

How to Improve the Employability of Higher Education Graduates

EXECUTIVE SUMMARY

This paper focuses on the employability of higher education graduates in the private sector.

One of the main purposes of a post-secondary education system is to prepare graduates for the labor market, or to enable individuals to earn sustainable livelihoods through self-employment or through the establishment of a company or cooperative. Everyone should be able to make a living for themselves and to contribute skills to a developing economy.

It is widely accepted that an increase in the production of graduates from higher education will benefit African countries and will contribute to higher economic growth and employment in the continent. In spite of this, enrolments in tertiary education are still low. As a consequence, there is a lack of graduates in certain professions, which is made even worse by the brain drain. Furthermore and paradoxically, most African countries record high unemployment rates among young graduates.

The present situation of rapidly increasing enrolment in higher education without improving employability is to be addressed urgently. In order to avoid increased

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unemployment among young graduates, more focus should be placed on quality and labor market needs.

Recommendations for improving employability for higher education graduates are:

- ▶ Review and renew missions and visions of institutions of tertiary education to give them a sharper focus on science, technology and innovation.
- ▶ Increase the share of student population studying science and engineering and ensure higher education follows an efficient system of vocational training and skills development, which feeds into the production of more technicians and engineers.
- ▶ Strengthen the demand orientation of the courses taught and research carried out in the institutions of tertiary education to make them more relevant, location specific and embedded in local systems of production.
- ▶ Increase opportunities and incentives for collaboration between industry and institutions of higher education.
- ▶ Strengthen links with industry by getting industry players more involved in curriculum design, evaluation and innovation activities.
- ▶ Focus more on African languages and other subjects which can support nation-building and national cohesion. In the field of social sciences, there is a need for economists, lawyers and accountants but also for anthropologists who can advise on the relationship between technology and social development.
- ▶ Undertake regular and periodic tracer studies on the absorption of graduates into the labor market in order to help tertiary education institutions to undertake curriculum adjustments and innovation.
- ▶ Make labor market analysis and a comprehensive labor market information system an integral part of the accreditation process.



- ▶ Encourage all areas of higher education to increase their focus on rural development and improved agricultural techniques in order to benefit people living in rural areas which still constitute a majority of the continent's population.

WHY IS THE EMPLOYMENT OF HIGHER EDUCATION GRADUATES IMPORTANT?

There is no doubt that higher education plays an important role in human capital development and economic growth.

Articulation between higher education and employment in the workplace has been a focus of initiatives in many African countries. There is pressure on higher education from both Government and employers to produce employable graduates with the attributes, capabilities and dispositions to work successfully.

There has often been a complex relationship and a common misunderstanding between higher education institutions (HEIs) and employers, particularly in the private sector. Employers often voice concern over the quality of graduates from universities and other higher education institutions, while HEIs feel that business is not fully appreciative of what qualities and skills these graduates possess.

By international comparison, tertiary enrolment in African countries is still low and there is a lack of highly skilled experts in engineering, science and medicine.

Africa has the youngest population in the world, and the educational level is ever increasing (figure 1).

By 2030, 59% of the population aged 20-24 years in Africa will have benefited from secondary education. That will result in 12 million persons with tertiary education in

2030. This is a great opportunity but also a risk for more unemployed graduates.

The expansion of tertiary education must be carefully planned. Nearly 60% of the unemployed are aged between 15 and 24, a significant number of whom are graduates. It is clear that merely increasing tertiary enrolment will not be sufficient to meet the needs of labor markets.

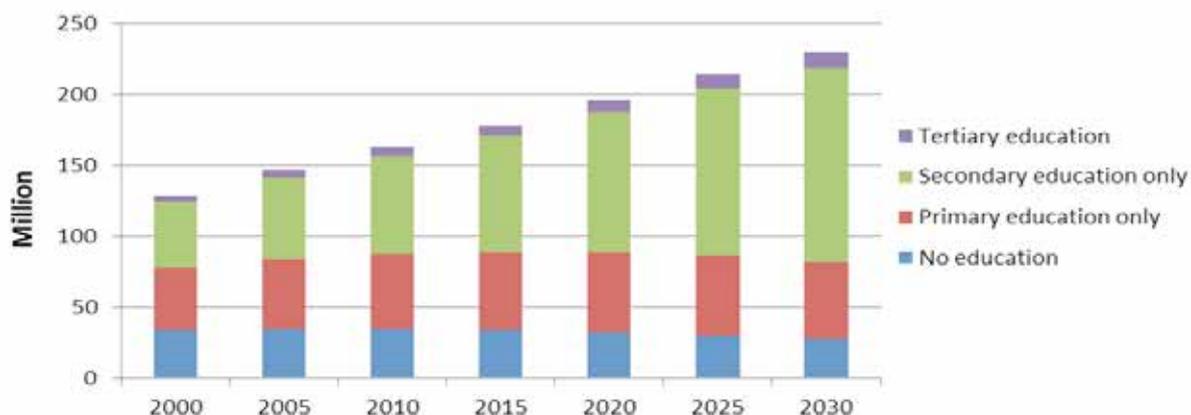
Graduate employment and employability must be carefully considered. The factors affecting graduate employment and employability can be grouped into 3 categories: (i) exogenous factors relating to the absorptive capacity of the country for its graduates; (ii) endogenous factors associated with the institutions' effort to employability of its graduates; and (iii) factors linking the exogenous and endogenous factors.

The endogenous factors include massification of higher education and the lack of creation of adequate jobs, which is the main cause of the rise of unemployment rates for graduates. This situation has forced many students to continue their studies, thus paradoxically reducing their chances of being recruited because of over qualification.

Exogenous factors include stiff competition for human skills globally, as other parts of the world attract many graduates from the continent and also depriving African learners of the best trainers.

In many African countries, the unemployment rate among young graduates is higher than 30%. If the general unemployment rate reaches a level of around 15%, the unemployment among young graduates can typically reach around 30%. However, there are also countries like Malawi, where university graduates had almost no unemployment, according to the most recent study.

Figure 1: 20-24 year-old cohorts by education, 2000-2030.



African Economic Outlook: Promoting Youth Employment. World Bank calculation

The unemployment rate could rise in many countries in the coming years despite all the arrangements made for young graduates to enter into the labor market. To understand the determinants of this type of unemployment, most analyses are based on the diagnosis of the situation through a synthesis of the key findings of surveys conducted on the promotion of graduates. This diagnosis is often supported by econometric models linking the unemployment indicator to key indicators of qualification.

Still, higher education graduates are doing better than people with lower educational levels and the graduates contribute greatly to economic growth and employment.

With the exception of a few specialties such as medicine, information technology, telecommunications and architecture, where opportunities are also available abroad, other types of graduates meet varying difficulty on the labor market. Overcoming the crisis of unemployment is rather difficult, with solutions requiring considerable resources over several years. These solutions would affect several areas such as higher education, vocational training, investment and regional integration in Africa.

CRITIQUE OF POLICY OPTIONS

More than 60% of the population of Sub-Saharan Africa lives in rural areas. Agriculture occupies a dominant place in the occupational structure, including among young people.

However, the agricultural departments in HEIs focus on production agriculture, mainly crop and animal production. Few deal with the problems of rural development and food security. Very few graduates become specialized in a field which will enable them to live and work

in rural areas and to contribute to agricultural development.

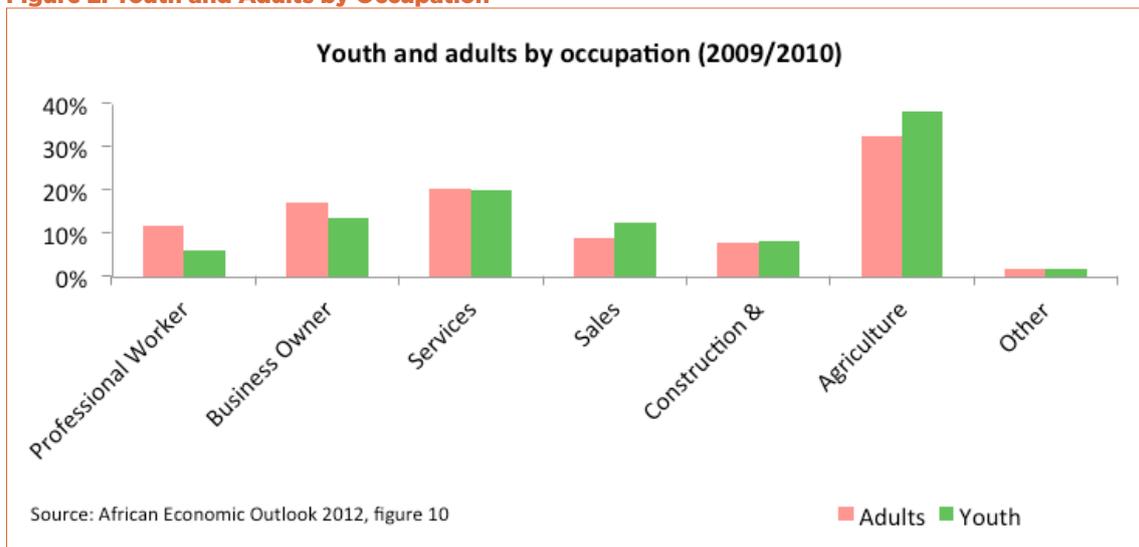
Not enough emphasis is put on the quality of education and employability. The number of science/engineering graduates is comparatively small while the number of social science graduates is too high.

There is too little focus on private sector employment and entrepreneurial education.

POLICY RECOMMENDATIONS

- ▶ There should be a balance between the wish for foreign investment as a means to create more jobs and development of a national strategy to encourage national companies and small and medium enterprises (SMEs) to create more jobs for graduates and other skilled people.
- ▶ More efforts should go into the development of universities and technical colleges.
- ▶ Greater focus should be placed on the need for differentiation in higher education systems together with a strengthening of technical and vocational training, which is crucial for Africa's growth.
- ▶ National manpower planning should be more up-to-date and data systems should be further improved.
- ▶ National strategies should aim at increasing the number of graduates specialized in areas that will satisfy the local market: i.e. more emphasis could be given to planting cocoyam, cassava, beans, and other local produce instead of cocoa and coffee whose prices are determined by the world market. Likewise national strategies should encourage the development of local textile industries that support local specificity.

Figure 2: Youth and Adults by Occupation



Source: African Economic Outlook 2012, figure 10

Figure 3: Priority areas and actions to be taken

Graduate skills	Priority areas	Actions to be taken	Stakeholders
<ul style="list-style-type: none"> ■ Bachelor ■ Master ■ Ph.D. 	<ul style="list-style-type: none"> ■ Private sector ■ Entrepreneurs ■ Science / Engineering ■ Rural development 	<ul style="list-style-type: none"> ■ Improve curriculum ■ Better counselling ■ More practical training ■ Comprehensive data ■ Information systems 	<ul style="list-style-type: none"> ■ Students ■ Educational institutions ■ Ministries ■ Business sector

► Rural development should be mainstreamed in the curricula in all areas of higher education so that it may benefit from HE's particular role in enhancing ongoing proactive intervention in the chain of value creation.

For each step upwards in the academic ladder, the effect on job creation is strengthened.

A particular challenge is that enrolment at Ph.D. level constitutes only one percent of total university enrolment. Having more Ph.D. graduates will not only benefit the public research sector, but also the private sector.

WHAT CAN THE VARIOUS STAKEHOLDERS DO?

Institutions for higher education

Curriculum should be more adapted to the real world. Cooperation with business should be much closer. HEIs should assist more in job-seeking in special dedicated units. The same units should provide support for alumni associations. More job counselling is essential to ensure an efficient transformation from education to work. And it is essential to conduct tracer studies.

First, tertiary education institutions have a big potential to push the frontiers of science, technology and innovation to greater heights; to do this, they need to adopt an innovative systems approach which focuses on making knowledge accessible for it to be used by all actors in the processes of innovation. In line with this, researchers and innovators in these institutions need a paradigm shift through which they stop looking at research, science, technology and innovation as 'academic', self-serving engagements but as vehicles for the growth and competitiveness of their organizations and the development of Africa's economies.

Secondly, if 'science' as taught and practiced in tertiary education institutions is to meet and blend with the technology and innovation in the worlds of production

in firms and farms, there needs to be convergences between this science and those technologies and innovations. In recent years such convergences have emerged in agricultural research.

What can students do?

Student should focus more on private sector employment and be encouraged to form alumni associations.

What can business do?

Businesses should provide training internships and provide part-time teachers to lecture on subjects such as engineering, economics, finance, accounting, etc.

It is important to note that youth unemployment can be reduced if tertiary education institutions link up with productive sectors for the development of curriculum. The tracer studies carried out by national authorities in countries like Ghana and Namibia show that the greater the distance between classroom-imparted skills and skills required in the worlds of work, the higher the rate of graduate unemployment is likely to be.

Entrepreneurship education is essentially critical in most African societies where students are highly socialized into a "wage-earner" mindset in the face of rising graduate unemployment.

Accordingly, entrepreneurship education can be for all when it is aimed at equipping students of HEIs with entrepreneurial behavior to make them more marketable on the job market and to make self-employment an attractive alternative. At the same time, it can be designed with specializations for the purpose of extensively preparing persons for self-employment (and for job creation), equipping the self-employed with entrepreneurial competencies for the growth and development (job creation inclusive) of their ventures and/or for developing SME development practitioners and even entrepreneurship educators.

What can Ministries of Higher Education and Research do?

They should carefully prioritize resources between different fields of study: science/engineering/technology, medicine, agricultural studies, social sciences, African languages etc. Although the needs are particularly strong in science related subjects, there is also a strong need to strengthen teaching in African languages and culture to preserve the national identity and develop the cohesion in societies.

From social sciences there is a need for economists, lawyers and accountants but also anthropologists who know about the relationship between technology and social development. Anthropologists bring in their expertise at many levels including our understanding of the diversity and specificity of local cultures, beliefs and practices, peoples' history and relationships to the outside world, and the meaning and appropriation of global and local technologies, etc.

Governments should encourage cooperation with the business sector and establish advisory councils involving governments, HEIs and business.

The central statistical bureaus or statistical offices in Ministries of Higher Education should create a comprehensive educational and labor market information system based on the following approach:

- Collect good data on higher education and employment: Current data needs should include intake, enrolment and graduates at bachelor's level, Master's level and Ph.D. level.
- Make projections where it makes sense.
- Calculate transition rates and drop-out rates.

- Collect data on tuition and fee costs.
- Provide up-to-date data on student loan numbers and amounts.
- Update data on employment of graduates.
- Collect data on the creation of locally owned start-ups.
- Collect data on local professionals or companies employed on international aid projects.
- Collect data on losses of graduates to emigration.

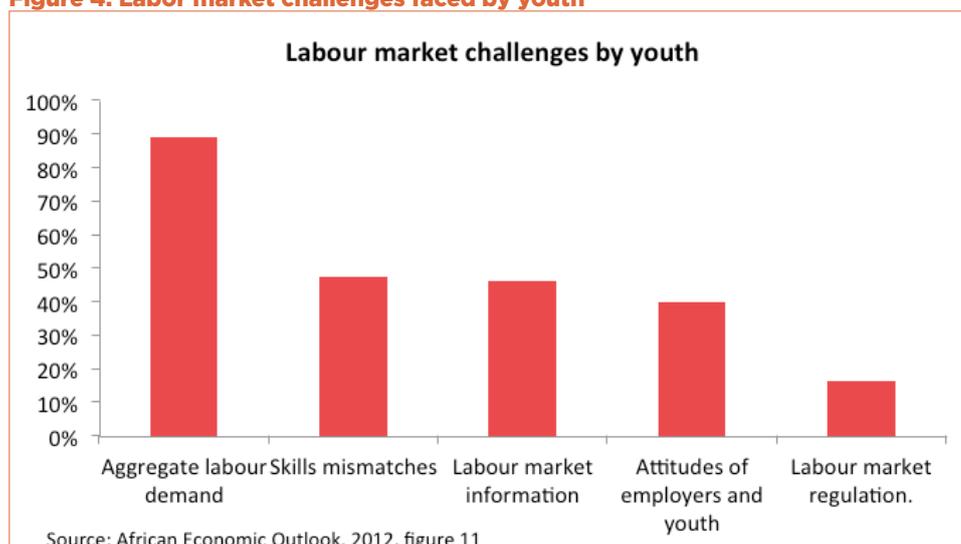
Losses to emigration should be seriously dealt with

It is estimated that more than 10% of African graduates emigrate, with a much higher fraction in the medical and technical fields. Far too many doctors have left African countries over the last 30 years. In sub-Saharan Africa, the loss is calculated to 1 billion dollar per year, twice as much as the amount USA provides in development aid.

Expectations of young graduates in the diaspora are: more attractive salaries, making employees know they are valuable and providing social security, facilitating access to credits, separating political affiliation from professional competence (promotion in the work place should not be dependent on employees' political party), regular update on technologies needed by professionals to improve their output, etc. Fulfilment of these wishes is expensive and can only be implemented over a span of years according to a realistic action plan.

Data should also be provided about challenges facing graduates in countries receiving many African emigrants. In many European countries, unemployment among local new graduates 1 year after completion of studies is more than 25%. This information could be

Figure 4: Labor market challenges faced by youth



useful for students in African countries and make them more motivated to work in their own country.

The main challenge for graduate employment is the lack of jobs [see Figure 4]. However, imbalances concerning qualification and skills, lack of good labor market information systems, attitudes of employers as well as young graduates' are other important challenges.

Better counselling

Better counselling on employment opportunities is essential for all categories of higher education. It is necessary to prepare more students for work in the private sector.

Traditionally, most higher education graduates in Africa have become employed in the public sector with Government being the biggest employer. This has historically been the case for countries in other continents. In some European countries, the share of university graduates employed by the private sector has gone down to 50%. In a few countries like Malawi, higher education graduates are mainly employed in the private sector.

The aim should be to increase the number of Ph.D. graduates employed in the private sector and ensure a mixture of bachelors, Masters and Ph.D. level staff. Many studies show that employment of people with highest skill levels will extend employment to other skilled and unskilled workers. It is important to also persuade SMEs to employ people with higher education. This will enhance economic growth and employment.

Education and work should be better linked

Governments aim to also improve the amount and quality of workplace training for higher education graduates. The policies and systems can, and must, impact on the nature, type and quality of training that is made available in the workplaces.

Workplace training and work-integrated learning (WIL) should be a central part of any training system. In most areas of education and training, a combination of both theoretical knowledge and practical experience is important, indeed essential.

This means that training systems for graduates, including curricula, need to be designed with close cooperation between employers and education and training providers – especially in those programs where training is an essential part of the curriculum. In some areas such as medicine, where work in hospitals is an integral

part of training doctors, this is well developed and could possibly provide a model for others, including professional organizations.

Higher education has to follow an efficient system of vocational training, which is feeding into the training of technicians and engineers. Establishing a good artisan training system is also an urgent priority in many African countries. South Africa has set a current target to produce 30 000 artisans a year by 2030.

All countries in the continent should set goals in the Science, Engineering and Technology field and do it in higher education as well as vocational training. It is crucial to facilitate such workplace learning partnerships between employers and educational institutions.

Given the demographics of the African labor force, it is not enough to focus education and training on preparing students for formal-sector employment.

In order for all graduates to make a living, employment opportunities need to be made in other ways – by starting small businesses in the informal or formal sector, or by establishing cooperatives, community organizations or non-profit initiatives of various types. Education must also cater for the needs of communities by assisting them to develop skills and knowledge which are not necessarily aimed at income generation. These include: community organization; knowledge of how to deal with government departments or commercial enterprises such as banks; citizenship education; community health education; and literacy. The community colleges are expected to play a particularly important role in this regard and must therefore be designed to be flexible in meeting the needs of their own particular communities.

Entrepreneurship education has an important role in educating students to create or start new ventures; to equip business managers (especially managers of SMEs) and project managers with the requisite knowledge and skills for successful management and/or implementation of their businesses or projects; and to build competencies of persons for the development of SMEs.

The need to build competencies of persons for the development of SMEs is of utmost importance due to the strategic role that SMEs play in African economy. In Ghana, it is estimated that SMEs constitute about 92% of businesses and enterprises but they have generally very low survival rates and existing ones are less successful in terms of growth and development due to a number of reasons including limited access to business and technological support services and SME development.

All undergraduate students of HEIs could receive entrepreneurship education in the form of one or more entrepreneurship courses with the purpose of enhancing their employability and developing their mind-sets to consider self-employment. Moreover, optional courses could be designed for students (irrespective of level) who are motivated to start a new venture. This is imperative because experience shows that without the right basis, persons can become demotivated by the demanding nature of education for new venture creation. SME promotion and development practitioners are recommended for postgraduate studies. This is due to the relatively higher investment that should go into their

design and delivery as well as the need for students to have extensive prior/concurrent knowledge in business management and other related fields.

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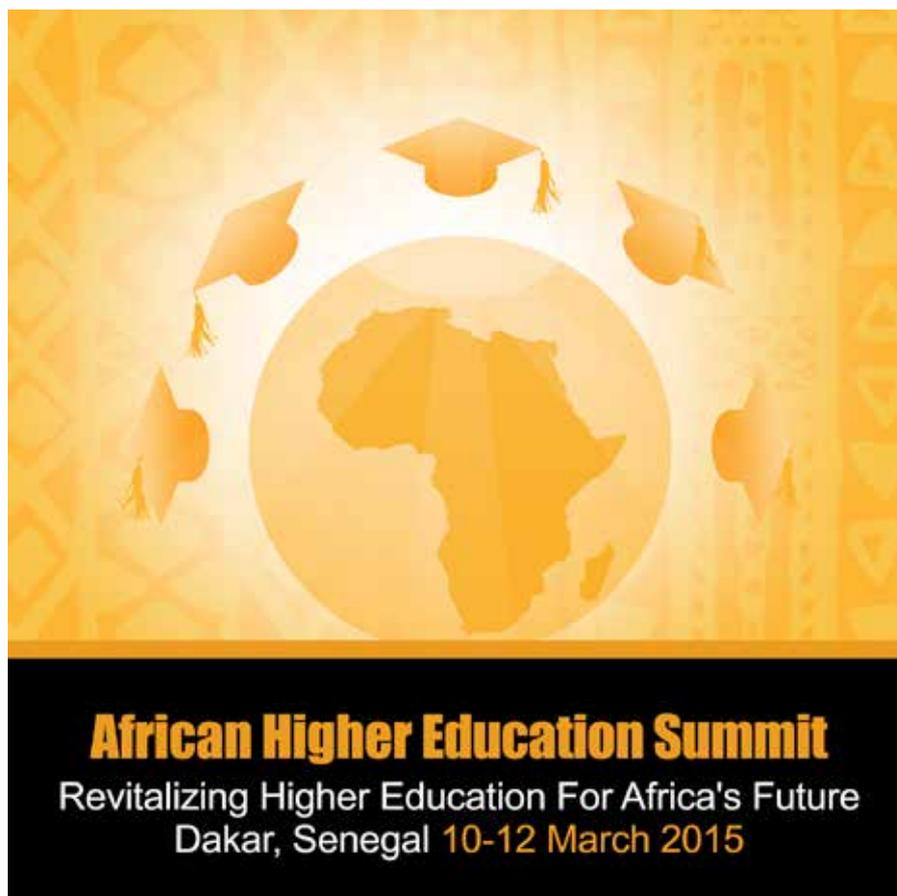
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ADEA represents a partnership between African ministries of education and development partners. It is also a Forum for policy dialogue bringing together a vibrant network of African Ministries of Education, bilateral and multilateral development agencies, researchers and stakeholders from Africa and around the world.

Collectively the network aspires to the vision of high quality education and training. Programs focus on supporting education systems to develop the critical knowledge and skills needed for Africa's accelerated and sustainable development.

In 2013, the African Union's Heads of State endorsed the Strategic Policy Framework developed by ADEA to guide the transformation of African education and training systems.

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