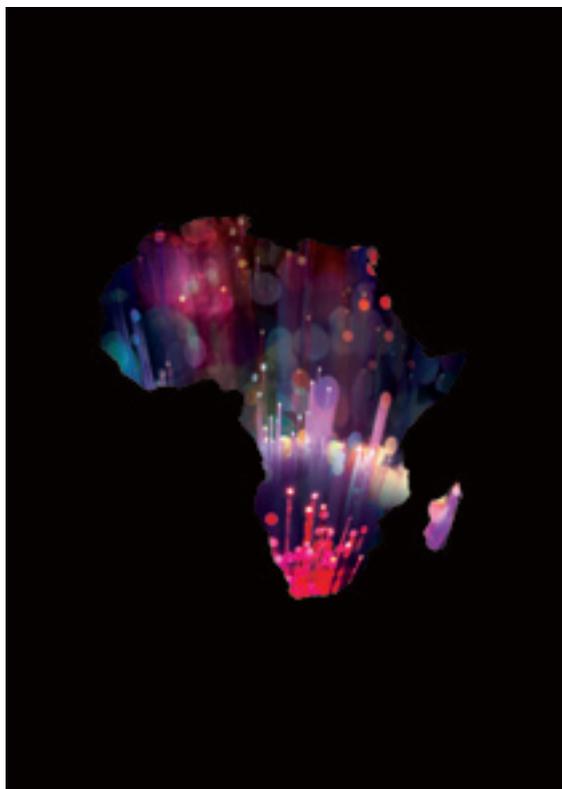


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AfricanBrains was formed by managers who have been working in Africa and the Middle East for over 15 years. That work has involved bringing investors into many countries and the organisation of major summits bringing together government ministers and officials to work with private sector technology leaders and investors.

Our overall aim is to promote greater investment into education in Africa and stimulate key sectors for information, communications, technology, innovation, scientific research and e-business. Central to this strategy is the development of long-term multi-stakeholder partnerships and encouragement of private sector technology transfer.



follow @AfricanBrains and please tweet about the summit using the tag #AfBrainsIA"

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# Welcome to Innovation Africa



This summit follows on from the ICT for Education Summit in Victoria Falls, January 2012 and continues the overall aspiration of AfricanBrains to fulfil the need and opportunity for greater public private partnership in education, science and research in sub-Saharan Africa.

We would like to offer our warmest gratitude and appreciation to all partners and participants to the summit. Thank you to the South African Government and especially the Deputy Minister for Economic Development, Hon. Hlengiwe Mkhize and our partners the University of the Western Cape (UWC).

The 5<sup>th</sup> October is a special day at UWC for ministers, officials, partners and universities, and we are grateful to the support of Vice-Chancellor Prof. Brian O'Connell and his team.

Thank you to all participating African ministers and government officials who will be contributing to the content of the summit with speeches and for hosting their own meeting roundtables for the afternoons of 6<sup>th</sup> & 7<sup>th</sup> October. Thank you to all our sponsors and delegates. Without your contribution this summit would not be possible and we are grateful for all your commercial support. Thank you to all speakers and additional participating officers from the African Development Bank, British Council, UNESCO and ISASA.

For the 6<sup>th</sup> & 7<sup>th</sup> October, these two days are structured around an innovative program of keynote presentations during the mornings and then converting to pre-scheduled one-to-one meetings for both afternoons of the event.

Please see the separate summit agenda for a summary of all speakers and timings.

After lunch at 14:00, on both days of the event, the pre-scheduled meetings will start between government, educational institutions, civil society and industry. We kindly ask that all officials and delegates start the meetings promptly after lunch each day.

The floor plan of roundtables is available at the entrance to the conference room. Prior to the start of the summit, sponsors and delegates have utilised our online scheduling system to arrange their afternoon meetings. There will also be the opportunity to arrange ad hoc meetings through the course of the event.

We will be hosting a special gala dinner at the Moyo Restaurant in the Kirstenbosch National Gardens. The dinner is for all participants – please ensure you have your delegate badge with you. Transport will depart the Westin Hotel 19:30 on the 6<sup>th</sup> October.

For assistance, please contact any of the organising staff available throughout the venue.

We trust this summit can play its own small part in bringing together key decision-makers from both government and industry to build their own relationships and strengthen public-private partnerships. We are grateful for your support and participation and we trust your time at the summit is enjoyable, and productive. We hope to be working with you for a long time.

Warmest regards

**John Glassey**

Managing Director, AfricanBrains



# Foreword

On behalf of the University of the Western Cape (UWC) and AfricanBrains, your co-hosts, I would like to welcome you to Innovation Africa, a 2012 Summit for Education, ICT, Science & Technology, Research and Development. We are thrilled by the large number of participants from the host country South Africa, and are thankful for the support of our Ministers and Deputy Ministers together with all other important decision-makers and implementers from government, business and civil society: the triple helix upon which all development depends. We are equally delighted by the long list of luminaries from Africa, our beloved continent, who have graced us with their presence. These include Ministers and Deputy Ministers from 18 African countries. Also with us are representatives of some of the world's most influential structures like UNESCO. Many other organisations deeply involved in the relationship between education and development, like the African Development Bank have joined us too.

This gathering is timely as it is now clear that the 21<sup>st</sup> century will present humankind with complex challenges. The Norwegian educationist, Per Dalin, argued that we are now being confronted with the unprecedented challenge of ten revolutions occurring simultaneously. They are: the knowledge and information revolution, the population explosion, globalisation, the economic revolution, the technological revolution, the ecological revolution, the social/cultural revolution, the aesthetic revolution, the political revolution and the values revolution. He argued that humankind would be so tested by this combination of incredible changes on so many levels that our cultures would have to undergo the kind of dramatic paradigm shifts last experienced in the 16<sup>th</sup> and 17<sup>th</sup> centuries when science began its challenge to all existing forms of knowledge. Chief amongst these changes is the ability to build networks and the ability to change. In fact, Lyle argues that change, built on the best knowledge available, is our only security. There was a time when nations sought their safety behind moats and thick walls or zones of influence like the Monroe Doctrine's "America for the Americans" and more recently the same idea from African sources that "Africa is for Africans". Such a time has been overtaken comprehensively by globalisation and the development of modern communication technologies. It is now clear that no nation has all the knowledge, skills and natural resources that it needs to survive now or in the future.

More than any other sub-continent, sub-Saharan Africa faced the impediment of physical isolation from humankind's great knowledge leaps, due largely to the barrier to communication presented by the Sahara desert. Added to this was colonialism and in South Africa, Apartheid. These impediments have all been swept away by the digital world and by the attainment of political freedom from colonialism that all African nations now enjoy. The space to grow is now available to us. All we require to meet these challenges is to connect, engage, and make sense of things based on the best knowledge available and then implement, based on the best processes with their appropriate technologies.

The Summit puts together players, local and international who are experts on many of the above challenges and who will be available for consultation during the summit. The outcomes of our time together should be extremely valuable for us as we chart our way toward a prosperous future.

Welcome again to all as we strive to bring the best together and arrive at the best results.

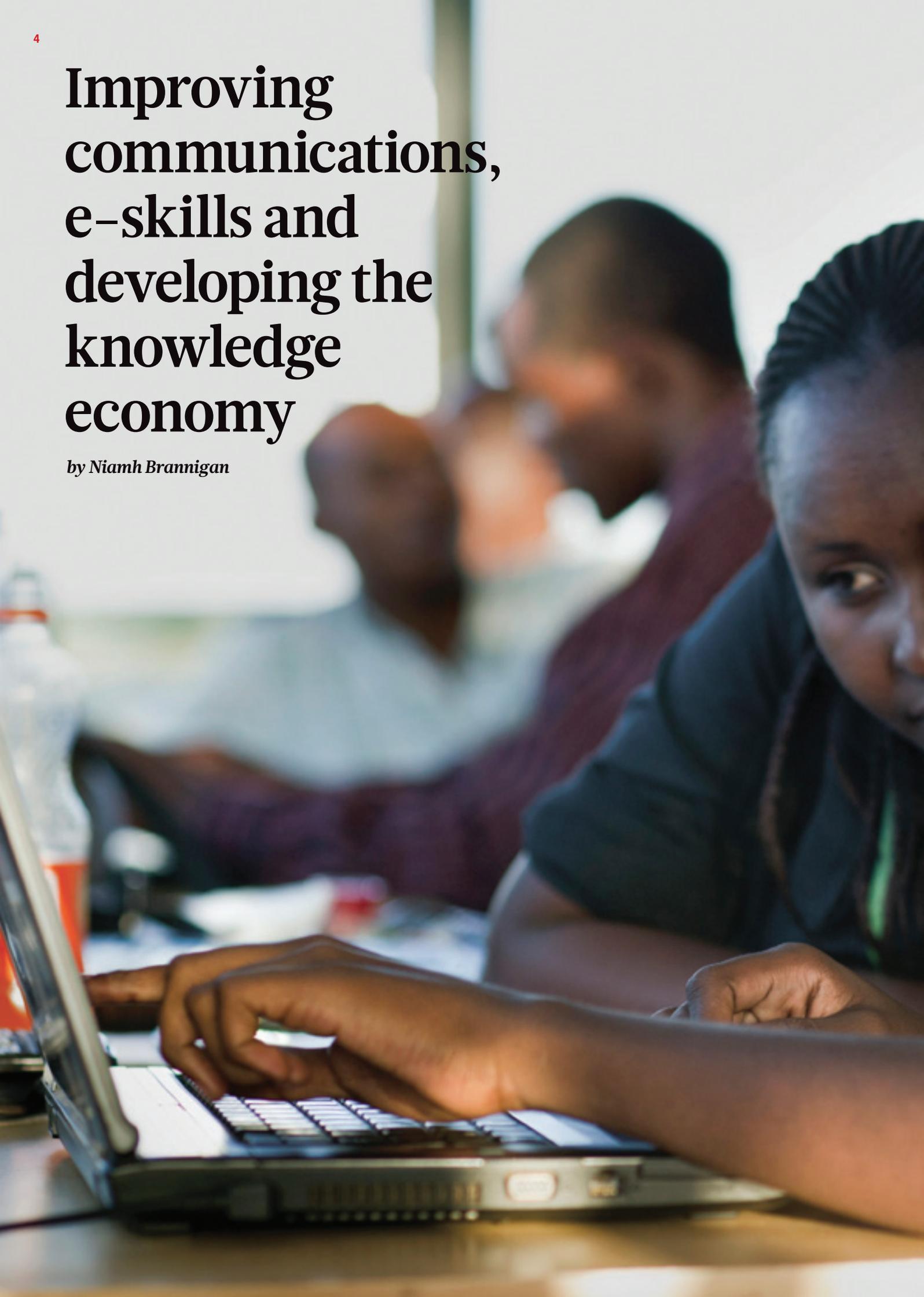


**Prof Brian O'Connell**

Rector and Vice-Chancellor, University of the Western Cape

# Improving communications, e-skills and developing the knowledge economy

*by Niamh Brannigan*



Young people at iHub, Nairobi's innovation hub for the technology community. An open space for technologists, investors and tech companies.

Photo: Panos Pictures © Sven Torfinn

*the greatest challenge facing the i-hub, is not equipping these techie graduates with more programming skills or e-skills, but is in fact coaching them to think like business people*

I recently attended an *Innovation in Kenya* meeting at Nairobi's innovation-Hub, with several African and international journalists on a fact finding mission, courtesy of the Finnish government - a leading proponent of knowledge society development in Africa. Our i-hub hosts presented us with compelling accounts of fledgling home-grown innovations being coaxed, through World Bank, Nokia and Finnish funding, into commercial success stories. These innovations, they hoped in time, would become Kenya's, and even Africa's, next Mpesa, Kenya's mobile money phenomenon. The i-hub is also the physical and virtual home to hundreds of aspiring tech entrepreneurs or 'digerati', many of whom utilize i-hub resources (including training, know-how and networks), to enhance their skills and develop enterprises. Following some Q&A, it was revealed that the greatest challenge facing the i-hub, is *not* equipping these techie graduates with more programming skills or *e-skills*, but is in fact coaching them

to *think* like business people; to *communicate* effectively with clients; to *market* themselves and their skills: in sum, to prepare them to take their place in a nascent knowledge economy. For a long time, our hosts admitted, applications were created at the i-hub without thought to how practical, useful and marketable they were. This clearly demonstrates that the impediments to knowledge society development, from a skills perspective, are not just technical in nature. They are far more complex, and require us to see that the creation of *knowledge workers* demands coherently developed Education, Information Communications Technology (ICT), and Science, Technology and Innovation (STI) policies. Presently, our policy and planning departments across ministries operate in silos, thus wasting resources, duplicating effort, losing out on learning opportunities, and perpetuating disconnects between the education systems that are charged with prepping young people for life in the workforce, and the

STI and ICT supported eco-systems that must absorb graduates, either as entrepreneurs or knowledge workers.

Professor Hiroshi Tasaka, of Tama University in Tokyo, predicted some years ago, when describing the paradox of knowledge societies<sup>1</sup>, that knowledge would become increasingly devalued, as easy access to information removed the need for us to retain it in our own heads. Wisdom, he suggested, would be the premium currency in knowledge societies. In such societies, graduates would enter innovation centres like the i-hub with the skills to filter through large amounts of disparate information, and identify, probe, analyse, and synthesize it for specific and meaningful purposes. They would be able to take this information and from it create, produce, package and disseminate knowledge in an array of digital and other formats, while at the same time possessing the communication skills to build networks, and the problem solving and critical thinking skills to live productive, and happy lives. From there, graduates would be equipped to create employment for themselves, or work for other agencies, supported by an environment in which access to capital, infrastructure, life-long learning opportunities, research, and other resources, would be readily available, and considered essential supports to knowledge society development.

There are many impediments to the creation of such societies (far too many to address here), all of which we, both knowingly and unknowingly, have created. One important impediment worth addressing is our own short-sightedness, which can lead us to see market forces as the natural harbingers of the knowledge society. We can be lulled into complacency by decontextualized data on levels of foreign investment in Africa, corporate/brand euphoria over the growing middle class, news headlines about year-on-year growth, telecoms rapture over mobile penetration in Africa, and NGO reports on Education for All success.

But Education for All does not address the issue of *quality* of teaching and learning, which is a critical pillar of knowledge society development. Without a quality education, that is, a relevant education that produces a labour force with the skills demanded by knowledge based industries; a knowledge economy will be bereft of the fuel it requires to grow. Education for All in Africa all too often translates as basic and inadequate education for many, and a quality education for all who can afford it: creating greater social and economic inequality, and thus social unrest. And a mobile phone or lap-top, and an internet connection, cannot alone, be parlayed into critical thinking, collaboration, creativity and innovation skills in learners. We need well (and continuously) trained teachers for that, for a start. And while the middle class is clearly on the rise, many are concentrated in North Africa, Nigeria and South Africa. One thing is certain, whether we take middle class thresholds to be 4\$ a day, as some argue, or a more globally comparable \$20 a day, rapid population growth is undercutting any significant gains made in poverty reduction.

The starker reality, and one noted in a 2011 African Development Bank Group report<sup>2</sup> on Africa's middle class, is that about 100,000 of the richest Africans have a collective net worth totalling 60% of the continent's gross domestic product, hardly an indicator of knowledge society development.

So we must resist the *every-man-for-himself* illusion of separation, if we want to place Africa on a trajectory to an *inclusive* knowledge society, where the knowledge economy, supported by education, STI, ICT, and infrastructure will more fully benefit the majority. To do this we must create a mind-shift on a massive scale. We must become *futures thinkers*. Our future policy makers and implementers, who are now middle managers in ministries across Africa, must begin to consider the consequences of their decisions on future generations. The policy, planning, and implementation processes must take account of trends and signals that will impact important pillars of knowledge society development (education, STI, ICT, infrastructure etc.)<sup>5</sup>, 10, and 20 years from now, so that we are empowered to plot our own course to the future we want, and not simply create policies that react to the status quo. Futures thinking should be introduced into all school curricula and become standard planning practice in ministries, because we cannot allow election cycles to dictate a short-term focus on the future. To create inclusive knowledge societies we must accept that any society is only as strong as its weakest link, and therefore, policies should be developed and implemented that are underpinned by a genuine commitment to create prosperity for all. I came across a fitting analogy of the consequences of our current societies' half-hearted attempts to take responsibility for the wellbeing of all its members. When the Titanic sank, it brought almost everyone down with it – indiscriminate of wealth, class or age. Let's not wait until it's too late to build a ship to a better future – *A Knowledge Society for All*.

#### Endnotes

- 1 Tasaka, H. (2007). The Paradox of Knowledge Societies [Video file]. Retrieved September 13th 2012, from <http://www.youtube.com/watch?v=5TgXaaHPHAs>
- 2 African Development Bank Group (AfDB). (2011). The Middle of the Pyramid: Dynamics of the Middle Class in Africa. Retrieved September 14th 2012, from [http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/The%20Middle%20of%20the%20Pyramid\\_The%20Middle%20of%20the%20Pyramid.pdf](http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/The%20Middle%20of%20the%20Pyramid_The%20Middle%20of%20the%20Pyramid.pdf)



#### About the author

Niamh Brannigan is a communications specialist born and raised in Dublin, Ireland, and now living in Nairobi, Kenya where she works for an international NGO. Niamh is passionate about the role of different forms of indigenous knowledge in the development of knowledge societies, pedagogy for skills development, life skills for a new society, as well as the meaning and role of innovation in Africa. Niamh has an MSc in Technology and Learning from Trinity College Dublin and a Masters in Publishing from University of the Arts London. Email: [niamh.brannigan@africanbrains.org](mailto:niamh.brannigan@africanbrains.org)