

**Can higher education
solve Africa's job crisis?**

Understanding graduate
employability in Sub-Saharan Africa



Going Global 2014

Acknowledgements

The British Council commissioned Institute of Education, University of London to lead this research project, which has been carried out in partnership with Kenyatta University, Kenya; University of Education, Winneba, Ghana; University of the Free State, South Africa; and University of Ibadan, Nigeria.

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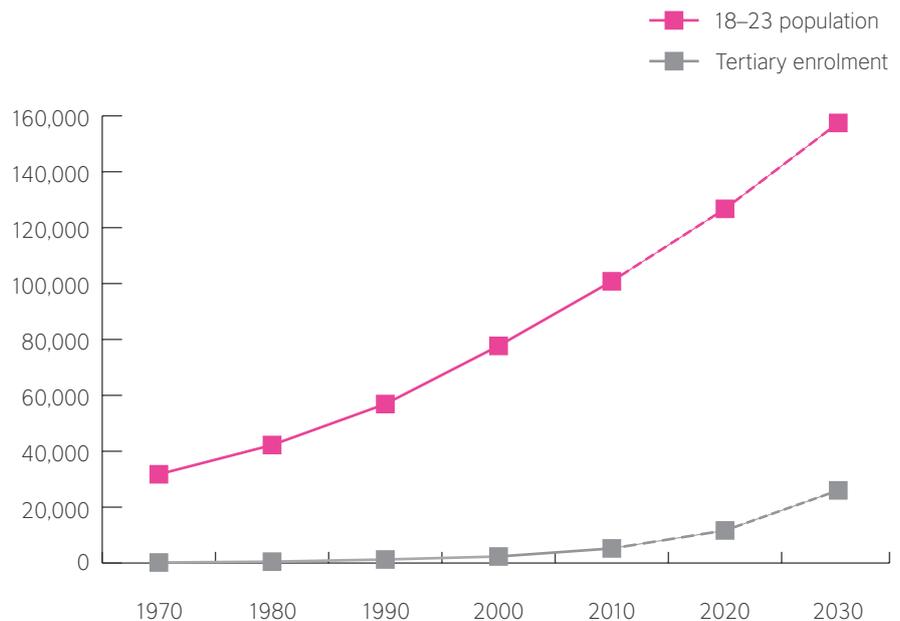
Introduction

Africa's economic outlook is bright. Five of the world's top ten countries in GDP growth are in the region, with foreign direct investment up, inflation slowed and remittances at record levels¹. Yet will that growth be sustained? And with what impact for its societies? A major challenge for the region is creating enough jobs for its growing population. A recent World Bank report² estimates that as many as 11 million young people in Sub-Saharan Africa will be joining the job market every year for the next decade, and the risks associated with growing numbers of urban youth without meaningful occupation are high.

It is widely recognised that long-term economic growth can only be achieved through investment in a highly skilled workforce. In the context of the knowledge economy, higher education has become particularly critical in this regard. Following decades of relative neglect as development agencies focused their efforts on expanding primary education systems, there is now renewed acknowledgement of the key role that universities can play in economic and social development. The debates on the post-2015 agenda have been characterised by this renewed emphasis (though have stopped short of recommending a specific goal for higher education). As the high-level panel report states: 'What matters is not just having technology, but understanding how to use it well and locally. This requires universities, technical colleges, public administration schools and well trained, skilled workers in all countries.'³

Yet despite the rapid expansion of higher education enrolments, there are serious concerns about the ability of Africa's universities to produce the kinds of graduates who can drive the region forward.

Figure 1: 18 to 23 age group population and tertiary enrolment in Sub-Saharan Africa (thousands)



Source: United Nations (2011); UIS 2009; 2012.

The challenge posed

Higher education is booming in Sub-Saharan Africa. Between 2000 and 2010, enrolments more than doubled, increasing from 2,344,000 to 5,228,000⁴ (see Figure 1). While the enrolment rate in the region is still only seven per cent (compared to 29 per cent worldwide)⁵, over the last 40 years the higher education system has been expanding at almost twice the global rate.

Nevertheless, there is a potential time bomb of pent-up demand. The 'youth bulge' in the region, and increasing value attached to university-level study, has meant that even

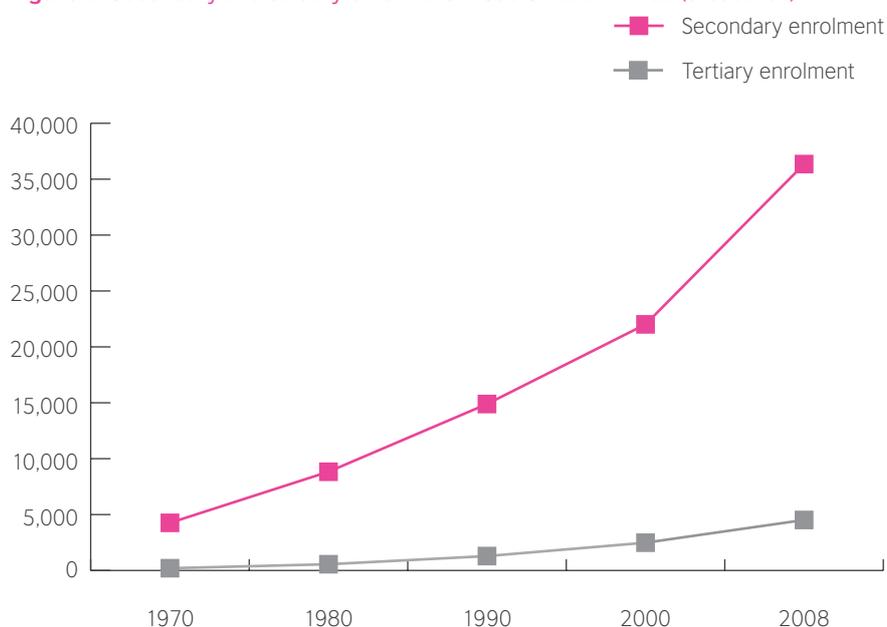
these high levels of expansion have not been enough. In 2010 the population in the 18–23 age group in Sub-Saharan Africa was 100,805,000⁶. This figure is projected to grow by more than 50 per cent by 2030. Even if recent high rates of expansion are maintained for the next two decades, rapid population growth will dampen the gains in terms of gross enrolment ratio (GER).

Investment in secondary education will further boost demand. The ratio of upper secondary enrolment in Sub-Saharan Africa compared to tertiary enrolment is 4.7, more than twice the global average⁷. Given the inevitable expansion of the secondary

1. World Bank (2014) Africa's Pulse: an analysis of issues shaping Africa's economic future. Volume.9 (April). World Bank (2014) Data tables. Available at: http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?order=wbapi_data_value_2012+wbapi_data_value+wbapi_data_value-last&sort=desc
2. World Bank (2014) *Youth employment in Sub-Saharan Africa: Africa Development Forum*. Washington: World Bank.
3. *The Report of the High Level Panel of Eminent Persons on the Post 2015 Development Agenda* (Digital Report) <http://report.post2015hlp.org/digital-report-executive-summary.html>
4. UNESCO Institute for Statistics (UIS) (2009) *Global Education Digest 2009: Comparing Education Statistics Across the World*. Montreal: UIS.
5. UIS (2012) These figures refer to the *gross enrolment rate*: that is, the number of students (of whatever age) enrolled divided by the total population of the relevant age group.
6. United Nations (2011) *The World Population Prospects: The 2010 Revision: Volume I: Comprehensive Tables* New York: United Nations Department of Economic and Social Affairs.
7. UIS (2009).

system – fuelled by the increasing attention to this level by international donors in the post-2015 discussions – this ratio may even increase if concerted efforts are not made. Growth of the private sector and distance education may facilitate the expansion in the short term, but without government financial support for students and improvements in communications infrastructure, access will still not be possible for the majority.

Figure 2: Secondary and tertiary enrolment in Sub-Saharan Africa (thousands)



Source: UIS 2011⁸.

There are significant inequities of access. University is still for the privileged few in Sub-Saharan Africa. Only 38 per cent of enrolment is female, and significant inequalities exist between different socio-economic, ethnic and regional groupings. Many talented young people are thus prevented from taking up the opportunity for further study that could help drive forward the region's development. Sub-Saharan Africa also has the highest rate of outbound student mobility of any region, leading to significant risk of brain drain⁹.

Quality is already under threat. Just as the introduction of free primary education in many African countries led to strains on infrastructure and drops in standards, so a rapid expansion of the higher education system presents similar dangers. Even at current levels of access, universities report inadequate facilities and numbers of teaching staff. There are already 50 per cent more students per lecturer in Sub-Saharan Africa than the global average, and it is not clear where the new recruits will come from to fuel this rapid expansion.¹⁰

Too few graduates gain the skills they need to find work. Nowhere is this quality challenge more evident than the transition to the labour market. Graduate unemployment rates are high in many countries and employers across the region complain of a lack of basic, technical and transferable skills. Given the pressures for expansion outlined above, absorption of graduates into the labour market will be a significant undertaking.

8. UIS (2011) *Financing Education in Sub-Saharan Africa. Meeting the Challenges of Expansion, Equity and Quality*: Montreal: UIS.

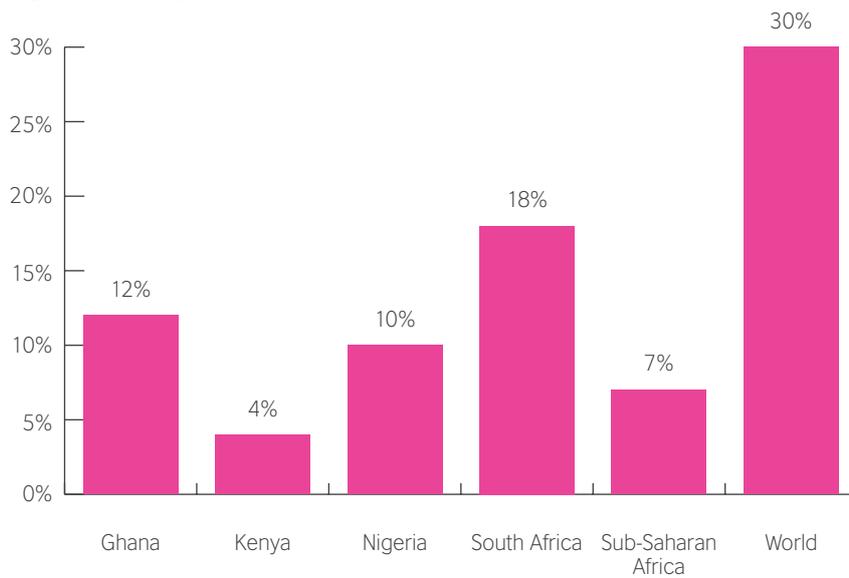
9. UIS (2010) *Trends in Tertiary Education: Sub-Saharan Africa*. Montreal: UIS.

10. There are currently 217,000 teaching staff for sub-Saharan Africa compared to 10,983,000 for world (UIS 2012). The student staff ratio across the region is currently 24.1 compared to a global rate of 16.2.

It is this final challenge – that of preparing graduates for the workplace – that will form the principal focus of this policy brief. The publication forms part of the British Council-funded study *Universities, Employability and Inclusive Development*, focusing primarily on four Sub-Saharan Africa countries: Ghana, Nigeria, Kenya and South Africa. These four countries have different levels of access to tertiary education (see Figure 3), different income levels and diverse political and social conditions, but all face the common challenge of how to ensure universities provide the highest quality of preparation for young people.

The study aims to provide policy makers with compelling evidence on how they can build a stronger link between their higher education sector and the labour market, ensuring graduates generate the growth and strong societies Africa needs if it is to release its potential.

Figure 3: Tertiary education enrolment rates



Source: DHET, 2011; UIS 2014¹¹.

11. Department of Higher Education and Training (DHET) (2011). *Higher Education Management Information System (HEMIS)*. Pretoria: DHET. UIS (2014) data tables: tertiary education. Available at: www.uis.unesco.org/datacentre/pages/default.aspx

Graduate employability in Sub-Saharan Africa

What we know

Employability can be defined as the possession of relevant knowledge, skills and other attributes that facilitate the gaining and maintaining of worthwhile employment. While there are extensive discussions in the media about graduate unemployment and the 'skills gap' (between the skills graduates have, and those that are needed in the job market), there is in fact a surprisingly weak evidence base. The assumption is that a linear causal relationship exists between the input of university study, the attributes that graduates take into the job market, and their success in obtaining work, as seen in Figure 4:

However, there are a number of other factors affecting progression between stages 1, 2 and 3. Graduate capacities are influenced by learning experiences outside the university, particularly in the family and previous schooling. Second, a range of factors beyond one's employability attributes affect entry into employment, such as the availability of jobs, graduates' social networks, and possible discrimination. The interaction between these influential factors is not sufficiently well understood.

There are, however, three areas in which we do have existing knowledge:

1. There is graduate unemployment in Sub-Saharan Africa

All four countries in this study have concerns about graduate employment. In Nigeria the unemployment rate is as high as 23.1 per cent for those with undergraduate degrees. Although the rate for university graduates is much lower in South Africa (5.9 per cent¹²), it is high for those with diploma or certificate level qualifications. Unemployment figures specifically for university graduates are not available in Ghana and Kenya. However, across the 25–29 age group as a whole (the range corresponding most closely with recent graduates) the unemployment rate is 41.6 per cent in Ghana¹³, and 15.7 per cent in Kenya¹⁴. It has been estimated that, on average, it takes a university graduate five years to secure a job in Kenya¹⁵.

As will be discussed further below, the understanding of 'employment' contained in these figures is ambiguous (i.e. whether including own account work as well as wage employment), but the challenges are clearly evident. In many cases the reality is worse than is indicated, since many of those in employment are not engaged in graduate level work, or are not in work that corresponds to their degree area.

Figure 4: Employability – a linear progression?



12. Van der Berg, S and Van Broekhuizen, H (2012). 'Graduate Unemployment in South Africa: A much exaggerated problem'; Stellenbosch Economic Working Papers: Vol. 22, No. 212.
13. Ghana Statistical Service (2012). 2010 Population and Housing Census: Summary Report of Final Results: Ghana Statistical Service. Accra: Sakoa Press Limited.
14. Omollo, J (2012). 'Youth Employment in Kenya: Analysis of Labour Market and Policy Interventions'. *FES Kenya Occasional Paper*, No. 1. Figures are for 2005.
15. Omollo, OJ (2010). *The Dynamics and Trends of Employment in Kenya*, IEA Research Paper Series, No. 1/2010, Nairobi: Institute of Economic Affairs.

2. Employers are dissatisfied with the skills and qualities of graduates

There is widespread concern about the work readiness of graduates. While employers are generally satisfied with the disciplinary knowledge of students, they perceive significant gaps in their IT skills, personal qualities (e.g. reliability) and transferable skills (e.g. team working and problem solving). Research carried out in Nigeria¹⁶ has

shown a significant 'skills mismatch' between employer requirements and graduates' display of skills in the workplace, particularly in relation to communication, IT, decision-making and critical thinking.

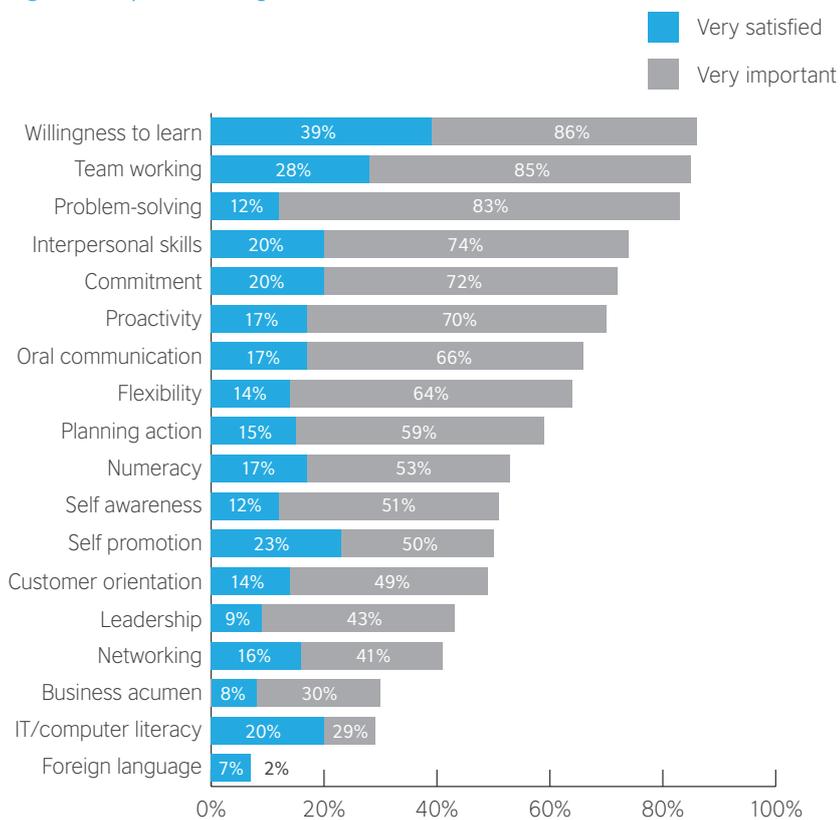
Figure 5 shows the importance attached to different skills by graduate employers in South Africa (grey bar), as well as employers' level of satisfaction with the actual skills of graduates (blue bar):

3. Universities have severe quality challenges

A recent review¹⁸ commissioned by DFID assessed existing research on the impact of tertiary education on development. While in a range of contexts there was seen to be a positive effect on macro-economic growth, individual incomes, broader capabilities and strengthening institutions, the impact was limited by a number of factors – particularly quality.

There are some universities in Sub-Saharan Africa of the highest quality, and pockets of excellence across the region. However, as discussed above, expansion in the context of limited public funding has placed the system under significant strain. At the major public universities in Kenya, for example, there are now as many as 64 students for every member of academic staff¹⁹. In many cases, lecturers lack adequate qualifications and preparation themselves, and transmission-based pedagogy and rote learning are commonplace. Universities have also suffered a severe lack of physical resources, including buildings, laboratories and libraries. While South Africa has better infrastructure, there are low completion rates, with 40 per cent of students dropping out in the first year and only 15 per cent finishing in the allotted time²⁰.

Figure 5: Importance of graduate skills



Source: SAGRA survey 2013¹⁷.

16. Pitan, OS and Adedeji, SO (2012). 'Skills Mismatch among University Graduates in the Nigerian Labour Market'. *Journal of US-China Education Review*, 2, pp. 90–98. Dabalen A, Oni B and Adekola, OA (2000): *Labour Market Prospects for University Graduates in Nigeria*. The Nigeria University System Innovation Project Study.
17. South Africa Graduate Recruiters Association (SAGRA) (2013) SAGRA Employer and Candidate Survey 2013.
18. Oketch, M, McCowan, T and Schendel, R (2014). *The Impact of Tertiary Education on Development: a Rigorous Review*. London: Department for International Development. The review covers all low- and lower middle-income countries, but includes many from Sub-Saharan Africa.
19. Commission for University Education (CUE) (2013). Institutional Audit Report 2013. Commissioned by CUE, Kenya.
20. Council on Higher Education, (CHE) (2013). A Proposal for Undergraduate Curriculum Reform in South Africa: The Case for a Flexible Curriculum Structure. Report of the Task Team on Undergraduate Curriculum Structure, Pretoria.

What we don't know

One of the greatest challenges facing Sub-Saharan Africa is in fact one of robust research and evidence on which to base policy. The review of the impact of tertiary education on development referred to above also identified a severe lack of research – particularly as regards the effectiveness of policy reforms or local-level interventions. Furthermore, for many countries there is a lack of basic statistical information relating to higher education enrolment, quality and outcomes, and even a lack of background data from censuses or household surveys. In relation to graduate employability, lack of evidence is in fact a global phenomenon with only a small number of high-income countries (e.g. USA, UK and Australia) having developed data sets in this area.

There are three critical areas in which we need to enhance knowledge:

1. The nature and causes of graduate unemployment

With the partial exception of South Africa, for the countries in question there is a lack of robust information on the labour market, on transitions from university to work, and the link between disciplinary area and employment prospects. In addition, the notion of 'unemployment' is context specific, and care is needed in interpreting statistics. It has even been suggested that in Sub-Saharan Africa, unemployment is a 'privilege' of the wealthy, with their greater financial security enabling them to wait for an ideal job, while the less well-off have to engage in a range of provisional income generating activities²¹.

While in some cases employers are unable to recruit because of lack of suitable applicants, there are multiple causes of unemployment, involving complex macro-economic questions. According to the recent World Bank report on youth employment in Sub-Saharan Africa²², only 16 per cent of jobs in the region are in the wage sector, with the rest in family farming and household enterprises. The extent to which graduate unemployment is due to a skills gap, or to a simple lack of jobs is as yet unresolved.

2. What the qualities and needs of graduates are

Most claims about graduate attributes are anecdotal. Beyond completion of degree courses, there is a severe lack of information on the knowledge, skills and values that graduates actually possess. Mostly we rely on surveys of employer perceptions – but even these are lacking in some countries. There is consequently little opportunity to compare across contexts, and over time. The OECD is developing a tool for assessing core skills – the Assessment for Higher Education Learning Outcomes (AHELO) – but as yet it is being used predominantly in high income countries. In addition, there is a strong need for research assessing student perceptions of university quality and their own employability needs.

21. Teal (2000). *Employment and Unemployment in Sub-Saharan Africa: An Overview*, www.csae.ox.ac.uk/conferences/2000-OiA/pdfpapers/teal.PDF

22. World Bank (2014). 'Youth employment in Sub-Saharan Africa: Africa Development Forum'. Washington: World Bank.

3. What universities should be doing

Finally, a much stronger evidence base is needed in relation to the kinds of responses that universities should make to these challenges. Without doubt, employers have significant responsibilities in the preparation of graduates, but universities nevertheless have their own critical role. In this area, research is lacking even in high income countries. While universities have expended considerable effort in ensuring that students gain the skills required by employers, we have just a handful of studies that actually gauge the impact on employment outcomes²³. Research in eight universities in the UK has found a positive effect on employment outcomes of work placements and employer engagement in course design and delivery, but no significant effect of departmental teaching of employability skills. This form of research needs to be rolled out in a range of settings in order to develop a more comprehensive understanding.

To date, the responses to the employability challenge in the four Sub-Saharan Africa countries have centred around updating of curricula and orienting course content towards employer needs; expansion of work placement programmes; and introduction of entrepreneurship courses. Nigeria, for example, has made entrepreneurship education compulsory in all federal institutions. The impact of these initiatives, however, is not yet known.

23. Melink, M and Pavlin, S (eds.) (2012). *DEHEMS Employability of Graduates and Higher Education Management Systems: Final report of DEHEMS project*, University of Ljubljana. Graduates Northwest (2013). Evaluation report: The North West Graduate Employability Support Project, University of Cumbria. Frigerio, G Cartwright, L and Bimrose, J (2010). *Narratives of Employability: Effective Guidance in a Higher Education Context*, Warwick: University of Warwick.

Universities, employability and inclusive development research study (2013–16)

The British Council has commissioned a three-year research and advocacy study to support the development of higher education systems in four Sub-Saharan Africa countries, and for comparative purposes, the UK.

The project is led by the Institute of Education, University of London, in partnership with the University of the Free State, South Africa; Ibadan University, Nigeria; Kenyatta University, Kenya; and the University of Education, Winneba, Ghana.

This study aims to develop a strong knowledge base to support universities in enhancing the quality of their provision, particularly in relation to graduate employability. The project analyses trends and practices at the macro level – assessing policy on higher education, and trends in national level access and employment – and at the micro level – conducting in-depth case studies of diverse types of universities, including academic and technical, and public and private institutions. The UK

is also integral to the project, given the well-established initiatives relating to employability in the country, and the project will assess evidence relating to effectiveness of interventions, as well as the potentials of partnerships between UK and African institutions.

The project has the following key aims:

- To generate in-depth understanding of the current context and needs of higher education systems, including perspectives of students, academic staff, policy makers and employers.
- To identify innovations and best practice in the five countries, develop institutional scorecards and use the quantitative and qualitative findings to build models of effective change.
- To engage key stakeholders and develop university partnerships to set in motion processes of institutional development to enhance graduate employability.

Three pathways

Solving the graduate unemployment problem is not something that universities can do alone; the task involves co-ordinated efforts between diverse segments of government and society. Nevertheless, there are compelling reasons for enhancing the quality of university education, both to improve individual life chances, and also to contribute to the broader development of society, fostering innovation and strengthening citizenship and democracy. Graduates must be well prepared for obtaining work, but also for making a positive contribution to their workplace and to society as a whole.

In order to improve the quality of their preparation of students, universities must focus on three areas of work, conducted simultaneously:

1. Improve the quality of taught courses

Sound teaching and learning quality in degree programmes is the *sine qua non* of enhancing graduate employability. There is little point in providing tailored initiatives if the basic building blocks are not in place. Analytical, problem solving and written communication skills, for example, depend on high quality teaching and learning provision.

At present there is extensive evidence of the poor learning environment for students in Sub-Saharan Africa countries. Some of the change required to address this challenge involves significant structural reform: for example, decreasing the student-lecturer ratio and improving infrastructure. But there are also more affordable interventions, such as pedagogical development for existing staff, and enhancing student voice in relation to teaching and learning.

Innovative practice 1: active and collaborative learning in Rwanda

As part of its post-conflict reconstruction, Rwanda has prioritised improving the quality of its university sector so as to foster innovation and technological development for the knowledge economy. In line with these aims, the Faculty of Architecture and Environmental Design at the University of Rwanda College of Science and Technology has introduced a range of innovative teaching and learning approaches, including the use of active and collaborative learning, adoption of varied and open-ended assessment, and the provision of extensive opportunities for student and faculty feedback. The Faculty has also worked to achieve an appropriate balance between academic challenge and student support, including constructing a progressive programme curriculum structure that scaffolds the student experience by gradually increasing requirements while decreasing the level of instructor support. Research has shown that these changes have brought a significant improvement in the critical thinking capacity of its students.

Source: Schendel 2013²⁴.

24. Schendel, R (2013). A Critical Missing Element: *Critical Thinking at Rwanda's Public Universities and the Implications for Higher Education Reform* (PhD thesis). London: Institute of Education.

2. Enable a broader learning experience for students

Research shows that experiences outside the classroom can be pivotal in enhancing employability. In a study²⁵ conducted in the Western Cape, South Africa, for example, after field of study, the factor in university background most influential in securing successful employment outcomes was

students' prior engagement in extra-mural activities. Experiential learning in the community – service learning, volunteering etc. – as well as on-campus, through student societies and other extra-curricular activities should be facilitated. Employers increasingly value global perspectives and understanding of diversity, and these qualities can be developed through these forms of engagement on campus and beyond.

Innovative practice 2: Macquarie University Global Leadership Programme

Macquarie University in Australia has established a Global Leadership Programme to help students prepare more effectively for the rapidly changing and complex global workplace. This credit-bearing programme involves experiential learning, such as international volunteering, student exchanges or internships, as well as colloquia on diverse topics relating to leadership and global citizenship. Ethical integrity and cross-cultural understanding are fostered through work experience in diverse contexts, combined with self-reflection sessions within the university. Graduates of the programme are seen to be better equipped to operate in multicultural environments, assume leadership positions and understand global issues.

Source: BIS 2011²⁶.

3. Provide targeted employability input

Beyond these general learning experiences, more specific provision is also required to inform students about career opportunities, to enable them to reflect on their personal aptitudes and develop them further where necessary. Careers advisory services are an obvious focal point in this regard, as well as job fairs and other interactions with employers. A research study²⁷ at Warwick University in the UK has shown the importance of one-to-one careers interviews, although they are hard in practice to resource for many universities. Other innovations include the web-based *Gradlink* developed by the University of the West of England, which connects international students in the UK to employers in China, Malaysia, India and Africa, as well as providing careers advice.

Targeted skills enhancement programmes also play an important role, whether focusing on entrepreneurship, ICT or presentation and communication skills. Finally, closer links are needed with employers, in terms of updating curricula and involving industry representatives in course delivery, as well as providing quality work placements.

However, a nuanced understanding of graduate needs is required. Industry, technology and the employment market are rapidly changing, and it is hard to see what will be needed in the next decade – both in terms of programmes and their content. Making a direct correspondence between the perceived needs of industry and the university curriculum may not be the best solution. Transferable skills and critical thinking that will allow graduates to adapt to make a positive impact on a rapidly changing economy and society are essential.

25. CHEC (2013). *Pathways from University to Work*. Wynberg: Cape Higher Education Consortium.

26. Department for Business, Innovation and Skills (BIS) (2011). *Supporting Graduate Employability: HEI Practice in Other Countries*: BIS Research Paper Number 40. London: BIS.

27. Frigerio et al. (2010).

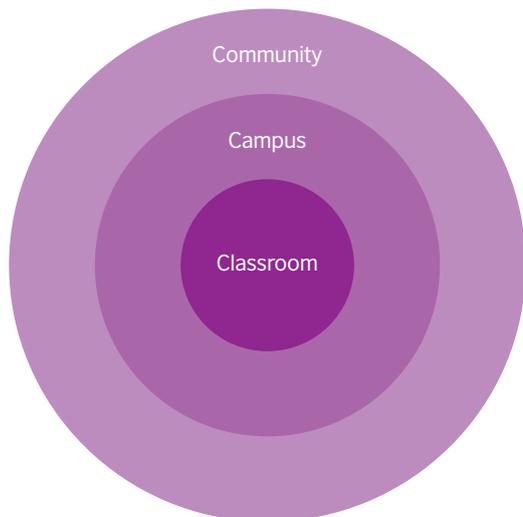
Innovative practice 3: Business enterprise in the curriculum

All students at the University of Newcastle-upon-Tyne in the UK have the opportunity to undertake a Business Enterprise Module. This module allows students to set up and run a real company, supported by a businessperson and a range of advisers from legal, sales, public relations and banking backgrounds. As well as gaining an award, and a better understanding of the business world, a number of students have continued their business ventures after completing their degrees.

Source: Bottomley and Williams (2006)²⁸.

These three pathways are expressed through three interlocking learning spaces: classroom, campus and community.

Figure 6: Embedded learning spaces



'Classroom' here represents all formal learning related to degree courses. Beyond these formal activities, 'campus' refers to the learning spaces afforded by other opportunities within the university, including interactions with a diverse student and staff body, involvement in student societies, and engagement in workshops and skills programmes. Community is understood in its broadest sense, involving local, national and global levels. This final sphere represents learning outside the university – whether through work attachments, voluntary placements or other experiences.

The key element here is the interaction between the different levels. Learning from within the 'classroom' can enhance activities in the wider campus and community; in turn, the experiential learning from work in the 'community' can be reflected on within the classroom, enhancing the theoretical knowledge. To provide an effective learning experience capable of improving graduate employability, universities need to pay attention to all three of these spheres.

In turn, the effectiveness of these spaces in promoting meaningful learning depends on wider enabling conditions: the quality of primary and secondary education, the existence of a supportive institutional governance framework and conducive national policies.

28. Bottomley A and Williams, H (2006). *Employability: Higher Education Institutions Engaging with Employers: a guide to international best practice in engaging employers in the curriculum*, Mansfield: Quality Assurance Agency.

Towards takeoff?

Africa stands at a crossroads in relation to higher education development. If countries can effectively invest in enabling access for the increasing numbers of ambitious school leavers, while at the same time ensuring quality provision and successful transition to the workplace, then the subcontinent will reap substantial benefits from the youth bulge. Without doubt, universities cannot solve the jobs crisis alone, and co-ordinated action across all sectors, including macro-economic policy, is necessary. Yet providing high-quality university education is central to the task. Failing to do so will hamper economic growth, weaken democracy and good governance, and leave a generation without the opportunity to pursue their ambitions for a better future.

In achieving these goals, equity of access is a pressing concern. In the majority of African countries, and in public and private sectors, only those from the wealthiest backgrounds can obtain a place, and numerous talented and ambitious young people go without. But access is not enough. Rapid expansion of primary systems has shown us the dangers of simply pulling down the fences without attention to quality. A university degree certificate can open doors, but without a rich learning experience underpinning the degree, it cannot change lives, release potential and transform societies.

Creating university systems of the highest quality requires political will and resources, but also research and analysis. While there is an unmistakable ground swell of concern and energy for change around graduate employability, too often policy and institutional initiatives are hampered by a lack of evidence on which to base decisions. The *Universities, Employability and Inclusive Development* project grapples with this challenge head-on, working with institutions and governments to develop the knowledge-base and shared experiences necessary for forming Africa's graduates in the 21st century.

