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# Bridging skill gap in real estate education in Nigeria

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#### ABSTRACT

Purpose: The importance of education is always underscored without adequate demonstration of skill(s) for practice. Appropriate professional skills guarantees efficient real estate investment decision making and prevents loss of investment fund. The study evaluated, from the perspective of employers of labour, the effort of the government, through students, industrial scheme, at bridging skill gaps in real estate education in Nigeria. Design Methodology/ approach: Primary data were collected with the aid of questionnaire served on 270 estate surveying and valuation firms in Lagos state, Nigeria. The descriptive methods of mean and proportion method were used to determine the contribution of government industrial scheme to real estate education in Nigeria. Findings: The result found that through the student industrial scheme, students acquired experience/skill in real estate marketing as well as the art of team work. Originality/Value: The paper is to serve as impetus to policy makers to enhancing the quality of real estate in Nigeria. It will also serve as proof to foreign investors of the quality of Nigerian real estate practitioners to give them efficient service.

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Education; employers; industry; industrial training; real estate; skill; skill gap

# 1. Introduction

The relevance of the University education to the needs of the industry has been a growing concern among researchers, practitioners and industrialists (Crews, 2004; Poon, 2012; Poon, Hoxley, & Fuchs, 2011; Small & Karantonis, 2001). Since the two forms of learning (education and training) are required to prepare students of tertiary institutions for the productive world of work, the skills required for efficient practice in the contemporary dynamic business world must be relevant to the world of practice (Crews, 2004; Helyer, 2015; Tu, Weinstein, Worzala, & Lukens, 2009). Though the products of Nigerian tertiary institutions have been academically adjudged to be equal to the best in the world, employers are of the impression that they have not brought much significant progress in endogenous technology (Mafe, 2010). As such, the contemporary business environment indicates a pressing need to educate and train graduates for a sustainable professional competence (Abdulrahman, 2016; Karisiddappa, 2004; Ugwuanyi & Ezema, 2010).

Researchers in the recent past have documented a wide gap between the theory and practice of real estate, that is, between the skills possessed and what are required by the industry {Akerejola, 2004; Poon et al., 2011; Poon, 2012 and Boyd, Amidu, and Smith

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(2013)}. Growing concerns among the professionals have also identified skill gap as one of the reasons while many graduates, especially of real estate schools remain unemployable in African countries like Nigerian (Aiyedogbon & Ohwofasa, 2012) thus suggesting the fact that theoretical knowledge alone will not sufficiently meet the needs of the practice.

Reactions from real estate practitioners and other stakeholders in African countries in respect of the skill requirements have however been diverse. While some have criticised the existing University curricular as not incorporating sufficient practical exposure to make graduate fit for the requirements of the practice (Ayofe & Ajetola, 2009), others have adjudged the graduates of the Universities as half baked (Mafe, 2010; Uvah, 2004) who, as a result of skill gaps, are not readily relevant to the needs of the practice. This situation might have contributed to the high rate of unemployment which made social vices and crime prevailing phenomena among the youths in African countries.

The desire to address observed skill gaps has however led to some employers establishing special training schools where fresh graduates who are to be employed are made to acquire requisite skills necessary for the job that is to be performed (Kragha, 2004). An example of this approach to bridging the gaps in the knowledge and skills required of fresh graduates, according to Kragha (2004) can be seen in the Special Intensive Training Programme (SITP) of the Shell Petroleum Development Company of Nigeria Limited. This programme was established in 1998, apparently as a global policy of the organisation to train would-be employees in preparation for practice. Participants in the programme undergo a one-year intensive technical skills acquisition through hands-on experience (Mafe, 2010) that prepares them for effective service delivery.

Awakening to stakeholders concern about the skill gap between learning and practice, the government as the regulatory body, established a mid-school internship known as the Students' Industrial Work Experience Scheme (SIWES) with the sole purpose of bridging the existing skill gap by exposing students to industrial work situation, so as to give them a balanced training and practice experience. The programme is required to be undertaken by all students of tertiary institutions in Nigeria pursuing courses in "specialized engineering, technical, business, applied and environmental sciences as well as applied arts" (ITF, 2004). It is intended to provide undergraduates with practical knowledge which will help them develop skills through the use of tools or equipment required to perform tasks. SIWES was introduced to promote the acquisition of marketable skills and also to enhance mass production of competent professionals (Ogunlade, 1992).

The quest for employable graduates in real estate could attest to the importance attached to real estate. To individuals, real estate is said to take the largest investment of every household (Smith & Smith, Undated). Corporate organisations account for between 5 and 25% of their total expenditure on occupancy costs and real estate activities, while the real estate sector contributed \$925 billion, or 5.8% of GDP of the USA nation's economic output and 6.3% of India's GDP in 2013 (Amadeo, 2013). As such, the need for requisite skills for effective practice necessitates mandatory participation of students of estate management in the skill-bridging scheme of SIWES.

The real estate market in African countries like Nigeria can be said to be growing owing to the influx of direct foreign investment into the African emerging market. In the same way, the popularity of public private partnership in most African countries could have also opened up the region for participation by foreign investors. With increasing activities in real estate therefore, the need to ensure that graduates who are to work in the real estate industry are well equipped with relevant/requisite skills become apparent. Since government has taken action in this regard through the establishment of SIWES, it is necessary to examine, to what extent has SIWES been able to bridge the gap in real estate education? This study will provide answers to this. The result of this study will also reveal the potentials in the African human resources for employability in any part of the world. The paper is structured into five sections. Following the introduction is the review of past studies. Section 3 contains the study area, research method and data requirements. The results and discussion are contained in Section 4 while Section 5 contains the conclusion.

# 2. Review of past studies of learning theories

Learning as a product of education can be acquired in various ways. In this sense, authors vary widely in their views about the process and methods of acquiring skill for use/practice in the work place. Studies such as Savin-Baden (2000), Krathwohl (2002), McKimm (2002) and Newble and Cannon (1995) have documented different theories and perspectives of learning and skill acquisition. While it is generally believed that the ultimate goal of education is to help students to become masters of their own learning (Uden & Beaumont, 2006) with a view to lifelong learning, the outcome of learning/research can vary between disciplinary groups, market requirements and learning focus.

Some authors believe that research-led learning actively engages students in their learning experience, encourages them to pursue new knowledge and to develop the independence of thought, critical thinking and entrepreneurial skills and ability to handle uncertainty and new problems – personal and professional skills that are integral to the graduate-level jobs that can develop knowledge economy (Savin-Baden, 2000; Uden & Beaumont, 2006). Others argue that professional or transferable skills can be developed through enquiry-based learning together with the capacity to solve or manage real problems and present effective answers (Savin-Baden, 2000). Enquiry-based learning aims to help students learn more effectively, apply their knowledge to real-world issues and become independent learners.

The focus of Brew (2002) was on enhancing the quality of learning through research-led teaching. The author proposed five domains which can affect the extent to which teaching is research-led and determine what is understood by the concept. The author argued that the effectiveness and quality of any research led teaching is determined at five major domains of learning which must take cognisance of the following: assumptions related to research and teaching which define the limits and possibilities for research-led teaching – preconditions for research-led teaching; how the academic prepares for teaching (preparation for teaching); how the teaching is actually carried out (teaching in progress); what the teacher does after the teaching to reflect on or disseminate their teaching (the backward glance); and how research and teaching are organised (institutional context).

The Bloom's taxonomy developed in 1956 is also a major theory of learning which categorised learning into three main domains, namely: cognitive (which emphasised knowledge and intellectual skills), psychomotor (which emphasised physical skills) and affective (which emphasised feelings and attitudes). For learning to take place and students to acquire appropriate skills, the theory postulates that six hierarchy of learning levels namely, remembering, understanding, applying, analysing, evaluating and creating are relevant (Krathwohl, 2002; McKimm, 2002). The thrust of the cognitive domain part of the theory focuses on the need for curriculum developers to aim at ensuring that training assist the students to recall learnt information, understand what is taught and be able to solve problem as it arises (Newble & Cannon, 1995). The psychomotor domain with emphasis on the physical and participatory role of skill acquisition and learning, recommends five levels of learning. It proposes that physical skills can be acquired at five levels. First, imitation (observes skill and tries); second, manipulation (performs skill from instruction); third, precision (reproduces skill with accuracy). The fourth, articulation (combines one or more skills in sequence and consistency) the fifth, being naturalisation (completes skilful tasks competently and automatically). The affective domain which emphasises more on attitudinal skills postulates that skills are acquired by receiving (aware of external stimuli, for example, listening), responding (complies with expectations in response); valuing (displays behaviour consistent with a single belief coercion) organising; characterising (behaviour consistent with a value system).

Another learning theory is the Learning Cycles and Learning Styles of Kolb. The author approached the idea of learning as experiential (learning by doing). The theory recommends four cycles of learning abilities/learning contexts. For learning to take place, the theory recommends that every learner must be desirous of: concrete experience (learners are enabled and encourage to be involved in new experiences); reflective observation (time must be available for learners to be able to reflect on their experience from different perspectives, constructive feedback is important here); abstract conceptualisation (learners must be able to form and process ideas and integrate them into logical theories); and active experimentation (learners need to be able to use the theory to solve problems and make decisions and test theories in new situations, this takes learners back to the start of the cycle again). Maellaro (2013) described a graduate learning journal assignment that incorporates all phases of Kolb's model as a successful way of creating a bridge between simply learning about leadership and actually putting leadership knowledge into practice.

The learning theory of Honey and Mumford (1982) identified four types of learners, who would require different learning approaches. The Activist group responds most positively to learning situations that offer challenge and which include new experiences and problems. The Reflector group responds most positively to structured learning activities in which time is provided to think, reflect and observe. They like to work in a detailed manner. The third group is the Theorist group who responds most positively to logical, rational structure and clear aims. They need time to explore ideas and opportunity to question and stretch their intellect. Lastly, the Pragmatist responds most positively to practically based immediately relevant learning activities which allow them to practice and use theory.

The study of Biggs (1987) categorised different approaches to learning and studying. Learning according to the author, will take place at five major levels which are grouped into two. The first group indicate a surface approach to learning: an increase in knowledge, memorising and the acquisition of procedures while the deep approach to learning: the abstraction of meaning and understanding reality.

Students who adopt a deep approach to learning are interested in learning for its own sake, they want to understand ideas for themselves and learn by transforming. They tend to: relate ideas to previous knowledge and experience, look for patterns and underlying principles, be actively involved and interested in course content, adopt an evidence-based approach and critically examine arguments. Students who adopt a surface approach to learning often want merely to get through a course and learn by reproducing. They tend to: study without reflecting on purpose or strategy; memorise facts and procedures by rote; treat the course as unrelated sets of knowledge; have difficulty in making sense of new ideas and concepts; and feel pressured about the amount of work involved.

With the vagaries of views about learning and skill acquisition as well as the peculiarities of skills requirements between disciplines and different regions of the world, skill bridging has taken the focus of many conferences and researches at different parts of the developed countries. In 1998, for instance, the Egan Report titled "Rethinking Construction", was an influential report on the UK Construction industry which had stimulated various industry initiatives and government towards necessary changes for skill acquisition. Learning from experiences in other industries, the report advocated for the need to improve performance by eliminating waste or non-value-adding activities from the construction process. To achieve this, the report identified five key drivers of change for effective performance. These are that organisations should embrace committed leadership, have a focus on the customer, integrate processes with teams, have a quality driven agenda and be commitment to people. With a focus on investigating the extent to which there is a variation in skills levels or skills needs by region, the Egan Review noted the lack of reliable information relating to skills issues on a regional basis. As such, the study proposed a forecasting model to predict labour shortages by profession and by region. Egan called for a new approach towards skills and knowledge, driven by a new, national centre.

Building on the work of others, the study of Arup (2007) conducted a cross-sector assessment of supply and demand of skills required to deliver sustainable communities by profession and by region. In addition to an online survey of 146 organisations involved in the delivery of sustainable communities, the research also extracted information in respect of personal skills and future requirements from 763 individuals within organisations in the UK. Arup found that although significant investment and progress have already been made by organisations in tackling shortages, labour shortages and skills gaps are widening; and also that multidisciplinary working and generic skills are essential to delivering sustainable communities.

Researchers are not also left out in the efforts at bridging skill gap for effective practice. Yuan and McKelvey (2004) conducted a literature review of organisational learning theory in order to ascertain the approach adopted for competitive advantage. Of the two identified approaches, that is, those that treat symbolic information processing as fundamental to learning, and those that view the situated nature of cognition as fundamental, the study argued for importance of studying learning as interactions among people in the context of their environment.

The study of Healey (2005) examined the linkages between research and teaching by exploring disciplinary spaces and the role of inquiry-based learning. By extensive review of the literature, the author argued that, as much as research can no longer be seen as simply discovering or creating knowledge, teaching also is much more than simply transmission of what is already known. The study established several different relationships between research and teaching which are said to vary between disciplinary groups.

Lave and Wenger (1991) introduced another specific view of learning such as legitimate peripheral participation and situated learning. The instructional approach which follows the work of Dewey, Vygotsky and others (Clancey, 1995) argued that students are more inclined to learn by actively participating in the learning experience. In this learning environment, students are placed in authentic learning situations where they are actively immersed in an activity where they are required to use problem-solving (critical thinking) skills. Situated learning theory tries to explain the role of embodied social learning by replicating real-world situations (Bereiter, 1997; Korthagen & Lagerwerf, 1996; Stein, 1998). As an approach to learning, the work of Billett (1996) analysed the nature and possible cognitive consequences of situated learning and reconciled cognitive with sociocultural theorising as a basis to show how situations influence the co-construction of knowledge.

# 3. Review of past studies on real estate education

A number of studies have examined the relevance of the training and practice of real estate. Such studies include Small and Karantonis (2001), Crews (2004), Musil (2005), Blake and Susilawati (2009), Oladiran, Benjamin, and Aiyelabowo (2010), Oyeniyi (2011), Ekunke (2008), Yusuf, Ajidagba, Agbonna, and Olumorin (2010), Olugbenga (2009), Wodi and Dokubo (2009), Ayofe and Ajetola (2009), Poon et al. (2011) and Poon (2012).

An examination of the challenges of balancing the provision of education and training within vocational courses in Land Economy was the focus of the study of Small and Karantonis (2001). The study which recommended that property courses should incorporate both the classroom education as well as practical training, for the University students to be technically sound and be well equipped to respond challenges of change or to the interpretation of the relationship between his or her occupation and the environment within which he works, did \not show, in practical terms, how to bridge perceived gaps in real estate education.

In 2004, the challenge of the scarcity of professional real estate sales persons resulting from lack of interest by salesmen in advanced real estate education motivated Crews (2004) to examine the effectiveness of real estate programme in creating a robust academic and adult learning environment capable of meeting the needs of the students who require up-skilling but have limited time for study. The author observed a gap in skill. Though the study recommended innovative and flexible modes of learning suitable for a nation-wide, busy work force, it did not show how the identified gap could be filled.

The study of Musil (2005) which utilised university business school instructors in real estate, business and entrepreneurship for real estate practitioners' professional development to propose an advanced-level real estate continuing education MBA programme in response to identified skill gaps in real estate education restricted its focus to the advanced countries.

In Australia, Blake and Susilawati (2009) examined the preparedness of QUT UD40 students for entry into the professional workforce. The result of the analysis of data obtained from students, employers and industry representative bodies revealed that the students and employers consistently perceived that there should be sufficient integration of academic studies and professional work experience from the intermediate stages of the property programme so as to equip them with qualified skill for efficient practice.

In the UK, studies of Poon et al. (2011) and Poon (2012) are documented efforts at evaluating the relevance of the skills being acquired in the Universities to the industry. Specifically, the study of Poon et al. (2011) was an evaluation of real estate stakeholders' perspectives of gaps between the employers' expectations of real estate graduates and what real estate graduates considered that they have attained during their studies in line with the content of Royal Institution of Chartered Surveyors (RICS) accredited real estate courses. The result of the study which found practical experience to be missing from University courses made no conscious efforts to show how the identified gaps can be filled.

An attempt by Poon (2012) to assess human resource managers' view on the employability skills of real estate graduates in the UK did not take into consideration the peculiarities of African countries. With the analysis of data obtained from three samples of human resource managers, real estate employers and real estate course directors in 31 knowledge areas, identified 20 skills and 21 attributes, alongside a list of additional competencies made by graduates and employers, the result did not indicate how gap is being bridged. Also, applying the findings of the studies to developing countries like Nigeria could be misleading hence, this study. In Nigeria, the study of Oladokun (2012) which evaluated the training needs of Nigerian Estate surveyors for corporate real estate Management practice only documented the general needs for the acquisition of more practical skills to aid effective practice after graduation and hence has no relevance to the present study.

In a recent study, Wu and Eves (2013) examined the state of knowledge on residential real estate agency practice, career education and real estate licensing requirements in Australia. Whereas the study found major distinctions between real estate profession education and other professions post formal academic training, the place of skill-gap bridging effort of the government has largely remained un-examined.

An identification and examination of the activities that constitute the body of knowledge of real estate practitioners in the UK was the focus of the work of Boyd et al. (2013). Using a modified Delphi technique with a panel of real estate experts practicing in the UK, an anonymous consensus-building process using two rounds of questionnaire was developed. The study which found that effective practice requires skills such as: network with businesses, clients and other professionals to be aware of new opportunities; develop new professional products and services; discuss briefs with clients to identify their needs; and ensure all aspects of operational work comply with internal processes and professional standards, has left the research into "skill gap bridging" for a study of this nature.

In developing countries like Nigeria, researchers have also documented the success or otherwise of SIWES, a government intervention at bridging the gap that exist between education and practice. The findings in Ekunke (2008) identified the problems of manpower production in vocational technical education in Nigeria to include over reliance on imported technology, ineffective organisation of industrial attachment, attitude of industries, poor state of training institutions and insufficient data on manpower needs. While solutions such as giving the employer the opportunity to participate in recommending training for job seekers and potential students, outright streaming of students into training institutions, periodic appraisal of manpower needs assessment and improvement in the quality of vocational technical education programmes were recommended, a study to establish how skill gap is being bridged is required.

Olugbenga (2009) carried out a survey on the views of students in the three departments of the School of Applied Science, Nuhu Bamalli Polytechnic, Zaria, Nigeria about the adequacy of the skills acquired during their participation in SIWES. The result of the analysis which revealed that the skills acquired are inadequate due to the short duration of the programme as well as lack of modern facilities in their place of industrial training, need also be established in real estate. In the same way, the opinion of the employers of labour will provide a balanced view.

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The study of Wodi and Dokubo (2009) was limited to an evaluation of the extent to which the agencies involved in the operation and management of SIWES function to achieve the objectives of the programme. The result of the questionnaire survey conducted on 240 students, 18 staff of five tertiary institutions in Nigeria, did not reveal the efforts of the government at bridging the skill gap in real estate education.

An examination of the skills gaps between the industrial application of Information Technology and university academic programmes (curriculum) was the focus of the study of Ayofe and Ajetola (2009). With a focus on blending the academic rigidity with the industrial relevance, the study established a wide gap between the two, but did not show how the skill gap is being bridged. However, in the absence of real estate education study, this study will evaluate the skill gap bridging scheme of the Nigerian government in real estate education.

In the study of Yusuf et al. (2010), the effect of students' evaluation of teaching on university teachers' instructional practices in Nigeria was investigated. The findings of the survey revealed that while lecturers generally would not accept students' evaluation of their teaching, students' evaluation of teaching often bring about positive changes in their instructional practices. The recommendations that students' evaluation of classroom teaching should be made mandatory and conducted regularly in the Nigerian universities, is devoid of the efforts at bridging the skill gaps in real estate education.

The study of Oyeniyi (2011) documented the impact of SIWES in sustainable skills acquisition and utilisation in Nigeria. The result of the ex-post factor research design, which focused on an estimated population of 2242 comprising students drawn from 4 polytechnics (849), monotechnics (550) and 843 industrial training officials of SIWES in science, technological and agricultural related courses in southwest Nigeria showed that SIWES has contributed significantly to sustainable skills acq uisition and skills utilisation among beneficiaries and for national development. The non-focus on real estate education requires a study that will show the extent of government effort at bridging skill gaps in real estate education.

In an examination of the challenges of industrial work experience scheme in developing the workforce among youths in south west Nigeria, Oladiran et al. (2010) found, among others: absence of approved job specification for the courses; inadequate participation of students in skill acquiring project and poor supervision of students as major challenges. The focus of the study which was limited to the federal colleges offering technical vocational courses and polytechnics in South-West Nigeria did not incorporate the perception of employers of labour about efforts adopted to bridge the skill gap. The study of Oladokun and Ayodele (2015) evaluated the perception of students on the relevance of SIWES to real estate education in Nigeria. With restriction to students as the subject of study, the need for a study to evaluate, from the perspectives of employers of labour, the impact of SIWES at bridging skill gaps in real estate education becomes necessary.

In summary, with the above studies as efforts at evaluating the gaps that exist between the training and practice of real estate, there seem to be very few empirical studies to establish the extent to which gaps in real estate education are being filled, especially in developing countries like Nigeria. This study will fill the gap that exists in the literature in this respect.

#### 4. The study area

The study was undertaken in Lagos state, Nigeria between January and March 2016. As Africa's second fastest growing urban centre after Cairo (Abegunrin, 2003), Lagos has grown

to be a mega city. It is both a former federal capital of Nigeria and the commercial nerve centre of the country. It has an annual population growth rate of about 13.6%, which is almost 5 times as fast as the national growth rate of 2.8%, and a population figure of over 14 million (Omoogun, 2006; World Bank, 2006). Lagos State is a focal point for regional, national and international commercial activities and houses greater than 90% of the head-quarter offices of post-consolidation commercial banks and insurance companies (Babawale & Nubi, 2011).

#### 4.1. Methodology

Questionnaire was administered to two hundred and seventy (270) estate surveying firms with head offices in Lagos State, Nigeria in order to obtain information about their perception as to how students' participation in SIWES has bridged skill gaps in real estate education.

This was borne out of the belief that, as employers of labour who clamour for sufficiently equipped graduates, they will be more appropriate to give an assessment of the impact of SIWES at bridging skill gap in real estate education as well as their involvement in training real estate students on SIWES.

# 4.2. Questionnaire design

Closed-ended questions with statements about available organisational resources and the impact of SIWES as a skill gap bridging scheme of the government on real estate education were mainly included, and answers given on a five-point Likert scale: 1 – absolutely do not agree; 5 – totally agree. The questionnaire was filled by real estate practitioners who were also encouraged to make comments on every statement.

The survey comprised three sections: Section One contained questions about the respondents and their organisations. The questions included job designation, staff strength, length of participation in SIWES, mode of attracting attachee and reasons for accepting the students.

Section Two centred on obtaining data about resources available for training the students during SIWES and core professional services of the organisations. Questions included the adequacy of human and material resources as well as professional services where students could have acquired requisite skills during the programme.

The last section asked questions about the views and opinions of real estate practitioners on the contribution of the skill-gap-bridging effort of SIWES to real estate education. Respondents were asked to rank on a five-point Likert scale their perception about how SIWES has helped to bridge the skill gap in real estate education.

The data collected were analysed with the use of frequency counts and mean. They were further analysed with relative importance index and ranked accordingly.

#### 5. Result and discussions

In presenting the results of the survey, the profile of the respondents is presented first, followed by analysis of the perception of real estate practitioners on the extent to which SIWES has bridged skill gaps in real estate education in Nigeria.

## 5.1. Company profile

The respondents were asked to indicate their years of establishment. Three categories that represented the year of establishment of the organisations were provided. A 50% of the total number of the firms that responded we established within the last ten years. Thirty per cent were established about 15 years ago while the remaining 20% were established more than 20 years ago. Majority (83%) of the officers who responded for the organisations were male while the remaining 17% were female. On the average, the firms had branches in three locations within the state.

#### 5.2. Period of accepting attaché

The respondents were asked to indicate the length of time during which they have been accepting to train students on industrial training. The responses are contained in Table 1.

The result in Table 1 shows that 27% of the respondents had been involved in the skillgap bridging scheme of the government within the last 5 years and between 6 and 10 years, respectively. Altogether, a total of 54% being the majority had been training the students for a period of between 1 and 10 years. Further findings are that 19% of the respondents had between 11 and 15 years of involvement in training students. A further 6% had between 16 and 20 years of involvement in training students while the remaining 19% had more than 21 years in the students' training scheme. These are organisations that had devised their in-house training scheme for their would-be employers even before the government formally established the scheme. A relatively long period of involvement of all organisations in the scheme, even before the establishment of SIWES, reflects the importance attached to bridging skill gap in real estate education.

# 5.3. Mode of securing the attaché/trainee students

The organisations saddled with the responsibility of training the students were asked to indicate the mode of attracting students to their organisations for SIWES. Table 2 contains the responses.

The results, as contained in Table 2, are that majority (53%) of the students were referred to the organisations by their schools. Not only can this be adduced to the resolve of the school to assist the students to partake of the training as a major part of their curriculum of studies, it also laid claim to the belief of the school in the need to complement the training with short practical experience while in school. Further findings also showed that while 27% of the students were introduced to the company by their relatives, 20% of the organisations

Period	Frequency	Percentage		
1–5 years	45	27		
6–10 years	45	27		
11–15 years	32	19		
16–20 years	10	6.		
21 years and above	35	19		
Total	167	100.0		

Table 1. Period of accepting attaché.

Source: Field survey (2016).

Mode of securing attachee	Frequency	Percentage		
Through relatives	45	27.0		
Referral by school	89	53.0		
On request by the company	33	20.0		
Total	167	100.0		

Table 2. Mode of securing the attaché.

Source: Field survey (2016).

made request to the school for the specific number of students that they would want to train. The willingness to always request for industrial trainees so as to train their future employees suggests their awareness of skill gaps and their readiness to complement the effort of the school and that of the government in producing graduates that are ready for the work place.

#### 5.4. Factors that influenced the choice of attaché

In recognition of the fact that organisations could always have preference for whoever is "employed", the respondents were asked to indicate what factors were considered in accepting the student employees? Table 3 is a record of the respondents concerning the question, "what influence your choice of attaché"?

The result in Table 3 shows that real estate firms in the country considered the professional relevance of the students for accepting them. This is contained in the responses of 66% of the respondents. While it could be said that the need for professional relevance and development took precedence when considering who to accept/choose, the justification could be hinged on the yearnings of the practitioners to develop a sustainable practice. The second factor considered for accepting industrial students as contained in the responses of 21% of the respondents is the reputation of the person/individuals referring the students to them for industrial training. This could be because of the need to have a renowned/reliable individual to guarantee the conduct and behaviour of the students who might be given some sensitive responsibilities during the period of the training.

Other responses are that 9% of the organisations accepted to train the students on their preference for the students' institution. A subsequent 9% of the organisations accepted students seeking for industrial training on the reputation of the school that the students are attending while the remaining 1% accepted students based on exemplary knowledge displayed by the students during pre IT interview. The few organisations were those who were likely looking for students that could be trained and developed for possible employment after graduation.

#### 5.5. Available organisational resources

Available organisational resources are indications of the determinants of skills that could be acquired in the organisation. The respondents rating of the efficiency and effectiveness of the common organisational resources such as human resources, working equipment, information technology and transportation vehicle are contained in Table 4.

Measured on a five-point Likert scale, the organisations Human resources, working Equipment, information technology and transportation vehicle had mean values of 2.55, 2.37, 2.23 and 2.06, respectively. The results indicated that the respondents only considered

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#### Table 3. Factors that influenced the choice of attaché.

Factors	Frequency	Percentage
Professional relevance	110	66
Company preference for attachee's school	15	9
Reference by known contact	36	21
School's reputation	15	9
Exemplary knowledge displayed by the student	1	1
Total	61	100.0

Source: Field survey (2016).

#### Table 4. Ranking of organisational resources.

Organisational resources	Mean	Ranking
Human resources	2.55	1
Working equipment	2.37	2
Information technology	2.23	3
Transportation vehicle	2.06	4

Source: Field Survey (2016).

the available resources as being fairly adequate. With low mean ratings, the resources were considered as not being substantially sufficient to bridge skill gaps in real estate education.

Notwithstanding that human resources had the highest ranking, the low mean value suggested a gap in the skill expectation of the workers. Also, the low mean value of the available working equipment (2.37) and information technology (2.23) suggested that rudimentary and traditional practice were still prevalent in many of the firms, who either were yet to embrace the global IT explosion to transform into contemporary practice.

#### 5.6. Exposure to traditional real estate services

The respondents were asked to rank, on a five-point Likert scale, five common traditional real estate services, where they opined that the short training scheme had clearly bridged skill gaps. Their responses are contained in Table 5.

The results as contained in Table 5 reveal low level of involvement of industrial trainees in professional activities. The mean weighted values of: Property Management (2.72), Valuation (2.31), Agency (2.25) and Property Development (2.11) suggested that the IT scheme had only fairly exposed the trainees to the art of practice. With low level of trainees to active practice, skill gaps remain substantially unbridged. The employers could have limited the level to which trainees were exposed as a means to preserve their trade secret and/or as a means of preserving their clients from being highjacked by younger professionals/trainees who could be perceived to be more aggressive towards starting their own practice.

Nevertheless, exposure to property management got the highest ranking with a mean value of 2.72, followed by valuation with a mean value of 2.31. In spite of the perceived unwillingness to substantially get the trainees involved in what they do, the organisations might have been compelled to enable trainees have experience in these activities, as a means to enhance the production of qualified graduates who would preserve, importantly, the valuation profession from being completely hijacked by members of the allied profession, especially the engineers that were claiming to be most appropriate professionals to render

Services	Mean	Ranking
Property management	2.72	1
Valuation	2.31	2
Agency	2.25	3
Property development	2.11	4

Table 5. Exposure to traditional real estate services.

Source: Field Survey (2016).

plant and machinery valuation services in Nigeria. Also, with property management and agency being regarded as an "all comers" affairs, the organisation might be driven by the need to impart on the students, the skill that will be required to "bring back home" such activities that have almost been taken away by quacks and non-professionals.

# 5.7. Impact of SIWES programme

The rating of the employers of labour in respect of how students' participation in SIWES had bridged existing gap in real estate education in Nigeria is contained in Table 6.

The results from Table 6 show that SIWES had proved to be a major means by which students acquired marketing skill, which is not included in the University curriculum. Being the highest rated factor with a mean figure of 4.13, SIWES had made it possible for the students to be exposed to the art of effective property marketing in the contemporary business environment.

While marketing skill seems to be absent in the real estate Curriculum of the Nigerian Universities, the competitive nature of the property market requires organisations to generate "briefs" in order to remain in business. As such, the knowledge acquired by the trainee in sourcing for briefs made them better marketers of real estate products/services.

Rated second and third were improvements in students' inter-personal relationship and the art of team work with mean values of 4.01 and 4.0, respectively. The high rating of these factors suggested that participation in SIWES improved trainees inter personal relationship traits and made them better team workers. These could be made possible as most real estate services provision inter-depend on many actors. Relating with all these actors assisted trainees to be better team players.

S/N	Item	Mean	Ranking
1	SIWES equips students with marketing skill	4.03	1
2	SIWES improved students interpersonal relationship	4.01	2
3	SIWES taught students the art of team work	4.00	3
4	Students acquired the art of working with people in corporate setting	3.96	4
5	SIWES taught students personal and official organisation	3.91	5
6	SIWES taught students initiative and independent work	3.91	6
7	SIWES exposed students to the art of producing quality work	3.81	7
8	SIWES taught students to work under strict supervision	3.74	8
9	SIWES taught students involvement in Corporate Strategic Planning	3.45	9
10	SIWES taught students to work under pressure	3.38	10
11	The school personal attitude to work compared favourably with that of personnel in industry	3.28	11
12	SIWES taught students the art of entrepreneurship	3.22	12

Table 6. Impact of SIWES programme.

Source: Field Survey (2016).

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The mid-ranked factors which SIWES had moderately impacted on trainees with their corresponding mean vales were: Students acquired the art of working with people in corporate setting (3.96), SIWES taught students personal and official organisation (3.91), SIWES taught students initiative and independent work (3.91), SIWES exposed students to the art of producing quality work (3.81) and SIWES taught students to work under strict supervision (3.74). These relate to the art of personal and official effectiveness for job delivery. The little involvement as earlier observed could be responsible for the moderate level of skill acquisition in professional activities' job delivery.

The low rated factors were: students' involvement in Corporate Strategic Planning (3.45), ability to work under pressure (3.38) and the art entrepreneurship (3.22). These are leadership skills that often requires considerable length of time to truly manifest. The period of six months adopted for SIWE could be said to be too small to acquire the skill of leadership.

# 5.8. Relationship between the length of time of accepting attachee and the contribution of SIWES to bridging skill gaps in real estate education

Further analysis was carried out to show the relationship between the length of time the organisations have been accepting to train students on industrial training and the contribution of SIWES in bridging perceived skill gaps in real estate education in Nigeria.

The result, as contained in Table 7 is that most of the factors had no significant relationship with the time that the firms had been accepting students on industrial training. The opinion of the firms on "SIWES taught students personal and official organisation" was the only factor that had significant relationship with the contribution of SIWES to bridging skill gaps in real estate education in Nigeria. It could then be inferred that, students who participated in this scheme were subsequently more organised for both personal and official responsibilities. This could be made possible as the longer an organisation get involved in the training scheme, the better equipped and experienced the organisation becomes in knowing what is required to train the students and on way and manner to help students to develop the required skill. In addition, with a long period of training students on achieving targets and meeting performance expectation, students acquired the art of personal and official organisational effectiveness.

**Table 7.** Chi-square tests of relationship between the length of time of accepting attachee and the contribution of SIWES to bridging skill gaps in real estate education.

Contribution of SIWES to bridging Skill Gaps	Value	Df	Asymp. Sig. (2-sided)
SIWES equips students with marketing skill	13.119 <sup>a</sup>	16	0.112
SIWES improved students interpersonal relationship	10.083ª	16	0.862
SIWES taught students the art of team work	18.459 <sup>a</sup>	16	0.298
Students acquired the art of working with people in corporate setting	23.507ª	16	0.101
SIWES taught students personal and official organisation	44.788 <sup>a</sup>	16	0.000
SIWES taught students initiative and independent work.	16.870 <sup>a</sup>	16	0.394
SIWES exposed students to the art of producing quality work	22.364ª	16	0.132
SIWES taught students to work under strict supervision	13.176ª	16	0.660
SIWES taught students involvement in corporate strategic planning	14.976 <sup>a</sup>	16	0.526
SIWES taught students to work under pressure	16.396ª	16	0.426
The school personal attitude to work compared favourably with that of personnel in industry	10.256ª	16	0.853
SIWES taught students the art of entrepreneurship	19.227ª	16	0.257

# 6. Conclusion

The study has provided insight into the impact of SIWES, a short mid-school practical experience programme, in bridging skill gap in real estate education in Nigeria. The study found that the resources available to train SIWES in the Nigerian real estate industry was regarded as fairly sufficient to provide the required expertise to bridge skill gaps in real estate education. Nevertheless, the human and natural resources of the organisations assisted the students who participated in the scheme to acquire marketing and inter-personal relationship skills. As such, participation in the scheme moderately bridged the gap in real estate marketing, team work and inter-personal relationship skills. The result is that by participating in SIWES graduates of real estate are fairly "packaged" with marketing and inter-personal relationship skills that could be immediately required for effective practice. A further finding of the study was that the experience of the firm was significantly related to their opinion about the fact that students who participated in SIWES were more organised for personal and official responsibilities.

A major policy implication from the study is the need for the government to develop a framework for assisting students to get placement so as to ensuring full participation in the scheme. Both the institutions and the organisations should be sufficiently equipped with sufficient organisational resources for effective training of students. Since SIWES can be relied upon to bridge skill gaps in real estate education in Nigeria, the employers of labour who are the ultimate beneficiaries of the skills possessed by graduates should also see themselves as stakeholders in complementing government efforts at producing skilful graduates by accepting to train them. The professional body should mandate their members, as a matter of policy, to accept students for training without necessarily discriminating. Allowing/maintaining equal participation of students will produce equal opportunity for all students to be well prepared for the industry.

#### **Disclosure statement**

No potential conflict of interest was reported by the authors.

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