

The Architectural Education Curriculum in the Nigerian Schools of Architecture

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Abstract: Curriculum is a symbiotic relationship between architectural education and architectural practice the current curriculum is not structured to cope with the challenges arising from the societal demands and sues for a review of the present curriculum to enable architects cope in these circumstances. Hence, there is need for the National Universities Commission (NUC) in collaboration with the Architects Registration Council of Nigeria (ARCON)/ Nigerian Institute of Architects (NIA) to carrying everybody along during the curriculum renewal process especially on the identified areas for improvement.

Keywords: Architectural Education, Architectural Curriculum, National Universities Commission (NUC), Architects Registration Council of Nigeria (ARCON) and Schools of Architecture.

I. Introduction

Architectural education worldwide is multi-disciplinary in nature and that it often involves intensive practical exposures. The quality of architectural education in Nigeria is low compared with international standards; hence, there is a need to enhance the quality of education in terms of learning, teaching and working. Architectural education passes on a somewhat narrow conception of art which translates into an emphasis on individual creativity, questioning and problem solving skills (Kangasoja, Mälkki, Puustinen, Hirvonen & Mäntysalo, 2010). Architecture is principally concerned with the improvement of the human habitat. Thus the goal of architectural education, which is essentially to advance the profession of architecture, is to contribute to the attainment of a humane and responsive environment. The curriculum of architectural education in Nigeria, despite being tailored to meet local needs, has been a subject of debate in the last two decades. Its adequacy in dealing with emerging urban problems, and ability to adapt to the changing socio-economic situation in the country has been critically assessed (Olotuah, and Ajenifujah, 2009). The capability of the architectural education to adjust to new demands on the profession has been identified as an inherent problem. The role of the architect in the 21st century and the kind of architectural education appropriate to the realization of the dream of an indigenous school of African architecture are key factors in the re-design of architectural curriculum (Adedeji, et, al. 2011). It is geared towards meeting the challenges of the society, and generating knowledge for clarifying and solving problems of the built environment. The purpose of architectural education in Nigeria is in consonance with the general purpose of education in the country. Architectural education has indeed strived to meet the country's manpower needs for the improvement of the society.

Architectural theory as currently taught in modern universities throughout the world no longer provides a plausible basis for the discipline and practice of architecture (Salingaros & Masden II 2008). Students are left to their own inventions if they hope to gain an architectural degree. Forced to formulate a body of work constrained by the paradigm of contemporary design, students learn to copy fashionable images without understanding their geometry; or simply invent forms that look as if they possess a contemporary sense of architecture. By their very nature, such forms are irrelevant to human needs and sensibilities. Contrary to what students are led to believe, this practice does not provide a broader base for creativity, but instead effectively restricts choices to a very narrow design vocabulary. Most architectural institutions continue to propagate a curricular model that has sustained their particular ideals and ideologies for decades. While many innovative didactic materials and ideas for revising the architectural curriculum are available today, they are often overlooked or ignored. If implemented, these new ideas could drastically improve the educational model, allowing students to participate in a learning experience specific to their immediate and local context. The best way to face the global challenges of the 21st century is with a well-rounded education that establishes a foundation for lifelong learning (ACSA, 2011). In enhancing the teaching and learning of career courses in architecture, continuous research and updating is required, together with ensuring a good learning environment. A curriculum is a set of planned programme of activities designed to offer learning experiences to students under the guidance of a school. The curriculum is designed so that students will attain, as far as possible, certain educational ends or objectives. Stone and Nielsen (1982) assert that a curriculum is an integrated collection of

courses and activities developed in response to social needs and related to the needs of the culture that supports the school. The idea of curriculum according to Kelly (1999) is hardly new, but the way we understand and theorize it has altered over the years and there remains considerable dispute as to meaning. It has its origin in the running / chariot tracks of Greece. A useful starting point for us here might be the definition offered by Kerr (1958). The word curriculum according to Kerr originated from a Latin word “currere: meaning “the course to be run”. This implies a track, a set of obstacles that an individual is to overcome, something that has a beginning and an end, and something that one aims at completing. Schools have established “courses of study” through which individuals are to pass. Successful completion of such “course” warrants certification of competence. These courses are referred to as curriculum. The concept of curriculum as a term in educational discourse has been used in a wide variety of ways because educationists view it in different ways.

Kerr (1968) defined curriculum as all the learning (experiences) which is planned and guided by the school, whether it is carried out in groups or individually inside or outside the school. Curriculum is generally understood to mean all the processes, products and human activities intended for the realization of the society’s aspirations through schools (Cookey, 1970; Onwuka 1981). Ornstein and Hunkins (2004) opined that the success of a new curriculum depends largely on how well those who have planned its development and implementation have perceived the needs of students. It is in line with this that the study is being carried out to give the students an opportunity to select most acceptable curriculum contents for entrepreneurship education from a number of curriculum contents.

The Appearances of Architectural Education in Nigeria

The establishment of the Nigeria College of Arts, Science and Technology in 1952 led to the birth of architectural education in Nigeria. The college was located at Ibadan, the capital of the Western Region of Nigeria. It was relocated to Zaria in Northern Nigeria in 1955. The first set of Diploma students graduated in 1961. In 1962, the college was upgraded to a full-fledged University, named Ahmadu Bello University, Zaria. The course programme was restructured and graduates were awarded the Bachelor of Architecture degree, which had the same link as the earlier Diploma with RIBA (Royal Institute of British Architects). The link with RIBA (Royal Institute of British Architects) was maintained until 1968, when the course programme was again restructured, into two-tier, with the offer of the Bachelor of Science (B.Sc) and Master of Science (M.Sc) degrees in architecture. The new programme took off in 1969. In these periods, architects from Eastern and Western Europe dominated the faculty of the schools. This is the second period of architectural education in Nigeria, which Uji (2001) referred to as the Semi-colonial period of experimentation. Since 1979, fourteen schools of architecture have been established in the country with the faculty dominated by Nigerians.

The University of Nigeria, which came into existence in 1962, established a department of architecture in 1963. The new department became the second school of architecture in Nigeria. In 1970, a third school of architecture was established in the University of Lagos. At the turn of the century in 1999, the number of degree-awarding institutions in Nigeria had risen to sixteen (ten Federal and six State Universities). There were also nineteen Polytechnics and Colleges of Technology awarding National Diploma (ND) and/or the Higher National Diploma (HND) (Arayela, 2000). Two state universities (Kano and Ogun) and a private institution (Covenant University) have since established three additional degree-awarding schools of architecture.

NUC and ARCON Standards for Physical Facilities in Schools of Architecture

Adequacy and quality of physical infrastructure is a prerequisite for accreditation of architecture programmes by the National Universities Commission (NUC) and the Architects Registration Council of Nigeria (ARCON). The certification of architects in Nigeria is done in both Polytechnics and Universities, but registration by the Architects Registration Council of Nigeria (ARCON) requires completion of a Master’s degree in a university, or a combination of a Bachelor’s degree, working experience and additional examinations. Holders of diplomas from Polytechnics are required to have even wider experience, and to pass even more examinations. The minimum physical facilities required in Universities that award Bachelor’s degrees in architecture are established by the National Universities Commission (NUC) and ARCON.

The National Universities Commission bases its assessment of physical facilities needed on the NUC Minimum Academic Standards, which specify the type of spaces required, the minimum floor area of these spaces and the equipment required (National Universities Commission, 2010). These physical facilities are divided into six categories, viz.

- ✓ Laboratory and studio spaces
- ✓ Equipment of laboratories and studios
- ✓ Classrooms and lecture theatres
- ✓ Equipment of classrooms and lecture theatres
- ✓ Office accommodation
- ✓ Safety and environmental sanitation of teaching facilities.

Architectural Education Curriculum and Nigerian schools of Architecture

The curriculum of architecture in Nigerian schools of architecture is designed according to the British and American architectural education systems. In the sense that. The aim has been to ensure that the programmes are relevant to the nation's aspirations and that they meet current technological development. A critical appraisal of the curriculum of architectural education in Nigeria is of great significance in order to meeting the nation's needs in as far as sustainability is concerned. In this endeavour, schools of architecture strive to equip students with the education required to make them contribute to the promotion of an orderly development of the human environment. Architectural education leads to the production of professionals who are sensitive to human needs and aspirations and who have the requisite knowledge and the intellectual and aesthetic skills to evolve expressive design solutions of problems of the built environment and the society at large. They have the professional skills required for effective shaping, re-ordering and articulation of the built environment. The goal of architectural education is subsumed in the general concept of education, which is to prepare people to improve and perpetuate their society. This is achieved by taking due cognizance of the society's political, social and economic circumstances in the design of the educational programme.

Architectural programme in Nigeria was designed, at the onset, to meet the challenges of modern architecture. The programme has faced challenges in the last fifty years for it to be relevant to Nigeria's national needs and aspirations, as well as meet current technological developments (Olotuah, 2000). Adeyinka (1981) has succinctly shown that education must be consciously enlisted to serve national needs, and indeed education is an instrument of power on which national survival depends.

The objectives of the educational programmes in Nigeria, as stipulated in the 3rd National Development Plan provides a general framework within which architectural education in Nigeria is focused. These include (FGN, 1975) as cited by Olotuah and Adesiji(2005):

1. Reforming the content of general education to make it more responsive to the socio-economic needs of the country;
2. Consolidating and developing the nation's system of higher education in response to the economy's manpower needs;
3. Rationalizing the financing of education with a view to making the educational system more adequate and efficient; and
4. Making an impact in the area of technological education so as to meet the growing needs of the economy.

The objectives of architectural education in Nigeria to a large extent reflect this national aspiration. These objectives stress the importance of research opportunities appropriate to the development of national resources and technological skills in meeting emerging national demands.

The curriculum contents and specific subjects of study of schools of architecture in Nigeria are selected from the minimum standards stipulated by the country's National Universities Commission (NUC). There are over a hundred different course titles from which each school of architecture draws its programmes. These courses are however categorized into seven instruction modules namely:

- ✓ Architectural Design;
- ✓ Arts and Drawing;
- ✓ Historical and Theoretical Studies;
- ✓ Building Systems Technology;
- ✓ Humanities and Social Studies;
- ✓ Environmental Control System; and
- ✓ Physical Sciences.

The NUC recommends the spread of these modules and their credit units over a 6-year period within a 2-tier structure. Greater emphasis is placed on the architectural design module than the other modules, and thus more than 40% of the required credits for the degrees are earned in the studio. This is informed by the centrality of the design studio to the entire architectural educational programme. The design studio is the hub and nucleus of the programme since all learning in architecture are geared towards imparting into students skills they require in proffering solutions to problems of the built environment (Olotuah, 2000). Architecture in Nigeria has to equip students with the knowledge and skills 101 solving environmental problems to improve quality of the human habitat and attain humane and responsive environment in consonance with expected roles of the architect in the socio-economic and political milieu pervading the nation's social needs and cultural values.

Way Forward to Enhance the better Architectural Curriculum for Nigerian schools of Architecture

There are some areas where the curriculum needs to be improved on; Curriculum is the whole of the educative process i.e., the total environment in which education takes place including the student, lecturer the course, content, method, physical and psychological environment. Architecture in Nigeria has to equip students with the knowledge and skills 101 solving environmental problems to improve quality of the human habitat and attain humane and responsive environment in consonance with expected roles of the architect in the socio-

economic and political milieu pervading the nation's social needs and cultural values. The teaching of architecture as a course of study in a Nigerian university dates back to the 1960s'. Although slight changes were being effected in the ensuing years, the curriculum on architectural education has largely remained the same. With the advent of globalization in more recent times however, architecture has been presented with new opportunities, challenges and trends. Architecture through its evolution as a discipline started as a practice profession in trades, visual and natural arts aimed at developing the creative abilities which meet the shelter, environmental, emotional and aesthetic value needs of man. With the development of formal architectural education the need to strike a balance between the theoretical and practical aspects of the profession leading to the use of hand, mind and brain in the creative process. This advantage placed the graduates of schools of architecture in a vantage position of being highly employable by self, individuals and institutions.

In Nigeria as in the rest of the world, a university's curriculum no doubt brands it by reflecting its ethics, objectives and the capabilities of its students. So as to improve the architectural curriculum, Abubakar (2012) asserts the following areas

1. Provision of human and material resources for the effective implementation of the curriculum.
2. Expansion of the curriculum to accommodate new area of specialization in line with current trends in the industry and possibly extension of duration of the programme.
3. The curriculum content should be expanded to in the area of ICT, management and entrepreneurship.
4. The curriculum content should be passion in line with schools of architecture in the developed countries.
5. The curriculum should include more courses in the areas of understanding of our local environment, its material and studies towards developing our construction technique.
6. Field work (excursion, SIWES(Student Industrial Work Experience Scheme) and site visit) should be emphasized in the curriculum.

II. Conclusions

Curriculum is a symbiotic relationship between architectural education and architectural practice the current curriculum is not structured to cope with the challenges arising from the societal demands and sues for a review of the present curriculum to enable architects cope in these circumstances. Hence, there is need for the National Universities Commission (NUC) in collaboration with the Architects Registration Council of Nigeria (ARCON)/ Nigerian Institute of Architects (NIA) to carrying everybody along during the curriculum renewal process especially on the identified areas for improvement.

III. Recommendations

In order to enhance the profession of architecture and contributing well towards its sustainability, the following recommendations suggested below will help Schools of Architecture, practitioners in the country and the government if adopted as appropriate and will go a long way ensure the success of architectural education in Nigeria in the future.

- ✓ There is a need to review the existing curriculum of architectural education in Nigeria
- ✓ The practicing architect to some extent should be allowed to participate actively in curriculum design and development
- ✓ A total revision of existing curricula of studies towards achieving sustainable architectural education in Nigeria
- ✓ Revision of existing curricula to inculcate awareness in the minds of future Architects
- ✓ Government should make sure that professionalism is the central focus of the architecture curriculum thereby ensuring its sustainability;
- ✓ The National Universities Commission (NUC) in conjunction with the Nigerian Institute of Architects (NIA)/ Architects Registration Council of Nigeria (ARCON) should use the study findings as a guide in improving the architectural curriculum
- ✓ Adequate funding should be provided by the government to facilitate beeping up the existing human and material resources for the effective implementation of the improved curriculum in order to facilitate the continued relevance of the architectural curriculum to the Nigerian building industry.
- ✓ The curriculum and teaching of architecture must also teach the students on how to get a good briefing from the client.

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