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Chapter

A Philosophical Outlook on Africa's Higher Education in the Twenty-First Century: Challenges and Prospects

Dei Daniel, Osei-Bonsu Robert and Amponsah Samuel

Abstract

Higher education is perceived as key to the comprehensive development of Africa. In line with this perception, various governments have initiated several policies and models in an attempt to build quality higher education for developing Africa's human capital to positively respond to the global challenges of the twenty-first century. Despite these efforts, an observable gap still exists between higher education and socioeconomic development of Africa. This gap raises the question of how the quality of higher education in Africa could be improved to make the needed contribution to the comprehensive development of Africa. This chapter casts a philosophical outlook on higher education in Africa and doubts its relevance in Africa. The chapter reveals that commercialization of teaching and learning, scarcity of qualified faculty, inadequate resources for research, and ineffective governance of higher education institutions hinder African higher education from playing its role as a development agent. The chapter further claims that research collaborations across disciplines in higher education institutions, improvement in irregular/nontraditional modes of teaching and learning, utilization of student-based learning models, and restructuring the governance of higher institutions will help the African society reimagine the significance of these institutions to the socioeconomic developmental goals of the African society.

Keywords: higher education, Africa, methodic doubt, challenges, prospects

1. Introduction

Higher education describes systematic learning that takes place in the universities and colleges or other equivalent institutions of learning mostly termed tertiary institutions refer to higher education institutions. A survey of higher education institutions in Africa's ten most populous countries (Nigeria, South Africa, Ethiopia, Democratic Republic of Congo, Egypt, Sudan, Uganda, Algeria, Kenya, and Tanzania) indicates the existence of over 740 universities and colleges in Africa which are supported by both governments and private entities. As home to the world's oldest universities, the University of Al Qarawiyyin in Fez in Morocco (founded in 859 AD) and Al-Azhar University in Egypt (founded in 970 AD), [40] the continent is not oblivious of the benefits of higher education. Yet society

is sceptical about the kind of knowledge, skill and competencies graduates from higher institutions possess.

Although, governments in some African countries such as Kenya, Uganda, Ethiopia, Tanzania, Egypt, and South Africa have invested hugely in both public and private tertiary institutions. Such investments seem to have paid off locally. A 2016 Times Higher Education ranking identified 15 best universities in Africa. Among these, six were from South Africa, three were from Egypt, two were from Morocco, and one each from Ghana, Kenya, Nigeria, and Uganda [1]. But African Universities appear inferior to their counterparts in other continents. For example, the Edition 2019.1.2 of Webometrics indicates that the best university in Africa, University of Cape Town, ranked 272 on the world ranking [2].

This meant that the best of African universities was missing on the intercontinental list of 250 best universities. Interestingly, South Africa had eight of the top ten best African universities. Perhaps, South Africa has found an antidote to the declining underperformance of universities in Africa. Could national funding of research policy be the reason for its relative success on the continent? This question and the queries raised so far begin the probe into the relevance and impact of African Universities. This study inquires into the objectives and roles of African universities in a quest to determine challenges obstructing these universities from achieving their objectives. In this regard, the study will identify prospects for harnessing the potentials of universities in Africa.

Through the philosophical approach of methodic doubt [3], the study distrusts the relevance and impact of Africa universities, formulates a challenge-based argument that explains the underperformance and reduced impact of African universities, and argues for a solution based on identified prospects. The study casts doubts on all existing views on the relevance and impact of higher education in Africa in an attempt to arrive at indisputable recommendations for enhancing the relevance and impact of higher education in Africa. Rational analysis enabled secondary data on Africa's higher education to be examined in light of the identified challenges and prospects on the continent. The thrust of this chapter is that concerted efforts by all stakeholders, reviewing teaching and learning approaches by incorporation nontraditional modes and restructuring governance systems in higher education institutions can aid universities in Africa to contribute significantly to the comprehensive development of the continent.

2. Doubt of the relevance and impact of Africa's higher education institutions

Universities in Africa, like their counterparts elsewhere, are established to achieve lofty goals, but the continuous underperformance and low impact of these universities make these goals a mirage. Also, African universities seek to achieve the goals of a twenty-first century education institution wherein "knowledge producers, values and culture transmitters, and capacity builders" ([4], p. 221). In light of these goals, African tertiary institutions are seen as centers of learning for the development of Africa's human capital and agency for the enhancement of the African identity.

In contrast, the creation of national and African identities [5] bemoans how Western education philosophies have been wholly accepted in the African education system at the detriment of indigenous knowledge systems. The authors are of the view that current Western philosophies of education can be perfectly integrated into the indigenous education system. As centers of learning and the development of Africa's human capital, these tertiary institutions are expected to acquire theoretical and

practical information about issues and concepts relevant to the African community, process this information through systematic categorizations, and transmit this categorized knowledge to their students. African universities perform this task through research, assessment, and teacher-student engagements in both curricular and extracurricular activities. Once again, this highlights the call for African philosophies to form the framework for education in the continent [6] in order to make teaching and learning more relevant to students in African higher education institutions.

It is worth noting that the significance of these universities is mostly viewed by society through the performances and competencies graduates bring to bear in their attempt to resolve challenging issues [7]. As such, society expects that these graduates will leave the universities with a body of relevant knowledge, ability to use this knowledge in the society meaningfully, and skills to apply knowledge to solve the myriads of problems facing countries on the continent [7]. After all, society prides itself in the high-level human workforce who not only exhibit knowledge but use this acquired knowledge to brace up society for the extensive changes of the twenty-first century [8].

Given the considerable number of graduates produced annually by Africa higher education institutions and the disconnect between the industry and the knowledge and skill base of these graduates, one could argue for the relevance of establishing these universities. African societies do not just need the numbers because there must be commensurate quantity given that graduates are required for societal transformation given the pressures and opportunities of the twenty-first century. However, the high rate of graduate unemployability across the continent casts a slur on the relevance of African universities, bringing into the fore the question raised by Mouton et al. [9] on the relevance of these institutions on the continent. This unfortunate phenomenon has been blamed on the mismatch between graduate competencies and industrial/societal needs [10]. This has opened a Pandora box for both society and industry to question the worth of university graduates. Some university graduates are themselves not so hopeful of their future in terms of acceptance into the workplace and the contributions they can make.

To further highlight the situation under scrutiny, [11] reported that 25% of graduates from African universities were unemployed. In a similar instance, the [12] quoted the president of Coca-Cola Company as claiming that 50% of the annual 10 million university graduates that churned out of African universities were unemployed. Additionally, Osazuwa [13] pegged graduate unemployment in Nigeria at an alarming 70%. Whereas in South Africa, the economic powerhouse in Africa, [39] indicated that graduate unemployment was ~14.9%.

The picture painted above may readily suggest that high graduate numbers will result in unemployment when more jobs are not created. However, the situation is different in the case where it is noted that only 50% out of annual university graduates in Kenya are suitable for employment [14]. The report further indicated that less than half of this percentage possessed the requisite soft skills for their preferred careers. The lack of soft skills and mismatched knowledge and job requirement corroborates an earlier report by the [15] and that of the [10] which collected data from 36 Africa countries established a mismatch between university degrees awarded and “career paths such as telecommunications, engineering, agriculture, Information Technology, health, banking and education” [10].

Sadly, Wambugu et al. [16] argued that “African tertiary graduates are weak in problem-solving, business understanding, computer use, and communication skills.” Relatedly, Ncube [17] picked a compelling sentence from the keynote address by Professor Emmanuel Ngara of African Association of Universities in what follows:

Many African tertiary institutions produce half-baked graduates that aren't fit for the world of work mainly because of the way they are taught and the absence of curricular reviews that should respond to the calls of industry's contemporary needs.

As authors of this chapter, we note that entrance into African higher institutions are highly competitive and the best candidates are often offered admission until the throughput is overhauled to fill the mismatch the relevance of African universities in terms of graduate output will continue to be in doubt.

Apart from the socio-economic function of African higher institutions, there is a greater expectation that these institutions will be agencies by which the goal of constructing an African identity in the twenty-first century can be realized. Africanization is a concept that highlights the need to determine and sustain the personhood and the relationship of the African people in a globalized world [18, 19]. It stresses the need to incorporate the patterned way by which the African thinks, behaves, and expresses feelings about reality into the total life of the university [20]. Far from hostility towards the Western worldview, there should be a conscious and concerted effort of re-modeling higher education in Africa such that the goal, content, method, research, and administration converge to produce graduates who recognize the needs and values of the continent [21]. Essentially, tertiary institutions in Africa will achieve this aim if the graduates they churn out display a sense of Africa's commonalities, affirm Africa's culture, tradition and value systems, and foster a comprehension of the African consciousness in a bid to blend both western and African methodologies of resolving the challenges of the African people [5, 22].

An appraisal of tertiary institutions in Africa in terms of Africanization only deepens the doubt of the relevance of these institutions. For instance, research conducted in Kenya revealed that graduates from higher institutions were only strangers to the socio-economic development needs of the country [23]. A similar observation can be made across the continent as most African universities employ content and delivery methods that are simply out of tune with the developmental needs of African society or as noted by Amponsah et al. [5] are skewed towards western philosophies of education. As such, graduates from these tertiary institutions "are not active, creative participants in the economy" of their countries [24]. The logical conclusion from the disparity between African graduates and their subsequent irrelevance in Africa's socio-economic struggles would seem to suggest that content and methodologies used in educating these graduates are foreign to the demands of their developmental context [25]. In this regard, higher education institutions in Africa have, to a large extent, failed to contribute to the improvement of the quality of life of the African community [26]. As a result, most tertiary graduates in Africa are marginalized by society. This is obviously a defect in the efforts to educate people to the highest level and this needs to be fixed to reverse the negative assertions on higher education institutions.

3. Challenges of Africa's higher education institutions

The doubt on the relevance and impact of higher education in Africa has been sustained by certain pillars. A common proverb goes like "there is no smoke without fire." This section is therefore dedicated to establishing some key challenges African higher education institutions continue to battle among which are the commercialization of teaching and learning, scarcity of qualified faculty, inadequate resources for research, and ineffective governance of higher education institutions. First of

all, the increasing demand for higher education in Africa explains the escalation of private tertiary education institutions on the continent. It is recorded that private universities grew from 35 in 1969 to 972 in 2015. As a consequence, higher education in Africa has become a privileged right instead of a public good. This implies a *for-profit drive* rather than a *nonprofit drive*. Like other neoliberal institutions, widening the profit margins of the entity is a primary interest of its owners. In this regard, management of higher education institutions in Africa engages faculty, students, content, teaching and administrative methodologies that contribute to the economic interest of owners. Such *for-profit* motif has even infected public higher education institutions. African governments are reducing state funding of public universities in favor of commercializing policies such as “cost-sharing” [27]. The effect is that economic interest instead of the need to produce a refined workforce for society determines the standard of operations in most African universities.

More so as higher education in Africa expands, the need for qualified faculty becomes apparent but that has mostly been the case. For example, Kenya's Commission for University Education revealed that only 34% out of 18,005 faculties from the nation's 74 universities and colleges possessed doctorate degrees [14]. This reality implies that higher education institutions in Africa will have to rely on faculty without the requisite qualifications or part-time lecturers for students' engagement. Since these part-time lecturers have a primary commitment in their substantive institutions, their services in these part-time institutions are limited both in terms of contact times and quality of contents. Lecturing in multiple institutions most likely lead to limited research output. Available records indicate that Africa produced 2.1% of the world's academic publication compared with 33.1% by Asia and 32.9% by Europe. This results in the production of half-baked graduates for the African corporate society. No wonder the endless cycle of the mismatch between graduates from African higher institutions and African industries continue to exist and has been put on autopilot until something is done to salvage the situation.

Also, the lack of funding for research activities in African higher institutions is becoming pronounced [27]. Well-resourced libraries, Information-Technology facilities, and research-experienced faculty are lacking in most African higher institutions. For this cause, most Africa higher institutions fall short of being described as research universities. Not only are the research outputs low, but they are also regarded as substandard and hardly find their way to top-notch publication outlets. Global statistics on internationally collaborated publications in 2014 showed 90% of scholarly publications by African faculties were done in partnership with western countries. Most of the research outputs have more significance to the western partners than the African counterparts. This is indicative that such African scholars are insignificant to socio-economic issues of their immediate milieu [28]. By inference, even the majority of the research carried out by African scholars may never result in solving the problems of the continent.

To a large extent, the governance of Africa's higher institutions leaves much to be desired. Corporatization of African higher institutions has included individuals who are oblivious of leadership skills in academia. Governing councils of universities in Africa direct the affairs of the universities without recourse to the autonomy and freedom of the academic community. In some parts of Africa, the attitude of government regulatory bodies has added to the decline of quality in the operations of Africa's universities. Instead of adopting the collaborative approach to building these universities, these regulatory bodies have taken an interventionist stance. Through this approach, they prescribe content and methods that are mostly inconsistent with the aims of the general academic community under their jurisdiction. In some circumstances, these regulatory bodies assume a bias stance against private

universities. Such internal and external pressures rob African university communities of the vitality that academic freedom and autonomy brings.

4. Prospects of higher education in Africa

The presence of these challenges and their consequent hindrance to the optimal performance of the task of higher education in Africa is in itself a case for the relevance of these institutions in the twenty-first century. To have maximum impact on the African continent, it is suggested that the higher education system in Africa revisualizes its fundamental mandate and usefulness in the twenty-first century society. To this end, research collaborations across disciplines and higher education institutions, improvement in irregular/nontraditional modes of teaching and learning, utilization of student-based learning models, and restructuring the governance of higher education institutions will aid universities in Africa to contribute significantly to the comprehensive development of the continent. Such revisioning is necessary given the increasing demand for higher education in Africa [10].

Secondly, research collaborations across disciplines and higher education institutions will equip African faculties for significant research undertaking. Through such partnerships, African higher institutions will pull resources together for academic research. In working together, inexperienced-researchers will acquire skills from their experienced counterparts and skills learned will sharpen their curriculum planning, delivery, and research [29]. Also, the quest to conduct research that is relevant to the socio-economic and developmental needs of African society should be the top priority of African higher institutions. Such studies have the potential of attracting industries in Africa to invest in the research programs of the institutions. Through meaningful collaborations, such higher institutions will not only heighten their impact in the local context, but they would also create an impact on the global front.

Developing and maintaining irregular or nontraditional modes of learning is one sure way for higher education in Africa to respond to the increasing demand for quality and accessible higher education [30]. Otherwise known as innovative/modern learning methods, nontraditional learning modes refer to learning strategies that enable communication between learners and their faculties/institutions without the need to be physically present in the institution of learning. These strategies are generally self-directed and interactive. They can effectively engage the learner through technology-based methods such as virtual study environments (e.g., webinars), interactive interfaces, and blended techniques (use of videos and computers for teaching and learning). In the twenty-first century, harnessing the convenience, accessibility, self-paced and self-directed nontraditional learning modes of learning within the context of affordability can boost the quest of African higher institutions to remain relevant to the changing times.

Additionally, other modes of learning such as distance education, sandwich, weekend schools, and cohort learning methods could bring the benefits of a robust professional connection and single purpose experiences in the life of the learner. By these means, the missing link between higher education institutions and the requirements of industries in Africa could be supplied. In using these modes of learning, it is expected that regulatory bodies will objectively ensure quality in performing the task of education. In some places in Africa, these twenty-first century modes of learning have been rejected because they are always inferior to traditional styles of learning. Instead of showing hostility towards these learning modes, regulatory bodies should acquire the expertise needed to understand various technologies that drive these methods in their bid to ensure quality content, delivery, and assessment.

This requires a shift from teaching methods that emphasizes a teacher-mediated-classroom learning to more dynamic models of learning relevant to the comprehensive task of higher education in the twenty-first century. Such dynamic pedagogies utilize formal, nonformal, and informal strategies to engage students in analytical learning contexts that aim at making learning both a social construct and activity [31]. These dynamic pedagogies are drawn from several theories on the methods of teaching. The behaviorist learning approach is one of such models. This approach sees the learning process as a means of sharpening specific and general ways individuals respond to environmental conditions [32]. A mastery of these responses may equip learners with skills that may enhance their productivity in the society.

The constructivist paradigm may also be helpful in this regard. Shifting attention from the passive recipients of teacher-mediated information, constructivist learning engages learners in active learning contexts that use both the past and current situation of the learner as bases for the generation of functional ideas [33]. Its usage of collaborative learning ensures learners acquire knowledge from both their personal life and the life of their peers and/or colleagues. Situated learning is closely knitted with this paradigm. It distinctively uses the process of social interaction as the locus of learning [34]. Through field learning and interaction with experts of relevant professions, learners acquire firsthand information that aids personal reflections of subjects of study.

Same techniques may be observed in pedagogies that uses the problem-based learning approach. In this paradigm, learners are encouraged to resolve career-related dilemmas in a structured manner [35]. These problems may be real or hypothetical. However, knowledge gained from such exercises is likely to enhance learners' attitude of problem identification and resolution in real life situations. This also appears to be the goal of the lifelong learning model. Lifelong learning is predicated on the notion that learning is a process that continues through one's life, either unconsciously or consciously [36, 37]. In this regard, lifelong learning equips learners with the skills to master the content of what they learn as they progressively encounter the changing seasons of life.

African higher institutions cannot be relevant to their immediate society if the content, method of delivery, and assessment are irrelevant to the students. This calls for the utilization of student-based learning models in African higher institutions. Learning plans, content, and methods that place premium on the cognition, behavior, and affective traits of learners achieve "effective learning, self-efficacy, self-motivation, ability to plan, and seek help when necessary and be able to reflect on past learning experiences to look to the future" [27]. Such learning methods are capable of creating the environment necessary for students to apply, create, and evaluate the knowledge they obtained from the study [38]. By mastering their environment, students leave these institutions of higher learning with the skills needed to effectively transfer knowledge from the school setting to the wider society for meaningful output. African higher institutions will be re-imagined as the producers of the workforce necessary to drive the socio-economic development of the continent. The optimal performance of graduates from African higher institutions will call attention to the impact and relevance of these institutions in Africa.

Lastly, restructuring the governance of higher education institutions in Africa will be a step in the right direction. African higher institutions need administrative and finance teams who understand what it means to perform the task of teaching. These teams will partner academic communities to use their autonomy and freedom for effective teaching and learning. A conscious effort should be made to form institutional Councils with a membership that possesses the necessary capacities to understand the interplay of innovation, science, and technology, on the one hand, and strategic planning of higher education institutions, on the other side. Also,

governmental regulatory bodies must collaborate the efforts of African higher institutions, whether private or public, in ensuring that the institutions meet both the local and international standards of teaching. Together, the internal and external control of African higher institutions will solidify their existence as indispensable entities in the pursuit of the socio-economic developmental goals of the African continent and its people.

5. Conclusion

The gap between higher education in Africa and the socio-economic development of Africa has led to doubts on the relevance and impact of higher education institutions in Africa. Through the philosophical approach of methodic doubt, the core objectives for establishing these institutions were questioned. The mismatch between knowledge acquired from the higher education institutions and the soft skills required by the society to positively drive its quest towards socio-economic developmental goals in the African society sustains this doubt. Also, failure to satisfactorily reconstruct the African identity in the face of trends in the twenty-first century casts shadows on the significance of higher education institutions in Africa. Other factors such as the commercialization of higher education in Africa, the shortage of qualified faculty, inadequate or nonexistent funding, and corporatization of the governance systems of higher education institutions have crystallized the perception of nonperformance of the higher education institutions in the African society.

Despite the gloomy portrait of the relevance and impact of higher education in Africa, this chapter established that higher education is significant to the societal quest of resolving the socio-economic developmental challenges that continue to beset the African continent in the twenty-first century. Research collaborations across disciplines and higher education institutions, quality enhancement of nontraditional learning modes, utilization of student-based learning methods, and a restructured governance system of higher education institutions will enhance the relevance and impact of higher education in Africa. To this end, the system of higher education must consciously incorporate functional policies that will sustain cohesive teaching, learning, and research communities, funding and financial management, and improved governance of higher institutions in Africa.

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