

Quickening Revitalization and Quality Enhancement in University Education in Africa through Curriculum Re-Engineering: A Case Study of Nigeria

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Introduction

The African Union *Agenda 2063* telescopes into a glorious future for the continent. The goal of the agenda subtitled "The Africa We Want" has education as a major pillar. Within this educational thrust, it aims to deliver on inclusive and sustainable development, with an intersect with the Sustainable Development Goals (SDGs). It is a manifestation of the pan-African drive for unity, self-determination, freedom, progress and collective prosperity pursued under Pan-Africanism and African Renaissance. One of the core educational strategies of Agenda 2063 is the Continental Education Strategy for Africa (CESA)- 2016-2025, This strategy is driven by the desire to set up a qualitative system of education and training to provide the African continent with efficient human resources adapted to African core values and therefore, capable of achieving the vision and ambitions of the African Union. Curriculum re-engineering is seen in CESA 2016-2025 as a major pathway to achieving "The Africa We Want" through education.

There are 55 African countries that connect or are striving to connect via their national policies on education to Agenda 2063. Nigeria, the most populous African nation with the most expansive higher education system of over 700 higher education institutions (including 220 universities), enrolling about three million students, has aligned its national policy with the goals of Agenda 2063 and more specifically to CESA 2016-2025 curriculum re-engineering prompt. The National Universities Commission is leading the response to this prompt for university education.

The National Universities Commission (NUC) of Nigeria is empowered by law to regulate university education. On assumption of office as Executive Secretary of the Commission, Abubakar Adamu Rasheed, initiated the development of a *Blueprint for the Rapid Revitalization of University Education in Nigeria (2019-2023)*. The 10 strategic goals of the Blueprint are largely synced with CESA 2016-2025 goals. One of the strategic goals is curriculum re-engineering which is positioned in the epicenter of efforts to improve quality in the system. There has been a growing unease among an ever-increasing rank of the citizenry on the quality of graduates from the Nigerian university system. Deeply mired and implicated are a consternation of input and process variables chief of which is the quality of the curriculum and the curriculum delivery process. Avoiding a knee-jerk response, NUC adopted and is currently implementing a systematic review of the curriculum. This paper reports the stages in the curriculum re-engineering process which is seen as good practice worthy of emulation by other African countries with similar context with Nigeria in the march to achieving AU's Agenda 2063.

The context

Before independence in 1960 and in the early years of the development of the Nigerian university system, the curriculum of the universities was largely steered and colored along the tradition of British universities. The establishment of the National Universities Commission in 1962 changed the landscape of curriculum development in the university system. Since it is empowered by law to set minimum standards for university education and enforce such

standards, it took steps to harmonize the process of curriculum development across the universities and install a regime of accreditation. Key drivers of the process of minimum standards as encoded in the university curricula were the first and second national development plans and the national policy on education. These documents provided the directions to which the production of high-level human resources by the universities were directed. In turn, NUC and the universities developed the minimum academic (curricular) standards to reflect this aspiration.

One of the major responsibilities of the National Universities Commission as stated in Act No. 16 of 1985 and the Amendment Act No. 49 of 1988 is to lay down Minimum Academic Standards (MAS) for all academic disciplines being taught in Nigerian universities and to use the MAS to accredit the academic degree programmes. In 1989, the first set of the Minimum Academic Standards (MAS) documents was developed and approved for use by the federal government for 101 undergraduate programmes taught across the 13 major academic disciplines of Administration/Management Sciences, Agriculture, Arts, Dentistry, Education, Engineering/Technology, Environmental Sciences, Law, Medicine, Pharmaceutical Sciences, Science, Social Science and Veterinary Medicine. The MAS documents were used to accredit academic degree programmes in all universities. In 1996, 10 other programmes were identified and Minimum Academic Standards produced for them bringing the total number of programmes to 111.

In 2001, benchmark statements were produced for the various disciplines which were eventually merged with the content-based MAS in 2004 to form the outcome-based Benchmark Minimum Academic Standards (BMAS). The BMAS documents reflected extensive review of the composition of each discipline and the number of programmes increased to 133 from the initial 111. Major system-wide standards were proposed in the revised BMAS such as compulsory entrepreneurial studies.

The Journey to a Re-engineered Curriculum

The re-engineering of the BMAS to the Core Curriculum and Minimum Academic Standards (CCMAS) began with needs/gap analysis which sought views from employers of labour and other stakeholders about the quality of graduates from Nigerian universities and their reflections on the strengths and deficiencies in the curricula. This was followed by critical analysis of curricula of top-performing university systems in the world with a view to bringing the revised curricula of Nigerian universities to modern and contemporary standards. The third step was the drafting of the revised curricula by teams of experts using data from the first two steps. The product was version 1.0. As the fourth step, the revised draft (version 1.0) was sent to all Nigerian universities for review and input from university senates. Inputs from senates were harmonized, programme by programme and the harmonized documents emerged as version 2.0. This version was then subjected to intense scrutiny by national and international experts in the field over a period of ten months. The product was version 3.0.

A multi-stakeholder approach was deployed in constituting the panels for the exercise. The panels included: academic staff of Nigerian universities; representatives of the academies; representatives of professional bodies/associations; and representatives of the private sector.

In addition to the reviewers working individually and in consultation with their subject area peers, there were over 512 cumulative online meetings of the general assembly of vice-chancellors; discipline chairpersons, programme-specific reviewers and heads/representatives of international quality assurance agencies and institutions; discipline groups; and programme groups held between March and November, 2021. Physical meetings were also held to finalize

the curriculum review exercise. Finally, Version 3.0 was presented to the federal executive council for noting, through the honorable minister of education. The re-engineered curricula were formally unveiled on December 5, 2022 by Nigeria's Vice President Professor Yemi Osinbajo, represented by the Secretary to Government, Boss Mustapha. All the CCMAS documents are available for download at <https://nuc-ccmas.ng/downloads/>.



Formal unveiling of the CCMAS on December 5, 2022

Highlights of the Core Curriculum and Minimum Academic Standards (CCMAS)

Ten highlights of the 2022 CCMAS which replaces the 15-year old and long-overdue-for-change Benchmark Minimum Academic Standards (BMAS) are: (1) comparable in content to similar curricula in the best university systems in the world and relevant to Nigeria's socio-cultural context; (2) addresses the knowledge and skills gaps in the curriculum it is replacing; (3) while providing 70% of core curriculum as minimum for all Nigerian universities, it allows universities to customise and bespoke the curriculum by adding 30% of courses to reflect their uniqueness of mission and contextual peculiarities; (4) it places accent on entrepreneurship, practical rather than theoretical knowledge and skills and the development of 21st century skills; (5) in line with contemporary global practice, change of nomenclature from Benchmark Minimum Academic Standards (BMAS) to Core Curriculum and Minimum Academic Standards (CCMAS); (6) in consonance with emerging development globally, the curriculum is to stimulate blended learning in its delivery; (7) strategically configured to produce future-fit graduates; (8) provides essential foundations for lifelong learning; (9) nurtures deep thinkers and problem solvers and graduates who are highly skilled in their professions and disciplines; and (10) encourages interdependencies of disciplines.

Institutional addition of 30% courses to the CCMAS

A unique feature of the CCMAS which is expected to go into effect in the 2023/2024 session was introduced by the Executive Secretary of NUC, Abubakar Adamu Rasheed following stakeholder consultation especially with the vice-chancellors. This is to reflect the contextual peculiarities of each institution in the content and delivery of its programmes. According to

Rasheed in the preface to the CCMAS, universities have distinguishing vision, mission and strategic goals which of necessity, should reflect in the quality of their graduates, differentiating them from graduates of other universities with same degrees. The example is given of graduates of medicine. For example, University of Maiduguri in the northeast with the desire to produce doctors who can attend to diseases localized to the area, will need exposure of medical students to training in the treatment of such diseases. While the University of Ibadan in the southwest desires its medical doctors to be familiar with treating ailments that are nationally and globally common, special attention needs to be paid to such ailments that are indigenous to the locality. The same logic applies to graduates in all 17 disciplines, hence the opening of the curriculum development space for all universities to add 30% of the courses to the CCMAS to reflect their uniqueness.

This historic shift which allowed each university to add 30% of the courses in a programme to the 70% provided in the CCMAS was smoothed in implementation by intensive training of all academic staff in the Nigerian university system. Each university senate was required to set up a senate committee on the 30% addition and lower-level committees at the faculty, department and programme levels. Five training videos were produced. These were in a sequence to guide the development of the courses from programme level. The draft programme received approval at the level of the department, faculty and senate and thereafter, submitted to NUC through its Strategy Advisory Committee (STRADVCOM). Before final approval by NUC, STRADVCOM ensured sequential submission, review and resubmission of the drafts and finally, integration of the 30% institutional addition to the 70% of the CCMAS.

Outcome-based feature of the CCMAS

Unlike its predecessor- the BMAS, the CCMAS is outcome-based. Each course has a set of measurable learning outcomes which students should attain before earning a pass grade. This feature is aimed at hiking the quality of graduates of the Nigerian university system since the level of attainment specified in the learning outcome statements can be quantitatively and qualitatively assessed. In his keynote address at the sensitization workshop for all vice-chancellors, the secretary-general of the Association of African Universities (AAU), Olusola Oyewole, applauded this feature and wished other African countries that do not have their curricula configured along the outcome-based line, to consider this option.

Two tracks to ensure effective implementation

A re-engineered curriculum has a high chance of floppy delivery if the implementers are not trained and there is lack of supporting curriculum materials. Expectation of smooth implementation was the driver of the establishment of two CCMAS supporting projects. The first project is the training of all teaching and non-teaching personnel who will deliver the CCMAS. This project, which is led by a former minister of education, began with a training needs assessment. The report of the study showed twelve areas where training is needed. These are:

1. Effective use of technology for implementing the CCMAS
2. Teaching 21st Century skills
3. Nurturing deep thinking and problem solving among Nigerian undergraduates (beneficiaries of the CCMAS)
4. Evaluating techniques of an outcomes-based curriculum like the CCMAS
5. Using variety of pedagogies beyond the lecture in delivering the CCMAS
6. Delivering the CCMAS via ODL and hybrid modes
7. Teaching large classes
8. Effective teaching of entrepreneurship and General Studies

9. Effective supervision of Teaching Practice, SIWES and internships
10. Delivering practical and other laboratory activities
11. Quality assurance mechanism for effective implementation of CCMAS
12. Effective delivery and assessment of the 30% addition to CCMAS.

The second project is the development of textual materials to support the implementation of the CCMAS under the leadership of the chairman of the committee of pro-chancellors of Nigeria's federal universities. The project is anticipated to proceed in phases beginning with the development of Book 1 series. Book 1 is currently at different stages of development in the 17 disciplines. The goal is to launch the series on May 16, 2023, by the minister of education alongside the flag-off of the capacity building project.

A sub-project under the curriculum supporting materials project is envisaged. This is the development of videos by Nigerian lecturers on topics in the CCMAS especially those that are traditionally perceived to be difficult to learn by students. It is an extension of the Best Practices in University Teaching (BESTPUT) project which was initiated by NUC in 2001.

Conclusion

A major pillar in the march to attain the African Union Agenda 2063- *The Africa We Want*, is education. Within education, the curriculum and its implementation play a central role hence the Continental Education Strategy for Africa (CESA 2016-2025) underlines curriculum re-engineering as an area of focus for African countries. This paper highlights the efforts of Nigeria, spearheaded by the National Universities Commission to lead the quest in curriculum re-engineering towards the attainment of Agenda 2063 and alongside, the SDGs.

The narrative in the paper shows that the re-engineered curriculum is ready for implementation and the supporting activities such as teacher capacity building and the development of supporting textual materials are well on course. All the ingredients for success are in place. Graduates of Nigerian universities are largely famed for quality. The re-engineered curriculum expressed in the CCMAS is poised to spin Nigeria into a new quality trajectory.