

CRITICAL FACTORS INFLUENCING BUILDING GRADUATES' EMPLOYABILITY IN A DEVELOPING ECONOMY

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Schools of higher learning are endowed with the prerogative of churning out employable graduates to the workplace. This can only be achieved by measuring the need-thermometer in skills and capacities required in the industry in comparison with the education provided by the higher institutions. The study was aimed at evaluating the critical factors that influence building graduates' employability in a developing economy. Using an employer-academia perspective, a cross-section survey system through a questionnaire instrument provided information on graduate employability in the built environment industry. Top management officials in construction industry and academia in the built environment in schools of higher learning in Lagos and Ogun State provided the data for the study. Statistical tools such as stacked bars and Linear Regression was used in presenting the data. The study revealed major skills (communication, teamwork, professional expertise/problem-solving, self-management, planning and organizing, ICT, life-long learning, and initiative/enterprise) required by employers in the construction industry. The study showed that teaching strategies and curriculum content can influence building graduates' employability. In conclusion, the study developed a framework for increasing building graduates' employability to align with the skills needed by employers in the built environment in a developing economy. It is recommended that schools of higher learning need to continually measure the needs of the industry and incorporate findings into a robust construction curriculum. Work-learning settings should be encouraged for construction students.

Keywords: Construction industry, Education, Higher institution, Industry, Skill.

1 INTRODUCTION

Unemployment remains a clog in the wheels of progress of most developing economies. This continues to be an issue despite the upsurge number of institutions of higher learning; increment in new intakes and those that eventually graduate (Akinyemi *et al.* 2012). This study opined that it is not a question of unemployment but whether the graduates produced in developing economies are employable. Therefore, it is a case of structural unemployment, whereby, as the economy is developing, the industry's needs and technologies are also changing. Whereby, once the educational institutions producing the graduates cannot adapt, the result is massive structural unemployment. With over 200 tertiary institutions churning up unemployable graduates in Nigeria for instance (Anyadike *et al.* 2012), Uwaifo (2009) argued that the educational system must move away from the era of chalk and talk; rather it should focus on the industry needs to

build employable graduates. According to Anyadike *et al.* (2012), unemployment in Nigeria has worsened due to the outdated school curricula and lack of employable skills. Researchers such as Kakwagh and Ikwuba (2010) and Olokundun *et al.* (2014) noted that unemployment has been the most socio-economic challenge gripping developing nations such as Nigeria. A sad aspect of unemployment was felt in March 2014, where 522,650 youths gathered to fill 4,556 vacant positions advertised by the Nigerian Immigration Service, resulting in the death of several young graduates. The youth (15 – 35 years) unemployment and underemployment rate for the fourth quarter (Q4) of 2017 were put at 52.65 percent, which is 22.64 million people (National Bureau of Statistics 2017). Rather than waiting on the government in developing countries, the onus is on schools of higher learning to re-strategize on how to ensure that their graduates are employable and create employment for others. Whereas, in developed countries, the higher institutions have deeply taken initiatives to create graduates that are ready for the workplace as a result of listening to the needs of industries (Jackson 2013). Adeyemo *et al.* (2010) opined that this made possible in developed countries, whereby their university researchers are able to observe the need trends of industries and examine their importance in improving the state of the nation's economy and technological advancements. The case for building graduates' employability in a developing economy is built around their relevance in oiling the necessary housing and urban infrastructure needed in developing nations. Nigeria, for instance, struggles with housing deficit, for it has an over 180 million population and over-pressured infrastructure. The building graduates also find their skills relevant in other sectors from oil and gas, financial, manufacturing, and so on. Through planning, design, construction, maintenance and repair, and operation, building graduates are able to transform various resources into habitable and usable facilities. The construction sector is looking for raw talents that are able to assume the required positions within organizations with little or no need of retraining (Afolabi *et al.* 2017). These employable recruits will be able to fill the skill gap that exists in the construction sector. SME construction businesses are looking for individuals that would enhance the productivity and profit of the firms rather than becoming liabilities and increasing the employment turnover, ones they do not fit. For employers of labor, Jackson (2013) noted that a skill deficient graduate will lead to a loss and poor output for the firm. The construction industry is so critical in using graduates that have the required skills because of the nature of the products in terms of housing and other civil infrastructure (Afolabi and Oyeyipo 2017). Therefore, it is paramount that the graduates produced in this sector are of utmost quality as mandated by the industry. For schools of higher learning in developing countries, building graduates that have the required employability skills should be seen as a means of building competitive advantage and attracting more students. In some cases, employers of labor approach universities to supply their graduates based on the competence and reputation of the universities that have been tested in their graduates (Falola *et al.* 2018). The role of universities should not end in producing academically sound graduates but additionally ensuring that they are desirable to employers. Therefore, the study intends to evaluate the critical factors influencing building graduates' employability in a developing economy.

2 RESEARCH METHOD

This pilot study was carried out from a two-way perspective of the employers in the construction industry and academics in the built environment. Using the two (2) groups of respondents afforded, the study looked at a wide view of the industry needs and the curriculum review of the employability needs of building graduates. The two (2) group comprised of the population of the study. To narrow the respondents that participated in the study, a quota-purposive sampling

technique was used to select the employers-academics respondent. A total of 50 respondents in each group were selected. The survey research design used in this study required the use of a well-structured questionnaire data instrument, which was used in receiving responses on the subject of the study. Questionnaires were delivered by hand and through electronic means and retrieved via the same medium. A total of 30 completed questionnaires from each group were retrieved from the field survey. The study was carried out in Lagos and Ogun State. These two states have a vibrant construction industry with large volumes of construction activities ongoing. The states also have world-class universities that have a robustly built environment program. The data collected were analyzed using SPSS v.21 and presented using stacked bars and categorical regression.

3 RESULTS AND DISCUSSION

This section contains the result and discussion on the factors influencing building graduates' employability in a developing economy. The first section analyzed using stacked bars the employability skills perceived to have been covered in the curriculum by the academics and employability skills required in the construction firms by the employers. The second section showed the categorical regression of the factors influencing building graduates' employability in a developing economy.

3.1 Perceived Employability Skills

This section covered the employability skills perceived by the tutors in university and employers in the construction field. Academics provided the level of employability skills covered in the University curriculum in the built environment while employers of labor assessed the employability skills to conform to their requirement based on positions in their construction firms. The employability skills identified in this study are adapted from the Department of Education, Science and Training in Australia (DEST 2006). Figure 1 showed the perceived level of employability skills by academics and employers. In Figure 1, academics placed emphasis on the communication skills, professional expertise/problem-solving skills and teamwork skills. Although this is at par with the view of employers of labor in the construction sector, there is some form of gap in creating a well-rounded graduate fit for the needs of the industry. Other employability skills perceived important by the employers above the academics include planning and organizing skills, life-long learning skills, and initiative/enterprise skills. These are skills that are can be learnt in the classroom setting but perfected in a work integrated learning environment.

3.2 Factors Influencing Building Graduates' Employability

This section examines the factors influencing building graduates' employability in the construction sector. The factors considered are basically factors from teaching strategies and curriculum content. The factors analyzed using linear regression include "Meeting Deadlines for Assignment Submission", "Leadership Courses/Public Speaking Courses", "Writing and Presenting Assignments And Report", "Simulations", "Work Placement Programmes", "Town and Gown Sessions", "Entrepreneurship Courses", "Use of Case Studies", "Presenting & Participation in Class Discussion", "Mentoring and Coaching Activities", "Business Development Training", "Designing Change Processes", "Research Project", "Brainstorming Sessions", "Attendance in Class", "Role Plays/Demonstration", "Group Discussion", "Student Membership of Professional Bodies", "Start-Up Boot Camp Series", "Developing a Career Plan", "Planning and Organizing an Event", "Developing and Designing Models", "Data Collection for

Research”, “Searching for Internship”, “Sourcing for Library & Online Materials”, “Involvement in Student Bodies”, “Society or Sporting Activities”, “Use of Log-Books”, “Working on Group Assignments”, “Practical Experience in Courses”, “Decision Making Activities”, “Utilizing Specialized ICT Packages” and “Development of Portfolios”.

The null hypothesis; H_0 was constructed as teaching strategies and curriculum content cannot influence building graduates’ employability. While the alternate hypothesis; H_1 stated that teaching strategies and curriculum content influence building graduates’ employability.

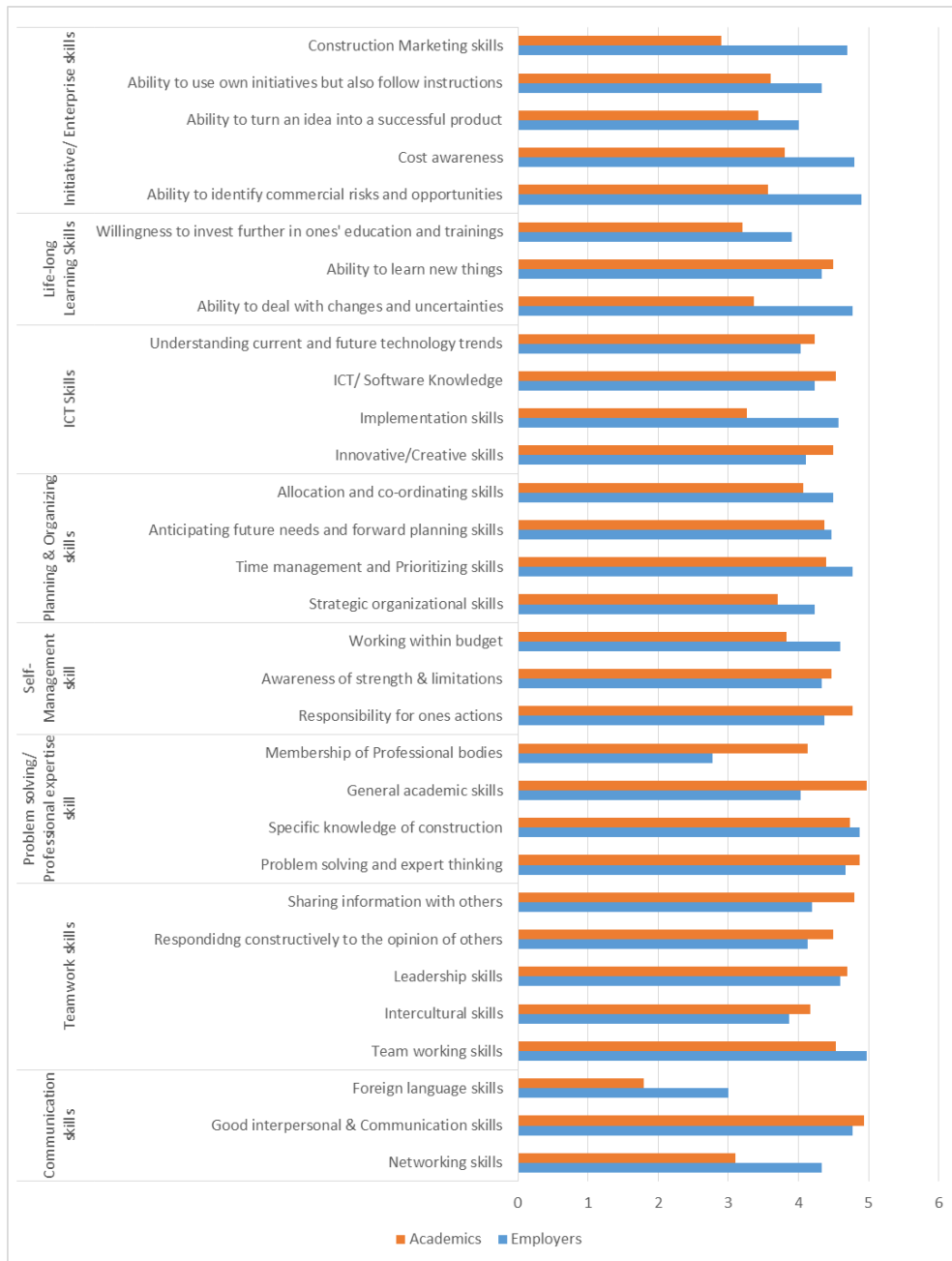


Figure 1. Employability skills perceived by academics vs employers.

With the significance level below 0.05 ($F(32, 27) = 3.972$; $p = 0.000$) as shown in Table 1, the alternate hypothesis is accepted and the null hypothesis is rejected, which means that teaching strategies and curriculum content significantly influence building graduates' employability.

Table 1. Analysis of variance^a.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.372	32	.387	3.972	.000 ^b
	Residual	2.628	27	.097		
	Total	15.000	59			

a. Dependent Variable: Category of respondents

b. Predictors: (Constant), Teaching strategies & Curriculum content

Table 2 showed the model summary of the regression analysis. From Table 2, it showed that teaching strategies and curriculum content has an influence (R^2) of 82.5% on building graduates' employability. This finding is corroborated by the study in Olokundun *et al.* (2018).

Table 2. Model summary.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.908 ^a	.825	.617	.312

a. Predictors: (Constant), Teaching strategies & Curriculum content

The result of the findings helped to develop a framework for increasing building graduates' employability in Figure 2. The framework highlighted the importance of having students go through a work-learning environment at different levels from their first year coupled with a rich curriculum content and effective teaching strategy, employability skills can be imparted on the Building students.

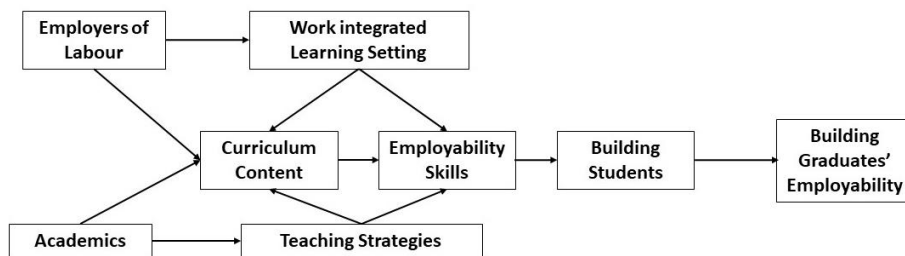


Figure 2. Framework for increasing building graduates' employability.

4 CONCLUSIONS AND RECOMMENDATIONS

The study was aimed at evaluating the critical factors that influence the building graduates' employability in a developing economy. The study revealed the major skills (communication; teamwork, professional expertise/problem-solving; self-management; planning & organizing; ICT; life-long learning; initiative/enterprise) required by employers in the construction industry.

There are specific skills that employers perceived as important in the construction industry. However, academics are of the opinion that it is not adequately captured in the construction curriculum. Even though academics and employers of labor are on par with their importance placed on communication skills, professional expertise/problem-solving, teamwork skills and ICT skills, there are still deficiencies in the construction curriculum to impact the knowledge and experience of planning and organizing skills, life-long learning skills and initiative/ enterprise skills, which are needed in the construction industry. The study showed that teaching strategies and curriculum content can influence building graduates' employability. In conclusion, the study developed a framework for increasing building graduates' employability to align with the skills needed by employers in the built environment in a developing economy. It is recommended that schools of higher learning need to continually measure the needs of the industry and incorporate the findings in a robust construction curriculum. The employers' role should not be neglected in building a well-rounded graduate for the construction industry. Work-learning settings should be encouraged for construction students as this would influence the skills that will engender a competitive and quality Building graduate in the construction industry.

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