

Fulfilling Education's Promise in Africa: The Role of the University

By
Professor Emmanuel Nnadozie
Executive Secretary
African Capacity Building Foundation
Harare, Zimbabwe

**Text of the 'Special Convocation Lecture' delivered at Alex Ekwueme Federal
University Ndufu-Alike, Ikwo**

17 December, 2018

Contents

Introduction.....	3
1. The university: History, role and relevance in contemporary development.....	5
2. The evolution of universities in Africa and Nigeria	6
3. Education’s unfulfilled promise and the associated challenges in Africa	9
4. Towards fulfilling education’s promise in Africa.....	12
5. Bringing all hands on deck to fulfil education’s promise	15
6. Revamping universities.....	16
7. Message for the graduating students.....	18

Fulfilling Education’s Promise in Africa: The Role of the University

The Chancellor,
Pro-Chancellor and Chairman of the Governing Council,
Other Council Members Present,
Vice-Chancellor,
Deputy Vice-Chancellor,
Other Principal Officers of the University,
Professors and Members of the University Senate,
Staff and Students,
Distinguished Ladies and Gentlemen.

Introduction

I am greatly honoured to stand before this august gathering on this auspicious occasion, and I would like to thank the Vice-Chancellor, Professor Chinedum Nwajiuba, for giving me the honour and privilege to deliver this ‘Special Convocation Lecture’ at the third convocation ceremony of this historical Alex Ekwueme Federal University Ndufu-Alike, Ikwo (AE-FUNAI). I rejoice with the Chancellor, the Pro-Chancellor and Chairman of the Governing Council, all the principal officers, staff and students, especially those in the third set who will receive degrees during this convocation. The giant strides recorded by AE-FUNAI, in only its seventh academic session, is most impressive, and I commend the Vice Chancellor for the efforts to place the university on a sound footing by seeking to attain universality in the university, an issue I will return to later.

I had very little difficulty in making up my mind that my lecture would focus on education’s promise—for four reasons. First, I am presenting this lecture at a higher education institution, and it is expected that I address an issue that would be of contemporary relevance. Second, education is one of Africa’s biggest concerns, as several countries on the continent have a poor education system incapable of creating well trained and knowledgeable graduates who can compete in the global job market. Third, I am a strong advocate for human capital development and education, as an investment in human capital, has a high payoff, with individuals benefitting from higher earnings and economies from higher productivity. Fourth and perhaps much more important, the stakes have increased for countries in Africa—with unprecedented population growth, democratic transitions, peace dividends and economic transformations. For these reasons, it is important to have a good understanding of how universities in Africa can fulfil their roles in spurring economic growth and development.

Indeed, no society can rise and prosper without educating its people. Learning raises aspirations, sets values and ultimately enriches lives. In many parts of the world, education is viewed as a fundamental human right. And education has become one of the main criteria to quantify a country’s development.

Education is a gradual process that changes human life and human behaviour for the better. It is about acquiring knowledge and skills passed on from generation to generation. In democracies, children and adults learn how to be active citizens. More specifically, education helps and guides individuals to transform from one social class to the next. Education is empowerment and individuals, societies and countries empowered by education are taking the edge over individuals, societies and countries at the bottom of the growth pyramid.

In summary, education facilitates the learning, knowledge, skills, values, beliefs and habits that transform and sustain society. Delivered well, education and the human capital it creates generate many benefits for economies—and societies. For individuals, education promotes employment, earnings, and health. It raises pride and opens new horizons. And for societies, it drives long-term economic growth, reduces poverty, spurs innovation, strengthens institutions and fosters social cohesion.

There are three main types of education—formal, non-formal and informal.

- Formal education, or formal learning, usually takes place in school, where a person can learn basic, academic or trade skills.
- Non-formal education includes adult basic education, adult literacy education or school equivalency preparation. In non-formal education, someone (who is not in school) can learn to read and acquire other basic skills or job skills. Home education, individualized instruction (such as programmed learning), distance learning and computer-assisted instruction are other possibilities. Such education is imparted consciously and deliberately and systematically implemented.
- Informal education is not imparted by an institution such as a school or college. Nor is it given according to any fixed timetable, with a set curriculum. Instead, it consists of real-life experiences from living in the family and the community.

Going by the characteristics of each of these education channels, it is evident that none is self-sufficient and that they work together. Thus, educating students is not only the task of schools. The successful conduct of life and social integration depend on what students learn in all the three educational environments, which complement each other for the student's benefit.

After extensive contemplation, I decided on '*Fulfilling Education's Promise in Africa: The Role of the University*'. This choice is hinged on my conviction that there is no problem that a society faces that ideas and knowledge cannot resolve. And the university is the home of ideas and the laboratory for incubating knowledge.

My lecture is structured as follows. The first section presents an overview of the history, role and relevance of universities in contemporary development. The second discusses the evolution of universities in Africa and Nigeria. The third examines why education's promise remains unfulfilled in Africa and the associated challenges. The fourth explores the pathways towards fulfilling education's promise in Africa. The fifth focuses on the necessity of having all hands-on-deck, the specific roles of universities in this respect, and the charge to FUNAI. The sixth has recommendations for revamping universities in Nigeria and in Africa, followed by a message for the graduating students.

1. The university: History, role and relevance in contemporary development

University education is more than the next level in the learning process; it is a critical component of human development worldwide. It provides not only the high-level skills necessary for every labour market but also the training essential for teachers, doctors, nurses, civil servants, engineers, humanists, entrepreneurs, scientists, social scientists and myriad other personnel. These trained individuals develop the capacity to drive local economies, support civil society, lead effective governments and make important decisions that affect entire societies.

There is some controversy about the origin of universities and the world's oldest university. It is generally believed that the earliest universities originated in Asia and Africa. These included Nalanda University, established by the 5th century BC in India and now in ruins—and Nanjing University founded in 258 B.C. in China. In Africa, there were the University of Al Quaraouiyine founded in Morocco in 859 B.C., and Al-Azhar University in Egypt which opened in 975 AD. But these were not degree awarding institutions, as that role has its origin in Europe.

The history of modern universities has thus been traced to medieval Europe—defined as a school of higher learning combining teaching and scholarship, and characterised by corporate authority and academic freedom. It has been observed that universities constitute the greatest intellectual achievement of the middle ages, of greater value even than the cathedrals.¹ Several were established in the 13th century, including the University of Bologna in Italy (1088), the University of Paris in France (1150) later associated with my *alma mater*, the Sorbonne, and the University of Oxford in England (1167). These universities had three major characteristics:

- They attracted or at least invited students from all parts of the world, not merely those in a particular country.
- As a place of higher education, they taught at least one of the higher faculties of Theology, Law and Medicine.
- To teach such subjects, they had a good number of Masters.

Despite more than 800 years of the modern university, there have been competing narratives about what the institution is designed to achieve. Each one has a strong contemporary resonance, and universities today generally reflect a balance—whether explicit or implicit—between the various strands. Watson et al. (2011) provide a good summary of the ways that universities have been seen as communities dedicated to the learning and personal development of their members, especially students (this could be termed the 'liberal' theory); as sources of expertise and vocational identity (the 'professional formation' theory); as creators, testers and sites for the evaluation and application of new knowledge (the 'research engine' theory, with an important corollary—the 'business and industry services' theory); and as important contributors to society and nations (the 'civic and community engagement' theory).

Following these perspectives, the main functions of a university have been identified as:

- Serving as repositories and generators of knowledge and technology (they are to provide new knowledge, wrought new invention/innovation, change paradigms, and aid society in its development and in meeting new challenges as they come along).
- Equipping graduates to obtain viable employment.
- Offering rational and timely criticism in areas of public policy and social and economic life.
- Being large and influential bodies in civil society and the state.

- Creating cohesive and tolerant communities.

These social functions of the university are essentially guided by:

- The pursuit of excellence in teaching, training, research and institutional performance.
- The relevance of services offered by higher education institutions to the perceived priority needs of their respective societies.
- The quest for balance between short-term pertinence and service and long-range quality, between basic and applied research and between professional training and general education.

2. The evolution of universities in Africa and Nigeria

Africa

In Africa, missionaries introduced western-style universities. The first to be established were the Fourah Bay College founded in Sierra Leone in 1826 and Liberia College, more than three decades later, in 1862. Meanwhile, South Africa established segregated institutions, beginning in 1829 with the South African College in Cape Town (later the University of Cape Town), which mostly catered to the English settlers. In 1866, a college for the Afrikaner settlers was established and named the Stellenbosch Gymnasium, which in 1918 became Stellenbosch University. And in 1873, the University of the Cape of Good Hope (renamed the University of South Africa in 1916) was established initially as an examining body before it became one of Africa's and the world's leading distance education providers.

In colonial Africa, the development of higher education remained limited, and Africans seeking higher education were often forced to go abroad. It was only after the end of the Second World War that colonial governments made concerted efforts to establish higher education. In the British colonies, the new era started with the establishment of university colleges in Nigeria (Ibadan in 1947), Ghana (Legon in 1948), Sudan (Khartoum in 1949 from the merger of the Gordon Memorial College and the Kitchener Medical School), and Uganda (Makerere was upgraded in 1949). Most of these new or upgraded university colleges served as regional universities and were affiliated with and awarded degrees from the University of London. After the war, French universities also set up a few overseas campuses in the colonies. The University of Paris established Institutes of Higher Studies in Tunis in 1945 and, together with the University of Bordeaux, Dakar in 1950 and Antananarivo in 1955, which became the University of Dakar in 1957 and the University of Antananarivo in 1960.

After the wave of independence, higher education was considered essential for cultivating human capital for effective leadership and governance. Newly independent governments invested heavily in education and training, leading to a rapid expansion in enrolments across Africa in the 1960s and 1970s. In 1960, often taken as the year of African independence, there were an estimated 120,000 students in African universities; the number jumped to 783,000 in 1975, to 3.5 million in 1995 and to 7.2 million in 2013. It has been estimated that Sub-Saharan Africa saw the fastest growth in its tertiary gross enrolment ratio during 1970–2013 at 4.3 percent annually, faster than the global average of 2.8 percent.²

But enrolment growth is still insufficient to meet the rising demand for tertiary education, and pressure is increasing on African countries to further expand access to tertiary education, driven by factors including economic growth, 'demographic dividend', improved enrolment in primary

and secondary education at 79 and 50 percent respectively, and structural shifts in the economy away from primary sector activities and towards manufacturing and services.

The massive expansion of education across the continent not only led to huge improvements in the African human capital stock, it also laid the institutional basis for the social production of African intellectual capacities and communities. But Africa remained the world's least educated continent, with a tertiary gross enrolment ratio of about 7 percent, compared with 10 percent for the low- and middle-income countries and 58 percent for the high-income countries.

Gender gaps also appear in fields of study and faculty distribution. Women were concentrated in the humanities and social sciences and grossly underrepresented in the sciences and most professional fields.

A major development in the early 2000s was the explosion of private universities and the privatization of academic programs and funding sources in public universities, both as manifestations of the growing liberalization of African higher education³. Private universities began to outstrip the number of public universities in some countries, a development that profoundly and permanently altered the terrain of higher education. While the number of public universities grew from 100 to 500 between 1990 and 2014, private universities expanded from about 30 to more than 1,000 (Bloom et al. 2014). As much as 80 percent of tertiary enrolment in Côte d'Ivoire is accounted for by private universities while Burkina Faso and Zimbabwe have very small shares of students enrolled in the private universities.

Nigeria

University education began in Nigeria in 1948, when University College, Ibadan, was established. The 104 students at the Yaba Higher College were transferred to the university, which was tied to London and the curriculum modelled after the British style of education. It broke the tie in 1962, when it upgraded its status to a full-fledged autonomous university, and name was changed to University of Ibadan.

By the late 1950s, it became apparent that Nigeria would need more universities to cater to the many secondary school graduates. In April 1959, the Ashby Commission (on Post-School Certificate and Higher Education) completed comprehensive research on the state of education in Nigeria and proffered several recommendations, including the establishment of more universities. The University of Nigeria, Nsukka, was established in October 1960, a few days after Nigeria gained its independence, making it the first full-fledged autonomous university in Nigeria.

Several universities followed suit. Ahmadu Bello University was established in 1962. In the same year, two more universities were established—the University of Ife, Ife-Ife (now Obafemi Awolowo University) and the University of Lagos, Lagos. These five universities are collectively referred to as the first-generation universities.

In my considered opinion, these institutions were truly world class. What made them world class? They practised the idea of universality that is implicit in the idea of a university, and there were four crucial success factors: *quality teachers, quality students, an enabling environment for learning and international competitiveness*. All four combined to ensure that Nigeria then had world-class universities.

Following recommendations from Nigeria's Third Development Plan, seven more universities were founded in 1975: Port Harcourt, Ilorin, Kano, Calabar, Jos, Maiduguri and Sokoto.

In 1979, state governments started establishing state universities. In 1999, the law prohibiting non-federal and state entities from establishing universities was abolished, paving way for the creation of private universities. The first private universities to receive licenses in 1999 were Babcock, Madonna and Igbinedion.

Currently, Nigeria has 165 universities (table 1) comprising 43 federal universities, 47 state universities and 75 private universities.

Table 1 Distribution of the 165 Nigerian universities by ownership, September 2018

Years	Federal	Region/ State	Private	Total (per row)	Remarks
1948–60	1	1 ^a	-	2	
1961–74	1	3 ^a	-	4 ^a	
1975–98	23	11	-	34	4 regional/state universities existing in 1974 were taken over by the Federal Government in 1975.
1999–2009	2	22	40	64	The first 3 private universities were licensed in 1999 and 15 were licensed in 2005; 1 in 2006; 10 in 2007 and 7 in 2009.
2010–18	16	14	35	65	4 licensed in 2011, 5 in 2012, 11 in 2015, 8 in 2016, 6 in 2017 and the last one in 2018.
TOTAL	43	(51) 47	75	(169) 165	

a. Four regional/state universities in existence in 1974, which the federal government took over in 1975, should be subtracted from the vertical region/state and total columns.

Source: Author, based on information available on the website of National Universities Commission. The list is the current and valid for 2018 (updated with NUC on 30 September 2018).

I look back fondly to the world-class education that I benefitted from at the University of Nigeria Nsukka in the 1970s. First, we had quality teachers, expatriates and Nigerians, and even the Nigerians on campus who could then hold their own anywhere in the world. Next, the educational infrastructure on campus—the libraries (central and departmental), bookstores, lecture theatres and science and language laboratories—were all adequately stocked and furnished, meeting the needs of students and staff. Further, infrastructure services (water, electricity and roads) were dependable just as the halls of residence were spacious and decent and the food was of good quality.

I can recollect the Sunday afternoon meals of jollof rice and chicken, which even attracted non-undergraduates to visit the campuses. There was peace on campus at all times, and no ASUU strike. You could predict when you would graduate, as cultism was not the order of the day. All this created an enabling environment for learning. And there were abundant opportunities for extracurricular activities: sports, discipline-related associations and societies, political party associations and social organisations such as dancing clubs.

3. Education's unfulfilled promise and the associated challenges in Africa

State of education in Africa and its economic implications

The 2015 report of the Africa-America Institute on the state of education in Africa noted that the African education system stands at a crossroads.⁴ More students than ever before are enrolled in schools throughout Africa. That's good reason to cheer, but the pipeline of trained teachers, instructional materials and infrastructure have not kept pace with the heavy demand. Rising enrolment rates have drastically outpaced increases in education funding, resulting in shortages of instructional materials and supplies, poorly stocked libraries and overused school facilities. Indeed, while more students are in school, many of them are not gaining basic skills. In fact, some students who are in school are not much better off than those who missed school. Consequently, the quality of education in Africa (particularly in Sub-Saharan Africa) is in a perilous state. Private institutions are increasingly stepping in to fill the gaps in the public education system, but this creates its own challenges.

Universities in Africa are also held back by low research output. A 2014 World Bank study showed that Sub-Saharan Africa's annual research output more than doubled from 2003 to 2012, and its share of global research increased.⁵ But Africa's overall research record remains poor, as it generates less than 1 percent of the world's research. Part of the problem is that the continent contributes less than 1 percent of global investment in research and development. Limited government funding for universities lies at the root of this challenge.

As a mark of the crisis, only 14 African universities feature in the top 1,000 of the Center for World University Ranking of 2018/ 2019.⁶ A cursory examination of table A1.1 (see appendix 1) indicates that 11 of the 14 universities are in two countries: South Africa (7) and Egypt (4). Uganda, Tunisia and Nigeria have 1 university each.

Very instructively, comparative statistics across sub-regions and the world for real GDP per capita growth, poverty and selected human development indicators show that Sub-Saharan Africa is at the lowest position for each indicator (figures A2.1–A2.8 in Appendix 2). The region has the highest population growth and the lowest real GDP per capita growth rate. Likewise, income inequality and the monetary poverty headcount ratio are highest in the region. The non-monetary indicators are no better. The region has the lowest life expectancy at birth and the highest under-five mortality (per 1,000 live births). Access to clean drinking water from an improved water source is lowest in the region. Enrolment in tertiary education is a low portion of total school enrolment. In sum, the Sub-Saharan region comes last in the Human Development Index computations.

The foregoing narrative is best associated with what I see as the failure to fulfil 'Education's Promise'.

What is education's promise?

Education's promise describes the payoffs that education is expected to deliver to individuals (employment opportunities, high earnings potential, sound health and escape from absolute poverty) and to society (driving long-term economic growth, spurring innovation, strengthening institutions and fostering social cohesion). Concisely, it is the salutary effects of education for people and their societies.

Empirical evidence and observations of experience show that the skills individuals acquire are what equips them for work and boosts growth. Like other developing countries, countries in Sub-

Saharan Africa have made a good start by getting so many young people into school and increasing their numbers. However, education's promise is yet to be fulfilled for most people and countries. Certainly, concrete actions are required to realize education's promise, and as soon as possible. But first, there is a need to ask why education's promise is not being fulfilled in Africa and in Nigeria in particular.

Why education's promise is not being fulfilled in Africa—and Nigeria!

Education's promise has generally not been fulfilled in Africa and Nigeria mainly because education is being provided but learning and skills are not being acquired. Three dimensions of the deep learning crisis in education were identified by the World Bank's (2018) report on *Learning to Realize Education's Promise*: learning outcomes are poor, schools are failing learners and systems are failing schools. All of these have resulted in poor quality education across levels of the education system.⁷

In particular, the poor quality of university education emerged as an outcome of the faulty advice from the World Bank to African governments to shift attention from tertiary education to basic education. The mistaken thinking was that if governments provided basic education, the children would be all right. This may be true to some extent and perhaps for developed countries, but African countries still need the transformative research and human capital development that universities alone can provide. As a consequence of the misguided advice, Africa is grappling with a huge mismatch between student populations and investments in higher education. The poor quality of university education was the price of this mismatch. The recent public acknowledgement of this fact by the World Bank is instructive.⁸

Even more important in the African context, attempts to boost the quality of university education have focused on student admission standards, lecturers' academic qualifications, rigorous examination protocols, degree programme requirements, course content and the availability of laboratory and classroom facilities, with little or no attention paid to pedagogy. This assumes, without evidence, that lecturers are experts in the theory and practice of teaching, learning and assessment. In reality, while lecturers are undoubtedly experts in their fields, the vast majority of them, especially those specialised in the physical sciences and business fields, lack knowledge and skill in effective pedagogy.

Consequently, instead of a model of pedagogy that views the classroom as a community of learners and a place where students develop collaborative skills and share knowledge through verbal questioning, analysing, critiquing and problem-solving, the classroom lecture model prevails in African universities. This model fails to stimulate the intellectual curiosity and creative development of students. Students have no opportunity to ask questions, discuss, critique, problem-solve or challenge what they are being taught. Nor does this model help students connect with their society and economy. This type of pedagogy is partly to blame for the high unemployment rate among university graduates in African countries. Accordingly, the high unemployment cannot be solved without a transformation in university teaching, learning and assessment pedagogies towards educating employable or self-employable students.

Universities all over the world see their tripartite functions as teaching, research and service to the community. Overall, community engagement remains at best marginally institutionalized in Africa. Most universities have not yet fully integrated community engagement into their budgets or their teaching, learning and research activities. Faculty hiring and promotion practices either

ignore or inadequately recognize faculty contributions to communities. In addition, funding for community engagement is sporadic and insufficient, often relying on foreign funding.

Many African universities are not educating young Africans to understand and solve Africa's problems. Consequently, most African universities are isolated from their immediate environment and from the broader requirements of the continent. A case in point is the African Union's Agenda 2063, the continental blueprint that envisions a prosperous Africa based on inclusive growth and sustainable development, with a focus on Africa's economic transformation, industrialization and growth. Agenda 2063 calls for an education and skills revolution that promotes science, technology, research and innovation—and builds knowledge, human resources, capabilities and skills for the African century in a people-driven development process that unleashes the potential of Africa's women and youth. The African Capacity Building Foundation has estimated the skills gaps needed to implement the ten-year plan of Agenda 2063 to include about 4.3 million engineers and 1.6 million agricultural scientists and researchers.⁹ Universities need to be at the forefront of developing these skills, yet I am not aware of any African university that has taken this document to heart.

Many other challenges are lowering the capacities of African universities to deliver quality education and produce employment-ready and functional graduates. As a concerned Nigerian, I would like to turn attention to the particular challenges of high-quality university education in Nigeria.

Challenges of higher education in Nigeria

The challenges facing quality higher education in Nigeria are serious and disquieting. The decline in the quality and standard of university education in Nigeria is palpable. The leading causes for the poor state of university education in the country include, without been exhaustive:

- *Woeful education policies and poor planning.* Nigeria's educational policies are not responsive to the goals, needs and aspirations of the country, and reflecting the poor planning that characterises policies overall and the education system in particular. Poor planning is rooted in a shortage of executive capacity, conflicts in planning objectives (particularly between federal and state governments), plan indiscipline, low quality advisory services of the planning machinery, financial constraints, insufficient and poor-quality data, lack of commitment, and lack of adequate public-private sector consultation.
- *Poor policy implementation.* Institutional policies are not geared towards making student learning a priority, so little attention is given to teaching effectiveness.
- *Inadequate funding.* Budgetary allocations and disbursements to education have fallen below UNESCO's benchmark of 26 percent of the national budget, and universities are struggling under this funding squeeze.
- *Lack of resources.* Universities suffer from acute shortages of critical infrastructure, such as science laboratories, workshops, student hostels, libraries and electricity. I am informed that power failures are commonplace in universities, which are unable to pay the huge electricity bills because of irregular subventions. How are science students coping with laboratory research without electricity?
- *Inadequate teaching staff and research capacity.* In large part because of inadequate funding, universities are short of the lecturers needed to adequately handle teaching loads. Thus, lecturers are seriously overworked. Research capacity has also been

impaired due to limited grant support and weak mentoring capacity by senior academics, mainly due to a brain drain.

- *Brain drain.* The mass exodus of the most talented lecturers to other sectors of the economy and to universities outside the country for better conditions of service has led to diminishing scope for mentoring junior lecturers and researchers by seasoned senior staff.
- *Lack of information and communication technology facilities.* Despite the importance of information and communication technologies in enhancing teaching and learning, there is substantial evidence that institutions of higher learning lack vital information and communication technology tools. This is a major contributory factor to the poor global ranking of Nigerian universities;
- *Frequent labour disputes and closures of universities.* Recurring student agitation and protests and staff union disputes result in frequent closures of universities. Hardly an academic session rolls by without some type of disruption. It is not uncommon for students to spend an average of six years to complete a four-year programme due to strikes by academic and non-academic staff.
- *Lack of vibrant staff development programmes.* Only a few universities have a rigorous staff development programme, including fellowships abroad.
- *Cultism and other vices.* Increasing criminal activities by cult groups, kidnappers and other outlaw groups have created an atmosphere of perpetual fear, with grave consequences for effective teaching and learning.
- *The provincialization of universities.* There has been noticeable transformation of universities into what I call 'Provincities'. Tribal and ethnic forces are increasingly turning universities into 'local conclaves' of the dominant tribes and ethnic groups in the area where the universities are located. These local groups see the universities as their base of control. It has almost become the norm that non-natives or 'foreigners' can never become vice-chancellors of universities.
- *Poor leadership.* Since the 1990s, the government has shown only weak commitment to higher education. At the institutional level, many universities are now run as chiefdoms, under the tyrannical sway of local administrators. Vice-chancellors are appointed on the basis not of merit but of tribal or ethnic attachment.

4. Towards fulfilling education's promise in Africa

It is high time that we raise our academic standards and bring our higher education institutions up to the level of global institutions. High-quality education is clearly the foundation for national and individual success and growth. *Thus, we face the question: How can education's promise be fulfilled in Africa?* Dissecting the reasons we have failed to realise education's promise shows clearly that the path to fulfilling education's promise lies in raising the quality of education, particularly higher education. Accordingly, we need to take the following strategic actions immediately:

Prioritise tertiary education

The starting point for any action to fulfil education's promise is to prioritise tertiary education. Only then can the critically required transformative research and human capital stock development needed for our growth and sustainable development be quickly initiated, achieved and maintained. Prioritising university education means making adequate funding available.

Facilitate the transfer of learning by adopting innovative pedagogy

Education is a powerful tool for development only if students are able to directly or adaptively transfer to real life what they have learned in classrooms, seminars and laboratories. This transfer of learning means putting what one has learned into practice in different contexts. Not only knowledge and skills must be transferred, but also habits of mind cultivated during formal education such as intellectual curiosity, evidence-based decision making, lifelong learning and self-questioning.

The ability to transfer learning is a vital part of being educated. According to an ancient Chinese proverb: *'Not having heard something is not as good as having heard it; having heard it is not as good as having seen it; having seen it is not as good as knowing it; knowing it is not as good as putting it into practice'*. So, in designing university courses in African universities, teaching activities and strategies that contribute to the transfer of learning deserve primacy. This requires taking three steps.

- Step one: make the course content—including concepts, learning activities and assignments—relevant to the student's community and world.
- Step two: incorporate individual and group presentations, problem-solving, case studies, simulations and scenarios into learning activities and teach by creating a collaborative culture for problem-solving and case studies.
- Step three: create opportunities for active student involvement through group or individual presentation and time for questions, suggestions, comments, debate and dialogue. Lace lectures with practical scenarios, thought-provoking questions and society-oriented cases aimed at amplifying the meanings and applications of concepts and theories as well as increasing the possibilities for transferring learning.

These steps can ensure that a university education in Africa includes innovative pedagogies that increase the prospects for transferring learning from the university to society.

In this regard, the salutary efforts of the Partnership for African Social and Governance Research, an independent, non-partisan, pan-African non-profit organisation based in Nairobi, initiating the Pedagogical Leadership in Africa (PEDAL) programme is most welcome. PEDAL is a network of academics in the social sciences in African universities that seeks to transform graduate education and its outcomes through investment and engagement in innovative and creative teaching and learning methods. It is intended to introduce and embed innovative pedagogy in graduate programmes that enhances the educational experience for lecturers and learners and thereby improve the quality of social science graduates and increase the efficiency of education programmes. Its aim is to significantly change how graduate education is imparted, to improve teaching and learning and enhancing the quality of graduates so that they are better able to get good jobs, and to lead research and thus contribute to the socio-economic development of their country. Partnering universities to date include the University of Dar es Salaam (Tanzania), Egerton University (Kenya), University of Ibadan (Nigeria), University of Ghana (Ghana), Uganda Martyrs University (Uganda) and Institute of Development Studies and University of Sussex (UK). More universities are expected to join.

It is strongly advised that more, and if possible all, Nigerian universities join this programme. Every effort should be towards its escalation to other universities and across disciplines.

Prioritize community service

African universities need to institutionalize community engagement. University-wide agendas and institutions—policies, structures and practices—should guide and facilitate the involvement of academic units, faculty, staff, students and external actors in community engagement. Such community engagement needs to be integrated into institutional budgets, teaching and research activities through service learning, collaborative research and internships and through the deliberate involvement of communities in curriculum development, among other activities. Engaging communities should be an integral mission of universities, receiving commensurate attention and effort, and not a fringe activity or a spillover from core university activities such as teaching and research.

Strengthen links between universities and the economy

African universities need to strengthen links with the productive sector, not just to generate new sources of funding but also to create employment opportunities for graduates. But as the African Capacity Building Foundation indicated, an optimal relationship can thrive only by tackling the multiple factors that undermine the relationship, such as low numbers of qualified faculty and brain drain, aging faculty and other issues associated with low staff retention; low enrolment in mathematics, engineering and other science-related disciplines against large enrolment in social sciences and humanities; inadequate research infrastructure and libraries; funding constraints; and a focus on research over teaching.¹⁰ Dealing with these issues should not deter efforts to strengthen the relationship with the productive sector, but should be taken into account in devising the best way forward.

University management must develop networks with the productive sector, creating opportunities to assemble university faculties and private sector representatives at the same table to forge stronger linkages, promote clearer understanding of mutual needs and constraints and stimulate greater demand on the part of industry. The private sector must also reach out to universities. A strong productive sector requires robust input from universities and other institutions of higher education for knowledge generation and skill development of the workforce. Governments must create an incentivized environment for strengthening such linkages through science and technology strategies, legislation on intellectual property rights and funding for R&D, among other items.

Retooling universities for African development

African universities need to re-orientate themselves to generate the evidenced-based knowledge required to overcome the developmental issues confronting the continent, such as poverty, inequality, food insecurity and the triple burden of malnutrition, disease and climate change. More than 100,000 foreign experts are employed to address Africa's problems, at a staggering annual cost of \$4 billion, most of it from aid budgets.¹¹ As the African Capacity Building Foundation reminds us, much of this expertise could be more efficiently and sustainably provided domestically if these resources were redirected to postgraduate training, research and university capacity building within Africa.¹²

A key role for universities is to provide the enabling skills (analytical, quantitative, IT, communication and soft skills) for their researchers and lecturers to take the urgent problems of society by fostering adaptability and innovation, especially through the capacity for research.

The new African university should develop and provide degree and certificate offerings in a wide range of issues and disciplines.

A renewed agenda for African universities must focus on skilled human resources for economic growth, especially in science and technology, to be prepared for the unfolding fourth industrial revolution and the global shift towards robotics, cloud computing and artificial intelligence. Universities must break free of outmoded paradigms, some dating to the colonial era, if they hope to contribute to meaningful progress. African universities (public and private) should regroup and provide leadership on reinventing African education and developing a new critical technical skills agenda for implementing Africa's Agenda 2063 and the Sustainable Development Goals, including training in the critical technical skills that the African Capacity Building Foundation identified as needed to implement the Agenda.

As the African Capacity Building Foundation also reminds us, 'Contemporary universities have a responsibility to transcend traditional disciplinary limitations in pursuit of intellectual fusion, and develop a culture of academic enterprise and knowledge entrepreneurship. They must also be prepared to begin delivering higher education at scale—in a manner that bestows status upon universities based upon the outcomes they achieve and their breadth of impact rather than the exclusivity and quality of their incoming freshman class. Universities must work creatively and be willing to take risks to become even greater forces of societal transformation. They need to foster student success by becoming student-centric—rather than faculty-centric. Successful universities will be those capable of being nimble, anticipatory, imaginative, and reactive. They must provide unique environments that prepare students to be “master thinkers” able to grasp a wide array of skills and become the most adaptable workforce Africa has ever known.'

5. Bringing all hands on deck to fulfil education's promise

The roles of education stakeholders

The World Bank identified multiple stakeholders in education, each with its own interests.¹³ Only by aligning these actors and directing their interests towards learning will we be able to achieve desired learning outcomes and build a bulwark of support against other competing (political) interests and potential conflicts. While the Bank outlined some ways to accomplish this, I consider them to be technical prescriptions. We need to complement such technical approaches with a socio-political approach. This hinges on the imperative of having all hands on deck working to fulfil education's promise. In this way, we can cultivate strategic alliances among stakeholders and advance together on a timely, efficient and effective path towards fulfilling education's promise.

If universities are to function optimally, each component—administration, faculty, students and trustees—must fulfil its responsibilities. University administrators need to encourage a 'tripartite education dialogue' among the university, the government and the private sector to agree on key milestones, strategic actions and shared responsibilities. State support of public universities has been declining, forcing many public universities to seek private support. These emerging relationships need to be formalised and strengthened. The world's best universities have huge endowments and support from the private sector. Harvard University had an endowment of \$37 billion in 2017, the highest in the world, followed by Yale University at \$27 billion and Stanford University at \$24.7 billion.¹⁴ While comparable statistics are not available for African

universities, evidence indicates that endowment funds are quite low in Africa universities and they need to step up efforts at attracting private funding.

Students and their parents also have responsibilities. Students need to study, attend lectures regularly and benefit from all learning opportunities as much as possible. Student unions occupy an important place within the university system. Typically, both undergraduate and postgraduate students automatically become members of their institution's student union. In Nigeria, student unions have long carried out a range of functions for their members, including providing support on academic and welfare issues, representing students individually and collectively, organising social activities and campaigning on local and national issues. Parents provide an important element of stability by supporting students financially and with career advice. Emotional support from other family members can also assist students in transitioning to university life.

Alumni associations also have a major role. As brand-ambassadors for their institution, alumni are great role models for current students and can offer practical support to students as they start their careers. Many alumni donate to their alma mater and offer other support, such as endowing prizes. With the advent of social media, universities have started to harness the power of alumni through various networking platforms.

Generally, universities are considered neutral conveners, assemblers of talent and unmatched idea factories that bring to bear the passion, creativity and idealism of great minds, young and old alike, to solve problems and advance our societal and economic well-being. This premise underlies my argument that universities are a critical stakeholder and driver in the quest towards better learning outcomes across the entire education system to fulfil the education promise in individual African countries and the continent in general.

Previously in this lecture, I identified four strategic action paths for fulfilling education's promise: prioritise tertiary education, prioritize learning over schooling, facilitate the transfer of learning through innovative pedagogy and harmonize the three main types of education, formal, non-formal and informal. In all of these tasks, universities must take the lead to identify the most actionable, evidence-based policy options and pathways.

Not easy, for these tasks require high capacity. Likewise, thoroughness and professionalism are required to develop evidence and examples of novel and tested approaches to pedagogy, adopt new standards in teaching and learning, align actors to make the entire system work for learning and harmonize the three main types of education. Universities need to accept these responsibilities and act accordingly.

6. Revamping universities

In the competitive global knowledge economy, the knowledge and skills of a nation's people will determine the country's well-being. This makes the quality of learning—the acquisition of knowledge, skills and values—of paramount importance to society as well as to each student.

Our quest and resolve to improve learning and skills acquisition in our education system requires overhauling our schools and curriculum and dedicating ourselves to a renewed commitment to educating every child—and educating them well. Universities have a critical role in this. But for them to significantly shape Africa's prosperity, they must facilitate the creation of and access to knowledge by sharing best practices, generating new information and innovations, promoting

academic research relevant to output to development and leading collaboration between higher education and industry.¹⁵

It is instructive to note that Korea followed this path to universal literacy, and today its students perform at the highest levels in international learning assessments. A high-income country, it is a model of successful economic development.

I have the following specific proposals to revamp universities in Nigeria and in Africa more broadly.

- The Government of Nigeria should place a high value on education by meeting UNESCO's benchmark for educational spending of 26 percent to revitalize higher education.
- Reforming higher education in Nigeria can be promoted through collaborative efforts by government, business sectors, civil society and academia to reinvent the Nigerian higher education system to deliver research, better quality teaching and community services.
- Giving the position of Minister of Education to the best qualified person for the job will be a good start. Education should be linked to agriculture, IT, development, industry and the network of academic and practical excellence on education.
- To stem the tide of Nigerians emigrating to universities in Ghana and other countries and to attract foreign students, our aim should be to transform Nigeria into an education hub in Africa and the world, raising it to the level of a world-class education institution. This was the trend in the 1960s and 1970s. It is an achievable target as Nigeria is blessed with world-class students and intellectuals.
- Quality teaching and learning should be encouraged within universities. Most academics are not trained to teach during their masters and doctoral studies, which focus on research. Academic institutions should set up pedagogy centres to appropriately train new staff. In-service teaching assistance should be provided to senior professors and others engaged in teaching (innovative pedagogies) to improve the transfer of learning from universities to society. The development of teaching skills should be a compulsory component of all doctoral training.
- An enabling environment for excellence should be created for staff through improved conditions of service, infrastructure, virtual libraries, information and communication technologies and internet connectivity.
- Since higher education is expected to contribute to the development of individual talent that meets the future needs of society and the labour market, the curriculum and teaching and learning approaches should be periodically assessed against their usefulness to the graduate.
- Quality education must reflect the recognition that the labour market requires employees and entrepreneurs with problem-solving skills, the capacity for effective teamwork and creativity and professional knowledge. Universities should maintain ongoing communication with their graduates and use their feedback to revamp curricula and teaching methods.
- Each university should create an advancement unit or department for resource mobilization, provide career guidance, job placement services and exchange programs, and invest in the capacity building and professional development of faculty members.

7. Message for graduating students

I am informed that the university will be graduating 355 students across the Faculties of Humanities, Science, Basic Medical Sciences and Management and Social Sciences. To all of you graduating today, a very warm congratulations on your graduation and best wishes for your next adventure. Graduation is an exciting time. It marks both an ending and a beginning, with warm memories of the past and big dreams for the future. The past is gone now, and your future beckons.

Given current circumstances in Nigeria, for many of you, your dreams may not immediately come to realisation as you had envisaged. But I urge you that no matter the situation, do not give up on your dreams. Do not lose faith either, but keep your eyes always on your goal. Let the moral values that you have internalized at this university be your guide so that you can be a true agent of the change and reform that our beloved country, Nigeria, so sorely needs. Say ‘no’ to the tribal/ethnic tendencies that are plaguing our society and driving us to the abyss of disintegration. Say ‘no’ to the corruption that has wreaked havoc in our country. Be ever conscious that you have a moral obligation, a mission and a mandate to do your part. Always be good ambassadors of your university. Please, put your education, the knowledge and skills you have acquired to good use for the benefit of yourself, our beloved country and our dear continent. You must play a role in fulfilling education’s promise and helping to redeem Nigeria and Africa.

As it is often said, a journey of a thousand miles begins with a single step. I, therefore, would like to charge and challenge the Alex Ekwueme Federal University Ndufu-Alike, Ikwo, to take the first step in our journey towards fulfilling education’s promise in Nigeria and throughout Africa. A pilot demonstration of the prescriptions presented in this lecture should be kick started in Ebonyi State to beckon other universities and states in Nigeria and across Africa to follow. I look forward to your acceptance of this charge and challenge and to seeing the outcomes in the not too distant future.

In bringing this lecture to a close, I would like to reissue the call to action by former American President John F. Kennedy:

‘Our progress as a nation [and continent] can be no swifter than our progress in education. The human mind is our fundamental resource.’

‘Let us think of education as the means of developing our greatest abilities, because in each of us there is a private hope and dream which, fulfilled, can be translated into benefit for everyone and greater strength for our nation [and continent].’

References

- Addison, T., P. Ville, R. Risto and F. Tarp. 2017. "Development and Poverty in Sub-Saharan Africa." Working Paper 2017/169, United Nations University World Institute for Development Economics Research (UNU-WIDER), Helsinki.
- Africa-America Institute. 2015. *State of Education in Africa Report*. New York: Africa-America Institute. Available at: <http://www.aaionline.org/wp-content/uploads/2015/09/AAI-SOE-report-2015-final.pdf>.
- ACBF (African Capacity Building Foundation). 2016. *African Union Agenda 2063: African Critical Technical Skills: Key Capacity Dimensions Needed for the First 10 Years of Agenda 2063*. Harare: African Capacity Building Foundation.
- African Union and African Capacity Building Foundation. 2016. *African Union Agenda 2063 Capacity Development Plan Framework: Buttressing Implementation of the First 10-Year Plan— "The Africa We Want."* Harare: African Capacity Building Foundation.
- Bloom, D. E., D. Canning, K. Chan and D. L. Luca. 2014. "Higher Education and Economic Growth in Africa." *International Journal of African Higher Education* 1 (1): 22–57.
- Darvas, P., S. Gao, Y. Shen and B. Bawany. 2017. "Sharing Higher Education's Promise Beyond the Few in Sub-Saharan Africa." *Directions in Development, Human Development, World Bank*, Washington, DC.
- Hayter, E. 2015. *From Technical Expertise to Empowerment: Why Higher Education Matters*. London: Association of Commonwealth Universities.
- Mugabi, H. 2015. "Institutionalization of Community Engagement at African Universities." *International Higher Education* 81: 21–23.
- Mutisya, E. 2018. "Shaping Prosperity by 2030: The Role of Universities in Africa's Socio-economic Transformation." Presented at the Ninth Annual Ibadan Sustainable Development Summit (ISDS), September 2018.
- Perkin, H. 2007. "History of Universities." In: J.J.F. Forest and P.G. Altbach (eds.), *International Handbook of Higher Education*. Springer International Handbooks of Education, vol 18. Dordrecht: Springer.
- Singh, M. 2015. "Global Perspectives on Recognising Non-formal and Informal Learning: Why Recognition Matters. UNESCO Institute for Lifelong Learning." *Technical and Vocational Education and Training: Issues, Concerns and Prospects, Volume 21*. Springer Cham Heidelberg: New York, Dordrecht, and London.
- Watson, D., R. Hollister, S. Stroud and E. Babcock. 2011. *The Engaged University: International Perspectives on Civic Engagement*. London and New York: Routledge.
- Wilson Investment Holdings (2018) Endowment 500. Ranking of Top Endowment Investment Funds by Universities in USA, Endowment Fund Association.
- World Bank. 2018. *World Development Report, 2018: Learning to Realize Education's Promise*. Washington, DC: World Bank.
- Zeleza, P. T. 2006. "A Historical Accounting of African Universities: Beyond Afro Pessimism." *The University in Africa*.

Appendix 1

Table A1.1 The 14 African countries listed in the top 1,000 of the 2018/19 University Ranking by the Center for World University Ranking

S/No.	World Rank	University	Location	NR	QE	AE	QF	RO	QP	INF	CIT	Score
1	223	University of Cape Town	South Africa	1	216	294	187	293	299	190	254	77.9
2	230	University of the Witwatersrand	South Africa	2	133	80	216	367	377	187	304	77.7
3	402	University of KwaZulu-Natal	South Africa	3	509	277	-	400	526	347	327	74.9
4	438	University of Pretoria	South Africa	4	-	686	246	416	555	600	460	74.5
5	448	Stellenbosch University	South Africa	5	555	139	-	428	500	409	541	74.3
6	452	Cairo University	Egypt	1	569	> 1000	228	378	629	602	541	74.3
7	715	Ain Shams University	Egypt	2	-	> 1000	-	606	870	779	541	71.8
8	771	Makerere University	Uganda	1	448	> 1000	-	981	779	456	673	71.3
9	790	University of Johannesburg	South Africa	6	-	> 1000	-	785	896	781	541	71.2
10	884	Mansoura University	Egypt	3	-	> 1000	-	731	942	971	898	70.5
11	903	Alexandria University	Egypt	4	500	> 1000	-	768	923	> 1000	898	70.4
12	908	Tunis El Manar University	Tunisia	1	->	1000	-	641	946	> 1000	> 1000	70.4
13	964	North-West University	South Africa	7	591	> 1000	-	823	> 1000	681	> 1000	70
14	991	University of Ibadan	Nigeria	1	540	> 1000	265	> 1000	> 1000	774	898	69.8

Source: cwur.org/2018-19.php

Breakdown: South Africa 7, Egypt 4, Uganda 1, Tunisia 1 and Nigeria 1.

TOTAL = 14

Key

- NR = National Rank
- QE = Quality of Education
- AE = Alumni Employment
- QF = Quality of Faculty
- RO = Research Output
- QP = Quality of Publications
- INF = Influence
- CIT = Citations

Appendix 2

Figure A2.1 Real GDP per capita growth rate by region

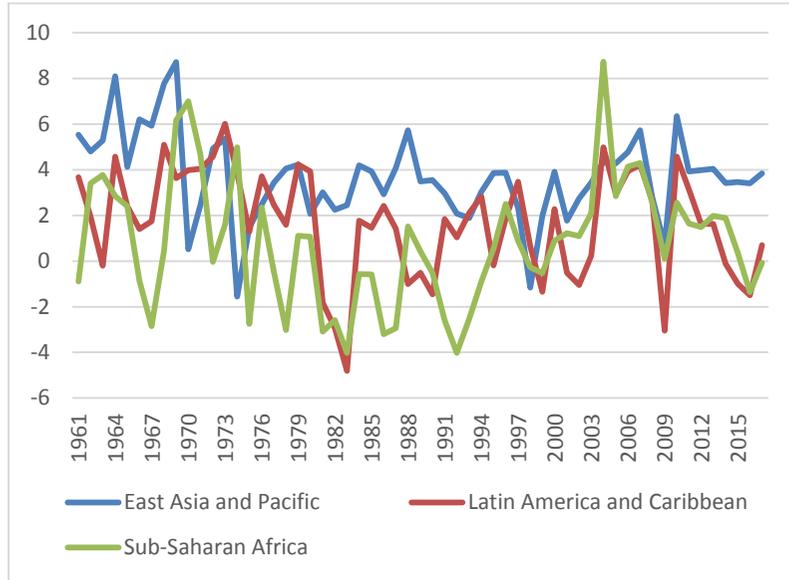


Figure A2.2 Life expectancy at birth

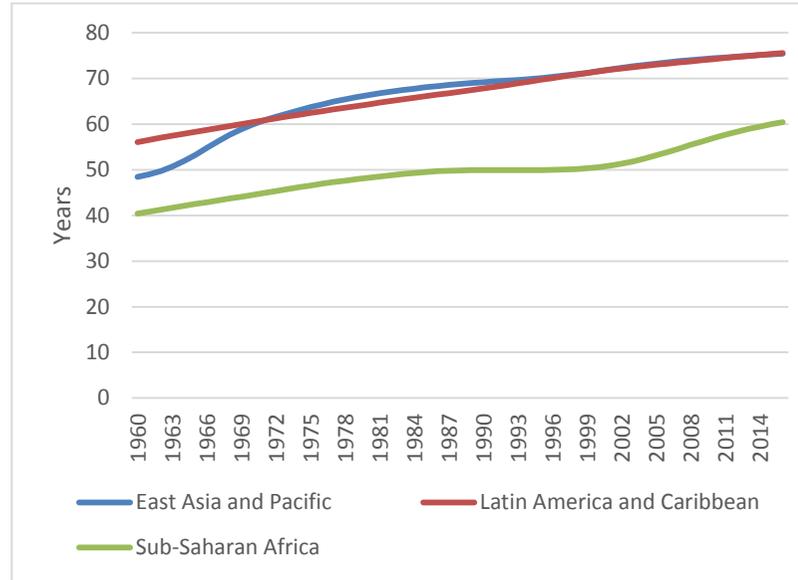


Figure A2.3 Monetary poverty headcount ratio at US\$1.90/day
(2011 purchasing-power parity)

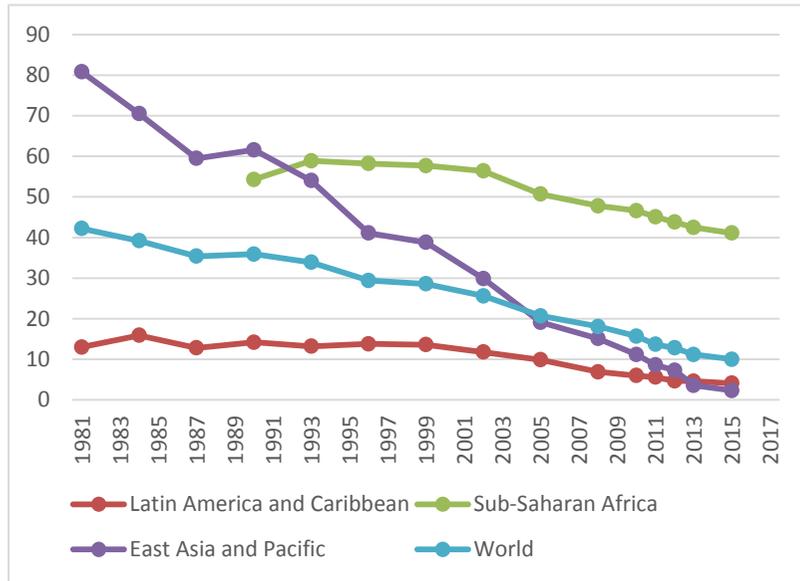


Figure A2.4 Income inequality across geographical regions

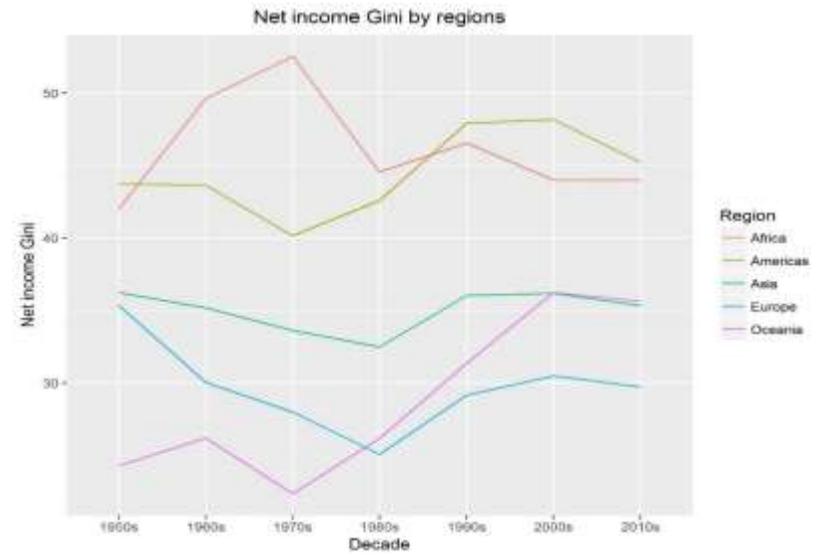


Figure A2.5 Under-five mortality (per 1000 live births)

by major world region, 1970–2015

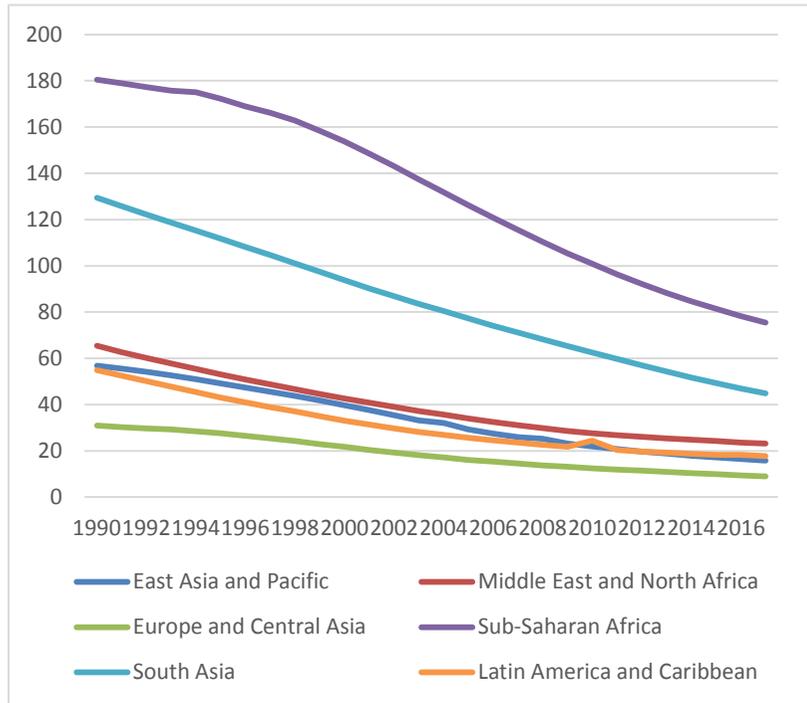


Figure A2.6 Access to clean drinking water from improved water source

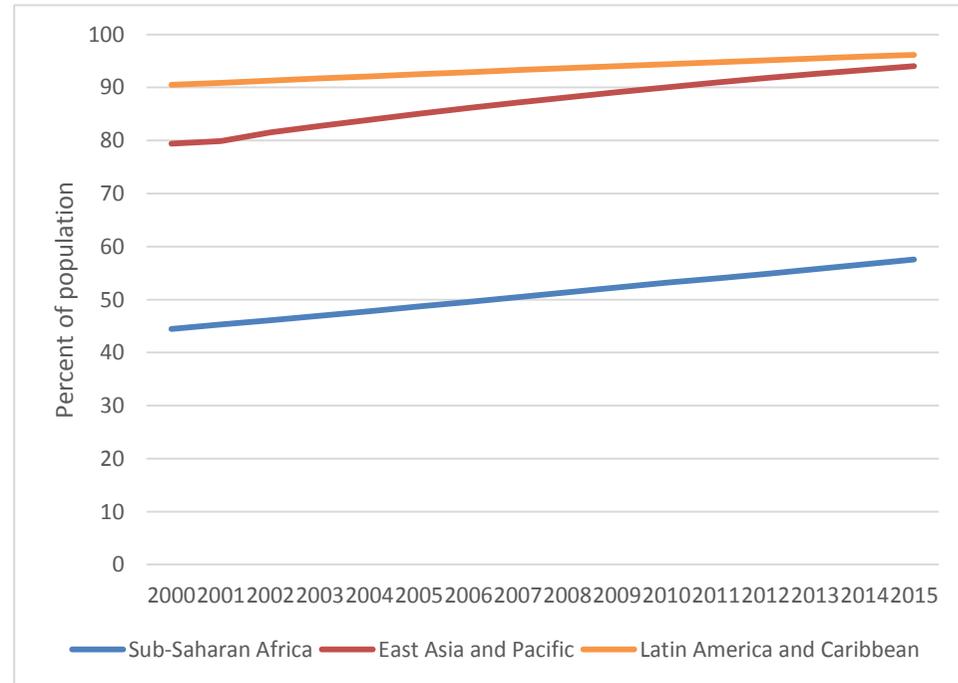


Figure A2.7 School enrolment in Sub-Saharan Africa

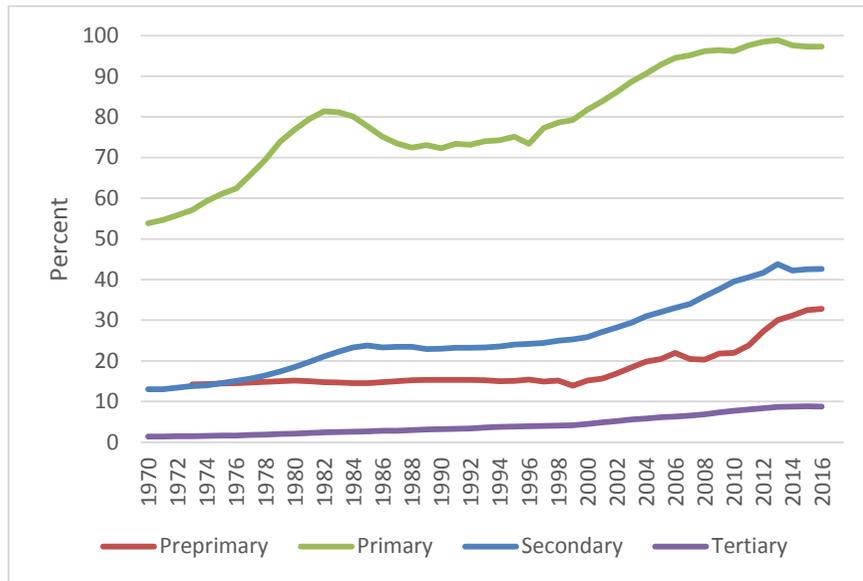
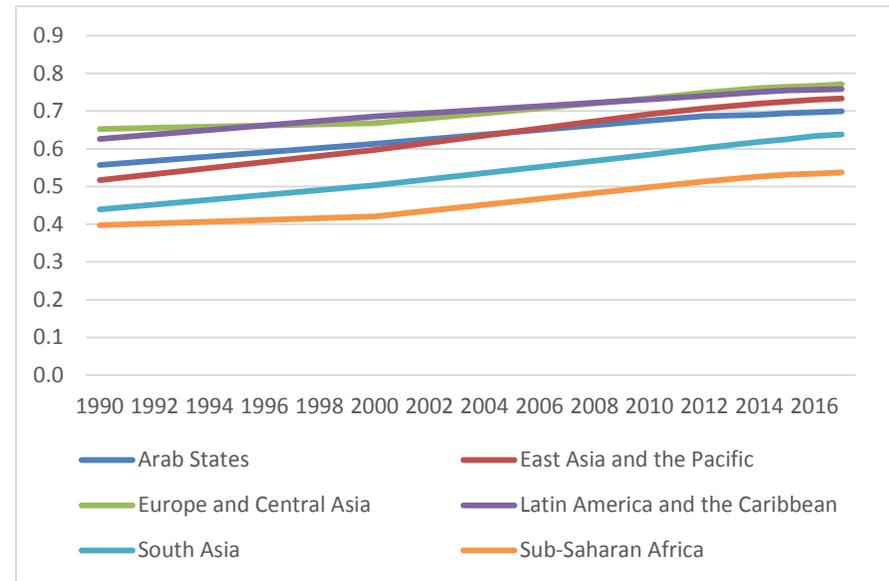


Figure A2.8 Human Development Index by region



Sources: Computed from World Development Indicators (2018).

¹ Perkin 2007.

² Darvas et al. 2017.

³ Zeleza 2006.

⁴ African American Institute 2015.

⁵ World Bank 2014.

⁶ Center for World University 2018.

⁷ World Bank 2018.

⁸ World Bank 2018.

⁹ ACBF 2016.

¹⁰ ACBF 2016.

¹¹ Hayter 2015.

¹² ACBF 2016.

¹³ World Bank 2018.

¹⁴ Wilson Investment Holdings 2018.

¹⁵ Mutisuya 2018.