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Perception of Entrepreneurial training beyond the domain of undergraduate programme in Estate Management and Valuation

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Abstract

Undergraduates at the Federal Polytechnic Idah in Nigeria are trained in vocations outside their domain programmes in connection with the entrepreneurship development course as pre-requisite for their graduation. This study assessed students' perception of entrepreneurship training in vocations beyond those taught within the core estate management and valuation curriculum. Unit of analysis was the 2014/2015 HND II estate management and valuation class. Questionnaires were administered to a stratified random sample of 40 students drawn from a sample frame of 70 students. Data harnessed from administered questionnaire were analyzed using percentiles, mean score of ordinal responses, one-way ANOVA and the chi-square test of goodness of fit. A consensus among the students towards combining a vocational trade with a career in estate management and valuation was affirmed from the chi-square test of hypothesis. Contrary to generic skills like product/services marketing, self-confidence, and motivation, the study found that vocational skills tutors place little emphasis on the teaching of problem solving, and teamwork and collaboration. These vocational skills tutors were urged to accord more importance to the teaching of these generic skills in order to provide emerging entrepreneurs with value-added transferrable skills.

Keywords: Entrepreneurship, Estate management and valuation, Generic skills, Undergraduate, Vocational skill

1. Introduction

Prior to the early 1990s, Nigerians undergoing undergraduate courses were hopeful that upon graduation, they would be readily employed as civil servants or staff of private sector organizations. The situation is however not the case from the early 1990s to the 21st century as large number of graduates from universities and polytechnics are confronted with the reality of having to become job creators rather than float their portfolios as job seekers. Among these are polytechnic graduates from the HND estate management and valuation programmes.

Estate management and valuation as a discipline falls under the ambit of professional courses, which avail students with array of skills to become job creators. This array of skills include property development, property and facility management, estate agency and brokerage, and valuation of landed property, which is exclusive to those graduates that have met the requirements to practice the profession.

As part of the requirements for graduation, undergraduates pursuing National- and Higher National Diploma (ND and HND) programmes are expected to offer courses in Entrepreneurship. Accompanying the study of the entrepreneurship course is the allotment of specific vocational training coordinated by the polytechnic entrepreneurship development centre. These skills include events planning, textile design, soap and cosmetics production, fashion design, beads production, installation of satellite dish and decoders, barbing techniques, hair dressing, fish farming, poultry management, brick making, and manufacture of pastries.

Experience has shown that some HND graduates of estate management and valuation would prefer to become freelance consultants in array of professional skills amassed from the programme while others tend to fall back on specific vocational skills they have learnt from the home, as well as entrepreneurship skill acquisition programmes taught as pre-requisite for their graduation.

Although a significant proportion of the vocational training is outside the fundamental skills required for the practice of estate management and valuation, there has been a knowledge gap pertaining to students' perception of the associated entrepreneurial skills. This study aims to assess students' perception of entrepreneurial training in vocations beyond the core estate management and valuation curriculum. Specific objectives of this study include to:

1. examine students' preference for a vocational skill;
2. examine students' preference towards combining a vocational trade with the practice of estate management and valuation upon graduation; and

3. evaluate students' perception of the generic skills taught in connection with vocational training.

The value of this research is the exploratory emphasis on students' assessment of the generic skills taught in connection with their allotted vocational training under the entrepreneurship development course offered as pre-requisite for graduation. This is because of the variation in individual preferences of some students who might aspire to become independent job creators upon graduation but would in the interim, rely on the vocational- and generic skills they have acquired outside the domain of the undergraduate programme they were offered admission to study. This study avails tutors of entrepreneurship/vocational courses with the opportunity to know the skills most required by their students.

2. Literature review

2.1 Overview of entrepreneurship

Wheelen and Hunger (2012) define an entrepreneur as an individual who establishes and manages a business enterprise alongside its attendant risk and profit. Prominent among the skills which endear an entrepreneur to excel in any chosen business enterprise include risk management, innovation, creativity, persistence, vision and ability to manage change (Okechukwu, 2009). A significant proportion of these skills notably innovation, creativity, persistence, vision, and ability to take risk are nurtured by the individual entrepreneur.

Okechukwu (2009) defines entrepreneurship as a dynamic process of value innovation and creation aimed at providing products and services that meets the needs of consumers. It is a key element of human resource, and drives the practical application of skills in a specific field of endeavour. This implies that entrepreneurship bridges the gap between knowledge and the use of the same knowledge to package products and services required by consumers. This definition underscores the relevance of training. In other words, an evolving entrepreneur requires a significant period of apprenticeship in order to build expertise and confidence in a chosen vocation.

2.2 Approaches to entrepreneurship education

Udo (2011) and Volkmann *et al.* (2009) identified two alternative approaches to entrepreneurship education to include the magnet model and radiant model. With respect to the ***magnet model***, the higher education institution establishes an entrepreneurship centre saddled with the responsibility of availing all the students with the opportunity to register for a vocational training under the entrepreneurship course irrespective of students' course domain. According to Udo (2011), this approach fosters interdisciplinary collaboration among entrepreneurs, entrepreneurship course tutors and the students except that it fails to address the entrepreneurship training needs of the student's domain discipline.

For the ***radiant model***, Udo (2011) reiterated that an entrepreneurship course is oriented towards the domain discipline of the student. In other words, the faculties or schools design a tailor-made curriculum to educate emerging entrepreneurs in aspects of professional practice for specific course of study.

Entrepreneurship- and vocational training at the Federal polytechnic Idah (in North-Central Nigeria), is currently tailored towards the ***magnet model***, such that the entrepreneurship development courses for all levels of polytechnic education are centrally coordinated by the polytechnic entrepreneurship centre.

2.3 Skills taught the emerging estate surveyor and valuer

Within the purview of estate management and valuation, students are taught vocational skills in property valuation, property management, facility management and estate services, property development, estate agency, land administration, building construction and building maintenance among others (Egbenta, 2012; Udechukwu, 2008). Aluko (2011) emphasized on the need for an emerging real estate practitioner to develop and exhibit leadership skills for a successful career. Among other consulting skills, leadership qualities should be able to endear the emerging estate manager towards customer satisfaction given an array of firms and colleagues competing for similar services. It can be asserted that the acquisition of these skills engenders competence in the performance of professional tasks within and outside a corporate environment. The teaching of entrepreneurship development as a course would help sharpen students' managerial skills in their core discipline and afford them the opportunity to be employable in other vocations.

Most students commence a study programme of their choice in a higher educational institution with the

aspiration of becoming a professional in their chosen field of endeavour. For instance, a student undergoing training in estate management and valuation at the HND level is preparing himself/herself for technical and managerial positions in the labour market. Specifically, such a student may want to avail himself/herself with the opportunity of graduating from the programme to pave the way to become a qualified estate surveyor and valuer (Egbenta, 2012; Udechukwu, 2008).

Although an array of vocational skills exist outside the purview of estate management and valuation, these skills still draw upon the teaching of entrepreneurship development. Within the framework of the magnet model of entrepreneurial training is the teaching of entrepreneurship development as a course aimed at empowering students with vocational skills that are not cognate to their core discipline. The philosophy behind such stride is to ensure that these students become job creators rather than job seekers upon graduation, thereby adding to the value chain of indigenous enterprises that have the potential of competing with other enterprises around the globe.

2.4 The vocational skills training for undergraduates

According to Oxenham *et al.* (2002), the two major policy thrusts for vocational training comprise literacy campaigns and acquisition of livelihood skills. In a related study, Korpi *et al.* (2003) found that vocational training improves employment prospects upon graduation. Suffice to say that vocation skills are taught and learnt for the purpose of business literacy, self-reliance, and a sustainable livelihood. It would be recalled from the introductory section of this article that there are twelve vocational skills in the Federal Polytechnic Idah in Nigeria for which HND students in estate management and valuation are taught as pre-requisite for their graduation. The following paragraphs provide an overview of these vocations.

1. Events planning

Events planning (management) entails organizing and coordinating an array of tasks tailored towards successful gathering of people for a specific purpose (Bladen *et al.*, 2012). From the theoretical perspective, this vocation demands students to deploy some prior knowledge of project management techniques (if they have been taught) to help plan and organize successful social events and occasion including wedding parties, birthday parties, meetings, seminars, and other ceremonies. Beyond the use of project management skills, a student is taught how to organize necessary logistics for a successful event. These logistics range from seating- and floral arrangements, shelter, ventilation, convenience, and refreshment among others.

2. Textile design

Although the foundation of textile design is taught at the Junior Secondary Home Economics course, it has been adopted as a vocational subject under the National Senior Secondary School Curriculum in Nigeria. Notwithstanding, a limited number of Universities in Nigeria offer degree programmes in this and other cognate disciplines such as Industrial design. According to Dunford (2002), textile design entails three steps comprising product development and planning, prototype design, product manufacture and assembly, and the marketing of textile products. This vocation empowers students with the skills necessary to provide raw materials for the fashion designing and tailoring industry.

3. Fashion design and tailoring

This skill is a corollary to textile design. People in their quest to look attractive cannot dispense with the services of a fashion designer or tailor who makes clothes to their specification. With the aid of sewing machines and other accessories, the trainee fashion designer is taught how to take measurement of their clients, cut fabric to specification and sew them to form clothes that can be worn. This vocation is anchored on innate creativity and exclusive initiative of the emerging practitioner (Banks *et al.*, 2000). Other specific skills that can be learnt include making designs and patters on fabrics and mending or amending an existing fabric to the taste of their clients (Drew *et al.*, 2007).

4. Soap and cosmetics production

Sani and Danwanka (2011) reiterated that soap making as an entrepreneurial vocation requires minimal input given the abundance of local raw materials. A good example was the research credited to Onyegbado *et al.* (2002) where plantain peel ash was used as a source of alkali for soap production. In a related development, the increasing demand for natural cosmetics and beauty care products is motivating manufacturers to adapt to consumer preferences (Łopaciuk & Loboda, 2013). Among the naturally occurring raw materials for the cosmetics industry in Nigeria is the African Shea nut butter (Warra, 2011). At the Polytechnic, the training of

students in the science of soap, cosmetics and perfume production is aimed at availing emerging cosmetologist and users of household consumables with products that scientifically meets their demand without compromising quality.

5. Beads production

According to Oklobia and Bakare (2009), beads and other ornamental body adornments are artefacts with cultural significance across the diverse ethnic groups in Nigeria. Related to the field of design and textiles is the production of beaded materials from beads and other locally sourced raw materials like coral shells which served as money in ancient Africa. With the aid of specialized tools and accessories, students undergoing this vocational training are taught how to use beads to form various objects such as earrings, handbags, and necklaces of various designs. At the polytechnic, students are taught how to attractively make and package these products; hence making them comparable to the imported variants. This training also avails the trainee to be self-reliant in the production of high quality beaded household items.

6. Installation of satellite dish

Satellite dishes otherwise known as microwave stations are devices that exchange data transmissions with communications satellites in the earth's orbit (Morley & Parker, 2011). A cursory examination of most existing and emerging homes in major Nigerian cities indicates that the demand for satellite and digital television broadcasts is increasing; hence the need to avail more youths the requisite training in the art of installing satellite dishes and decoders for home viewing of cable television programmes. Although a comprehensive knowledge of the sciences is not a prerequisite for this skill acquisition, it is required that students understand some basic principles behind electronic communication devices.

7. Barbing techniques

Enemuor *et al.* (2012) reiterated that most barbershops in Nigeria are business outfits operated in the form of sole proprietorship; hence, affording this vocation a place among the small-scale businesses. This vocational training include the use of various barbing instruments, sprays, and specific hair care cosmetics for treating hair and skin defects (Janjua & Nizamy, 2004). The trainee barber is taught how to offer quality barbing services to his/her customers as well as the requisite tools and managerial skills required for the management of a barber's shop. Hygiene and safety skills are taught throughout the practical session to ensure that the trainee barber handles sharp instruments with care.

8. Hairdressing

Although the salon management vocation encompasses teaching the trainee the skills of hairdressing, manicure and pedicure, the emphasis here is on hairdressing. A hairdresser working in a trendy salon would exhibit good reception skills, customer care, negotiation and hair styling in accordance with the client's taste (Billett, 2001). Just like the barbering vocation, the hairdressing vocation is characterized by interpersonal contact which can be explored for quality service delivery and long-lasting clientele (Garzaniti *et al.*, 2011). For this vocation, trainees are taught how to use various combs, hair equipment, and styling tools. In addition, they are taught how to treat hair defects, perform hair styling, weave hair, and apply relevant cosmetics to the hair among others. It is expected that the trainee would have amassed knowledge of equipment and skills required to operate a salon business upon completion of the training.

9. Fish farming

According to Olagunju *et al.* (2007), fish farming as a commercial enterprise in Nigeria commenced with an experimental- and large scale industrial fish farms in Lagos and Plateau states. Common in Nigerian fish ponds are freshwater fishes comprising catfishes and tilapia (Olagunju *et al.*, 2007). In Nigeria, the vocational training in fish farming is traced to the Junior- and Senior Secondary School curriculum for Agricultural Science. Notwithstanding, this vocation avails students with skills required to establish and manage a commercial fish pond. In some commercial farms, fish farming has been successfully combined with other forms of agricultural practices as means of diversifying sources of income (Gabriel *et al.*, 2007). This enterprise has been affirmed to be economically viable to proprietors who have requisite training, experience, and optimal workforce (Olagunju *et al.*, 2007). At the end of the training, the student would have been equipped with skills for the operation and management their own commercial fishponds.

10. Poultry management

Studies had it that Uganda and Kenya had attempted the teaching of poultry keeping among other livelihood activities with a measure of success under a special programme designed to integrate literacy with livelihood training (Oxenham *et al.*, 2002). This skill is conveniently taught students in any higher educational institution considering their high literacy levels. Poultry management, which is traced to both the Junior- and Senior Secondary School curriculum for Agricultural Science is aimed at availing the trainee with requite skills for the management of a poultry farm as well as products of poultry comprising meat and eggs, which serve as a raw material for bakeries besides domestic consumption.

11. Brick making

This aspect of vocational training aims to equip students with the requisite skills of manufacturing bricks for building construction purposes. Brick is a small block of burnt clay with length twice its width and can be conveniently held in one hand (Barry, 1999). The polytechnic and its host community are endowed with clay, which is the main material for the manufacture of clay bricks. A substantial number of traditional Igala buildings have been built using clay but a modified approach entails the manufactured of standard clay bricks which are fired in a kiln to improve their hardness and compressive strength. A cursory look at this vocational skill training reveals that it is cognate to building construction taught as a graduation requirement for the HND estate management and valuation student.

12. Manufacture of bread and pastries

Marić *et al.* (2009) define bread as an edible product obtained through the process of mixing, fermenting, forming, and baking of flour and other liquid ingredients. On the other hand, they define pastries as edible products manufactured using processes similar to bread but are lighter in weight and smaller. Cakes fall under this definition of pastries. In the polytechnic, students under the bread/pastries making cluster of the entrepreneurship and vocational training are taught how to start and manage a bakery business through the development of business ideas, sourcing for raw materials, baking techniques, flavouring, packaging, branding and marketing skills. For the bakery business, grains like wheat, cassava, maize, and cowpea have been found to be good sources of protein and fat especially during the manufacture of composite bread (Oladunmoye *et al.*, 2010). Students can harness skills from this vocational training towards establishing their own bakeries or becoming self employed as freelance bakers on the special request of their customers.

A student is expected to choose one of these twelve vocational skills while taking the entrepreneurship development course. Notwithstanding, the final allocation of students to a given cluster of vocation would depend on the decisions of the departmental coordinator for the students' entrepreneurship training.

2.5 Combining a vocational trade with the domain discipline of Estate Management and Valuation

Adair (2010) opined that a successful person is that individual who chooses a vocation that matches his/her interests, aptitudes and temperament. From this perspective, a successful entrepreneur is someone who can match his/her business interest with career interest. Business interest in this context entails that particular enterprise which attracts their commercial sense and profit generation, while career interest might entail that vocation they have chosen to engage in for a lifetime and with a passion. These concepts are the motivational triggers for the establishment of an enterprise. In other words, a match between these two concepts is actually what makes an astute entrepreneur.

The relevance of vocational training in addition to a domain academic programme for which students are enrolled cannot be overemphasized given the currently limited opportunities for white-collar jobs in Nigeria. The implication is the innate tension in the minds of the student who seeks a balance between business- and career interests upon graduation. In other words, the business interest of the student might be skewed towards self-employment through the establishment of a small/medium scale enterprise where the vocational skill learnt in connection with the entrepreneurship development course can be used as a source of livelihood. On the other hand, career interest of the student might be skewed towards purely practicing estate surveying and valuation.

Patel (2015) however admonished that entrepreneurs should hold on to their existing businesses even when they desire to establish new ones. This practice has become the norm especially when resources from an existing business could be used to sustain diversification into other businesses. For instance, the interest of an emerging entrepreneur might be tailored towards combining the practice of a technical vocation with the practice of estate surveying and valuation especially where both businesses might be complementary as in the case of brick making enterprise which could serve the building material needs of clients in the property development process.

There might be situations where the business interest of a graduate from the estate management and valuation programme might not necessarily match his/her career interest. For instance, the HND graduate from this programme might desire to practice the estate surveying and valuation profession but would end up with a career in fish farming taught in the course of non-cognate vocation training.

Based on instances of this trade-off, this research seek to provide an answer to the question of convergence or otherwise between interest in a vocational trade and/or a career in estate management and valuation. Hence, the formulation of the ***hypothesis***, which states that- *Students would prefer combining a vocational trade with the practice of estate management and valuation upon graduation*. For entrepreneurs who combine two or more business ventures, Patel (2015) had identified their rationale to include financial security, averting monotonous work environment, innovation, and diversification of entrepreneurial experience among other reasons.

2.6 Generic skills associated with vocational training

Skills that are taught in connection with the entrepreneurship development course comprise the generic skills and domain-specific skills. While the twelve domain-specific skills have been examined, attention is now drawn to a review of the generic skills.

Gibb and Curtin (2004) described generic skills as drivers of employability of any individual undergoing some form of formal or vocation training. In the context of this study, generic skills are transferrable skills, which can be deployed in any domain-specific vocation of a student or the main discipline in which a degree or diploma is awarded upon graduation. Among the generic skills evaluated in this study include self-confidence; motivation; initiative; customer orientation; information gathering, market survey and analysis; time management; change management; teamwork and collaboration; problem solving; conflict resolution; financial management and bookkeeping; product/services marketing; preparation of business plan; and business ethics (Clayton *et al.*, 2004; Curtis, 2004; Gibb & Curtin, 2004; Hawke, 2004; Oxenham *et al.*, 2002; Sani & Danwanka, 2011). It is acknowledged that a substantial proportion of these skills are crucial to real estate consultancy (Aluko, 2011; Egbenta, 2012). Notwithstanding, these skills are transferrable should the graduate from the HND programme desire to practice any of these vocations learnt in connection with the entrepreneurship course.

Conducting a study on these generic skills, Callan (2004) concluded that both teachers and students perceive problem solving, information gathering, teamwork and communication skills to be the most important generic skills for vocation training. In Iceland however, the emphasis is mainly on technical competence in the manufacture of artifacts (Ólafsson & Thorsteinsson, 2009). For the purpose of this study, an evaluation of students' perception of these skills and their link with the practice of estate management and valuation was performed to help address the third research objective.

3. Methodology

Conducting this study within the framework of the survey design, an exploratory case study approach was adopted towards arriving at answers to research questions posed for the unit of analysis (Creswell, 2003; Yin, 2003). Davidsson and Wiklund (2001) identified the levels of analysis for entrepreneurship research to include micro levels, aggregate levels, Micro/aggregate mix, among other classifications. This research adopts the micro level of research and with particular emphasis on the individual emerging entrepreneur undergoing vocational and academic training. Hence, the unit of analysis for this study is the 2014/2015 HND II estate management and valuation class. Therefore, all analysis and inferences in this study can be traced to this class of graduating students in the Federal Polytechnic Idah.

3.1 Sample frame and sample size

A sample frame of 70 registered students in the HND II class was obtained from the official class list in the custody of the department of estate management and valuation of the polytechnic. In addition, the official list allocating the HND students to specific vocational skills training was obtained from the coordinator for entrepreneurship training in the same department (Table 1).

Table 1: Sample frame and sample size

Vocational skill	Sample frame	Sample size
Events planning	6	3
Textile design	2	1
Fashion design and tailoring	5	3
Soap and cosmetics production	9	5
Beads production	5	3
Installation of satellite dish	18	10
Barbing techniques	7	4
Hair dressing	4	2
Fish farming	5	3
Poultry management	1	1
Brick making	3	2
Manufacture of bread & pastries	5	3
Total	70	40

With a desired sample size of 40 students, which represents about 57% of the total number of registered students, this list was used to prepare stratified random sample for each category of vocational training.

3.2 Data collection instrument

For this survey research, questionnaire was designed to elicit information from the students based on the research questions and objectives. Motivating the choice of questionnaire as an appropriate research instrument include high literacy level of the respondents (students), the efficiency in the collection of data from trainees across the various vocation-training clusters, and compliance with the statistical analysis required for the study. The questionnaire comprises three sections. The first section elicits background data pertaining to the respondents; the second section elicits data pertaining to vocational training undertaken by the respondent (student), while the third section elicits respondents' (students') perception of the vocational training undertaken in connection with the entrepreneurship course at the polytechnic.

3.3Techniques for data presentation and analysis

Ordinal responses from the retrieved questionnaire were coded quantitatively using ordinal numbers (Table 2), and used as the criteria for the interpretation of the mean score used in the course of data analysis.

Table 2: Coding and interpretation of ordinal responses

Response category/Remarks		Ordinal score	Range of mean score
Category 1	Category 2		
Strongly agree	Excellent	5	4.50 - 5.00
Agree	Very good	4	4.00 - 4.49
Undecided	Good	3	3.00 - 3.99
Disagree	Fair	2	2.00 - 2.99
Strongly disagree	Poor	1	1.00 - 1.99

Techniques used to analyze data include frequency distribution, percentiles, mean score of ordinal responses, ranking, one-way analysis of variance (ANOVA) and the Chi-square test of goodness of fit. First, frequency tables were used to classify data, while percentiles, and mean score and ranking were used to report the distribution of responses. Secondly, one-way ANOVA was used to evaluate students' perception of skills associated with the vocational training; while the chi-square test of goodness of fit was used to test the hypothesis posed in the course of the review of literature.

4. Results and discussion

It is pertinent to note that all tables in this section are products of the data harnessed from the 40 questionnaire that were administered in the course of the survey. These questionnaires were appropriately completed and returned. From the socioeconomic characteristics in Table 3, it was observed that the male students in the sample outnumber the females by two persons.

Secondly, the mean and modal age of students in the sample was determined to be 25 years. However, only one student in the sample is above 29 years old, implying that this student might not be mobilized for the National Youth Service Corp (NYSC) programme if actual age exceeds 30 upon graduation from the polytechnic. Thirdly, while 38 out of the 40 students in the sample are single, 2 out of the same 40 students are married. Furthermore, the entire students in the sample claimed to be unemployed. Fourthly, 16 students in the sample have learnt a vocational skill before enrolling for the HND programme in estate management and valuation.

Table 4 summarizes the distribution of students who have learnt a vocational skill prior to their enrolment for the HND programme. It was observed that only two student had received training in vocations that are not currently imparted by the entrepreneurship centre of the polytechnic.

Table 3: Socioeconomic characteristics of students (respondents)

Indices	*Frequency (No = 40)*	*Percentage (%)*
Sex		
Female	19	47.5
Male	21	52.5
Age		
18 - 20 years	0	0.0
21 - 23 years	5	12.5
24 - 26 years	25	62.5
27 - 29 years	9	22.5
> 29 years	1	2.5
Mean age of students	***25 years***	
Marital status		
Single	38	95
Married	2	5
Currently employed		
Yes	0	0
No	40	100
Learnt a vocational skill before HND enrolment		
Yes	16	40
No	24	60

These vocations include Computer/business centre operation; and welding and construction respectively. Save for these two vocations, other students in this category had received training in vocations offered by the polytechnic entrepreneurship centre. However, one student learnt a combination of catering and computer operation.

Table 4: Vocation learnt prior to enrolment for HND programme

Vocation	*Frequency*
Poultry management	2
Installation of satellite dish	3
Installation of satellite dish and event planning	1
Hairdressing & Tailoring	1
Computer/business centre operation	1
Catering and Computer operation	1
Hair dressing	1
Fish farming	2
Fashion design and tailoring	1
Barbing	1
Bread making	1
Welding and construction	1
Total	16

Among the students in this category (Table 4), only three are currently operating a small business in the vocation they have learnt prior to their enrolment for the HND programme. The first student (being a male) explained that he currently operates a satellite dish installation business, the second student (being a female) combines catering with computer operation, while the third student (being a male) combines satellite dish installation with event planning. The implication of this result is the possibility that these three students (who are currently single) may not be totally depending on their parents and guardians for sponsorship at school. In comparison with Table 3, it was observed that these three students contradicted themselves probably on the notion that "being employed" implies having a white-collar job. Perhaps eliciting from them if they were self-employed would have clarified this position in the first instance.

Table 5: Preference for a vocational skill

Vocational skills	Frequency per choice		
	1st	2nd	3rd
Events planning	6	7	5
Textile design	1	0	0
Fashion design and tailoring	3	3	5
Soap and cosmetics production	4	1	7
Beads production	4	4	3
Installation of satellite dish	4	4	6
Barbing techniques	4	2	0
Hair dressing	3	5	2
Fish farming	3	4	3
Poultry management	4	6	5
Brick making	2	0	2
Bread & pastries making	2	4	2
Total	40	40	40

Table 5 indicates preference for a specific vocation skill on the premise that students would prefer certain vocations to the other even after being availed with choices prior to the allocation of the training. It was observed in Table 5 that there is an approximately uniform match between the first choices (most preferred) vocational skills of these students and their allocated vocational training except for satellite dish installation, which recorded a frequency of 4 out of a sample size of 40 as against the stratified sample of 10 students. In other words, 6 out of the stratified sample of 10 students do not perceive satellite dish as their most preferred vocation. Event planning is the most preferred vocational training in the 1st and 2nd places respectively; while soap and cosmetics production tops the 3rd preference list of students in the sample.

Table 6: Possible enrolment for further vocational training

Response	Frequency	Percentage (%)
Yes	39	97.5
No	1	2.5
Total	40	100.0

Given the dynamic world of business and interests in an array of vocations, students were asked to indicate the possibility of enrolling for further vocational training when they have graduated from the polytechnic. Table 6 indicates that 97.5% of students in the sample pledged their interest for further enrolment for vocational skills acquisition after graduation.

It can be explained that majority of these students may likely achieve further vocational skills acquisition while undergoing the compulsory 1-year NYSC scheme especially for those that are below the age of 31 prior to the commencement of the service year.

A career is a lifelong livelihood of an individual. In view of this assertion, Table 7 indicates that 34 out of the 40 students in the sample intend to make a career out of their most preferred vocational skill, while 6 out of the 40 students do not have such intention. The reason for this observation might be the miss-match between the business and career interests of these 6 students. In other words, they may just want to acquire these skills and fall back on them when it becomes difficult for them to secure a white-collar job.

Table 7: Career intentions with the most preferred vocational skill

Response	Frequency	Percentage (%)
Yes	34	85.0
No	6	15.0
Total	40	100.0

The convergence or otherwise between interest in a vocational trade and/or a career in estate management and valuation was evaluated by information elicited from the student on their preference to combine a vocational trade with the practice of estate management and valuation upon graduation.

Table 8: Combining a vocation with the practice of estate management and valuation

Response	Code	Frequency	Percentage (%)
Strongly agree	5	16	40.0
Agree	4	14	35.0
Undecided	3	6	15.0
Disagree	2	4	10.0
Strongly disagree	1	0	0.0
Total		40	100.0

Computed from Table 8 is a mean score of 4.05 implying that the students generally agree to combine a vocation with estate management and valuation practice upon their graduation from the polytechnic. Affirming this position is the acceptance of a hypothesis in that regard following a chi-square value of 23.000 ($p < 0.01$) at 4 degrees of freedom. In other words, majority of these students want to combine the practice of estate management and valuation with a business venture based on their allotted vocational skill. This phenomenon might have accounted for the reason why majority of these students have a business interest in their allocated vocation but would not want to give up a career in estate surveying and valuation.

This result of test of hypothesis has clarified the initial position of majority of these students who intended to make a career out of their most preferred vocation (Table 7). The salient issue here is that they might fall back on these vocational skills to make a livelihood at the initial stage, but they are strongly attracted to a career in estate surveying and valuation without letting go of the vocational business they would have started after completing their HND studies. Although the code of conduct for the practice of estate surveying and valuation prohibits the office premises of the practitioner to be used for activities that are not compatible with the profession ("Estate Surveyors and Valuers Registration Board of Nigeria Act," 2007), it should be interpreted that the same code of conduct does not prevent the practitioner from carrying out legitimate businesses outside his/her office premises.

In other words, an estate surveyor and valuer can operate a professional firm in one office apartment; and operate a non-cognate business venture in separate office apartment, thereby affording him/her the possibility of engaging in other vocations besides a career in estate surveying and valuation. However, when a registered estate surveyor and valuer is employed/a proprietor in/of a non-estate surveying and valuation firm, s(he) shall not offer estate surveying and valuation and valuation services in such establishment (NIESV, n.d.; Olusegun, 2008).

In consonance with the achievement of the third research objective, Table 10 summarizes the mean score, ranking, and the *p*-value returned in connection with the one-way ANOVA of the perception of each generic skill across the cluster of students undergoing specific vocation training. Ranked first and second are product/services marketing ($\overline{X} = 4.03$; $p < 0.01$) and self-confidence ($\overline{X} = 4.00$; $p < 0.01$) respectively. Both mean scores indicate that students perceive the quality of teaching of these generic skills to be very good. Also significant at $p < 0.01$ include motivation ($\overline{X} = 3.90$), and business ideas and initiative ($\overline{X} = 3.65$) which have been ranked in the 3rd and 5th positions respectively; notwithstanding that the quality of teaching have been perceived to be good. Significant at $p < 0.05$ include time management ($\overline{X} = 3.60$, ranked 6th); customer focus/orientation ($\overline{X} = 3.50$, ranked 7th); financial management and bookkeeping ($\overline{X} = 3.50$, ranked 7th); and change management ($\overline{X} = 3.48$, ranked 9th).

Table 10: Students' perception of generic skills taught

Generic skills	Mean score	Rank	*p*-value
Product/services marketing	4.03	1	0.002
Self-confidence	4.00	2	0.000
Motivation	3.90	3	0.003
Preparation of business plan	3.73	4	0.092
Business ideas and initiative	3.65	5	0.005
Time management	3.60	6	0.030
Customer focus/orientation	3.50	7	0.025
Financial mgt. and bookkeeping	3.50	7	0.042
Change management	3.48	9	0.016
Problem solving	3.45	10	0.251
Teamwork and collaboration	3.38	11	0.105
Market intelligence and analysis	3.30	12	0.057
Business ethics	3.23	13	0.014
Conflict resolution	3.23	13	0.032

In spite of their significance at $p < 0.05$, the teaching of business ethics ($\overline{X} = 3.23$) and conflict resolution ($\overline{X} = 3.23$) recorded a tie at the 13th position in the array of generic skills taught in connection with the allocated vocational training. Significant at $p < 0.10$ include the preparation of business plan ($\overline{X} = 3.73$, ranked 4th); and market intelligence and analysis ($\overline{X} = 3.30$, ranked 12th). Although the teaching of skills ranked in the range of 3rd to 13th position in Table 10 were generally perceived to be good, problem solving ($\overline{X} = 3.45$, ranked 10th); and teamwork and collaboration ($\overline{X} = 3.38$, ranked 11th) were identified as not significant. Although Callan (2004), found that teachers and students perceive problem solving and teamwork/collaboration as important skills within the Australian context, results from this study shows that vocational skills tutors in the Federal Polytechnic Idah have not accorded much emphasis to the teaching of these skills.

Finally, the study captures the position of the students concerning the transferability of these generic skills should they decide to go into full-time practice of estate surveying and valuation.

Table 11: Transferability of generic skills for estate surveying and valuation practice

Response	Frequency	Percentage (%)
Yes	32	80.0
No	8	20.0
Total	40	100.0

32 out of a sample of 40 students (Table 11) desire to fall back on these generic skills when in the full-time practice of estate surveying and valuation, while 8 out of the 40 students held a contrary view. Given that, 80%

of the respondents (students in the sample) acknowledged the transferability of these generic skills to the practice of estate surveying and valuation, there might be risk of failed enterprises arising from the less emphasis which vocation skills tutors have placed on problem solving, and teamwork/collaboration.

5. Recommendations

For higher educational institutions teaching entrepreneurship and vocational courses within the framework of the ***magnet model***, it is recommended that vocational skills tutors should place more emphasis on the teaching of the vital generic skills among which are teamwork, collaboration and problem solving as these would go a long way to avail the emerging entrepreneur with value-added knowledge required to manage the dynamics of any modern enterprise. In the labour market, the advantages of these generic skills become eminent as potential employers would be proud to attract graduates with array of transferrable skills beyond the traditional domain of estate management and valuation.

6. Conclusion

Motivating this research is the knowledge gap on students' perception of vocational training in connection with entrepreneurship course offered as pre-requisite for graduation, notwithstanding that a significant proportion of these vocational training is outside the practice domain of estate management and valuation. For the sample of final year Estate Management and Valuation students, there was an approximately uniform match between their most preferred vocational skills and their allocated vocational training under the auspices of the entrepreneurship development course they offered. Event planning was found to occupy the first- and second choices of vocational skills acquisition, while soap and cosmetics production tops the 3rd preference lists of vocational skills. 6 out of the stratified sample of 10 students who earlier chose satellite dish installation eventually perceive that they would not prefer such vocation in the long run. For these students, it would be impossible to change their vocational interests after approval has been granted by the polytechnic entrepreneurship centre. The option however is for them to enrol for further vocational training (outside the supervision of the entrepreneurship centre) upon graduation from the programme.

The teaching of three generic skills comprising product/services marketing, self-confidence, and motivation was applauded by students across the twelve vocational training clusters. Contrary to these, they perceived that less emphasis had been placed on problem-solving and teamwork/collaboration. The implication of this gap can be ameliorated by the vocational skills tutors in subsequent years when they design and implement a curriculum that practically facilitates teamwork/collaboration as well as problem-solving using real-life scenarios and entrepreneurial role-playing on the part of the students. To conclude, it was found that students desire combining a vocational trade with the practice of estate management and valuation upon completion of their undergraduate studies. Although not discipline-specific, it is perceived that the magnet model of entrepreneurship training would avail students with array of generic skills, which are transferrable to the practice of their core discipline upon graduation.

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