Appraising Landscape Design Education in Architecture Departments in Nigerian Universities

Ayeni, Dorcas .A (corresponding Author)

Department of Architecture, School of Environmental Technology, Federal University of Technology, P.M.B 704, Akure, Nigeria
dorcasayeni2@yahoo.com , +2348037006788

Olotuah, A.O.

Department of Architecture, School of Environmental Technology, Federal University of Technology, P.M.B 704, Akure, Nigeria
Olotuah@yahoo.com, +2348034018236

Adedeji, Y.M.D

Department of Architecture, School of Environmental Technology, Federal University of Technology, P.M.B 704, Akure, Nigeria
yomi_adedejiy2k@yahoo.com, +2348064681423

Abstract

For a developing country like Nigeria to respond effectively to the global challenges of environmental beautification, landscape design needs to be adequately taught in tertiary Institutions. At present, only a few tertiary Institutions in Nigeria offer landscape courses. Management capacities are limited in the field of landscape design. Thus, there is the need to develop strategies to equip architecture students with the knowledge of landscape design so as to support local and regional development in Nigeria. Using the literature review and case study approach, the paper critically discusses the need and importance of landscape design education in tertiary Institutions in Nigeria and the implication of the absence for the nation Nigeria. It further appraised the level of landscape education in selected universities in southwest Nigeria. The paper revealed the inadequacy of effective landscape education in the selected Institution and concludes that unless these are improved upon, Nigeria will not benefit much from the graduates in terms of environmental beautification as well as showcasing the cities and taking advantage of the huge opportunities, landscaping offers.

Keywords*:* Architecture, Education, Effective, Landscape design, Nigeria Universities, Pedagogy.

1. Introduction

Globally, there have been changes in the means of generating, delivering, assessing and disseminating knowledge and information in higher education systems as noted by Tefere and Greijn (2010), and this as further argued is posing challenges in sub-Saharan African countries. In addition, Oyewole (2010) noted that many African countries face significant challenges in generating and disseminating knowledge which is very vital in the creation of wealth. This is because, the success of any economy depends basically on the capacities to create, develop and disseminate knowledge.

As shown by Akpan and Etor (2012), human capacity building involves teaching, training and providing students with new skills, knowledge and attitudes in order to be able to use the acquired skills effectively for national development. As such pedagogy is a means through which the information needed is effectively disseminated. Pedagogy as defined by dictionary.com is 'the art and science of teaching, education as well as instructional methods used'. It is also occasionally referred to as the correct use of instructive strategies (Olotuah, 2011). It is the way teaching is done, the strategies behind the teaching and the focus of the teaching (New Zealand Education Ministry, 2011), furthermore, it provides the foundation for deep and meaningful student learning (CIDER, 2012) and it is expected to produce better quality professionals. This basically involves the creative and imaginative ability or the different strategies of instruction a teacher uses in catching the attention of the students in understanding as well as in achieving a desired and successful outcome of what is taught.

Education is a basic instrument of economic growth and technological advancement in any society (Moti, 2010) and it is critical to the development of nations because it serves as an antidote to poverty in the emerging knowledge society (Dauda, 2010; Obe, 2010) and any country which is unable to develop the skills and knowledge for effective national economy will be unable to develop anything else (Olugbadewo, 2007; Akpan and Ekor, 2012); it is the process of receiving or giving systematic instruction, especially at a school or university (Oxford Dictionary.Com, 2012) and enables students to function effectively in a society (Akinjide, 2011). As such education is of great value to any nation and its importance to human beings cannot be over emphasized (Amadi et al, 2007; Ajeyalemi, 2009)

Globally, teaching and learning have gone beyond the teacher standing in front of a group of pupils and disseminating information without the students' adequate participation (Ajayi and Ekundayo, 2009). Many African institutions still face the challenges of poor infrastructure, inadequate funding, high cost of Internet connectivity, the lack of human resources and the ability to train and retain highly skilled academic staff and researchers (Shabani, 2010) in order to discharge appropriate teaching strategies. Thus, if these problems are solved and if higher education in developing countries is to take the lead in promoting innovation in education, government must create appropriate conditions and funds channelled towards education (Bon, 2010).

Ajibade et al (2011) have noted that the main goal of the Nigerian educational system is "to provide functional education for the nation in order that the products can be employable or self employed". However, many of the institutions are faced with problems as identified by Shabani (2010); Bon (2010) and highlighted above, resulting in inadequate provision of effective skills. Therefore, Nakpodia (2009) argues that the Nigerian higher institutions, being an important contributor to the nation's 'industrial, political, technological and economic growth' calls for learning which permits and encourages appropriate professional status in order to achieve excellence in teaching and learning.

The objective of this paper therefore is to examine landscape design education in universities in southwest Nigeria. It discusses the requirements for improvement in teaching and learning of landscape design in universities in Nigeria. This is to engender effective pedagogy in landscape design education in Nigeria.

2. The Need for Effective Pedagogy in Landscape Design Education in Nigeria Universities

The Nigerian Higher educational system is comprised of universities, polytechnics and colleges offering programmes in almost all spheres of learning (Moti, 2010) and architectural education is one of such courses offered. Architectural programme was established in Nigeria by the British as noted by Anunobi (2006), Olotuah (2006), Adegbile (2012 and Abubakar, 2012) with the first school of architecture in Zaria; prior to this time, Nigerian architects trained abroad. The number of schools of architecture increased to three in 1970 and subsequently to ten in 1987, and fourteen in 1991. At Present, several universities and higher institutions offer architecture which is a key field in the built environment professions. Consequently, courses offered in architecture are an amalgamation of several courses in the diverse field of the built environment (Anunobi, 2006; Sauve, 2005) and reflects the various ways of enhancing the human environment.

Although, many of the schools of architecture in Nigeria run similar and basic architecture modules, tailored to suit the schools' curriculum, however, the methods through which the modules are taught have not changed in spite of the modern development globally. Clearly, the case is not peculiar to Nigeria, as argued by Colomina (2012), despite major transformation in recent times, with the growth of globalization, new technologies and information culture, curricular structure have hardly changed.

As observed, many, with reference to Nigeria, lack practical experiences as the curriculum did not adequately prepare them to face challenges. Many graduates of architecture from different schools roam the streets without a job and are not able to cope with the 21st century challenges (Abubakar, 2012). As such, there is urgent need for a shift from theoretical teaching as argued by Alade (2011) to practical application of knowledge necessary for employment and skill development. This is because positive impact as further emphasized cannot be made through theoretical knowledge which places emphasis on paper certificate rather than training and practice.

In view of the above assertions, the way modules are taught in Nigerian universities show that many are not keeping pace with the challenges of technological change. With new ideas and information pouring in globally as stated by Abubakar (2012), it is imperative to update curricula regularly. Thus, there is the need for effective pedagogy in architectural education, with reference to landscape design module; merging theoretical paradigm with the practical in order to come up with new idea and new thinking that will help transform the Nigerian physical environment. As opined by Buchanan (2012), 'education for architects must be radically reconsidered through new, more fully human paradigm that engages with society and culture'. As such, Nigeria cannot afford to be allergic to change (Akinjide, 2011).

3. Effective Pedagogy in Landscape Design Education in Nigerian Universities

curriculum in architecture schools in Nigeria include architectural: designs, graphics, history, building construction, Structures and materials, building services, building climatology, surveying and town planning, landscape design and computer application (Okpoechi, 2006). These relevant subjects have been set up in architecture curriculum in the various architecture schools. However, one major area identified to be deficient in the method of teaching and application is landscape design which deals mainly with planning, aesthetics and beautification of the environment.

Landscape design is concerned with the design of all exterior spaces around a building and a relationship between it and users. Landscape architecture as noted by WiseGEEK (2012) is a "branch of architecture that deals with planning and design of land and its relation to the building around it". Its education as noted by Freire and Ramos (2012) is characterised by a strong interdependence and articulation of knowledge and practices. Furthermore, it is centred in studios and creates opportunities for practical experience as well as providing dialogue between the students and teachers. Landscape design education should compliment architecture, providing opportunity to contribute to the aesthetics of the environment; as such, it should be ensured that students are trained not only in theory but also in case study approach; providing them with skills and knowledge in order to improve both in the built and natural environment and ensuring continued sustainability. Moreover, the essence of landscape design in architecture is to blend the buildings with the environment in order to achieve a well organised physical environment. In this vein, WiseGEEK (2012) stated that its goal is "to create pleasing, functional and beautiful spaces". As such, should not be pulled apart by paying less attention on the exterior of buildings designs as it's the case in many schools of architecture in Nigeria. Substantial time and focus should be dedicated also to the surroundings of the designed structure in order to improve the environment.

Basically, the approach to effective pedagogy in landscape design education would be to engage students to acquire appropriate skills and contribute to developing the society in a holistic approach of theory, studio and case study formats, by actively participating in learning, in live projects and integrating designs within the environment. That way, graduates are able to respond to the various challenges currently being experienced in the Nigerian built environment. Hence they are better professionals who are able to practice and respond to the need of the society.

An aspect that needs attention is in the area of ICT (Information and Communication Technology). The use of ICT in schools is taken very seriously by governments and education system around the world (Newhouse et al, 2002). Moreover, knowledge is expanding rapidly with the use of modern technology (Jung, 2005) and teaching becoming more challenging. In view of this using ICT can facilitate delivery of instruction as well as learning process in landscape design education in the Nigerian schools of architecture. As Abubakar (2012) stated, 'it is not an understatement to say that the 21st century is the century of information technology', as such any discipline that does not restructure its curriculum to fit in information technology may lose relevance.

Also of importance is studio and case study experience. Apart from gaining knowledge, case study experience acquaint students with live projects and transferring the theory to real life while the studio experience gives student the opportunity of finding solutions to real problems as well as providing skills and establishing a link between theoretical and practice (Freire and Ramos, 2012; Chritensen and Worzala, 2010). At the end it produces graduates with good attitude, ethics and knowledge when practicing (Othman, 2011). As such, students must be equipped with a certain degree of knowledge which enables them to execute their professional task wisely. In this vein emphasis should not only be placed on theory but also on studio, ICT and case study experience in order to train the students to face reality.

4. Methodology

In the south-western part of Nigeria there are eight Universities that have accredited departments of architecture. They are private, state and federal universities. These are the University of Lagos (UNILAG), Covenant University, Ota (CU), Caleb University Lagos, Federal University of Technology Akure (FUTA), Joseph Ayobabalola University Ikeji (JABU), Obafemi Awolowo University Ile-ife (OAU), Olabisi Onabanjo University Ago-Iwoye, and Ladoke Akintola University, Ogbomosho (LAUTECH). There are also some new private universities in the south-western part of Nigeria that offer architecture, but the architecture departments are yet to be accredited, hence they are not listed among the universities above.

The study adopted the qualitative research approach using case studies in combination with relevant literature and used a random sampling technique to select samples for the study. Thus, five of the eight Universities were randomly selected for the purpose and made up of The Federal University of Technology Akure (FUTA), Covenant University Ota (CU), University of Lagos (UNILAG), Obafemi Awolowo University Ile-ife (OAU), and Ladoke Akintola University Ogbomosho (LAUTECH). The indices used in describing landscape design education include the school, the department, year or level in which landscape design module is offered, the number of credit unit, the frequency with which the module is taught, method used in teaching, access to computer laboratory and the adequacy of the teaching method used. Findings were analysed using descriptive statistics as well as comparing the various teaching methods .Data gathered were tabulated as shown in Table 1 and discussed.

5. Findings and Discussion

As shown in Table 1, the selected Universities have the department of architecture and all offer landscape design as a module. However, it was discovered that the level or year in which the module is taught differ. While the Covenant University and the University of Lagos teach the module in the third year or 300 level, the Federal University of Technology Akure, Obafemi Awolowo University and Ladoke Akintola University teach the module at the forth year or 400 level. Of the five Universities, only the Covenant University offer the module in the second semester.

Similar to all the schools is the same number of credit unit dedicated to the module. Also similar to all the schools is that the module is theory based; none of the schools make use of studio or case study approach. Again, it was discovered that in all the schools, the students have no access to the computer laboratory; as these are not available and where available are not adequate. Thus a fundamental need in the architecture departments of the various universities is the computer laboratory. This is because a computer laboratory will be an added learning environment for the students in order to give the opportunity to explore and prepare students professionally for the future. Figure 1 also shows the inadequacy of the teaching methods involved in landscape design module in all the schools presented. All schools offer landscape design mainly on theoretical basis and attention is not paid to studio work or practical. Thus the students cannot be adequately equipped with design skills and practical competence.

Education as seen from the literature is a fundamental driver of knowledge and graduates are needed in all spheres to contribute to national development. In addition, graduates are expected to serve as avenue for training and dissemination of skills and knowledge. Furthermore, the literature has shown that teaching and learning have gone beyond the traditional methods of information and knowledge dissemination and in order to achieve excellence in teaching and learning, appropriate strategies need to be employed. Although the case with many Nigerian universities as discovered from literature is the lack of fund to adequately equip the schools. However, with the change and modern development globally, there need to be appropriate fund channelled towards education in order to be compliant with the 21st century.

Summarising the table, it implies that many of the schools offering landscape design are mainly on theoretical base and less or no attention in studio work or practical. Students need to be equipped with skills and practical competence and a wide range of teaching method employed in an attempt to communicate with students. Moreover, students acquire design skills and knowledge, guided and monitored by the teachers in order to function effectively and professionally in the society, as such both students and teachers need improvement especially, if the Nigerian physical environment is to be transformed.

The credit unit for landscape design module as observed from the Table 1 is not enough if studio and practical have to be added and so need to be increased in order for students to have a full grasp of the knowledge and skill involved in landscape design education so as to contribute effectively to

the development of the Nigerian Nation. New discoveries are emerging globally as seen from the literature and various technological advancements, thus a fundamental need in the architecture department of the various universities is the computer laboratories which as observed are absent in the universities. This is because computer laboratory will be an added learning environment for the students in order to give the opportunity to explore and prepare students professionally for the future.

The advancement in technology globally has also reflected in the trends of training and knowledge acquisition from higher institutions worldwide. This has given graduates from various fields the opportunity to compete, with no exception to architects; as such high standard, wide-ranging learning and training is required to meet the technological challenges.

Architecture in the modern world is not all about designing of buildings, but encompass the designs and transformation of the physical surrounding, improving on the quality of the environment, the design of exterior spaces comprising the hard and soft landscapes, which is ecologically sound, aesthetically pleasing, well organised and making the environment eco friendly; hence landscape design education which reflects in the curriculum of architectural schools as seen in Table 1 above. The dawn of globalisation has brought about competitions and challenges and therefore call students in the field of architecture to be better equipped with skills, not only in theory but also in case study and studio practice in order to be responsive to the changing times as well as contribute meaningfully to the physical development of the Nigerian environment.

Thus, there is the need for vigorous studio training in landscape design education which is absent in the schools of architecture in Nigeria for architecture to have a great impact on the Nigerian physical environment. Also is the issue of funding; funds should be provided to equip the studios and also train teachers for effective outcome of a functional education.

Furthermore is the need to have well equipped computer laboratories which seem absent in virtually all the schools of architecture in order to provide the opportunities and keep abreast with new discoveries and developments. ICT is the order of the day in a fast changing world, as such; architecture students and teachers need to be conversant in software involved in architectural and landscape design in order to be relevant and impact positively in transforming the Nigerian environment.

Case study experience is also relevant in landscape design education and a necessary training need. This is fundamentally deficient in Nigeria schools of architecture; involving students in case studies will help students and graduates overcome challenges which may be encountered in life project experience and help provide necessary professional competence in facing real life challenges.

6. Conclusion

The study has elaborated on the absence of effective pedagogy in landscape design education in schools of architecture in Nigeria and has shown that landscape design is mainly a theory- based classroom module. Thus the study suggests that widening the landscape design curriculum in the Nigerian schools of architecture by including ICT, Studio and case study experiences, as well as providing fund towards equipping the studios and staff training will improve the pedagogy. In addition, it will present the opportunity to adequately prepare students to face challenges and be employable or self-employed professionals. They will in turn contribute positively to developing the Nigerian society, hence the need for appropriate learning environment of excellence in teaching and learning.

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Table 1: Landscape design Module in Selected Architecture Schools in Southwest

School	Year/Level	Credit Unit	Frequency	Method	Access to Computer	Adequacy
CU	300	2	2nd	Theory	None	Inadequate
FUTA	400	2	1st	Theory	None	Inadequate
LAUTECH	400	2	1st	Theory	None	Inadequate
OAU	400	2	1st	Theory	None	Inadequate
UNILAG	300	2	1st	Theory	None	Inadequate

Source: Researchers' Survey 2012