Pathways to Architectural Education and Practice Success in Nigeria

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Abstract

Architectural practice and education has always been seen by architects and students of the discipline as a tough and demanding terrain. This may be connected to the obvious demands of the training of architects, characterized by long hours of design, drafting, and modelling. This does not end at the schools of architecture but continues through the practice journey. However, some veterans of the profession argue that this is the sure pathway towards success in architecture. This paper aims at providing pathways towards the preservation and sustenance of the relevance of the profession and architectural practice in Nigeria. The paper adopts a qualitative research approach while presenting findings from in-depth interviews of sixteen leading principals of architectural firms drawn from Lagos, Abuja, Benin-city, Enugu and Port Harcourt. The study explores the challenges of the practice environment, the shortcomings of the products from the schools; practice demands and the pathways to being a desirable graduate and architect in practice. The paper concludes with the recommendations that certain areas of study of architecture such as detailing, understanding of planning laws, regulations and entrepreneurship studies in architecture should be given intensified attention in the training institutions. The need for architects to reach out socially through all available media within the ambits of the law to promote commissions while being actively involved in the activities of their professional bodies was found to be a crucial path to practice success. Finally, partnerships and collaborations between architects and firms is assuredly a path towards promoting stronger, healthier and enduring architectural businesses.

Keywords: architectural education, entrepreneurship, partnerships, practice, Nigeria

1. Introduction

Architecture profession in Nigeria is constantly being challenged with issues that range from the quality of graduates, battle of relevance in the society, scarcity of commissions, increasing competition among practices for the few opportunities available and contentions over the traditional role of the architect. This situation is not peculiar to architecture professional practice in Nigeria. In the United Kingdom for instance, Kucharek (2006) reported that there is a perception of shortage of design and management professionals. It was also discovered that the construction industry is plagued with fewer professionals that specialise in computation and optimal use of computer aided design (CAD) and building information modelling (BIM) applications. Adeyemi (2012) argue that the emphasis of the professional bodies on training rather than education is not advantageous to the profession. This perspective is held for because education provides broader sphere of mastery while training concentrates on the acquisition of skills.

From a professional membership of thirteen at inception of the Nigerian Institute of Architects (NIA), there has been incremental growth to 2,362 fellows/full members by 2007 (Arayela 2008). The number of architectural firms has also risen from 38 in 1975 to 649 registered firms by 2010. It should be noted that there are many more practices that are not registered by the professional bodies but are licensed by the Corporate Affairs Commission (CAC). It suggests therefore that there has been a gradual growth of the profession and increase practice participation in the country. This is further enhanced by the formal structure of architectural practice as laid down by the Architects Registration Council of Nigeria (ARCON) established by decree No. 10 of 1969. ARCON's establishment gave a legal backing to the vision of the NIA and since 1969 there has been effective collaboration between the two bodies. However, it is observed that the opportunity available in architectural practice in Nigeria does not seem to match the growth rate experienced. By simple extrapolation, Nigeria with a population of over one hundred and fifty million people and about three thousand registered professional architects shows a ratio of one professional architect to service the design need of fifty thousand Nigerians. This calls for concern, hence the need for this study. The main objective of this paper therefore is to provide answer to the following questions: Does the practice environment have an adverse effect on architectural profession in Nigeria? Secondly, to what extent does the quality of graduates from schools of architecture in Nigeria impact on professional practice?

Thus, the study explores the challenges of the practice environment, the quality of the products from the schools

and practice demands and proposes a pathway to being a desirable graduate and architectural professional in practice. Two main critical sections of the study are the education of architects and the practice of the profession. The study recognizes that there are few scholarly articles on this subject particularly as it relates to the practice of the profession in Nigeria, but it will attempt to deduce the pathways to the sustenance of befitting products from the institutions and success in practice of the profession in real life situations.

2. Historical Perspective of Architectural Practice in Nigeria

The inception of architectural practice in Nigeria is recorded to have been pioneered by the works of Maxwell Fry and Jane Drew who were commissioned to prepare master plans and building designs for the University College, Ibadan. The institution was established in 1948. Prior to this time, the British introduced education, religion, trade/commerce, administration and colonial rule/government. As a result, some buildings were designed and prefabricated in Europe and thereafter shipped for assembly on site here in Nigeria. The next phase in the development of the practice of the profession witnessed a domination of foreign (British) architects. They established architectural firms to provide professional services for the enormous physical developments embarked upon by the government and multi-national companies (Arayela 2001; Dare-Abel 2013).

Notable Nigerian architects impacted the practice scene such that more young architects were produced. Most of the older architects were trained in foreign institutions, although some were trained both in the few colleges available within the country and abroad. The Public Works Department (PWD) was the government's physical development agency during the post-independence and early pre-independence period. The PWD had an extensive training programme responsible for producing professionals, technical officers and artisans for the fields of engineering, architecture, building construction and other relevant fields. The scheme produced Nigerian professionals who qualified in architecture, engineering and other related professions from notable institutions from Europe and America.

Daramola (2009) presented a chronological report of the development of architectural practice in Nigeria covering the period spanning 1861 to 2009. The study brilliantly identified four eras which are: the first era (1861-1930) colonial; the second era (1930-1947) later part of the colonial era; the third measuring the period within the late colonial/post-independence (1947-1970); and lastly the period between 1970 and 2009. The study discussed the significant physical development, major contributors and the practice environment of the identified eras. The period between 1947 and 1970 was a crucial point in laying the foundation for architectural practice in the country. Many Nigerian architects were produced during this period and the rapid development of the premier universities provided opportunities for them to be engaged. However, British/expatriate owned firms initially dominated the practice scene. They included architectural firms as: Fry Drew and Partners, Watkins Gray Woodgate, Messrs Nickson and Boys, Ronald Ward and Associates, Design Group, James Cubitt and partners, Godwin and Hopwood amongst others. Oluwole Olumuyiwa and Associates and Ekwueme and Associates were founded between 1958 and 1960, pioneering the establishment of indigenous architectural firms in the country. A handful of Nigerian architects rose to become senior public servants in government and directly involved in decision making. Shortly after the Independence, a few of the architects withdrew from the public service to set up their own firms. The available opportunities overwhelmed the existing firms at the time since they did not have the capacity to cope with the speed of development. This encouraged many young professionals to set up their firms.

In spite of the promising start to architectural education and professional practice in Nigeria, the current situation is at variance with the expected level of development, hence the call for proactive steps to be taken towards saving and preserving the profession.

In a paper presented at the Architects Colloquium organized by the Architects Registration Council of Nigeria (ARCON), Arc. Ibrahim Abdullahi Haruna identified architectural practice to include any sector that is involved in the shaping or re-shaping of the built environment (Haruna 2008). He identified that success in professional practice is built on certain foundation. The first is the tutelage years which involves the period spent in school acquiring education. The second is the associate/apprenticeship age which is the period spent developing experience and confidence in the practice of the profession. The third and final stage is the specialist age which involves years of professional practice where a practitioner struggles to maintain relevance through coping with new developments. He enumerated the ideals of architectural practice in the presentation. Haruna (2008) further established some of the absurdities witnessed in architectural practice in Nigeria in the last 20 years. Some of the absurdities identified are non-compliance with requirements of the NIA Code of Conduct and the ease with which anyone (qualified or unqualified) can register a construction business. Furthermore, Haruna in an attempt

to trace the challenges of architectural practice in Nigeria recognized that the dynamic nature of architecture as a profession cannot be divorced from the practice of it as a business. Therefore, the architect is faced with the "dual role of being both producers and managers at the same time". Haruna suggested that for a practice to survive the pace of development in Nigeria, it must reposition itself in the most competitive state. This can be achieved by aiming at high-performance through reaching out for new opportunities. Secondly, success oriented architectural practice must equip its staff with the ability to integrate theory into practical reality. Most importantly, architectural practice must take advantage and exploit advances in technology to the fullest.

Similarly, Arc. Roti Delano, the President of the Association of Consulting Architects of Nigeria (ACANigeria) identified that the bane of architectural practice in Nigeria is the over-reliance on expatriates to work illegally on projects at the expense of qualified indigenous practices (Njoku 2011). He asserted that before now, projects were awarded to "Nigerian architects provided they showed they have the technical experts". In this sense, the Nigerian practice gets the project and "then engaged his counterparts from anywhere in the world because probably at that time, they didn't have the skills to design some of those large projects". He observed however that the reverse is now the case. Arc. Delano asserted that "Nigerians are now going out to get architects from outside who are coming to work here despite the fact that they have a lot of Nigerians who can do the job even better than the foreign architects" (Njoku 2011).

It is evident from the few articles reviewed that the architectural practice in Nigeria is faced with a lot of challenges. While scholarly articles on the subject are few or non-existent, this study makes an attempt to identify issues germane to the sustenance of the practice. The findings are not exhaustive but serve as a springboard towards beaming a searchlight on resuscitation and sustenance of architectural profession and practice in Nigeria.

3. Architectural Education and Significance

Any attempt to provide a pathway to the future of architectural practice in Nigeria must take into cognisance and integrate holistically the preservation, sustenance and context-relevance cultures that abound in the nation. To sustain the growth of architectural education and practice in Nigeria therefore, the pathways for pedagogical development, academic standards, and professional competence need to be inclusive in policy formulation and implementation strategies. Taking a cue from the US educational standards, standard based reforms have been the de-facto national education policy since 1980s. In the strategic planning, every State has set standards for student performance and hold schools accountable in meeting those standards. The goal is to raise performance for all students and close the achievement gaps setting clear expectations for what all students, regardless of their background, should know and be able to do. Banks (2012) identified four (4) types of pathway standards namely:

- Content standards
- Performance standards
- School delivery standards
- System performance standards

In all these, architectural education can interconnect these benchmark values to establish a nexus that will dovetail the pedagogic skills into the required professional pathways in an integrated manner. There are bundles of prospects for architectural education in Nigeria if the significance of synergy in the pathway standards can be drawn. For instance, architectural educators and practitioners must jointly establish content standards benchmark through which required knowledge and skills all students should learn in schools are clearly spelt out as way of bridging the gap between schools and practice. Architectural educators and practitioners also have the obligation to setup performance standards benchmark which specifies the level of achievement students should attain in schools and at graduation point in order to be considered proficient. In addition, schools accreditation board [Nigerian Universities Commission (NUC) and Nigerian Institute of Architects (NIA)/Architects Registration Council of Nigeria (ARCON)] must establish school delivery standards benchmark which indicate, monitor and evaluate the resources and capacity schools should maintain with sincerity and on regular basis for students to reach the required standards. Lastly, the school systems should establish a national policy on system performance standards which emphasize practically the support they have in stock to enable students to meet these standards. An inference could also be drawn from the inclusive pattern of the US programme of No Child Left Behind (NCLB act of 2001). While in school, this act could be better enabled directionally by involving the therapist-teacher to offer curriculum instructions with the salt of Gestalt ideology; assisting the student-patient to systematically discover the talents and gifts in them. Sequentially, these potentials would be manoeuvred

pragmatically through hands-on-experience of certain component-studies of architectural education that are inclined to vocational practices; such as knowledge of fabrication, specification, jointing, detailing, and relevant entrepreneurship skills.

In a study by Eagen, Ngwenyama and Prescod (2008) the question was posed to local practitioners on what they look for in a graduate of architecture. Out of all the responses given, a significant few said that the first thing they did was give the graduates some paper and a pen and say "here, can you sketch something for me in 20 minutes?" Therefore, established partnership and cooperation between the schools and practice firms could sift out relevant skills and competences as required in the best practice. This may be infused to students through internship programmes, workshop practices, symposia and targeted site visits. This may help to bridge the gap between the school and practice demands, eradicate the shortcomings of the product-graduates from the schools, and alleviates the 'unemployment and unemployables' syndrome (Aderonmu 2012) of the practice environment.

These aforementioned have served globally as ingredients to meeting the needs of practice environment, individuals and communities satisfactorily. In other words, all stakeholders, be it in school or practice need to establish an ideological framework for the development of a wide spectrum of educational-practice scheme whilst maintaining a pathway to professional registration, proficiency and competency in Nigerian dynamic society.

4. Methodology

The study adopted the qualitative research approach, sourcing data primarily through in-depth interviews. An interview schedule was prepared and used for all sixteen participants to ensure uniformity in the data collected. The participants were drawn from cities within Nigeria with high concentration of architectural firms; Lagos, Abuja, Benin-city, Enugu and Port Harcourt. Principals of architectural firms that have been established for at least ten years qualified to be selected as the participants and the willingness to participate in the interview was considered. The participants included architects having rich professional experiences with between 10 and 50 years practice experience. The interview sessions took place from November 2012 to January 2013. Appointments were scheduled ahead in view of the extremely busy schedules of the participants. Notes and voice recordings (optional-by permission) were taken to facilitate effective documentation of the facts and insights derived from the interviews. Content analysis of the data was embarked upon towards distilling findings and recommendations for the study.

5. Discussion of Findings

The findings of the study were presented under the two main sections as it relates to the practice of the profession and education of architects as earlier identified.

5.1 Strategies for Overcoming the Challenges of the Profession

The following are selected comments from the interviews that the study considers crucial towards the achievement of its aim.

"For architectural practice to develop and improve in Nigeria, architects must come together and work together so as to acquire increased capacity and quality of service. This is the vogue in Europe; it is not surprising to see a firm having about fifty architects in their employment".

"Architects in Nigeria need to develop the capacity and ability to retain commissions from start to finish. It is becoming increasingly difficult to achieve this, hence the need to engage in design and build services".

"We encourage Nigerian architectural firms to pay attention to details and embark on thorough studies of the materials and methods they adopt".

An executive of the professional body believes:

"For architecture in Nigeria to develop, collaborative work should be encouraged. Essential qualities needed for success in practice include honesty, integrity and diligence. There is a need for more graduates of the

profession to pursue professional regeneration with the NIA and ARCON to create the emergence of a stronger and more influential professional body that can pursue the interest of architects in Nigeria".

A veteran in the profession with over 40 years post qualification experience stated emphatically:

"The practice of architecture involves politics so architects need to learn how to be involved. The economic environment is a bit hostile to architects, resulting in scarcity of commissions. Architects need to be patient and committed to the profession. Government as clients may delay consultants payments, the architect will have to develop effective follow-up strategies and means to battle the 'Nigerian Factor".

It is apparent that Nigeria is a unique environment that requires both globally tested and specific local solutions towards the sustenance and relevance of architecture. Architects in Nigeria need to constantly study the dynamism of the environment and apply acquired knowledge and experiential knowledge to the challenges faced. It is becoming obvious that collaborative efforts are more successful in current business circles than small sole ownership firms with the advantage of fund attraction, leverage, combined pool of resources and networking. Collaborative relationships are easily formed when architects network during events organized by NIA, ARCON and stakeholders in the construction industry.

Professional ethics do not permit traditional forms of advertisement for architectural services but information and communication technology (ICT) provides platforms such as websites, blogs, social media and online exhibitions to disseminate the capacity and services of firms and professionals. Electronic media has become a powerful tool for attracting clients and business opportunities in general. This is in line with the thoughts of Haruna (2008) who suggested that for a practice to survive the pace of development in Nigeria, it must reposition itself in the most competitive state.

Lack of knowledge in entrepreneurship is evident among professionals and managers of architectural firms. Many have learned the hard way and it has also taken a long time to discover certain principles of business success. The interviewees believe that early introduction of entrepreneurship education in schools of architecture will enhance the business experience in practice.

5.2 Architecture Graduates and Expectations from Schools of Architecture

Certain areas of architectural skills have been seen by principals of firms to be deficient in many young graduates of the profession within the period 2005 to 2014. They include detailing and working drawings (a major need in firms), organization of simple functional spaces - (toilets, kitchens) and knowledge/application of planning laws and regulations to real life cases.

Entrepreneurship in architecture should be a part of the curriculum. By so doing, it exposes the students to self-reliance and market survival strategies within an environment with limited available opportunities. The mastery of the art of design, construction methods and details and the use of computer applications in architecture are non-negotiable ingredients towards success in the profession. The mastery of functional space analysis and its use in arriving at functional building spaces is also vital in the training of students of architecture.

Most respondents believe that computer aided design (CAD) and building information modelling (BIM) should be used at the master's classes for design production. However the mastery of graphical movement of lines and its application to the design of different building types should be consolidated at the undergraduate level. A view corroborated by Alagbe et al (2014) who concluded in a study on relevance of manual drafting in architectural schools in Nigeria that while students recognized the relevance of manual drafting, majority advocated the engagement of the strengths of CAD to overcome the shortcomings of the former.

Diligence is a virtue necessary for the completion of the architecture course. It is however necessary for students to build up portfolios and building albums. Improvement in quality and speed of design production should be driven by tutors and the training structure. Furthermore, there is a need to expose lecturers of architecture to practice and practical aspects of the profession for better teaching. The need for continuous industrial training for students is crucial. Furthermore, practicing architects should be invited regularly to the schools to share experiences with the students and lecturers. Field trips, excursions and travels are essential for exposure of staff and students. It was noted that many students have wrong perception of practice and the profession. It is very important for students to be guided to know that architecture is a profession of patience and 'dues must be paid before the glory comes'. Figure 1 captures the deductions from the study in a conceptual framework.
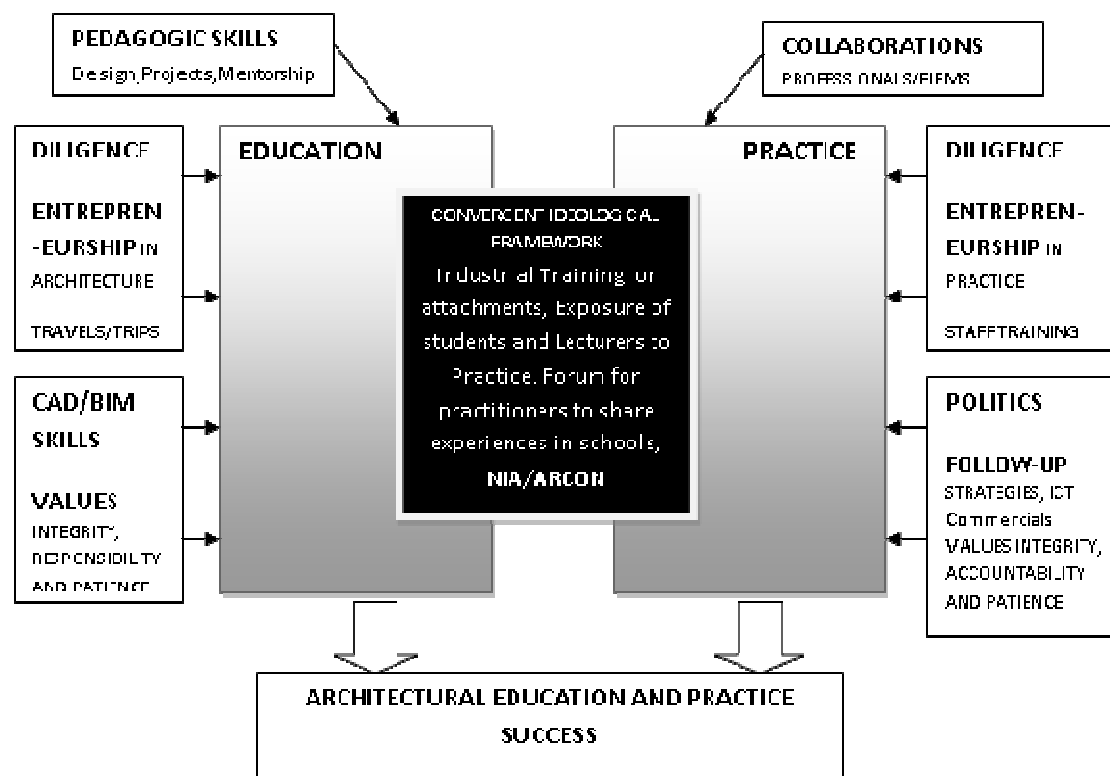
Figure 1: Model for Effective Architectural Education and Practice Success

6. Conclusion

The education of the architect ultimately affects the quality of practice and services provided in the real world. A broad based education, with focus on the development of design abilities, mastery of the use of planning regulations, managerial capacities, ICT usage skills and the knowledge of entrepreneurship are keys to success in practice. This is crucial in view of the changing roles of the architect and the need to maintain leadership in the industry. Education is not complete without the infusion of appropriate values which help to sustain relevance and growth. Values of integrity, diligence, responsibility, accountability and patience are useful for completing the study of architecture and also for sustaining healthy and successful practices.

Collaboration among professionals and firms are necessary for longevity and survival in the business environment. Architects must constantly study how to be involved in the politics of their profession with the peculiarities of the Nigerian society. Involvement in the activities of the professional bodies helps in building useful networks while the platforms available through ICT complement to provide avenues for disseminating the services and products of professionals and firms. Investment in staff training is surely rewarding in the long term and attempts should be made towards the development of appropriate strategies for follow-up on clients for remuneration for services rendered.

A partnership between education and practice develops a convergent ideological framework that promotes interactions between the two sectors. Internships/industrial training, exposure of students and lecturers to activities of organizations in practice will improve the quality of education in the various institutions. Furthermore a forum for architects in practice to regularly share experiences with the schools and engage researchers for problem solving should be created to maintain equilibrium and foster advancement in the profession.

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