators, as well as a local entrepreneurial ecosystem that encourages and benefits from the creation of new companies.

Starting a startup incubator

For any university looking to get into this space, the task can seem daunting; knowing where to begin can be hard. For us, experience has been a good teacher. If we can offer any advice – or at least the benefit of our experience – we would suggest the following:



The Velocity Garage is home to 80+ early-stage startups and includes a science lab, meeting rooms, assembly space, workshop, and prototyping lab

1. Start small...but start

The benefits of supporting entrepreneurship and startups at your institution cannot be overstated. It provides experience and employment, generates excitement and capital, creates opportunity, empowers youth, enriches your community, and attracts innovative students and faculty to your campus.

2. Build a funnel

Create exposure to entrepreneurship across your campus and provide in-depth programmes to generate and maintain awareness among your students. Provide support to students who advance past general interest and start down the path to building a company. Accept that not everyone will be interested, but the more people who understand the opportunities involved, the more will take part.

3. A successful incubator is more than bricks and mortar

Launching an incubator is an ongoing commitment that calls for more than space. It requires continued effort and the availability of experienced mentors who can coach budding entrepreneurs through their journey.

4. Don't do it all at once

Know that your programme and the support it needs are going to evolve, and may evolve differently than they have in other places. Talk to people who have founded companies near your institution and get an idea of what is needed. You can then evolve over time to fill any gaps that become apparent.

5. Understand and accept that startups are fragile

Incubators have a lot of moving parts, and things can change quickly. Startups require a lot of attention and can be at the mercy of the marketplace. Accept that many of the businesses will fail, but that doesn't mean you've failed as educators. The experience and knowledge gained by starting and growing a business are invaluable.

For the University of Waterloo, getting to where we are with Velocity has been a ten-year journey. Its success is rooted in a university culture that embraces risk-taking, encourages exploration into the unknown, and accepts that failure has preceded some of the greatest success stories.

With the world changing at such a rapid pace, it is increasingly necessary to ensure we are flexible enough to change with it. We have to understand and accept that the things we are doing today will be different tomorrow. To remain competitive as individuals, institutions and nations, we need to be part of building what's next, instead of waiting for it to happen.

Dr Feridun Hamdullahpur is President and Vice-Chancellor of the University of Waterloo, Canada.

The ACU's international conference for university HR professionals takes place at the University of Waterloo from 23-26 September 2018. Visit **www.acu.ac.uk/canada-2018** to find out more.

Understanding climate change and the cultural context

Universities across the Commonwealth are making a vital contribution to understanding and mitigating the impact of climate change. These include the University of Reading, where former Commonwealth Scholar, **Andrew Ainslie** – now a lecturer himself – is working with current Commonwealth Scholars as part of a research group exploring how knowledge of climate change informs decision-making at a grassroots level.

All over Africa, smallholder farmers make a major contribution to food security, with a key role to play in economic growth and poverty reduction. Yet as the continent's youth population grows apace, a crucial question confronts the agricultural development community: how can smallholder farmers adapt to a changing climate?

While governments, donors, researchers, and NGOs all weigh in with studies, facts, and figures about how serious things are and how they might turn out, one player in this drama stands out among all others: the African smallholder farmer – predominantly female, overwhelmingly rural, and battling to secure their livelihood.

Attention is increasingly centred on what will make smallholder farmers in Africa more resilient in the face of significant environmental, sociopolitical, and economic change. What information do they need in order to make the daily, weekly, and seasonal decisions necessary to manage their limited resources and secure their livelihoods? And in this heady mix, what do they perceive 'climate change' to consist of?

Beyond technology

In the information age, there is no shortage of freshly-minted perspectives and technologies on offer to assist the farming community: sophisticated meteorological modelling, satellite imagery, index-based insurance products, daily market prices, precision agriculture and more, all directed at increasing productivity and driving efficiencies. These new sources of expert advice are on offer to rural farmers via text and email, radio and television, social media, and participatory action research. In other words, the support on offer has never been more wide-ranging. But does this necessarily translate into improvements in adaptive capacity and productivity? If it were only an issue of more scientific information and more technology communicated more seamlessly, then surely the so-called 'technology transfer' model – so long the mainstay of agricultural extension services – would have cracked the case. But there are other issues to consider: what are farmers' frames of reference? What sources of knowledge do they trust and why? How much of what they do and the technologies they adopt is based on knowledge derived from a local understanding of the world, shaped by a particular historical and cultural context?

As such, two pertinent questions emerge: is it even possible for people to detect longer-term changes in climate, as opposed to more localised changes in weather? And does the widespread reporting of climate change influence people's perceptions? Several researchers at the University of Reading's School of Agriculture, Policy and Development – including three Commonwealth doctoral scholars – are seeking answers to these questions.

Changing rainfall in Cameroon

Commonwealth Scholar Louise Abongu's doctoral research in rural Cameroon explored the vulnerability of crop farmers in rain-fed systems. As part of this work, she sought to gain a better understanding of how climate change is perceived in farming communities.

Louise found that farmers articulated their understanding of climate change by focusing on changing rainfall patterns. The first rains used to fall in early April, they explained, and would continue to fall steadily, so that by 20 May (a national day) the millet would have reached knee-height. More recently, however, the start of the rainy season had shifted and was unpredictable. Dry spells frequently followed the first rains, hindering the sowing and early growth of crops. Farmers reported that rainfall now differed in its intensity, frequency and duration, causing them to wonder when to plant their crops. They also averred that temperatures had increased over recent years. Although they did not keep accurate records to evidence this assertion, they observed these changes by pointing to shifts in the crop planting season, changes in crop yields, decreasing soil moisture, and exceptional events such as bridges being washed away by flash floods.

At village level, Louise found that the traditional leader was the person who most shaped the common narrative in the community, as he was the influential conduit for NGO projects and ideas coming into the village. Louise recorded instances of NGOs visiting the traditional leader with the message that 'climate change is caused by deforestation'. Leaders were also offered tree saplings to distribute and plant in the community. Through her interviews, it became clear that a new narrative – 'the rains have changed and become less reliable' – was widely recited and officially endorsed.

Crop choices in north-western Ghana

Commonwealth Scholar George Dakurah undertook his doctoral research in north-western Ghana, exploring the drivers of decision-making in relation to crop choices and household food security.

His fascinating research into perceptions of climate change found that farmers in Ghana, like those in Cameroon, are extremely attentive to changes in rainfall. They are in receipt of high quality information, via meetings and radio, on seasonal forecasts and the price of crops. In response, they are adjusting their crop choices – typically by adopting faster maturing varieties, such as white maize.

But he also found that communities have a particular need for certain crops – such as sorghum, which has ritual and medicinal uses – and a taste preference for millet that goes beyond meeting basic nutritional needs. Although better adapted white maize – previously unknown in the region – has largely replaced sorghum and millet, male farmers pointed out that when a staple meal (known as tuo-zaafi) is made from white maize, the taste is inferior to millet. Women, however, prefer maize because significantly less labour is required to prepare it than is needed to thresh and winnow millet. Younger people, meanwhile, report disliking the taste and colour of sorghum.

What George's research makes clear is that farmers' decisionmaking is as much shaped by domestic food preferences and cultural needs as it is by economic reasons and perceptions of climate variability.

Cultural beliefs and drought in Mozambique

A third doctoral student and Commonwealth Scholar, Daniela Salite, is studying the cultural beliefs that inform people's responses to drought conditions in southern Mozambique.

She found that farmers have deep local knowledge about changes in seasonal weather that rests on a close observation of a wide range of signs. These include changes in the natural environment, such wind direction; the state of trees and plants, especially the quantity and quality of fruits and flowers; and unusual livestock behaviour. However, they are also informed by cultural beliefs regarding both the causes of drought and how to counteract it. In her interviews with farmers, for instance, Daniela was told that the ancestors could punish those whose behaviour displeased them by sending drought. For example, abortion is deemed unacceptable to the ancestors and a special ceremony is held when a young women is suspected of having undergone an abortion, lest the ancestors punish the whole community. When one family reneged on their deceased relative's stated wish to have his dreadlocks cut off before he was buried, this was interpreted as a reason for the onset of drought and drastic remedial action was taken to posthumously honour his wish.

What Daniela's research suggests is that the rural Shangaanspeaking people of this region understand that the natural state is for drought and floods to sometimes strike, but their wish is to find an explanation for what causes these events to befall them specifically.

Some of those she interviewed recognised the connections between cutting down trees (which 'hold the rain') and the onset of droughts, floods and cyclones. But it can be difficult to untangle how much of this is based on indigenous knowledge and how much is an amalgam of scientific and local knowledge. What a final anecdote reveals, however, is how people can incorporate the two quite seamlessly: when asked what they understood by El Niño (a climate phenomenon that occurs when a vast pool in the Pacific Ocean becomes abnormally warm and causes droughts in southern Africa and elsewhere), they explained that El Niño was an animal in the sea which caused drought. 'Now that it is raining,' they asserted, 'the animal must be dead.'

Change and context

What all these experiences demonstrate is that smallholder farmers are working hard to secure their livelihoods in difficult circumstances. Of anyone, they are surely geared towards maximising practical and economic efficiencies. But any efforts to support their 'adaptive capacity' and resilience in the face of considerable change must take full account of their cultural frames of reference and understanding of the world.

It must also take into account their aspirations and preferences, which are rooted in local, sociocultural circumstances, historical narratives, and political contexts. Knowledge of a changing climate, and the power to act on this knowledge, need to be woven into the very real preoccupations of millions of individual women and men bent on securing their futures.

Dr Andrew Ainslie is a Lecturer in International Rural Development at the University of Reading, UK.

The ACU manages the UK government's three main scholarship schemes – Chevening, Commonwealth Scholarships, and Marshall – as well as the Commonwealth Scholarship and Fellowship Plan. Find out more at **www.acu.ac.uk**/ **scholarships**

Sorghum field' by www.j-pics.info is licensed under Creative Commons BY-NC-SA 2.0

Truth and reconciliation at the University of Melbourne

In universities across the Commonwealth, truth and reconciliation processes have an important role to play in starting to address colonial legacies of injustice and in building fairer societies. Here, **Shaun Ewen** explores how Reconciliation Action Plans can provide useful frameworks to drive institutional change.



A sign at the University of Melbourne's main entrance welcomes students, staff and visitors in the Wurrundjeri language, as well as English

'If all Aboriginal and Torres Strait Islander peoples are to realise their true and full potential as individuals and as the original custodians of this land then change is required across Australian society and institutions.' (University of Melbourne)

Established in 1853, the University of Melbourne has engaged with Aboriginal and Torres Strait Islander peoples for more than a century. However, these engagements have, historically, been far from positive. In the research arena, for instance, senior academics in the early 1900s engaged in distressing research practices, including illegally gathering Aboriginal human remains for experimental purposes.

We have come a long way since that time. Today, we value and promote a research environment that is characterised by deep collaboration with Indigenous communities across the country on a range of projects and across the breadth of disciplines. We have more than 370 academics engaged in research focusing on Indigenous topics, and our research grant allocations to Indigenous researchers, and on Indigenous issues, exceeds AU\$100 million.

Belated beginnings

In 1959, more than 100 years after the university first opened its doors, Margaret Williams-Weir became the first Aboriginal student to graduate from the University of Melbourne. She was, in fact, the first Aboriginal person to enrol and graduate from any Australian university.

Seven years later, Charlie Perkins, well known for his role in the Freedom Ride campaign, became the first Aboriginal man to graduate from an Australian university, with a BA from the University of Sydney. It took until 1983 for Helen Milroy to graduate from the University of Western Australia as the country's first Aboriginal doctor.

This was in stark contrast to other settler-colonial settings. In Canada, for example, one of the first Indigenous Canadians to graduate in medicine did so in 1866 at the University of Toronto; the first Māori doctor to graduate from a New Zealand university did so in 1904, from the University of Otago.

From these belated beginnings, however, the University of Melbourne now has a talented and growing Indigenous student cohort whose retention, success, and completion rates are among the best in the country. We have more than 340 Indigenous students enrolled, half of whom are graduate students, and our Indigenous research higher degree cohort has more than tripled since 2014. We also offer 33 subjects with an Indigenous focus, in which more 1,260 students have enrolled. Next year, we expect to graduate our 1,000th Indigenous student.

These successes are attributable, in part, to the university's firm commitment to a series of Reconciliation Action Plans. These set out our commitment to creating an organisational culture that works to ensure Indigenous people have an equal opportunity to achieve in education. It also prioritises Indigenous perspectives in shaping the future of the university and, in turn, Australian and global society.

Action for reconciliation

The Australian approach to redressing this history of exclusion has been to embark upon a national path of reconciliation. This formally commenced with the establishment of the Council for Aboriginal Reconciliation (CAR) in 1991, which called for a 'united Australia which respects this land of ours; values the Aboriginal and Torres Strait Islander heritage; and provides justice and equity for all'.

In 2001, Reconciliation Australia was established to continue this work, a key focus of which has been to guide the development of Reconciliation Action Plans, or RAPs as they are colloquially known. These plans document the practical actions that an organisation will undertake to contribute to reconciliation in Australia. There are four tiered categories of action plan, each designed to promote appropriate and achievable outcomes at the varying stages of an organisation's reconciliation journey: Reflect, Innovate, Stretch, and Elevate.

Reconciliation at Melbourne

Acknowledging its long and often highly problematic history of engagement with Indigenous Australians, the University of Melbourne's formal reconciliation journey commenced in 2008. In a formal apology to Indigenous Australians, the Vice-Chancellor committed to 'using the expertise and resources of the university's teaching and learning, research and knowledge transfer expertise to make a sustained contribution to lifting the health, educational and living standards of Indigenous Australians'. In 2010, following consultations with the local Aboriginal and Torres Strait Islander community, we committed to developing a universitywide action plan for reconciliation.

The university's inaugural 'Reflect' Reconciliation Action Plan (RAP 1) was expressly aimed at developing institutional knowledge and the fundamental processes that support Indigenous development and wellbeing. It laid the administrative framework and developed the necessary processes to bring Indigenous objectives into the mainstream of university activity and policy.

It led to increases in student and staff numbers and the maintenance of high completion rates, and created a greater capacity for the university to consider and respond to future reconciliation objectives. Importantly, it also normalised Indigenous strategy as core university business.

The university's second Reconciliation Action Plan 'Stretch' (RAP 2) aimed to not only maintain and build on earlier

commitments but also to extend our vision for reconciliation to incorporate a holistic, inclusive, two-way relationship between Indigenous and non-Indigenous Australians, based on mutual responsibility and respect.

To do this, the plan sought to strengthen and prioritise cultural recognition in all processes to ensure a culturally safe work and study environment, and focused on the development of strategies and initiatives that enabled all university departments to achieve their own reconciliation outcomes. It also established internal accountability processes to monitor and report on organisational progress towards embedded targets.

Leading change

In May this year, during National Reconciliation Week, the university launched its third Reconciliation Action Plan. RAP 3 marks a shift in focus from earlier plans, which emphasised measures and targets across all divisions of the university, to focus instead on the development of 14 signature projects.

These 14 projects aim to deliver outcomes which are transformational in terms of their impact, and are classified under four themes: leadership for change, our place, purposeful partnerships, and international engagement.

In developing RAP 3, the university embarked upon an exhaustive consultation process and received feedback from the wider university community, including Traditional Owners and Elders and Indigenous and non-Indigenous staff and students. In total, more than 800 people engaged in this process.

This new plan, underpinned by our suite of other Indigenous strategies and frameworks, signals our intention to invest in reconciliation at a deeper level. This commitment has resulted in its endorsement by Reconciliation Australia as an 'Elevate' RAP. The University of Melbourne is one of 11 Australian universities currently implementing formalised action plans, and one of only two (together with Swinburne University) to be endorsed by Reconciliation Australia with 'Elevate' status.

This important endorsement signals that the University of Melbourne now has a 'proven track record of embedding effective RAP initiatives... [and a preparedness] to take on a leadership position to advance national reconciliation... and actively champion initiatives to empower Aboriginal and Torres Strait Islander peoples and create societal change'.

Professor Shaun Ewen is Pro Vice-Chancellor (Indigenous) at the University of Melbourne, Australia.

Later this year, the ACU will hold a scoping session with the University of Melbourne on the theme of peace and reconciliation, bringing member universities together to explore the potential for greater collaboration in this area. Contact **george.lakey@acu.ac.uk** to find out more.

Staying ahead: open learning in the Commonwealth

A new partnership between the ACU, the Commonwealth of Learning, and the Commonwealth Secretariat will see the three organisations working in closer collaboration to support sustainable development through education. Ensuring equal education opportunities for all will be key to this aim, but innovative approaches are needed to reach those otherwise unable to access higher education. **Asha Kanwar** and **Sanjaya Mishra** report.

All over the world, demand for higher education continues to rise. Reports estimate that global enrolment in tertiary education is expected to rise to 262 million by 2025, reaching 522 million by 2035.

A key driver of this demand, according to a recent World Bank working paper, is the steady return on investment. The paper found that the average rate of return on investment for private and social costs is estimated at 15.8% and 10.5% respectively, with higher returns in lower income countries relative to higher income ones. Meanwhile, a 2016 study by the London School of Economics revealed that doubling the number of universities is associated with more than 4% higher GDP per capita in a region.

While the economic benefits are clear, increased enrolment presents a challenge in terms of meeting demand. In real terms, if we are to accommodate the young people reaching enrolment age between now and 2025, we will need to build four new universities – each with a capacity of 30,000 students – every single week.

The birth of distance education

Increasingly, distance education is viewed as an alternative approach, and one that can complement and supplement 'bricks and mortar' institutions. Correspondence courses opened up access to newer constituencies, and the world's first distance learning university was established in South Africa in 1946. However, a major boost to the provision of distance higher education came with the establishment of the UK's Open University in 1969. This heralded a new type of higher education provision – one that was more open and flexible, and that relied on the use of technology and distance education methods.

The success of the Open University captured the imagination of policymakers globally, but particularly in developing countries. Today, there are 30 open universities in the Commonwealth, 17 of which are in India alone. Our survey of 27 open universities in the Commonwealth found that over four million students study in these institutions every year.

As well as open universities, many campus-based institutions also offer distance and online courses to increase access to higher education opportunities – and these are becoming increasingly popular across the globe. A 2018 study by the Babson Survey Research Group, for example, found that nearly a third of US students take at least one distance online course.

The Commonwealth of Learning

Recognising the value of distance learning and technologies, Commonwealth heads of government decided to create the Commonwealth of Learning (COL) in 1987. Major concerns at the time were inadequate access to higher education in developing countries, the high cost of sending students overseas, and the risk of 'brain drain'. The aim was to look for technological solutions that could 'move courses rather than the students' (Daniel, 2007).

Affordable technologies were emerging, but many Commonwealth countries did not have the capacity to harness the potential of these technologies within higher education. COL began by promoting the development and sharing of knowledge, resources, and technologies for open and distance learning. In the 30 years since, it has evolved to become a thought-leader in the use of innovative educational technologies, helping member states to widen access to learning that leads, in turn, to sustainable development.

Evolution of technologies

Open universities pioneered the use of audio and video media to teach at a distance, particularly the Open University through its collaboration with the BBC. The use of self-learning printed materials, supported by radio and television, created a new pedagogy for adults where learning could take place without a teacher.

Distance and open learning universities developed expertise in instructional design and the development of self-instructional materials to cater to the needs of a diverse range of learners. Students could learn at their own pace and convenience, and often at substantially lower costs.

The emergence of online courses led to innovations such as authoring tools, learning management systems, web resources and online self-tests, all of which introduced greater scope for personalisation and flexibility in both distance and campus-based institutions. As most higher education institutions now integrate these technologies into their teaching and learning, the boundaries between distance and campus universities have become increasingly blurred.

Massive Open Online Courses

Massive Open Online Courses, or MOOCs, emerged in 2008 and sought to open up access far beyond the classroom. In order to

ensure that MOOCs bridge the digital divide, COL promotes MOOCs for Development (MOOC4D), which use technology options suited to low bandwidth scenarios and provide offline learning possibilities. Using the innovative platform mooKIT, developed at the Indian Institute of Technology, Kanpur, COL has supported free online courses at Athabasca University in Canada, the National Open University of Nigeria, and the University of the South Pacific.

At the same time, many governments are harnessing the potential of MOOCs to strengthen their curricula, such as India's SWAYAM platform (Study Webs of Active Learning for Young Aspiring Minds) and the Malaysia-MOOC. These online courses are available largely free of charge and can be taken up by anyone with an internet connection. Many are also available through mobile apps.

With the advent of MOOCs, learning modules have become smaller and more granular, with greater emphasis on video learning, dialogue, and interaction – often among peers. MOOCs may also be having a more indirect impact on access and affordability: a 2015 study published in the *American Economic Review* revealed that US colleges are charging lower fees for online course work, which potentially 'bends the cost curve' in higher education.

Open educational resources

The high costs of textbooks can be a major barrier to access and affordability in both developed and developing countries. A study in the US noted that full-time students at public two-year colleges spend over \$1,200 per year on textbooks and course supplies (College Board, 2013). A recent COL study in Bangladesh revealed that 73% of students rely on photocopied materials and spend about BDT 1,850 (about \$22) per year on textbooks. Another COL study in Malaysia found that 76% of students do not buy textbooks because of prohibitive costs. Those that do spend over MYR 190 (about \$47) on average per year.

To address this challenge, COL promotes the use of Open Educational Resources (OER). These are teaching and learning materials, available free of cost, which can be reused, revised, remixed, and redistributed without permission from the original copyright holder. This allows teachers to modify and translate learning materials for specific learning contexts.

OER include course materials, modules, textbooks, videos, tests, software, and any other tools, materials or techniques used to support access to knowledge – and research suggests they can be very effective, cutting costs and improving efficiencies. A study commissioned by COL in Antigua and Barbuda revealed that the use of 'open textbooks' saved around 64.50 EC\$ (around \$24) per student per semester at Antigua State College. Moreover, students using these resources demonstrated a 5.5% higher score compared with the previous year when only commercial textbooks were used.

Offline technology

Not all regions of the Commonwealth have reliable access to electricity or internet connectivity. As a result, COL offers technology solutions that are accessible, available, and affordable. One example of this is Aptus – a device that enables wireless access

to educational resources in areas without grid electricity or internet. Aptus has two components: a mini-PC that acts as a server with the capacity to store large quantities of digital resources, in combination with a wireless router, which allows learners to access the resources stored on the server. It also has rechargeable battery backup.

Aptus was deployed to teach Foundation Computer Studies at the National University of Samoa, and a study concluded that access to the learning management system via Aptus helped teachers to manage course content, class notes, exercises, and testing more efficiently, as well as improving student motivation.

The way ahead

As we at COL continue to learn from our interventions, some key lessons have emerged. The first of these is that technology by itself cannot be a panacea for all that ails higher education today, but must be placed in an appropriate social, cultural, and political context. Second, if technology is to have optimal impact, there must be systematic development of institutional policies and systems to support its integration. Leadership oversight of this integration into teaching and learning also leads to universitywide understanding and acceptance of the importance of technology in higher education.

Third, we must identify appropriate technologies that can be sustained over time. This requires consideration of a range of issues and solutions, including security and data protection issues, hosted services, and cloud technologies.

Fourth is the need for continuous capacity building for staff at all levels to ensure they are prepared to integrate evolving education technologies into teaching and learning. And finally, there is the need to monitor and evaluate results to show the impact of change.

Technology continues to evolve at a rapid rate, and developments in artificial intelligence, blockchain, virtual reality, and more will have far-reaching implications for higher education in terms of access and affordability. The challenge is to harness the potential of technology to prepare our teachers and learners for the road ahead. Are we bystanders, reluctant adopters, or ahead of the game? The future of higher education will depend on our response today.

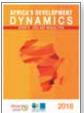
Professor Asha S Kanwar is President and CEO of the Commonwealth of Learning, Canada.

Sanjaya Mishra is Education Specialist: eLearning at the Commonwealth of Learning, Canada.

A full list of references for this article is available at http://oasis.col.org/handle/11599/3044

Recent publications

Nick Mulhern, ACU Librarian, summarises the latest titles in international higher education.



Africa's Development Dynamics 2018: Growth, Jobs and Inequalities [African Union; OECD; 2018]

oecd-ilibrary.org

The first report in a new annual series recommends 'ten key actions to guide development strategies', including support for the expansion of education.

Assessing Returns on International Collaboration

[Deloitte Access Economics for Universities New Zealand; 2018] universitiesnz.ac.nz

An analysis of the economic benefits of research collaboration, academic mobility, student flows, and work placements which, nevertheless, acknowledges the need to 'take into account broader social and economic benefits through a separate assessment of qualitative factors'. Among its conclusions is 'a more significant role for government in supporting international collaboration opportunities'.



Atlas of Sustainable Development Goals 2018 [World Bank; 2018] documents.worldbank. org

This visual guide uses a range of data to show progress made on the Sustainable Development Goals. It maps the world by income and region, including contexts for gender equality and innovation, as well as details on funding and enrolment in relation to Goal 4 ('inclusive and equitable quality education...for all').

Research Snapshots

[Australian Government Department of Education and Training; 2018]

internationaleducation.gov.au

Recent updates in this regular series of 'Snapshots' have included brief analyses

of international mobility, the impact of studying abroad, and comparisons of international education sectors.



Beyond the Economic: How International Education Delivers Broad Value for New Zealand [Research New Zealand for Education New

Zealand; 2018]

enz.govt.nz

An analysis of the contributions made by international education to the economy and workforce, but also its 'broader benefits' to the community, culture, and soft power, with brief reference to comparative international education markets and case studies.

Bologna Process: Paris Communiqué [European University Association; 2018] ehea2018.paris

A statement which incorporates commitments from European ministers of education to the social responsibility, engagement, and equitable access policies of higher education institutions.

Education Policy Outlook 2018: Putting Student Learning at the Centre [OECD; 2018] oecd-ilibrary.org

A report exploring policy priorities and trends in education (equity, quality, employability) in 43 education systems, supplemented by useful country contexts.



Gone International: Expanding Opportunities [Universities UK International; 2018] universitiesuk.ac.uk/ international

An annual analysis of UK undergraduatelevel students studying abroad – where they go, what they study, and whether long or short-term. Increasingly detailed contextual information shows trends in access; while 'disadvantaged students continue to be underrepresented in mobility, there has been a marked increase in the participation rate for these groups'.



Growing Smarter: Learning and Equitable Development in East Asia and Pacific [World Bank; 2018]

documents.worldbank.org

A detailed World Bank regional study of policies and practices in 'top-performing [education] systems' in east Asia and the Pacific, from school-level onwards. The coordination of institutions, public spending, teacher development and support, 'readiness to learn', and student assessment are among the factors cited. Summaries of education systems are also included by country.

Guide to Research Partnerships with Canadian Universities

[Business Higher Education Round Table; U15; 2018]

bher.ca/publications

Practical guidance to support academic/ business partnerships, but which could also apply to other higher education contexts.



How is the Tertiary Educated Population Evolving? [OECD; 2018] oecd-ilibrary.org This OECD working

paper records the continuing growth of tertiary education, but also the need to 'provide students with transferable skills, both across borders and across fields'. China and India dominate, particularly in STEM subjects, and a widening gender gap is anticipated – 'as many as 32% of women are expected to have a tertiary education by 2030, compared to 27% of men'.

ICT for Better Education in the Pacific [Asian Development Bank; 2018] adb.org/publications

This report explores how ICT has been incorporated into the education sector in the region. Its recommendations, which acknowledge the need for a 'more collaborative and systemic approach' and long-term goals, also suggest 'increasing access to university ICT networks'.

Internal quality assurance (IQA) in higher education

[UNESCO; International Institute for Educational Planning (IIEP); 2018] bit.ly/2zSx34r

A new series of brief reports on internal quality assurance and 'how to develop and implement more effective and innovative IQA systems' in higher education. Specific contexts are employability, management, external quality, and the effects of internal quality assurance – including its impact on teaching.



Learning Abroad and Employability: Researching the Connections [Potts, D.; International Education Association of Australia; 2018]

ieaa.org.au/documents/item/1267

A useful synthesis of the links between learning abroad and employability, collating recent evaluation reports and impact studies on international study from Australia, Canada, Japan, and the UK. It cites, in conclusion, skills development as well as the environment in which to apply these skills, but also acknowledges the value of further work on the 'enduring' impact of learning abroad, perhaps through longitudinal tracer research.

Retaining International Students in Canada Post-Graduation: Understanding the Motivations and Drivers of the Decision to Stay [Esses, V. et al; Canadian Bureau for International Education; 2018] cbie.ca/what-we-do/research

A survey-based brief which confirms that future work opportunities and applications for permanent residency motivate many applying to study in Canada. It concludes that 'employment opportunities for international students post-graduation are essential' for future strategy.

Social and Economic Conditions of Student Life in Europe

[Eurostudent; W. Bertelsmann Verlag; 2018]

eurostudent.eu/results/reports

A detailed comparative study aggregating data from 28 European countries, with further detail from Eurostudent focus groups. It offers an invaluable source of international higher education trends as reflected in its student indicators (socioeconomic background, types of study, employment, resources, etc). It also profiles student mobility and the factors or structures, including funding, which affect it. The scale of the ongoing project – this is the sixth such analysis – gives further evidence for the different contexts and cultures within which students operate.



Study Abroad Matters: Linking Higher Education to the Contemporary Workforce through International Experience

[Institute of International Education; American Institute for Foreign Study Foundation; 2018]

iie.org/research-and-insights

This new white paper synthesises research on the value of international study from student or employer perspectives, as well as the skills and attitudes it fosters. 'As employers increasingly value diversity and a global mindset, study abroad can serve as a pipeline and foundation to grow, nurture, and retain diverse talent.' Recommendations suggest 'how to better articulate the value of study abroad for the contemporary workplace'.

Teachers of Refugees:

A Review of the Literature [Richardson, E. et al; Education Development Trust; IIEP; 2018]

iiep.unesco.org

A valuable literature review which covers the management, recruitment, professional development, remuneration, and retention of teachers of refugees, as well as policies framing the right of refugees to education. Its focus is on the Middle East and east Africa.

The Shape of Global Higher Education: Understanding the ASEAN Region [British Council; 2018 (Volume 3)] bit.ly/2zVASFY

This British Council report – the third in its series – profiles higher education policy and its development in ASEAN states. Significant differences between countries in programme and institutional mobility are acknowledged.

Whatever Happened to the Promise of Online Learning? The State of Global Online Higher Education

[Garrett, R.; The Observatory on Borderless Higher Education; 2018] bit.ly/2LvzM53

Analyses and categorises current forms, and possible futures, of online distance learning.

SDG 4 data at your fingertips New tools from UNESCO's Institute for Statistics aim to help international stakeholders make use of data on Sustainable Development Goal 4 – to 'Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all'. uis.unesco.org/ en/ news/ sdg-4data-your-fingertips-new-tools-uis



Quick Guide to Education Indicators for SDG 4 A summary of the relevant SDG4 targets, indicators, and their

development, both for scholarships as well as tertiary education.



SDG 4 Data Book: Global Education Indicators Detailed statistics, which are regularly updated.

ACU membership update

The current membership total (as at 31 July 2018) is 528.

New members

We are delighted to welcome the following institutions into membership:

Bishop Grosseteste University, UK

Caribbean Maritime University, Jamaica

GD Goenka University, India

ICFAI University, Jaipur, India

ICFAI University, Jharkhand, India

ICFAI University, Sikkim, India

Jharkhand Rai University, India

Nile University of Nigeria

North Borneo University College, Malaysia

Rabindranath Tagore University, India

University of Health and Allied Sciences, Ghana

University of Medicine and Health Sciences, St Kitts and Nevis

University of Mpumalanga, South Africa

Returning members

We are delighted to welcome the following institutions back into membership:

Abertay University, UK

Lincoln University, New Zealand

Macquarie University, Australia

University of East London, UK

University of Surrey, UK

Executive heads

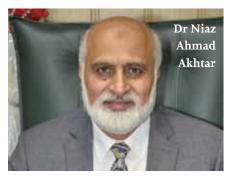
Professor James McWha has been appointed Vice-Chancellor of **Lincoln University**, New Zealand, as of 28 March 2018.





Dr Suhas Pednekar has been appointed Vice-Chancellor of the **University of Mumbai**, India, as of 27 April 2018.

Professor Andrew B Pembe has been appointed Vice-Chancellor ofMuhimbili University of Health and Allied Sciences, Tanzania, as of 1 June 2018.



Professor Dr Niaz Ahmad Akhtar has been appointed Vice-Chancellor of the **University of the Punjab**, Pakistan, as of 5 June 2018.

Dr S Sacchidananda has been appointed Vice-Chancellor of **Rajiv Gandhi University of Health Sciences**, India, as of 12 June 2018.

Dr KR Venugopal has been appointed Vice-Chancellor of **Bangalore University**, India, as of 14 June 2018.



Professor Mamokgethi Phakeng has been appointed Vice-Chancellor of the **University of Cape Town**, South Africa, as of 1 July 2018.

Calendar

2018

September 11-14 European Association for International Education Facing outward

Geneva, Switzerland www.eaie.org/geneva

17-18 Magna Charta Universitatum (30th anniversary) **University values in a changing world** Salamanca, Spain www.magna-charta.org/events

23-26

ACU HR in HE Community conference, in partnership with the University of Waterloo

Universities of the future: global perspectives for HR Waterloo, Canada www.acu.ac.uk/canada-2018

25-28

Africa Evidence Network **Evidence 2018: engage, understand, impact** Pretoria, South Africa www.evidenceconference.org.za

25-27 THE World Academic Summit, in partnership with the National University of Singapore **The transformative power of research: advancing knowledge, driving economies, building nations** Singapore www.theworldsummitseries.com

October

3-5 African Network for the Internationalisation of Education **Africa in the global higher education landscape: the role of internationalization** Nairobi, Kenya www.anienetwork.org/-conference

8-10

World Federation of Colleges and Polytechnics **Preparing for the skills future, now** Melbourne, Australia www.wfcp2018.com.au

9-12

Australian International Education Conference **Empowering a new generation** Sydney, Australia www.aiec.idp.com

22-26

Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) Aligning African universities to accelerate attainment of Africa's Agenda 2063 Nairobi, Kenya www.ruforum.org/biennial2018

November

4-5 The Observatory on Borderless Higher Education **Mission possible? The international quest to define and improve student success** Dubai, UAE www.obhe.ac.uk

13-15

International Association of Universities Higher education: partnerships for societal impact Kuala Lumpur, Malaysia iau-aiu.net/iau-global-events

18-21 Canadian Bureau for International Education **CBIE 2018** Ottawa, Canada www.cbie.ca/cbie-2018

2019 May 13-1

13-15 Going Global 2019 **Knowledge diplomacy** and the digital world: does international

tertiary education have a role? Berlin, Germany www.britishcouncil.org/going-global

26-31

NAFSA Association of International Educators **Global leadership, learning, and change** Washington, USA www.nafsa.org

June

4-6

THE Teaching Excellence Summit, in partnership with Western University **Degrees of change: forces shaping the teaching and learning of tomorrow** London, Canada www.timeshighereducation.com

26-28 THE Young Universities Summit (in partnership with the University of Surrey and University of Wollongong) **Embracing risk, creating opportunities** Guildford, UK www.timeshighereducation.com

July

2-5 Higher Education Research and Development Society **Next generation, higher education: challenges, changes, and opportunities** Auckland, New Zealand www.herdsa.org.au/conference

14-21

ACU Summer School, in partnership with the University of Mauritius **Public health: from a small island state to the global community** Mauritius www.acu.ac.uk/summer-school

The Association of Commonwealth Universities

About us

Universities (ACU) is the world's first and oldest international university network, established in 1913.

A UK-registered charity, the ACU has more than 500 member institutions in over 50 countries. We bring together many of the most prestigious and well-funded universities internationally with relatively new institutions in some of the world's least developed countries. What binds us together is a common belief in the value of rigour and excellence in everything that we and our member

The Association of Commonwealth

higher education to society, the conviction that this value is enhanced by international collaboration, and a passion for

universities do.

Join us The Association of **Commonwealth Universities** Woburn House 20-24 Tavistock Square London WC1H 9HF United Kingdom Tel: **+44 (0)20 7380 6700** membership@acu.ac.uk www.acu.ac.uk (a) The_ACU

With three distinct but interconnected areas of work member services, programmes, and scholarship administration supported by robust infrastructure and governance arrangements, the ACU combines delivering value to its members with achieving impact on the world of higher education and wider society.

Our mission

To promote and support excellence in higher education for the benefit of individuals and societies throughout the Commonwealth and beyond.

Our vision

Vibrant and exciting universities that use their transformational power to:

- Create opportunities for individuals to fulfil their potential
- Increase understanding through international partnerships both inside and outside the higher education sector
- Contribute to the cultural, economic, and social development of every nation

Our values

The ACU's set of values help guide the organisation in its mission. Our values reflect our aspirations, who we are, and how we do things, and are brought alive in everything that we do:

- Quality
- Collaboration •
- Innovation
- Respect
- Inclusion •