

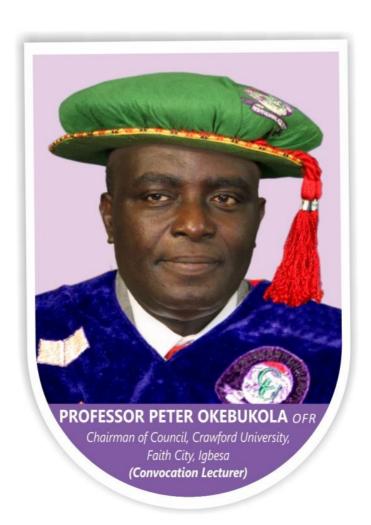
10th CONVOCATION DISTINGUISHED LECTURE

Higher Education and Africa's Future: Doing What is Right

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CITATION

Peter A. Okebukola is Professor of Science and Computer Education and a specialist in quality assurance in higher education. After his Bachelor's degree in 1973, he earned a PhD from the University of Ibadan, followed by specialised training at the Massachusetts Institute of Technology (M.I.T.) and Harvard University both in Cambridge, USA. He was a foundation staff of UNESCO International Institute for Capacity Building in Africa (IICBA) in Addis Ababa.

Professor Okebukola is noted as the First African to win the UNESCO Kalinga Prize for the Communication of Science. He is a Fellow and Member of the Board of Directors of the International Academy of Education whose membership is restricted to distinguished professors of education in the world. He is a member of the Executive Board of the International Association for Research in Science Teaching. He was also the African Representative and Member of the Board of Directors of the International Council of Associations for Science Education. He is a Fellow, Life Member and Past President of the Science Teachers Association of Nigeria as well as of the National Association for Environmental Education. He has won several international gold medals in science and computer education. He was a Visiting Professor at the Curtin University of Technology, Australia.

His research efforts have resulted in over 160 internationally published works and over 190 national and international conference presentations. He has given keynote addresses in major international conferences in over 80 countries in all regions of the world. Many of his publications can be found in the world's top 10 science education, computer education and environmental education journals and he is among one of the most-cited researchers in his field in Africa.

Some of his works on co-operative learning, metacognition, and eco-culture and science have appeared in the American Biology Teacher, School Science and Mathematics, Science Education, Journal of Research in Science Teaching, European Journal of Science Education (International Journal of Science Education) Journal of Social Psychology, International Journal of Educology, Research in Science Education, Human Relations, Educational Research, Journal of Biological Education, Journal of Chemical Education, Educational Perspectives, Instructional Science, and Research in Science and Technological Education, among several others. Some of the major finding of his research in computers in education have appeared in Educational Research, and Journal of Educational Technology Systems.

He is the immediate past Executive Secretary of the National Universities Commission (NUC). He has been Chairman of Council of several universities including Osun State University and

currently Chairman of Council of Crawford University. He has been awarded a number of honorary D.Sc degrees. He is the Executive Chairman of Okebukola Science Foundation which supports quality teaching, learning and research in science and technology. He is the current Executive President of the Global University Network for Innovation (GUNI)-Africa that was established by UNESCO in 1999. In January 2015, he was elected Chairman of the International Quality Group of the US-based Council for Higher Education Accreditation. Born on February 17, 1951, Professor Peter A. Okebukola is the recipient of the National Honour of the Officer of the Order of the Federal Republic-OFR.

Preamble

I am honoured to deliver the 10th Convocation Lecture of Covenant University, Ota and thrilled that it affords us all another opportunity to confirm that Jesus is a covenant-keeping God. Several years ago, God instructed Bishop (Dr.) David Oyedepo to set up a university that will be instrumental in lifting African peoples from their downtroddeness, poverty, disease. marginalisation and poor leadership. Right before our very eyes, this covenant-keeping God who was at the time of Abraham, who is today, and ever more shall be, is confirming His faithfulness by the mighty exploits of the University. In less than 13 years, more than any other university in Nigeria, West Africa and I am sure Africa, Covenant University (CU) through its products has been impacting positively on development in line with what God envisioned for it, as covenanted with Bishop David Oyedepo. Since His words are "Yea and Amen" (2 Corinthians, 1:20 (KJV), we shall, by the abundance of His Grace, be living witnesses to other success stories of CU by 2020 and beyond.

Even before the mantra of "change" filled the air in Nigeria about a year ago, CU has been effecting silent change through the quality of its graduates who are offering exemplary service in the public and private sectors of Nigeria, Africa and in other parts of the world. Change can be negative, transient, illusory, or flash-in-the-pan. It can also be positive and sustainable. What we are

witnessing with regard to the impact of CU graduates is sustainable change. Many CU graduates are currently in middle and high-level management positions. Ten or so years from now or even less, they would have moved up the ladder in top management in the public and private sectors and at the political level in Nigeria, be Governors of States, Members of the State and Federal legislatures and President of the Federal Republic of Nigeria. Ladies and Gentlemen, then we will see sustainable change in governance and rapid elevation of the African race to high global heights.

In all of these, we give glory to God for His promises fulfilled and thank all those who have allowed themselves to be used positively by God to achieve His purpose for CU. Standing tall in the list is our Daddy, Bishop David Oyedepo and Mama, Faith Oyedepo and all members of the Board of Regents. The huge contributions of Professor Aize Obayan who for seven positively-eventful years, steered the ship of CU as one of the most successful Vice-Chancellors in Africa and Professor Charles Ayo, the current VC who has brought a freshness of vision to governance of CU through his innovative, creative and inspiring leadership are noteworthy. Of course, all members of Senate, other staff as well as students and their parents are worthy of our appreciation. We will continue to back you up in prayers for greater successes in the years to come.

Now to an anecdote that will ease us gently into the theme of this lecture. I was here about five weeks ago and had a chat with Professor Alvin Elliot Roth, a 2012 Nobel-prize winner in Economics who delivered the keynote address at the Second ICADI Conference. The conversation went like this:

Me: Is this your first time in Nigeria?

Prof Roth: Yes it is. It is a lovely country you have here.

Me: When did you arrive?

Prof Roth: Actually just last night. Barely a few hours ago! **Me:** What is your impression of Covenant University?

Prof Roth: It is a university with outstanding promise to lead the

world in shorter time than people will imagine.

Me: When are you back in the US?

Prof Roth: I am leaving for the airport soon. I have classes to

teach tomorrow!

Two lessons struck me immediately. First, is the endorsement of the CU brand by a Nobel laureate. Second, is the high differential between the commitment of the typical Nigerian academic to work and that of an academic in a North American or European University. The typical Nigerian academic invited to a distant land will hardly care about rushing back to catch up with his or her lectures. Some shopping, sight-seeing and extra days lobbying for sabbatical or other appointments will engage his or her time. The students in Nigeria can wait; their lectures will be re-scheduled and crammed into a few hours on return. The university

administration is unaware of the overseas travel of the academic and cares less about sanctions for missing classes. Students are happy about the free time which they spend enjoying themselves. At the end of the course, students are poorly prepared as graduates and the entire Nigerian university system is the worse for it.

Chancellor, Distinguished Ladies and Gentlemen, the 10th convocation lecture of this University should be on a topic that goes beyond the Nigerian context. Four justifications exist. Covenant University has spread its wings of impact far beyond Nigeria and West Africa and its footprint is firmly stamped all over Africa. So, a convocation lecture for its tenth set of graduates should be phrased around a topic that concerns the African higher education system. Proverbs 22:29 (KJV) says "Seest thou a man diligent in his business? he shall stand before kings; he shall not stand before mean men." Covenant University has been diligent in its business and it should, therefore, stand before kings in Africa.

Secondly, our research group has empirically proved that Covenant University has the highest rate of growth (RoG) in Africa for its age. Rate of growth has several elements including rate of increase of quality infrastructure, number of quality staff and students, number of quality graduates, hence the frame of reference for the university should be regional rather than national. Thirdly, no university in West Africa and only a

minuscule all over Africa has been able to attract three Nobel Prize winners to offer lecturing service within a two-year period with a plan to sustain such programme in the coming years as Covenant University has done. The 10th Convocation Lecture of such a university should actually address a global topic, but since one of the agenda of the university is to produce graduates who will liberate the "Black man" from the shackles of oppression, a topic themed around Africa would not be too far off the mark.

Fourthly, Covenant University is on course to achieve its vision, by the special Grace of God, of becoming one of the best universities in the world by 2022. Will this happen? Yes, yes and yes! My source of confidence is the supersonic speed at which the university is overtaking many well-known, older universities in Africa on the league table of global ranking of universities. Also, we have faith in God who has promised us the attainment of this goal. As Hebrews 11:1 (KJV) says, "Now faith is the substance of things hoped for, the evidence of things not seen." We have not seen it, but we believe "For with God nothing shall be impossible" (Luke 1: 37, KJV).

Introduction

This lecture has three main purposes. First, it is to underline that the attainment of Agenda 2063 of the African Union as a roadmap for Africa's future will be severely hindered without a significant re-orientation of the higher education delivery system in the region. Second, it will identify obstacles to higher education and how these can be pulled down at the regional, sub-regional and national levels. Third, it is to narrow focus on Nigeria and provide some prescriptions for getting things right with the higher education system. Lastly, it will draw lessons from the success stories of Covenant University as models for Africa and Nigeria in the march to improving quality in higher education and ensure its greater impact on Africa's development.

With about 1.1 billion people, Africa accounts for close to 15% of the world's human population. It is a continent with the youngest population having over 50% of its population below 20 years, a phenomenon with implications for the provision of basic and higher education and employment. In spite of vast natural resources, the continent remains one of the world's most underdeveloped, a consequence of a miscellany of factors including high level of illiteracy and corruption. On a bright note, Africa has an unprecedented opportunity for transformation and sustained growth. GDP growth has accelerated from an average annual rate of 2.0 percent during the 1990s to 5.5 percent in the last decade. Even though growth declined as a consequence of

the global financial crisis, it has rebounded and in 2015 there is a spurt of improved GDP performance with five African countries appearing in the top league of the fastest-growing economies in the world. This remarkable economic turnaround is the result of increasing macro-economic stability, of reforms and rapidly increasing global demand for the natural resource-based commodities exported by African countries. As noted by the African Union (2013), the commodity-driven growth has not been inclusive. It has not created sufficient jobs, especially for women and youth, and has not translated into poverty elimination. Income inequalities have increased. There has been a process of de-industrialisation, declining agricultural productivity and lack of food self-sufficiency.

Looking beyond the economic triumphs, the continent has made steady progress in several other areas. Broad gains are being made on the democratic front, with an increasing number of elections that are free and fair, and meeting international standards. Conflicts have diminished substantially and peace and security are on the upswing. The continental integration process is being fast-tracked with the aim of putting in place, a Continental Free Trade Area by 2017.

Africa's Future seeing through Agenda 2063

Let us see the future envisioned for Africa by the leaders of the continent through the African Union's Agenda 2063. It is hoped

that by 2063, a number of aspirations would have been met. Highlights of these aspirations are:

ASPIRATION 1: A Prosperous Africa Based on Inclusive Growth and Sustainable Development.

We aspire that by 2063, Africa shall be a prosperous continent, with the means and resources to drive its own development, and where:

- African people have a high standard of living, and quality of life, sound health and well-being;
- well-educated citizens and skills revolution underpinned by science, technology and innovation for a knowledge society;
- cities and other settlements are hubs of cultural and economic activities, with modernized infrastructure, and people have access to all the basic necessities of life including shelter, water, sanitation, energy, public transport and ICT;
- economies are structurally transformed to create shared growth, decent jobs and economic opportunities for all;
- modern agriculture for increased production, productivity and value addition contribute to farmer and national prosperity and Africa's collective food security; and
- the environment and ecosystems are healthy and preserved, and with climate resilient economies and communities.

ASPIRATION 2: An Integrated Continent, Politically United Based on the Ideals of Pan Africanism and the Vision of Africa's Renaissance

We aspire that by 2063, Africa will:

- be a United Africa;
- have world class, integrative infrastructure that criss-crosses the continent;
- have dynamic and mutually beneficial links with her Diaspora; and
- be a continent with seamless borders, and management of cross border resources through dialogue.

ASPIRATION: 3. An Africa of Good Governance, Democracy, Respect for Human Rights, Justice and the Rule of Law

We aspire that by 2063, Africa will:

- be a continent where democratic values, culture, practices, universal principles of human rights, gender equality, justice and the rule of law are entrenched; and
- have capable institutions and transformative leadership in place at all levels.

ASPIRATION 4: A Peaceful and Secure Africa

We aspire that by 2063, Africa shall have:

- an entrenched and flourishing culture of human rights, democracy, gender equality, inclusion and peace;
- prosperity, security and safety for all citizens; and
- mechanisms to promote and defend the continent's collective security and interests.

ASPIRATION 5: An Africa with a Strong Cultural Identity, Common Heritage, Values and Ethics.

We aspire that by 2063:

- Pan Africanism shall be fully entrenched;
- the African Renaissance has reached its peak; and
- our diversity in culture, heritage, languages and religion shall be a cause of strength.

ASPIRATION 6: An Africa where Development is People-Driven, Unleashing the Potential of its Women and Youth.

We aspire that by 2063, Africa:

is People-centred and caring;

- puts children first;
- women are empowered and play their rightful role in all spheres of life;
- has full gender equality in all spheres of life; and
- has engaged and empowered youth.

ASPIRATION 7: Africa as a Strong, United and Influential Global Player and Partner.

We aspire that by 2063, Africa shall be:

- a major social, political, security and economic force in the world, and with her rightful share of the global commons (land, oceans and space);
- an active and equal participant in global affairs, multilateral institutions, a driver for peaceful co-existence, tolerance and a sustainable and just world; and
- fully capable and have the means to finance her development.

Higher Education, Africa's Future and the Attainment of Agenda 2063

Africa's future and the attainment of Agenda 2063 is inextricably linked with the quality of higher education delivered on the continent. The socio-economic performance of the region can be significantly bolstered and sustained if greater attention is paid

to basic and higher education and the challenge of skills shortage, among others is addressed. African economies face unmet demand for highly-skilled engineers, medical workers, agricultural scientists and researchers, particularly in the growing sectors of extractive industries, energy, water, environment, infrastructure, and service sectors, such as hospitality, banking and ICT (Materu, 2011). For instance, the extractive industries demand specialised civil, electrical and petroleum engineers as well as geologists, and environmental and legal specialists.

Investment dealing with the development of human capital in Africa - a critical element in socio-economic transformation is still far from optimal. Unsurprisingly, Africa is at the bottom of almost every knowledge-economy indicator. For instance, it contributed less than 2% to global patents in 2013 and had the lowest researcher-to-population ratio in the world with less than 120 researchers per million inhabitants compared to about 700 in North America, 300 in Latin America, and 1,600 in Central and Eastern Europe. Investment in quality higher education would generate more high-quality professionals with higher-order skills, entrepreneurial spirit and high research capacity. Part of the driving force of the East-Asian economic miracle was a rapid build-up of technical and technological workforce stimulated by quality higher education and an ever-improving applied research system. These capacities will also be important for diversifying the African economies by increasing the likelihood of new economic growth sectors with higher value added.

Higher education, defined as "all forms of post-secondary education offered in universities, polytechnics, colleges of education and their equivalents", has witnessed impressive numerical growth in Africa since the 1989 UNESCO World Conference on Higher Education. The report on Africa at the 2009 World Conference on Higher Education which traced growth trends confirmed a 25% jump in student enrolment into higher education institutions and the high international mobility of African students. In comparative terms, African students may be considered the most mobile in the world, largely due to limited access and lack of comprehensive study programmes in the region. In a number of countries, the outbound mobility ratio is one third of the students. These countries include Botswana (89%), Namibia (61%), Swaziland (58%), Lesotho (48%) and Mauritius (41%). Given that the global average is 1.8%, the outbound mobility ratio is still high in many other African states, such as Malawi (31%), Niger (22%), Central African Republic (21%), Senegal (17%), Cameroon (15%) and Kenya (11%). The lowest ratios for the region are found in South Africa (0.8%), Nigeria (1.6%) and Ethiopia (2.1%) (UNESCO-UIS, 2013). The rate of growth of private higher education institutions especially universities has remained one of the highest in world over the last 15 years (Varghese, 2012).

The higher education systems of Africa are currently not capable of responding fully to the immediate skill needs in the medium term. There are several impeding factors. There is shortage of a

critical mass of quality lecturers, insufficient sustainable financing, inappropriate governance and leadership, disconnect with the demands of the economy, and inadequate regional integration, The average percentage of staff with PhD in public tertiary education institutions in Africa is estimated to be less than 20 percent (based on a study of 10 countries in the region by Materu, 2009; 2011). Most departments do not have more than one or two senior professors. This prevents departments and universities from establishing vibrant research environments. The relatively low salaries of lecturers, lack of research funding and equipment as well as limited autonomy provide disincentives for professors to stay in African universities (Materu, 2011; Okebukola, 2014). Some other issues which the higher education system in Africa is grappling with as summarised by Materu (2009) include (a) efforts to improve educational quality at secondary level are still not yielding desired results, as shown by African countries' performance in international mathematics and science tests; (b) a review of distribution of graduates in 23 African countries shows the predominance of "soft" disciplines: social sciences & humanities (47 percent); education (22 percent); engineering (9 percent); sciences (9 percent); agriculture (3 percent); and (c) funding for research in African universities is low and is mostly supported by outside organisations.

Woldetensae (2013) identified challenges to quality in higher education in Africa to include increased enrolment; inadequate facilities and infrastructure; shortage of qualified staff and heavy

workloads; outdated teaching methods; weakening of research and publishing activities; mismatch between graduate output and employment; low level of quality management system and limited capacity of governance and leadership; many countries yet to establish regulatory agencies for quality assurance and accreditation; and the problem of comparability (credit transfer). In a recent regional survey by Shabani (2013), the top ten challenges facing higher education in Africa are listed in Table 1.

Table 1: Ranking of Challenges to Quality Higher Education in Africa

Rank	Challenges
1	Depreciating quality of higher education teachers
2	Research capacity deficit
3	Infrastructural/facilities inadequacies
4	Lack of a regional quality assurance framework and accreditation system
5	Slow adoption of ICT for delivering quality higher education including distance education
6	Capacity deficit of quality assurance agencies
7	Weak internationalisation of higher education
8	Management inefficiencies
9	Slow adoption of LMD reforms
10	Poor quality of entrants into higher education from the secondary level
Source: Shabani (2013)	

The removal of the foregoing challenges to quality higher education is imperative for the actualisation of the vision of the African Union. The 2063 vision of the African Union is "to build an integrated, prosperous and peaceful Africa, an Africa driven and managed by its own citizens and representing a dynamic force in the international arena". One of the major thrusts of AU in the realisation of this vision is the strengthening of the higher education systems in the continent. The AU overarching framework for the development of higher education is the Harmonization Strategy with four key policy objectives. These are (a) to establish harmonised higher education systems across Africa; (b) to strengthen the capacity of higher education institutions to meet the many tertiary educational needs of African countries through innovative forms of collaboration: (c) to ensure that the quality of higher education is systematically improved against common, agreed benchmarks of excellence; and (d) to facilitate mobility of graduates and academics across the continent. At the heart of the five objectives is quality higher education.

The African Union identified quality in higher education as focus in the Plan of Action for the Second Decade of Education for Africa (2006-2015). In furtherance of this, the AU Commission developed a framework for Harmonisation of Higher Education Programmes in Africa, with the specific purpose of establishing harmonised higher education systems across Africa, while strengthening the capacity

of higher education institutions to meet the many tertiary education needs of African countries through innovative forms of collaboration and ensuring that the quality of higher education is systematically improved against common, agreed benchmarks of excellence and facilitates mobility of graduates and academics across the continent. One of the key result areas of the Harmonisation strategy is 'Cooperation in information exchange'. This involves the:

- establishment and maintenance of a central database of African higher education institutions and programmes;
- establishment of an African system to measure and compare performance of higher education institutions; and
- representation of African interests in global higher education ranking systems.

The African Quality Rating Mechanism (AQRM) is a product of this Strategy. The aim is to establish an African system to measure and compare performance of higher education institutions. The purpose of this is threefold:

- Establishing an African system will ensure that the performance of higher education institutions can be compared against a set of criteria that takes into account the unique context and challenges of higher education delivery on the continent.
- Creating a system that allows for comparison can if well

- designed facilitate improvements in quality of delivery of institutions across the continent, and allow for an objective measure of performance.
- A continental system will pave the way for African institutions to compete more effectively in similar systems in operation at a global level, while also creating a case for review of the basis on which those global systems operate.

Alongside AQRM, the African Union Commission (AUC) is also running the Mwalimu Nyerere African Union Scholarship Scheme. This Scholarship Scheme is designed to enable African students undertake degree programmes (Bachelor, Master and PhD) in leading African Universities, in science and technology, with a binding agreement that the beneficiaries will work in an African country for two to five years after graduation. Let us now see the diversity and scope of the African higher education system.

Diversity of the African Higher Education System

The African higher education system is made up of over 2,450 post-secondary institutions (about 7% of the world's total). The diversity of these institutions is seen in varying institutional types, ownership, linguistic orientation, curriculum and student characteristics. The greatest proportion (over 65%) of institutions in the system is made up of universities (UIS, 2013). Non-university higher education institutions include polytechnics, colleges of education, as well as vocational and technical

institutes. This institutional diversity comes with varying missions and mandates. While the universities generally have teaching and research thrusts, non-university institutions are more focussed on specific programmes leading to acquisition of skills e.g. for teaching (colleges of education) and for varying technological enterprises (polytechnics). These differing missions come with variability in staff qualifications and expectations for career advancement with implications for quality standards.

Within institutional diversity, universities lead the pack in the choice of secondary school products aspiring for higher education. This trend in cases like Ghana, Ethiopia, Nigeria and South Africa leaves about 10 candidates struggling for one available university space. In 2007 at Osun State University, Nigeria, over 100,000 candidates applied for 500 available spaces! In 2011, a total of 99,195 candidates applied to the University of Lagos. Only about 9,000 could be offered admission. The preponderance of the bright and more intellectually able takes up such spaces. The non-university higher education institutions is where many of the others find repose, although a good number who are bright but would want vocational and technical career paths elect for these institutions as first choice. The preference for universities and the quest to increase highlevel human resources have led many African countries to spaces through converting university expand institutions to universities as exemplified by South Africa and aspirations by Nigeria to increase the number of universities

under private ownership. Kenya, Ghana, Nigeria, Sierra Leone and Tanzania provide examples (Okebukola, 2011; 2012).

Diversity exists even within institutional categories. Specialised universities have continued to thrive in response to societal demand for specific skills. Of the 147 universities in Nigeria, ten are specialised universities of technology, five are universities of agriculture, one medical university and five universities of education. Ghana has a specialised University of Development Studies and one which specialises in telecommunication. Ivory Coast has a University of Science and Technology. In Kenya, there is the Jomo Kenyatta University of Agriculture and Technology. Namibia has a University of Management. Somalia has the Somaliland University of Technology.

Beginning from the 1990s, the African higher education space opened to greater private participation. The diversity in public-private ownership has become a distinguishing feature of the system. In many countries, private higher education institutions range in proportion of total from 15% in Ghana and Ethiopia, through 20% in Kenya to 33% in Nigeria. While private higher education institutions have maintained high numbers, enrolment in these institutions is relatively low compared with public institutions.

Linguistic diversity given expression by language of instruction is another enduring characteristic of African higher education. In Anglophone countries (e.g. Ghana, Nigeria and Sierra Leone), English is the medium of instruction while French is used in higher education institutions in francophone countries such as Cote d'Ivoire, Mali and Senegal. Lusophone countries - Angola, Mozambique and Cape Verde apply Portuguese in teaching and learning in higher education. This linguistic diversity comes with curriculum diversity fashioned along the lines of institutions in English, French and Portuguese higher education systems. The originally-American course-unit system has been overlaid on the structure of academic programmes in most of the institutions. Within the last ten years, francophone countries have moved far in reaching consensus on the Licence-Master-Doctorate (LMD) reform which is aimed at streamlining programme offerings with anglophone models.

Diversity is also seen in racial composition of staff and students in African higher education. Nowhere is this more pronounced as South Africa where a mix of Blacks, coloured, Indians and whites populate staff and student communities. There is also diversity with regard to gender and physical disabilities. The preponderance of males has been widely reported across Africa with females making up on the average about 32% of undergraduate enrolment. The percentage of students with physical disabilities is low (less than 1%).

On the March to Harmonisation with Quality

Diversity and differentiation are by themselves positive hallmarks of higher education institutions. Down through the ages, these institutions were noted for their uniqueness induced by institutional autonomy. Since such institutions could define their terms for teaching and research, they were able to metamorphose to achieve peculiarities in curriculum, orientation of research and governance. However, the forces of globalisation have steered some aspects of these age-old university traditions to cohere along congruent lines in institutions with similar missions. Harmonisation which does not mean uniformity, is fostering collaboration and partnerships among higher education institutions. Mobility of staff and students is encouraged. Research collaboration in the pursuit of solutions to global problems is fostered. The uniqueness of the core values of individual higher education institution is, however, not offset by the quest to harmonise.

There are at least eight major efforts at harmonising higher education in Africa with an eye on maintaining quality standards. These are (a) implementation of the Arusha Convention; (b) introduction of the African Credit Transfer System; (c) articulation of the African Quality Rating Mechanism; (d) creation of regional centres of excellence; (e) the establishment of the African Higher Education and Research Space (AHERS); (f) establishment of the Pan African University; (g) LMD reforms in francophone

countries; and (h) the establishment of the Africa Regional Qualification Framework. These efforts are propelled by two drivers: the need to promote quality higher education in Africa and to foster African unity.

Implementing the Arusha (now Addis Ababa) Convention: Meeting in Arusha on December 5, 1981, African countries signalled intention to foster harmony in the variegated higher education systems through mutual recognition of diplomas and certificates. The decision to enter into the accord came at a time when traffic of students and teachers to institutions in Asia, Europe and North America was heightened and the pace of brain drain was quickening. Most graduates who were outbound for postgraduate studies cherished a higher degree in non-African countries. Even the transfer of undergraduate candidature from countries within and outside similar linguistic zones in Africa took long to process and finalise. A regime of freer intra-regional movement of students and staff was targeted with the initiative of the Arusha Convention which was updated in 2012 as the Addis Ababa Convention.

The Convention makes provision for general guidelines to facilitate the implementation of regional co-operation in the area of recognition of studies and degrees through national, bilateral, sub-regional and regional mechanisms already in place or created for this purpose. Specifically, the Convention aims at:

- strengthening and promoting inter-regional and international co-operation in the field of recognition of studies, certificates, diplomas, degrees or other academic qualifications;
- defining and putting in place effective quality assurance and accreditation mechanisms at the national and regional level;
- encouraging and promoting the widest and most effective possible use of human resources available in Africa and of the diaspora in order to speed up the development of their respective countries and to limit African brain-drain;
- facilitating the exchange and greater mobility of students, teachers and researchers of the region and the diaspora, by the recognition of studies, diplomas, degrees or qualifications delivered by another Contracting State in order to follow or continue higher education studies;
- furthering the setting up of high level joint training and research programmes between higher education institutions and supporting the award of joint degrees;
- improving and reinforcing the collection and exchange of information for the purpose of implementing this Convention; and
- contributing to the harmonisation of diplomas, taking into account the current global trend aiming at generalising the Licence Master's Doctorate (LMD) system.

The mechanism for implementing the convention is at three levels - national level by national bodies; sub-regional level by sub-regional and bilateral organisations; and regional level by the regional committee in charge of the application of the convention. Any national of a contracting State having obtained, on the territory of a non-contracting State, certificates, diplomas, degrees or other qualifications similar with those defined above, can prevail herself/himself of these provisions, provided that her/his certificates, diplomas, degrees or other qualifications have been recognised in her/his country of origin and the country in which s/he wishes to continue her/his studies, without prejudice to the provisions of this Convention. The development of an online database for exchange of information accreditation, quality assurance and recognition of studies and degrees is being planned to facilitate the implementation of the convention.

Currently, there are 21 contracting States and the Holy See. At least 19 countries which have not ratified the convention are playing a major role in its implementation through sub-regional bodies in charge of recognition like the African and Malagasy Council for Higher education (CAMES), the SADC (Southern Africa Development Community) Technical Committee on Accreditation and Certification and the Inter-University Council for East Africa.

Introduction of the African Credit Transfer System: One of the pillars of student mobility is the credit transfer system. The

currency of exchange is the credit (units assigned to a course) which is aspired towards or earned from a particular institution. Binding the endeavours together is mutual recognition of courses by partnering institutions and standardisation of credits assigned to courses.

Credit transfer is at several levels. It can be from one department to another in the same institution or from one institution to another in the same country. Yet another level is from one institution in a country to an institution in a different country. The African experience so far shows a hindering of credit transfer within country and even across countries in the region. Beyond the bureaucracy installed by institutions on credit transfer, lack of harmony in what constitutes a credit and the additive mechanism has emerged another factor impeding progress. The importance of student mobility across departmental, institutional and national boundaries in search of knowledge and skills in a knowledge economy has spurred African countries to endorse the establishment of the African Credit Transfer System. Initial thoughts were given to the scheme at the 1997 Africa Regional Conference preparatory to the 1998 UNESCO World Conference on Higher Education with approval by several meetings of African Ministers of Education in Abuja (2001) and Dakar (2008).

Managers of African higher education systems especially Vice-Chancellors and Rectors are not in doubt about the practicability of the Africa Credit Transfer System. This confidence was expressed at the 2015 AAU Conference of Rectors, Vice-Chancellors and Principals (COREVIP) held in Kigali, Rwanda. If it works in Europe, there is no reason why it should not work in Africa is the typical perspective. At the sub-regional level, practical application is given to the system by University of Ilorin (Nigeria) and University of Cape Coast (Ghana). Since 2009, the two universities have had students take and transfer credits from one institution to another. Over 200 students have so far benefited from this cross-national credit transfer scheme.

LMD Reform in Francophone Countries: The LMD system was adopted by the UEMOA member countries in July 2007 through Decision No. 03/2007/CM/UEMOA. It was to achieve the following: (a) improve the efficiency and performance of institutions of higher education (b) promote a sub-regional system open to the world, able to develop joint mechanisms for promoting quality and (c) ensure international recognition of degrees issued by the institutions of higher education in the UEMOA member countries.

The UEMOA countries have made several commitments in order to facilitate the implementation of this reform. These include (a) the establishment of national mechanisms for assessing the quality of academic programmes; (b) establishment of a regional mechanism for monitoring, coordination and sharing of best practices on the LMD reform, and (c) promulgation before December 31, 2009 of the legislation required for the

implementation of the UEMOA decision on the LMD reform. UEMOA Commission is committed to support the process of transition to the LMD system and the establishment of quality assurance mechanism through the project on "Support to Higher Education" jointly funded through a grant provided by the African Development Fund and a financial contribution from UEMOA.

Implementation of the reform occurs at three levels: subregional, national and institutional. The African and Malagasy Council of Higher Education (CAMES) is responsible for regional coordination of the LMD reform process and issues relating to accreditation and quality assurance. Two strategies were adopted to facilitate reform at sub-regional level (a) establishment of monitoring mechanisms and (b) organization of sensitisation workshops on the reform. In the UEMOA member countries, monitoring of the reform is carried out through the project on "Support to Higher Education". The REESAO (Network for Excellence in Higher Education in West Africa) also participates in the implementation of the LMD reform, in particular through the organization of information workshops on various issues relating to the LMD reform.

At the national level, the reform mainly involves ministries responsible for higher education and their partners. Several countries have already enacted the necessary legal texts governing the reform and set up national commissions for steering and/or monitoring of the reform. At the institutional

level, some institutions have already adopted legal frameworks, established technical units responsible for monitoring the reform and organized awareness raising workshops. A forum on the current state of the LMD reform in the CAMES member countries held in Dakar in April 2009 was used to assess progress made in the implementation of the reform and to identify challenges that need to be taken up. Indeed, the forum identified several challenges that can be grouped into four categories related to the quality of teaching and learning, the pedagogic capacity of teachers, the level of research development and management of the credit systems.

African Quality Rating Mechanism: Higher education has been identified as a major area of focus in the African Union (AU) Plan of Action for the Second Decade of Education for Africa (2006-2015). Within the framework of this Plan of Action, the African Quality Rating Mechanism (AQRM) was instituted to ensure that the performance of higher education institutions can be compared against a set of criteria that takes into account the unique context and challenges of higher education delivery on the continent (Oyewole, 2011). AQRM is also envisioned to facilitate improvement in quality of delivery of institutions across the continent, and allow for an objective measure of performance. A continental system will pave the way for African institutions to compete more effectively in similar systems in operation at a global level, while also creating a case for review of the basis on which those global systems operate. The purpose of the African Higher Education Quality Rating Mechanism is to present an alternative

to the existing global ranking/rating systems that do not take into consideration African specificities. It specifically addresses the AU priorities (as outlined in the Plan of Action for the Second Decade of Education) regarding the improvement of quality in African higher education.

The existence of a quality rating mechanism, specifically relevant to the African higher education context, will support the AUC in its endeavours to identify centres of excellence across the continent. It will also provide a means for the AUC to make decisions regarding which institutions or programmes can participate in the Mwalimu Nyerere African Union Scholarship Scheme. A pilot run of AQRM was implemented in 2010 on eleven clusters of standards.

Regional Quality Assurance Framework: Another strategy for fostering harmony within the diverse African higher education system is the establishment of a regional quality assurance framework. The assumption undergirding the award of degrees and diplomas is that the quality of certificate will not be too significantly different from one institution to the other. For example, knowledge and skills of the holder of a bachelor's degree in chemistry from University of Cape Town should not be different from that of a person holding an equivalent degree from University of Cocody in Cote d'Ivoire. There is another layer of assumption - the minimum standards for earning the degree are similar in the two institutions. In Africa, both assumptions are largely not met. Harmonisation of standards for the award of

degrees has been work in progress. However, the establishment of a regional quality assurance framework for achieving this goal has received endorsement of African Ministers of Education at the November 2008 meeting in Dakar.

The African quality assurance framework is being designed to have three key elements (Okebukola & Shabani, 2011). These are the benchmark/minimum standards, regional accreditation mechanism and the strengthening of institutional quality assurance. The basis of measurement in the quality assurance process is the degree of deviation from a set of minimum standards. This, therefore, implies that consensus should be reached on what the minimum standards should be for every academic programme and for the operations of the entire institution. Consensus is built by relevant professional bodies and experts in various disciplines. The resultant of this consensus is the regional minimum standards and benchmarks.

Most African countries have minimum standards for the higher education system below which a programme is not deemed eligible to graduate students. Sub-regional benchmarks have been set for francophone West African countries being supervised by the African and Malagasy Council of Higher Education (CAMES). It is also noteworthy that individual country efforts at setting minimum standards and benchmarks are strong in the region. Ghana, Nigeria and South Africa have well-acclaimed minimum academic standards for their higher

education systems. Weaving together of the national and subregional efforts is the thrust of the establishment of the regional minimum standards. This activity is expected to be undertaken by relevant experts and professional bodies. The standards and benchmarks are to serve as minimum and will in no way constrain individual institutions from expanding the horizon of learning experiences they provide their students or the richness of activities in the institution. With the minimum standards in place, the stage is now set for implementing the regional quality assurance mechanism.

The regional quality assurance mechanism is the assessment of programmes and institutions against set standards and benchmarks by a regional body with a mandate to undertake such task. A network of national and sub-regional quality assurance agencies is being proposed as the foundation structure for this regional body. Already, AfriQAN has been put in place as precursor.

- All countries without national quality assurance mechanisms or agencies should put these in place without delay.
- Strengthen institutional and human capacity for quality assurance at the national, sub-regional and regional levels.
- Strengthen the external examiner system and encourage regional and sub-regional peer reviews.

Creating Regional Centres of Excellence: In view of the limited capacity in science and technology in individual African countries, a concrete way of collaboration among African states is through the creation of Regional Centres of Excellence. There already exist several such centres. The International Centre for Insect Physiology and Ecology (ICIPE) was set up in Kenya way back in 1970 and is now a world reference in its field of specialisation. More recently, the International Institute for Water and Environmental Engineering (2IE), which has strong links with industry, was created in 2005 in Burkina Faso to carry out advanced training and research in areas that are directly relevant to Africa. The African Institute for Mathematical Sciences (AIMS) was established in South Africa in 2003 as a partnership of six international universities (Cambridge, Cape Town, Oxford, Paris Sud XI, Stellenbosch and Western Cape) to promote excellence in mathematics and sciences in Africa. Through its Next Einstein Initiative (NEI), AIMS plans to create 15 AIMS Centres across Africa over the next decade.

A different concept in creating Regional Centres of Excellence is to network existing institutions. For example, the Carnegie Corporation of New York is promoting high quality graduate training in Africa through a programme known as the Regional Initiative for Science and Education (RISE), which was launched in 2007 and which makes use of African universities of proven excellence in specific disciplines as training nodes in a network. The World Bank through AAU instituted the ACE project in 2014,

phase 1 of which is running well in West Africa. Phase 2 is expected to kick off soon in eastern Africa.

The Pan African University: In the Plan of Action for the Second Decade of Education for Africa, African Ministers of Education reiterated the need to promote quality in African institutions of higher education and research and to strengthen intra-African collaboration and networking between African Higher Education institutions. One of the African Union Commission's (AUC) responses to this felt need has been to set up the Pan African University (PAU). PAU is designed to meet the need for African higher education through capitalising on the experience and intellectual resources of the best African universities and research centres and using them to create regional knowledge 'hubs'. The Pan African University aims to fulfil the following objectives:

- 1. promote science and technology in Africa and strengthen quality in African institutions of higher education and research;
- 2. speed up the exchange of results and data through African and international networks, including linkages between African academia and industry;
- 3. increase systematic intra-African mobility of researchers and students;
- 4. provide exemplars for enhancing attractiveness and global competitiveness of African higher education space;

- 5. produce an adequate supply of highly qualified Africans able to innovate in order to address the challenges facing the development of the African continent; and
- 6. improve the retention of skilled African professional human resources.

Five key thematic areas corresponding to the pressing needs of Africa have been identified and these are: space sciences; water and energy including climate change; basic science, technology and innovation; earth and life sciences; and governance, humanities and social sciences.

Five hubs, one in each of the five African regions and each specialising in a different field, have been identified, and each hub will network with other institutions in its respective field, thus creating a network of networks. The hubs and fields already identified are Nigeria in earth and life sciences, Cameroon in social and human sciences and governance, and Kenya in basic sciences technology and innovation. The host for a hub in water and energy sciences in North Africa is Algeria while space sciences is based in South Africa. This is a bold and innovative approach and it would certainly help in reinforcing the teaching and research capacity of existing institutions in fields that are very pertinent to Africa's development (Mohamedbhai, 2012).

Trends in quality in higher education across Africa

Trends in student quality: In most African countries, there are encouraging developments to ensure improved quality of candidates admitted to the higher education system. A more rigorous entrance examination system is commonplace. In Botswana, Kenya, Liberia, Nigeria, Tanzania and Uganda only the cream from the secondary school makes it to the university. The regional average shows that one in 15 of secondary school leavers find a place in the higher education system.

In Liberia, the National Commission for Higher Education, created by the office of the National Legislature in 1989 has been taking steps at quality assuring student input into the Liberian higher education system. Standardisation of curricula of freshmen and sophomore started in 2011 to improve quality of students. One of the key goals of the initiative was to ensure that students have basic and broad knowledge for "life's foundation and for career development and advancement" and to ensure uniformity of quality in disciplinary course faculty and smooth matriculation of students between baccalaureate degree-granting institutions. This effort has translated to students improving on their communication, conceptualisation, analytical and critical thinking skills. They also have the opportunities to fulfil core liberal arts courses that are appropriate for general education and foundation. It is also enabling Liberian graduates to compete favourably on international tests (Slawon, 2012).

There is a growing trend especially in **Francophone countries** to admit beyond the carrying capacity of the higher education system. The resultant is gross over-enrolment leading to overcrowded classes and hostels and deteriorated infrastructure. With higher student/teacher ratios, quality of instruction is equally compromised. Efforts by institutional authorities to improve quality standards by matching enrolment with available resources have been stalled by political directives from Ministries of Higher Education to continue with the uncontrolled growth which in turn is spurred by pressure to please the electorate and win more votes. Recent developments impelled by the action of CAMES present an outlook for the reversal of this trend. CAMES, for instance, is compelling institutions subscribing to its quality assurance guidelines to trim student enrolment to match available resources. How far this new direction will go in the face of political influence which has not waned is far from certain.

In **Nigeria**, two processes are in place to double check quality of entrants into the university system. Apart from the Unified Tertiary Matriculation Examination (UTME) which aspiring candidates for higher education need to take, high scorers are further subjected by the universities to a second-level filter known as the post-UTME. The overall goal is to get the best from the secondary system. Sadly, the output from the secondary system keeps dropping in quality and hence failing to be quality

feedstock for the higher education level in spite of the layers of filter.

In **Tanzania**, the growing number of higher education institutions and the subsequent expansion of student enrolment created a number of challenges including multiple students' admission; use of forged certificates during application for admission; multiple loan allocation and disbursements. Other negative impacts are the delayed commencement of academic year due to admission irregularities; and inability for some universities to meet their admission capacity. To increase efficiency and effectiveness of the admission of students into higher education institutions, the Tanzania Commission for Universities (TCU) established on 1st July, 2005 developed an electronic Central Admission System (CAS) to streamline the admission of students into higher education institutions. CAS was used for the first time during the 2010/2011 academic year. In 2012, the system was improved to become more interactive and to eliminate multiple students' admission and use of forged certificates during the application for admission. It also allowed only those who meet the minimum entry requirements to proceed with the admission process. The system has also been designed to track selected applicants through registration in their institutions, their performance and progression in subsequent years until graduation. It has scaled up the quality of input into higher education and eliminated multiple loan allocation and disbursements.

The Tanzanian CAS system is unique since it is able to process the admission of applicants from both the school and TVET systems. It has addressed all the challenges related to forgery of certificates, examination results for each applicant are directly obtained from the National Examinations Council of Tanzania (NECTA) and the National Council for Technical Education (NACTE) databases using applicant's index number. CAS has made it possible to determine the actual admission capacity of each institution. This has resulted in an increase in number of admitted applicants more than ever before. Multiple admissions have become a matter of history as the system allocates the applicant to only one programme out of the many programmes applied for. CAS has generated important data and reports to be used by researchers, policy makers and decision makers.

Trends in staff quality assurance: In the last ten years in many African countries, staff appointment and promotion processes have hardly improved in a way that will guarantee good quality teachers. The increase in the number of universities especially by private and cross-border providers has continued to depress the appointment and promotion standards to be able to meet prescribed minimum standards for staff mix by national accreditation agencies. More worrisome is the appointment into professorial positions of persons with academic credentials much lower than what obtained between 1970 and 1980. A crop of professors had started to emerge within the last ten years that would hardly merit a lecturer grade 1 position in any of the first

generation African universities in the 1960s and 1970s. The claim to research and publications by these "professors" is found in "roadside" journals and self-published, poorly-edited, largely-plagiarised books.

National quality assurance agencies have been taking steps to ensure better quality staff through the raising of minimum standards for teaching and non-teaching staff. In Nigeria, for example, the minimum qualification for appointment or promotion to a senior lectureship position was set in 2005 as a PhD. In the Nigerian university system with about 37,000 teachers and 4,102 full professors, no serving teacher of the rank of senior lecturer and above has no doctorate degree or its equivalent as a professional qualification.

Professional bodies especially in accounting, engineering, law and medicine have also installed rigour in their quality assurance practices over the last ten years. Minimum standards for enrolment of members and attainment of fellowship status have been raised. It is doubtful if these standards are enforced in view of numerous reported cases of poor quality professionals.

Trends in quality of external examiner system: In the early days of the African university system (1960-70), the external examiner was typically a top-rate scholar from a highly-reputable university outside the country. Many were from European and North American universities who were the household names in their

disciplines. They vetted examination questions, moderated marked scripts and sat in judgement over the defence of projects, dissertations and theses. They applied the strict and stringent conditions for curriculum delivery and evaluation that prevailed in their institutions. This translated into adoption of the same culture of quality by the African university of the top-rate university where the external examiner came from. In contrast, the external examiner in contemporary times, is not cut in the same mould. Many are friends of the head of department who are invited not to rock the boat but paper over quality cracks in the curriculum delivery and evaluation processes (Okebukola, 2013). The good external examiner who stands the chance of being invited again (and make some little money on the side), is one who makes positive recommendations on a poor quality process. The "wicked" examiner who will hardly be invited a second time is one who applies the quality rule book and penalises as appropriate. With the ever-growing number of professors appointed or promoted on doubtful research and publication output, the ranks of the mediocre external examiner, if not checked, may swell in the coming years and lead to severe compromise of quality.

Trends in quality of the accreditation process: Accreditation as a process is a relatively recent phenomenon in the African higher education system. This is perhaps a consequence of its recency in the global higher education space. In less than 20 years of its implementation, the process has been adjudged to be of fairly

respectable quality in Africa (Okebukola, 2013; Ramon-Yusuf, 2013). The accreditation process has continued to undergo refinement in the quest to improve based on lessons learned from one year to the next. In many countries such as Egypt, Nigeria and South Africa, programme accreditation is enriched with institutional accreditation. We shall consider some country case studies in this section. In the next chapter, fuller details will be given in respect of the six study sites.

In **Burundi**, the regulatory agency - the National Commission for Higher Education is about three years old and is fast setting up structures for quality assurance including the development of guidelines for accreditation. The accreditation process takes a year and an institution has to go through all the steps in the preparation and implementation phases. The establishment of the EQA gave credibility to higher education in Burundi and has led to the establishment of more better-regulated institutions.

The **Democratic Republic of Congo** (DRC) is a post-conflict country on its way to recovery. For over three decades, DRC's higher education system had an uncontrolled and unbalanced quantitative growth accompanied by quality deterioration. Uncontrolled establishment of public and private institutions of higher education and universities led to decline in graduate quality. Graduates' poor professional performance as noted by public and private employers had raised questions on the relevance of the whole Congolese education system. The number of higher education institutions increased from three during

1954-1960 to 37 in the period 1981-1990 and more than 1300 public and private higher education institutions in 2012.

In order to keep up with international standards and make the education system competitive, organisational audits and surveys of public and private higher education institutions were permanently initiated in 2009 for purposes of updating the database of each institution; setting standards for adequate quality training in educational structures at all levels; cleaning up the system of non-viable institutions; and setting up performance structures at central and decentralised levels to effectively contribute to the implementation of the new vision of the overhauled higher education and university system. The audits are conducted by a multi-sectorial and multi-disciplinary investigation team according to set criteria including infrastructure, educational materials and human resources. As a result, a database of viable public and private sector institutions and universities would be established.

Three quarters of the universities and colleges of higher education in DRC have set up a quality assurance unit in charge of designing the institution's strategic plan, assessing the institution's strengths, weaknesses, opportunities and challenges, and suggesting appropriate remedial action where necessary.

In **Ghana**, the National Accreditation Board has been active in prosecuting its accreditation mandate. Beyond periodic accreditation visits, the Board is placing emphasis on ensuring

that institutions maintain quality at all times. The process is different from normal accreditation as it is limited in scope and does not target the operation of the entire institution; it requires short notification; limited preparation, if any; and it is random in the selection of programmes or aspects of the institution to evaluate. The process targets both public and private universities and checks among other things the quality of academic staff, relevance of courses, adherence to entry requirements and grading systems. The uniqueness of the process is its short notice where the Board is able to see institutions "as is" leaving little chance for window dressing. There were concerns that the short notice may compromise the quality of information gathered since information in a university is domiciled in many areas such that the verdict arrived at may not be objective. This argument is faulted since the audit targets specific functions of interest in the institution and, therefore, the auditors are able to dig deeper and get concise information.

The Higher Education Relevance and Quality agency of **Ethiopia** employs an expansive stakeholder participation in assessment of the status of quality assurance in private higher education institutions. Stakeholders are involved at all stages of assessing quality including the development of assessment criteria. The initiative has had positive outcomes including the establishment of quality status of all universities and increasing the credibility of Ethiopian higher education; establishment of a ranking criteria; and closure of institutions that were not meeting standards.

Once all the stakeholders bought into the idea of quality then it becomes easy for the regulatory agency to assure the same.

In **Lesotho**, the mandate for quality assurance and accreditation is held by the Council on Higher Education (CHE). CHE accredits programmes offered by public and private institutions; registers private institutions in consultation with the Ministry of Education and Training; audits private and public institutions; and, monitors and evaluates the performance of private and public institutions.

In Mauritius all higher education training institutions are expected to be registered by the Mauritius Qualification Authority. The highlights of the process include the submission of a project proposal, accreditation, and then grant of awarding powers. The authority registers both private and public institutions intending to offer higher education in Mauritius. The authority also registers foreign universities wishing to set up campuses in the country. Education is first viewed as a business and therefore universities have also to acquire business licenses. Registration involves both programme and institutional accreditation as well as post accreditation quality audits. The process has led to the establishment of campuses in Mauritius by 49 foreign institutions. However, the process faces challenges due to the increased number of institutes. The Tertiary Education Council (TEC) is empowered by law to quality assure all higher institutions in Mauritius through programme education accreditation and institutional audits.

In **Namibia**, the National Council for Higher Education (NCHE) has been conducting tracer studies of graduates from higher education institutions in the country. These studies have revealed gaps in the quality of student input and processing that needed to be bridged. Steps are being taken by the institutions to bridge the gaps.

In Uganda, the Universities and Other Tertiary Institutions (Amendment) Act, 2006 empowers the National Council for Higher Education (NCHE) to accredit over 1000 programmes (and/or) courses as at June 2014, in all the 30 private universities and five government-owned (public) universities. NCHE has developed minimum standards for the courses and made these available publicly. In 2006, NCHE announced that all academic programmes needed the approval of Council. Older Universities were at first hesitant to adhere to the requirement but had no choice on account of the legal backing of the order. On the other hand, NCHE did not have adequate personnel to implement the law immediately. However, since 2006, NCHE has recruited many qualified persons to assist in the implementation of the very important mandate. This accreditation of academic programmes has been particularly timely for the new universities – both public and private.

In the quality assurance process, the academic content of each programme is scrutinised on the philosophy and objectives;

curriculum content: admission requirements into the programme; academic regulations; course evaluation; standard of students' practical/project work; and the external examination system. On staffing, the main concerns are administration of the faculty/department; academic staff - number of staff, student staff ratio, staff mix by ranks, and the competence and qualifications of teaching staff; non-teaching staff; and staff Physical facilities development programme. including laboratories/studio/clinics/farm and equipment; classrooms equipment and facilities; office accommodation; and safety of the environment are considered. Also considered are library facilities where seating capacity, journals and ICT installations are evaluated.

Challenges to quality in higher education

As alluded to earlier, the findings of several studies have converged documenting funding, human capacity deficit, poor policy implementation environment, weakness in institutional governance and enrolment pressure as major challenges to quality assurance in higher education in Africa (see for example Materu, 2011; Mohammedbai, 2011; Okojie, 2011; Oyewole, 2011; Ramon-Yusuf, 2012; Okebukola, 2013; Shabani, 2013). Reports from national quality assurance agencies support the findings of these studies. Many of these reports were presented at the series of UNESCO-led International Conference for Quality

Assurance in Higher Education in Africa (ICQAHEA), the seventh of which will hold in September 2015 in Abuja.

The challenge of funding recurs in all national reports on quality assurance in higher education in Africa. Partitioned into two, this challenge applies to higher education institutions as well as to national quality assurance agencies where these exist. Higher education institutions feel severely limited to deliver quality and assure same in the face of funding shortage. Funds required for provision and maintenance of facilities, funds for payment of attractive staff salaries that can reverse brain drain and funds for the modernisation of the delivery system are said to be in short supply. Public providers are short-changed in the volume of government grant and the quantum of fees paid by students. Private providers are inhibited by the level of fees charged to attract good number of students and remain financially able to deliver quality education. Varghese (2012) reports that in Ghana, Mozambique, Namibia, Nigeria, Tanzania and Uganda, private universities live in a delicate world of establishing a balance among fees to be charged, the number of students who can afford such fees and the achievement of minimum standards for university education especially the provision of adequate facilities and payment of staff salaries. The inadequate capacity of managers of public and private institutions to be creative in internally generating funds through endowments, consultancy services and alumni contributions has exacerbated the challenge of funding.

The national quality assurance agencies are equally underserved with funds to effectively discharge their mandate of instilling a culture of quality in the system. Only a few, for example, the Namibia Commission for Higher Education and the Tertiary Education Commission of Mauritius, are not hard hit with limitations of funds. Most, for example, the national quality agencies in Botswana, Ghana, Kenya, Liberia, Lesotho, Nigeria, Uganda and Tanzania have to grapple with the funding gap between what is needed to run and an effective and efficient agency and what comes in as revenue from governmental and other sources.

Human capacity deficit is another challenge. This deficit relates to knowledge and skills in quality assurance of personnel in the institutions and quality assurance agencies. On account of its relative newness, only a few have training and skills in quality assurance as a concept and disciplinary orientation. Over 80% of persons working in higher education institutions and the national quality assurance agencies have not received formal training in quality assurance. Many are learning on the job. This capacity deficit impacts negatively on how the institutions and the agencies conduct their quality assurance operations. Gladly, the situation is fast fading as training on quality assurance as part of in-service is gaining momentum.

Policies on quality assurance at the institutional and national levels are fairly adequate to address the demand for quality

higher education in Africa. However, there is the challenge of inclement socio-political environment for the implementation of such good policies. Pressure of parents for admission of their children to already overstretched universities, interference by political actors in the day-to-day running of the institutions and disruption to academic calendar by strikes called by student and staff unions are examples of inclement socio-political environment. As long as institutional autonomy is not fully guaranteed, the challenge of political interference will persist.

Weakness in institutional governance is another challenge. Contributing to this weakness is inadequacies in the appointment system of Vice-Chancellors and Rectors who are heads of the institutions. Where, as you find in most of the countries such as Ghana, Ethiopia and Nigeria, the Vice-Chancellor is appointed through a politically-steamrolled process, such appointee will be shackled by the desires of those who have played a part in his or appointment rather than be guided strictly by the vision and mission of the institution. Another contributory factor is the lack of full deployment of the committee system in governance. On paper, all institutions are to be run through a layer of committees. In practice, these committees are largely hijacked by a few powerful persons in the university with the connivance of the Vice-Chancellor or Rector.

Doing What is Right

As can be seen from the foregoing, there are several gaps that Africa needs to bridge in the quest to make higher education the pathway for catalysing development especially to elevate it to a global commanding height. Three weeks ago in Kigali, at the June 2-5 Conference of Rectors, Vice-Chancellors and Presidents of African Universities (COREVIP), I surveyed participants on these gaps and sought their views on steps that can be taken at the institutional, national and regional levels to close the gaps. The areas needing remediation in the views of the 56 VCs surveyed from all sub-regions of Africa are summarised and ranked in table 2.

Table 2: Top 10 challenges facing higher education in Africa

Rank	Challenges
1	Depreciating quality of higher education teachers
2	Inadequacies in facilities for quality teaching and research
3	Poor attitude of students to work
4	Curriculum inadequacies to impart 21 st century skills
5	Research capacity deficit
6	Poorly-prepared students from the secondary level
7	Slow adoption of ICT for delivering quality higher education
8	Management inefficiencies

- **9** Inadequacies in funding
- **10.** Safety of lives and property

Tackling the challenges of depreciating quality of university teachers

Reports have documented a gradual reduction in the ranks of good quality university teachers in African universities (Materu, 2007; Okebukola, 2014; Shabani, 2014). While there are spurts of exemplary practices, there is a growing number of teachers who lack depth in content and pedagogic skills to deliver quality education. This growing number is largely a consequence of the depressed quality triggered from the basic education system which has found its way up and now being harvested at the terminal end of the education pyramid as poor quality university graduates. Since the pool from which university teachers are drawn is the stock of unimpressive graduates, we are stuck in therut of producing new generation of university teachers who are not as skilled as we had in the early days running up to the 1970s.

The phenomenon of relatively less-endowed university teachers is aggravated by an ageing professoriate. The "old brigades" are kept in service by the lengthening of the retirement age to 70 years as in the case of Nigeria and by re-engagement on contract in most universities in Africa if retirement age is 60 or 65 years and the professor is still in good physical and intellectual health.

Incidentally, many of these older professors are unable, oftentimes resistant to adapt their old ways of delivery to respond to the use of new technologies for teaching and research, further compounding the problem for the system.

In an Africa-wide survey of 306 students conducted between May 15 and June 10, 2015, the "typical" university teacher was described as not up-to-date with content; hardly able to use technology; satisfied with reading old notes for students to copy during lectures (labelled "yellow-pages" lecturers on account of the colour of the old, brown notes they read to students); hardly punctual in class; shabbily dressed and looking unkempt; short tempered in class as if forced to take the job; and happy when the university is on strike so he/she can pursue other things.

In a follow-up study, students and teachers from 23 African countries listed the following attributes as what they expect from good teachers in African universities to adjudge them successful:

- 1. Has deep understanding of the content he/she is teaching
- 2. Is warm, accessible, enthusiastic and caring
- 3. Minimises the distance between the student and the teacher
- 4. Uses a variety of media in delivering the curriculum
- 5. Excellent communicator
- 6. Owns up to what he/she does not understand
- 7. Dresses well

- 8. Gives frequent feedback to students on assignment
- 9. Gives students room to innovate
- 10. Challenges students with projects
- 11. Thinks outside the box with his/her students
- 12. Cares for students beyond academics
- 13. Has passion for teaching
- 14. Covers the syllabus
- 15. Punctual in class, organised and makes efficient use of time
- 16. Does not insult students, encourages their participation
- 17. Uses the background and profile of the students to illustrate concepts
- 18. Encourages interactivity through group work
- 19. Is humorous knows how to take the tension out of tight situations
- 20. Appreciates and caters for diversity including the physically challenged.

The video version of the report of the study can be found at https://youtu.be/Rsbv2NrBNkw.

What should we do right with regard to arresting the depreciating quality of university teachers in Africa? There are several strategies for tackling the challenge. These include refinement in the appointment process, in-service capacity building and rewarding successful practices.

Refinement of the appointment process: The typical process for appointing a teacher (lecturer) in a university is (a) placement of an advertisement, (b) shortlisting of candidates who apply, (c) interview and (d) appointment by Council of candidate(s) who scale the threshold set for appointment. In itself, this is a global best practice. In many African universities, the problem arises in the implementation of the process especially the advertisement and interview stages. In order to get the best candidates, the advertisement needs to be broadcast further afield, internal and external. In cases where this is done, the university management may have some internal persons in mind and skew the advertisement in favour of such persons. It is important to let the advertisement net attract as many eligible candidates as possible and not operationally closed against candidates who are not the favourites of the proprietor or management. This way, you are expanding the choice of the best candidate being selected.

Moving now to the interview process, the narrowness of the scope of the interview exercise limits the chances of selecting a good university teacher. Since the attributes of choice include knowledge of content and ability to use technology for instructional delivery as well as oral and written communication skills, these should be tested during the interview exercise. A short ICT test, a one-page essay and a short demonstration lecture should be part of the traditional oral interview with a view to comprehensively assess the candidate's abilities as a teacher in a modern-day university classroom. If the goal is to

populate the university with teachers who will communicate fluently without breaking rules of grammar in their oral and written expressions; who are up-to-date in the content of their disciplines; who can effectively use technology to deliver instruction to the new generation of students who are hooked to technology in their daily lives, then we have to reformat the process of interviewing teachers for appointment in African universities.

Another aspect of appointment we should get right is that of appointment/promotion to the rank of professor. The process is becoming increasingly slack and devoid of the rigour of the past. In the 1960s up through to the 1990s, the professor in most African universities have international acclaim. Today, recognition of the scholarship of the professor is largely within the confines of his/her country. No thanks to the sprouting of online journals of doubtful quality where such little-known professors publish and sadly, recognised by their university. The politicisation of the appointment of professors in universities further weakens the standing and global acceptability of such professors. We should do what is right by benchmarking the process of appointment of professors in African universities against international standards and subject candidates to the post to international peer review.

In-service capacity building in pedagogical skills: Except for those in the faculty of education and the medical school, most

university teachers would not have had formal exposure to pedagogical skills as part of their training. Such skills are important to strengthen their knowledge and practice as university teachers. It can be conjectured that if all university teachers in Africa were provided in-service pedagogic training, the blight of poor quality teaching will be significantly erased.

An example of the success story of the Virtual Institute for Higher Education Pedagogy (VIHEP) is worth citing. By 2005, VIHEP had scaled up to the Virtual Institute for Higher Education in Africa (VIHEAF). Learning from these two success stories, we can operationalise the in-service capacity building on pedagogic training by implementing the scheme in Table 2.

Table 3: Scheme for Pedagogic Training of University Teachers in Africa

S/No.	Activity
1.	Conduct needs assessment of pedagogic training needs of university teachers in Africa
2.	Develop/adapt modules from VIHEAF and UNESCO Guide to the Teaching and Learning in Higher Education in Africa
3.	Set up online training platform
4.	Implement online training in four languages - English, French, Portuguese and Arabic
5.	Quarterly monitor and report on progress
6.	Annual review and improvement in the content and delivery of the online system

In addition to the regional online facility, each university in Africa should be encouraged to set up a Centre for University Teaching if one does not already exist for onsite training of all teaching staff in pedagogic skills.

Tackling the challenge of inadequate facilities for teaching and research

Inadequate facilities remain a predominant feature of many universities in Africa. Classroom, office, laboratory, workshop and hostel facilities as well as infrastructure such as roads, electricity and water are largely deficient. Only in a few universities do we have modern buildings dotting the landscape. Getting it right with regard to facilities for teaching, learning and research will require at least five steps. The first is to conduct a gap analysis of the physical facilities needs of African universities relative to what is required to deliver quality university education. This will define the scale and scope of the decay. Second, is to develop a plan for phased intervention to remedy the decay. Third, is to muster resources and political will to implement the plan. Fourth, is to implement and monitor the plan. The fifth step is to install a sustainable maintenance culture to ensure that the decay in facilities and infrastructure does not again set in. It is a delight to note that a number of African countries notably Botswana, Kenya and South Africa are on course to systematically improve the facilities in their universities.

Doing what is right regarding poor attitude of students to work:

It is often reported (Okebukola, 2011, 2014; Shabani, 2014) that the ranks of university students who have poor attitude to school work is swelling. Students in universities in urban areas and who live off campus are guiltier. Poor attitude is reflected in absenteeism, nonchalance towards assignments, writing lecture notes on flimsy sheets tucked into the back pocket of jeans and distractions during lectures. The antidote has several elements. These include orientation of fresh students which will emphasise the value of taking studies seriously and the consequences of being slack; marking lecture attendance register; conducting unannounced tests and quizzes; and announcing names of students who are derelict in class.

Improved investment in quality higher education: Relatively to other regions studied, African countries have not made significant progress in improving funding to higher education to deliver on quality. In recent years, some countries like Ghana, Lesotho, Nigeria and Tanzania have increased their higher education budgets in absolute terms; in the case of Nigeria, about 150%. Others like Botswana, Rwanda and South Africa continue to offer attractive working conditions. However, several countries have failed to mobilise adequate financial resources to improve teaching, learning, research and staff working conditions. The worrying angle is the lack of sustainability in funding even in cases where improvements are recorded. Like a

sinusoidal wave, funding level goes up one year and is lowered the next. The prompt for an upward rise, being in most cases, strikes by staff and student unions.

The national quality assurance agencies, except Namibia and a few others are underfunded to a point of lowering their efficiency and effectiveness in quality assurance. African countries can learn lessons from China's massive injection of funds into the higher education system (in 2013, about 12% of GDP) with anticipated dividend of boosting high-level human resources for China's economic growth. African countries should learn to provide funding for the higher education delivery system including the national quality assurance agencies if the genuine desire is to propel socio-economic development in the 21st century.

Better use of ICT in quality assurance and accreditation processes: African higher education systems can learn important lessons from the use of ICT in Canada, Hong Kong, India and Singapore in the quality assurance and accreditation processes. The cost of physical meetings by quality assurance agencies with the institutions is huge. In CAMES, Ghana, IUCEA, and Nigeria, most meetings to set minimum standards, agree on modalities for accreditation and review of higher education curricula are conducted on-site with participants having to travel long distances and paying to be accommodated in hotels. This can account for a sizeable proportion of the annual budget of the

institution and the national agency. For a fraction of the cost and as practised in the referenced countries outside Africa, technology can be used to deliver more or less the same result as the onsite meeting. Virtual meetings through video-conferencing and use of email exchanges can be worked into the process so that if there is to be onsite meetings, it will be fewer in number and more productive.

Only in a few countries such as Nigeria and South Africa is the self-study form for accreditation completed online. In many others, it is the hard copy that is completed by the institution and mailed to the national agency or professional body. The tedium in the traditional way of doing things can be relieved using technology by the adoption of a web-based procedure as practised in North America.

Sharing of good practices among linguistic groups in quality assurance: Africa's linguistic diversity into Anglophone, Arabophone, Francophone and Lusophone presents a set of challenges to quality assurance. The national quality assurance agencies in Nigeria and South Africa are acclaimed to be the most-experienced in sub-Saharan Africa. Both are English-speaking. Senegal and Mali as exemplars of French-speaking countries find it challenging to fully benefit from capacity-building efforts initiated by Nigeria and South Africa. Yet, Europe with wider linguistic diversity is able to surmount the challenge through better inter-phasing, a lesson Africa should learn.

Sharing of good research practices: Africa can learn from the European Higher Education Area in sharing good research practices across borders. Herein lies the merit of the African Higher Education and Research Space (AHERS) being proposed by ADEA and AU.

The African Higher Education and Research Space (AHERS) is the vista of opportunity for members of the higher education community in Africa to seamlessly interact in the quest to fulfil their teaching, research and service functions. The emphasis on research within the "space" underlines the accent placed on the congregation of African scholars to find solutions, through research, to problems inhibiting Africa's development. AHERS is to permit unhindered collaboration among students and staff of higher education institutions in Africa regardless of linguistic and other barriers. We recommend that steps be taken to fast-track the actualisation of AHERS.

Improved rigour in the selection of leadership of higher education institutions: Improvement in quality and fostering of institutional quality culture cannot be separated from the quality of leadership of the higher education institution or national quality assurance agency. In the US and the UK, there is a high degree of scrutiny in favour of quality of persons appointed to the position of leadership of a university or equivalent such as Vice-Chancellor or Rector. Even when appointed, the system activates a mechanism for ejecting an appointee who does not

measure up to quality standards for such leadership position. Between January and May, 2014, about eight Presidents of US universities lost their job on account of failing to meet the quality mark.

Africa had a history of appointing persons of high-quality academic, professional and ethical standing into posts of Vice-Chancellor or Rector. In recent times, cases of praise-worthy appointments are becoming less common which by the logic depicted in the foregoing paragraph is having a depressing effect on the quality of higher education in the region. The lesson that should be learned is to depoliticise such appointments and eliminate ethnicity, parochialism and favouritism in the appointment process. More than ever before, Africa needs its best brains and persons endowed with excellent leadership qualities in running the affairs of the higher education system.

Support by Development Partners: The intervention of development partners in North America and Europe in supporting quality assurance efforts in higher education is minimal relative to the volume of such intervention in Africa. Africa is symbolically looked at as the "crippled baby" that needs help of the stronger siblings to rise to the challenge of development in a globalised world. The stronger siblings of today benefitted from support in the past and are now able to fend, in large part, for their quality assurance needs. This is a lesson Africa should learn in the guest to install a sustainable guality assurance system. The support of DAAD in East and West Africa for the

strengthening of the higher education quality assurance system has been positively impactful. The European Union through a joint AUC partnership, has been foremost in intervening continent-wide, leading to perceptible improvement in quality assurance practices at the national and institutional levels. The Tuning-Africa project is one of the flagship interventions as well as support for the development of a Pan-African Quality Assurance and Accreditation Framework. In all of these, Africa should realise its huge natural resource endowment which if not frittered away through corruption and bad leadership, should be a major funder of quality assurance projects in other regions of the world and not a chronic cap-in-hand beggar for "financial crumbs from the table of others". In the wise counsel of Yizengaw (2008), we need a new kind of partnership based on listening to voices, on mutual benefit and respect, sense of ownership, urgency and purpose. It should be a partnership that recognises that the diversity of Africa and specific circumstances of each country will have lasting sustainable effect and impact.

Mobilisation of African Diaspora in Quality Assurance and Accreditation: The African Diaspora is one of the world's largest, and growing. The high mobility of African higher education students to Asia, Europe and North America indexes the magnitude of the pump inducing the growth. The power of the African Diaspora in bolstering quality in higher education in Africa is yet to be fully harnessed. Participation of the Diaspora in accreditation has hardly been documented by national quality

assurance agencies. Yet, such persons can plough their overseas experiences into local practice and help with setting minimum standards that will be globally competitive, participate in curriculum development and implementation as well as with research.

Strengthening centres of excellence: Rapid elevation of quality can be achieved through centres of excellence which are beginning to evolve more respectable in the African higher education horizon. This concept has worked well in Asia, Europe and North America. Since 2013, the AAU has been leading a World Bank-funded project in support of the evolution of such centres paying particular attention to their competitive advantages, experience and expertise, to improve research capacity and share in global scientific outputs. The lesson to learn here is that in other regions, the experiment is sustainable on account of less dependence on donor funding. African governments, through the AU should guarantee sustainable funding for such centres. The Pan African University (PAU) gives hope that this can be achieved.

Improving the quality of research: Africa can learn a few lessons from Europe and North America in at least six areas- research capacity of scholars; relevance of research to solving contemporary societal problems; adequacy and currency of research facilities and infrastructure; use of research output by industry; adequate funding for research; and reward for research

excellence. On all six measures, African scholars are poorly served.

Research capacity of scholars working in higher education institutions in Africa is largely weak. We do not take away the sprinkle of bright spots. An intensive regime of capacity building through a multiplicity of ways is recommended. One of such ways is collaboration and partnership with renowned scholars within but mostly outside Africa. Mentoring is another, that is between older and successful scholars and the younger "greenhorns" as mentees. The third is North-South collaboration in capacity building and exchange of scholars.

We subscribe to the view of Mohamedbhai (2014) that African governments can take several initiatives to both improve research capacity and boost postgraduate education. In his view, "First, they should abandon the approach of creating new universities in the existing model, or upgrading technical colleges and polytechnics to universities. Tertiary education needs 'mission differentiation'. In practice, this that means governments should support some of their existing universities to become research-strong institutions running Master's and PhD programmes while also offering undergraduate courses. Most staff should have a PhD and should be freed from heavy teaching loads so they can undertake research. The other tertiary institutions should place greater emphasis on the equally important mission of teaching and learning at undergraduate level. Only then can quality research really flourish in African countries. It would be impossible, and unnecessary, for most staff in all tertiary institutions on the continent to have a PhD."

African scholars pay less than acceptable attention to research for solving Africa's contemporary problems. The focus is less on applied research, bringing the regional research ethos into doubtful relevance. We recommend the shift in institutional and national research policies in favour of applied research and the enforcement of the provisions of such policies. The African Union is supportive of this trend through Project 2063. South Africa is well on course in this direction. Other African countries are entreated to be part of this research slant.

Safety against extremist individuals and groups: Doing what is right

In universities in Nigeria and in most of Africa, there is weak attention to security of lives and property especially against violent crimes including incursion by extremist groups. In higher education institutions in the north-eastern part of Nigeria, southern Chad, southern Niger, southern Cameroun, Kenya, Tanzania and in many countries in the north of Africa, the lives of students and staff are increasingly endangered by the violent activities of extremists. Danger looms since it is predicted that such extremist tendencies may spike in the coming years and the

management of universities should do what is right through preventive and coping actions.

Safety in schools has become a subject of global concern. It is a small animal in the education menagerie with a loud roar! No country is exempt as narratives of practices and actions which harm members of the schooling community including students, teachers and administrators have rented the airwaves over the last ten years at least. The rhythm of on-campus shooting in the US is alarming. Only last week, Dylann Roof planned to kill students in Charleston University before changing his mind to attack a church. The Columbine High School shootings in 1999, the massacres at Virginia Tech in 2007, Northern Illinois University shooting in 2008, the 2012 Sandy Hook Elementary School shooting and the June 5, 2014 shooting at Seattle Pacific University, killing one student and wounding two others provide US examples of unsafe schools. On March 19, 2012, in Toulouse, 23-vear-old France. Islamist terrorist and anti-Semitic Mohammed Merah opened fire at a Jewish day school, killing three schoolchildren and a teacher. On February 3, 2014 in Moscow, Russia, high school student Sergey Gordeyev, armed with two rifles, forced his way past a security guard, took hostages, and killed his geography teacher. He then killed a police officer and wounded another who arrived at the scene. In Rio de Janeiro, Brazil, a former student (23) fatally shot 12 people inside the school.

Not least of the dark clouds enveloping school safety is the case of the over 200 girls abducted in Government Secondary School in Chibok, Nigeria on the night of 14-15 April, 2014. In Kenya in April this year, about 147 undergraduate students of Garissa University were killed in an attack by militants. South Africa ranked last in school safety compared with 38 other countries in 2007 and recently (May 24, 2014) Naizi Evah, a third year computer systems engineering student was killed at the Vaal University of Technology. In Ghana, Godwin Ayogu, a 300-level Nigerian student of the University of Cape Coast was murdered a few months ago. Mention should also be made of Tunde Adelabu a Nigerian student of Lagenda University, Nilai, Malaysia who was allegedly shot dead by police.

Safety in schools is a human security issue. There are at least three compelling reasons for asserting a focus on safe schools. Without safe schools, our dream of harnessing the power of education for achieving goals in health security, food security, employment security, environmental security, energy security and a miscellany of other subsets of human security will come to nought. Without safe schools, Education for All will remain a pipedream so also attainment of post-2015 global development goals. Without safe schools, quality education yearned by all countries of the world will be hindered. The terminal point of the logic is: no safe schools and no future for the world.

Backtracking one step: what is a safe school? A safe school is an educational facility where all members of the community-students, teaching and non-teaching staff, find the environment to be non-threatening and friendly for teaching and learning. Safety in this sense is not narrowed to physical comfort but extended to include psychological safety. A safe school provides a learner-friendly environment where students do not live in fear of gun-toting school mates/insurgents lurking around the corner, vicious cult members, cane-brandishing teachers and physical assault by bullies. It is an educational facility where learners and teachers enjoy emotional comfort and low psychological stress. Our 20-year study on student anxiety and teacher stress confirm the depressing impact of unsafe schools on students' attendance and achievement and teacher motivation and productivity (Okebukola, 2014).

How can schools be made safe? We offer no simple solution to the complex problem of unsafe schools which is rooted in ideological, policy and other contextual factors. The obnoxious and warped ideologies of jihadist groups which abhor schooling especially of girls and women cannot be demolished by a few trite statements of condemnation. The pervasive use of the internet has opened a new vista of cyber-bullying by school mates which has led to the death of many youngsters. We can, however, suggest minimum standards for safe schools to which we implore all African governments (and others outside the region) as well as proprietors of schools to uphold.

Minimum standards for physical and psychological safety are of concern here. Physical safety standards will include at least seven elements. These are physical screening of the perimeter of the school against intruders with installed and functioning CCTV coverage; all areas within and immediately outside the school are designed with safety in mind; access into the school is controlled and visitors are monitored; safety problems are quickly reported and appropriately addressed by school authorities; enactment of school safety policy to be adhered to by all members of the school community; periodic awareness campaign and capacity building for students, teachers and administrators to rapidly respond to safety threats; existence of a security unit that is well-equipped with technology and vehicular support and linked with the public law enforcement department.

Besides what we have dubbed "minimum standards", there are other complementary steps that should be taken to ensure and assure school safety. For instance, all visitors to the school should be monitored and provided with badges; students and staff should be encouraged to report unfamiliar people to school authorities who should present themselves for search if requited to do so; schools should install anonymous reporting systems such as telephone hot lines and suggestion boxes; at least every quarter, schools should conduct preparedness drills on intruder alerts and fire outbreak and receive training on emergency response; school authorities should survey parents, staff, and

students about their safety concerns and respond rapidly to the findings of such survey; and schools should take steps towards early detection of behavioural problems of students and teachers and remediate accordingly. Other elements are establishment of counselling services for psychologically traumatised students and staff and periodic training for teachers and school administrators on strategies for lowering anxiety and stress levels (Okebukola, 2014).

It needs to be stressed that safety in schools should be approached creatively. A planned approach is needed not just to prevent physical and psychological danger to both staff and students but to build a culture of safety consciousness, linked to the university curriculum where teaching young people can develop their capability to assess and manage risks associated with schooling. While schools should make sure staff, students and visitors are safe, they also need to make sure that, as citizens of tomorrow, students are helped to become risk aware without becoming unnecessarily risk averse. Hence 'teaching safely' and 'teaching safety' need to go hand. Laws on safety in schools should be reinforced as well as provision of a robust insurance net for staff and students. In spite of the foregoing entreaty, there is no absolute guarantee that something bad will never happen. However, in an event we apply the minimum standards, the **possibility** of something happening will be less **probable**. Let it be said that we did our best to keep our universities safe.

We are all familiar with the history of university education in Nigeria. For completeness, we shall still walk along the road from 1948 when the University College Ibadan was established. Two years after independence, the country had five universities owned by each of the three regions with the then Western region having three. The increase in oil revenue in the mid-70s coupled with the need to forge national unity following the end of the civil war, influenced the creation of a national system of higher education. This was achieved through the reconstitution of the National Universities Commission into an autonomous body charged with additional responsibilities and powers in 1974. The development laid the framework of the takeover of all the regional universities in 1975. The widespread agitation for an expansion of access to University education and increased highlevel national human resource requirement and technological development contributed greatly to the establishment of the second generation and other specialised universities Agriculture, Technology) and a military university. The placement of higher education under the concurrent legislative list in the 1979 Constitution allowed state governments to establish universities.

Private sector participation in university education commenced during the second republic. However, in the absence of proper guidelines for their establishment, they all turned out to be universities only in name. All the 24 private universities established between 1980 and 1983 were abolished by the Federal Government in 1984. It was nine years later in 1993, that another law which allowed the establishment of private universities and spelt out procedures for such was promulgated. To further widen access to University education, a National Open University was established in 1983, closed shortly after and reopened in 2001 to offer education through Open and Distance Learning (ODL) mode.

The past three decades have witnessed significant changes within the University system in Nigeria. Notable among such changes are the increase in the number of universities and programmes offered in these institutions. By the June 24, 2015, there were over three thousand programmes across the entire universities with a staff strength of about 38,000. By far, however, the greatest change has been in the explosion in student population and the number of aspirants seeking university admission. The total student enrolment in all Nigerian Universities grew from just over 2000 in 1962 to over 1, 431, 312 in 2015. Data from JAMB and the universities confirmed that over 1 million students sat for the Unified Tertiary Matriculation Examination (UTME) in 2015. Of this number, the entire 147 universities in the country can only admit about 500,000 candidates.

The stress put on the universities in terms of demand and the limited expansion in physical facilities and academic staff to cater

for this demand has taken a great toll on the quality of programmes in the institutions. Employers of labour and the general public have expressed concern over the quality of graduates of Nigerian universities. The situation is glaringly evident when they are requested to take qualifying examinations. Hitherto, Nigerian certificates were offered automatic recognition abroad. Similarly, an increasing number of employers are forced to practically retrain newly-recruited graduates to give them the skills that should have been acquired in the university.

Where we are now

The 147 universities are faced with a host of quality challenges. As Okojie (2013) notes, "there has been growing concern over the quality of graduates as they are perceived to be lacking in skills required for the work of life, and their relevance to overall national and regional developments. The poor ranking of our universities (hence, lack of global competitiveness) is another major concern."

The most-recent empirical source to turn to for insight into these challenges is the 2012 needs assessment report of the federal government. The report shows that a majority of the universities are grossly understaffed, relying heavily on part-time and visiting lecturers, have under-qualified academics and have no effective staff development programme outside the Tertiary Education

Trust Fund intervention and the Presidential First Class Scholarship programme. The Yakubu report also revealed that only about 43 per cent of teaching staff have doctorate degrees. Only seven universities have up to 60 per cent of their teaching staff with PhDs. These are IMSU, UNICAL, OSUST, NOUN, UNIPORT, UNILORIN and UNIUYO. Also, the ratio of teaching staff to students in many universities is 1:100. For instance, it is 1: 363 at the National Open University of Nigeria; 1:122 at the University of Abuja; and 1:144 at the Lagos State University. In contrast, in Harvard University, it is 1: 4; Massachusetts Institute of Technology - 1:9; and Cambridge-1:3. Kano State University which is 11 years old, has one Professor and 25 lecturers with PhDs, Kebbi State University has two professors and five lecturers who have PhDs. About 74% of lecturers in the Plateau State University Bokkos, are visiting.

The report also stated that there is numerically more support than teaching staff in the universities, instead of the other way round. In some universities, it was discovered that the non-teaching staff double, triple or quadruple the teaching staff. With regard to infrastructure. The committee found that physical facilities for teaching and learning in the public universities are inadequate, dilapidated, over-stretched and improvised. Laboratory and workshop equipment as well as consumables are either absent, inadequate or outdated. Kerosene stoves are being used as Bunsen burner in some. Some engineering workshops operate under trees and in dilapidated sheds. Many science-

based faculties are running what is referred to as "Dry Lab," due to lack of reagents and tools to conduct real experiments. The committee also documented that 163 of the 701 physical uncompleted projects it found had been abandoned.

On students' enrolment, the report revealed that there were a total of 1,252,913 students in the public universities: 85 per cent undergraduates; five per cent sub-degree; three per cent postgraduate diploma; five per cent Master's and two per cent Ph.D *ad contra* to the National Policy on Education (FRN, 2013) which provides for 60:40 enrolment in favour of science-based programmes, 66.1 per cent of enrolled students are studying arts, social sciences, and management and education courses. Only 16 per cent are studying science and science-education courses; 6.3 per cent, engineering; five per cent, Medicine, while 6.6 are studying Agriculture, Pharmacy and Law.

Boko Haram, Education and the Role of Nigerian Universities

The Boko Haram insurgency can be halted in its tracks through several interventions. Our goal in this lecture is to describe the role of education in this effort. We begin with the curriculum and suggest some toning up of the basic education curriculum to which all 6 to 15-year olds are exposed. Boko Haram is about ideology and indoctrination. Education is a powerful tool for ideology change and indoctrination. We should draw on the potent and positive power of education to counter the jihadist

messages of the insurgents. The Nigerian Educational Research and Development Council which is charged with curriculum development and renewal should embed topics in all subjects in the basic education curriculum that can steer the young hearts and minds of Nigerian children and youth away from religious violence and jihadist tendencies. The message of religious tolerance should hit the children from all sides in every subject they learn and every day in school. The school anthem should contain a line or two which promotes temperate living.

With the curriculum as a document made to respond to this urgent societal need, the next important step is that teachers should be trained in efficient and effective ways of delivering it. It is essentially, training in the pedagogy of socio-religious and ethnic tolerance. Here we see in the immediate run, training at the local and state levels for all public and private basic education teachers during the first mid-term break in February 2015. The National Teachers Institute and the Universal Basic Education Commission working with State Ministries of Education should be assigned the responsibility of conducting the training. In the medium term, we propose long vacation training for July-August of 2015 and for the long term, the conduct of such training every two years. We compute the cost for the immediate and short term that will be implemented in 2015 at N600 million. For the dividend it will yield in terms of fostering peace in our land, this investment is exceedingly worth its while.

Another angle of attack through education is to invest in child-friendly schools. The logic is that if children are taken off the streets and feel safe and happy in school with a pleasing environment, the long hands of Boko Haram may not catch up with them. The Chibok girls were abducted from a school that was not safe even if we have the alleged vexed issue of the police and the military not responding quickly to distress calls from the community. Child-friendly schools will meet the psychosocial needs of the pupils and they will be encouraged to attend. When in school, the children can then be dosed with curriculum suggested earlier for countering the jihadist messages of the insurgents. Key words in this effort are counter propaganda in schools at full blast.

Resuscitation of the school feeding programme is another complement to the method of attracting and keeping children in school. This scheme has a successful example in India where millions of children are given a decent free meal a day in school. The programme gained traction during the Obasanjo Presidency but has now waned. Its revival is now urgent.

The averred goal of Boko Haram is to have the entire country in its grips. It has the north-east as its bridge head and plans to advance to other geopolitical zones. We need schools to compete in demonstrating that they are the least amenable to Boko Haram incursion. Here, state and national competitions should be established for the best schools that promote harmony and

tolerance and schools that best deliver anti-jihadist and anti-insurgency messages and practice. Well publicised awards should be made to winning schools, teachers and headteachers.

Boko Haram feasts mainly on idle hands as recruits, paying them much more that the national minimum wage. We should step up the delivery of entrepreneurial education at all levels of the educational system so that products of basic and higher education are better tooled for work. Government should offer wages that Boko Haram will find difficult to beat and more importantly constrict and strangulate the sources of funds for the jihadists.

Narrowing to the universities, the tasks have at least six thrusts. We need to rework the General Studies curriculum to ensure inculcation of socio-politico-ethno-religious tolerance. We should re-jig teacher education curriculum in a way that all Faculties of Education should prepare a new breed of teachers who are able to foster ethno-religious harmony in our schools. Thirdly, six universities, one in each of the geopolitical zones, should be kitted for research and development in weapons and surveillance systems. In the US for example, the universities such as MIT and Stanford are the sites for development of weapons systems for the military. The brains in Nigerian universities are as endowed as those of the American colleagues. The enabling environment for research is the missing element in the equation. A 20-year plan should be activated in 2015 to ensure that we begin to break the

barrier of over-dependence on foreign countries in these matters and rise to be true giant of Africa. The computation of my research group is that an annual investment of N6 billion for each of the six universities will deliver on this goal. A total of N36 billion a year for this purpose is less than what some of our leaders expend on overseas travels and for entertainment!

The fourth thrust is to strengthen the delivery of peace and conflict studies in the universities. There are some centres addressing this theme dotted all over the university system. More of such centres should be established and a coordination mechanism set up to be jointly run by the Institute of African Studies University of Ibadan and its equivalent at Ahmadu Bello University, Zaria. These centres should evolve what can be labelled next-gen methods in peace and conflict resolution.

Fifthly, the Association of Vice-Chancellors of Nigerian Universities (AVCNU) should partner the National Orientation Agency as well as State and Federal Ministries of Information to conduct advocacy in major Nigerian languages in conflict prevention, mediation, resolution and peace building. The final thrust of the role for universities focuses on the Police University. There are several issues with the Nigeria Police often calling for the massive reform of the system to improve its internal security apparatus. The management of the Nigeria Police Academies and Police University should take urgent steps through training at the

officer and other-ranks level to work towards producing a new breed of cops for an envisioned new Nigeria.

Learning Lessons from Covenant University

Chancellor, Distinguished Ladies and Gentlemen, having surveyed the practice of delivering higher education in Africa and narrowing to a case study of Nigeria, it is helpful to peep at the operations of Covenant University to see the lessons that can be learned from the huge success story. An in-depth study to determine the critical success factors of Covenant University is currently underway. At the close of the study, we will have empirical data upon which to suggest to national university systems all over Africa on how to adopt/adapt the Covenant methodology to stimulate improvement and ensure that Africa does what is right in delivering quality higher education to assure the attainment of Agenda of 2063. Initial findings of phase 1 of the study relative to challenges facing Africa in higher education are summarised in Table 4.

Table 4: Summary of Performance of CU relative to challenges to higher education in Africa

S/No	Africa Regional Challenges	Covenant University's Situation
	in Higher Education	Analysis
1	Depreciating quality of	CU's staff recruitment process is
	higher education teachers	exemplary, followed by in-service
		capacity building. Affiliation with
		Nobel Prize winners is a
		tremendous boost
2	Inadequacies in facilities	One of the best resourced
	for quality teaching and	universities in Africa with state-of-
	research	the-art and well maintained
		facilities for quality teaching and
		research. Proprietor makes huge
		annual investment in upgrading
		facilities
3	Poor attitude of students	CU students are imbued with core
	to work	values of diligence and not
		allowed to stray off the path of
		academic, moral and spiritual
		uprightness and excellence.
4	Curriculum inadequacies to	The Total Man Concept
	impart 21 st century skills	undergirding the curriculum
		framework ensures that all CU
		students are largely prepared for
		the unknown world of the 21 st
		century alongside their
		professional training.
5	Research capacity deficit	Research culture is promoted
		through competitive awards and

		grants, capacity building for
		budding researchers.
6	Poorly-prepared students	Living Faith secondary schools
	from the secondary level	serve as models for better
		preparation for university
		education.
7	Slow adoption of ICT for	Teachers are encouraged to utilise
	delivering quality higher	technology to deliver lectures and
	education	support practicals.
8	Management inefficiencies	This is the major key to CU's
		success as efficiency and
		effectiveness are the lodestones
		which guide management.
9	Inadequacies in funding	Funding is relatively generous but
		more importantly, accountability,
		prudence, wise investment and
		creative funds generation are
		hallmarks of the financial system
		of CU
10.	Safety of lives and property	Overt and covert security in place.
		Divine protection craved at all
		times.

Before the end of the year, the study will run its full course and the findings widely disseminated to the African higher education community.

Concluding remarks

Chancellor, Distinguished Ladies and Gentlemen, in this lecture we underlined that the attainment of Agenda 2063 of the African Union as a roadmap for Africa's future will be severely hindered without a significant re-orientation of the higher education delivery system in the region. We identified obstacles to higher education and made recommendations on how these obstacles can be pulled down at the regional, sub-regional and national levels. We narrowed focus on Nigeria and provided some prescriptions for getting things right with the higher education system.

As I close, I wish to extend my congratulations to students who will be graduating tomorrow. I wish them well as they journey through life and pray for God's bountiful blessings and protection.

Thanks to all the staff, teaching and non-teaching, who have made it possible for the realisation of the dream of these students to obtain the coveted certificate of Covenant University.

Once again, I appreciate the honour of the invitation to give this lecture and may God continue to bless your efforts.

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