

# “An assessment of generic skills demand in five sectors of the Nigerian labor market”

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## An assessment of generic skills demand in five sectors of the Nigerian labor market

### Abstract

This study investigates the important generic skills associated with the agricultural, banking, education, health, and manufacturing sectors in the Nigerian labor market. Despite the large number of unemployed graduates, employers still find it difficult to fill the existing few vacancies because these graduates are often found deficient in certain requisite skills for sustainable employment. Using purposive sampling technique, the study surveyed a sample of 600 management staff on the labor market skills demands. Data were analyzed using descriptive statistics and ANOVA. The results show that all the considered skills are deemed “very critical” by the five sectors. However, communication and analytical skills are rated particularly high by all the sectors. The results indicate the relative importance of generic skills in all the sectors which to some extent shows the context-dependency nature of generic skills. The study suggests that for Nigerian university graduates to meet the challenge of constant change in skills demand in the labor market, Nigerian universities should look for ways of addressing the identified skills needs of the different sectors of the labor market in their curricular. Students should also aspire to develop the generic skills to a reasonable extent before they transit into the labor market.

**Keywords:** change in skills demand, generic skills, labor market, university graduates.

**JEL Classification:** A22, A23, H51, J23, J24, O33.

### Introduction

**Background.** All over the world, the demand for generic skills is rising. Generic skills are high-order, transferable skills which are applicable and common to a range of contexts across all specific fields, and include communication, problem solving, and the ability to use information technology (IT). In contrast, the demand for skills related to manual dexterity and strength is falling. In the United States of America (USA), surveys of employers consistently report strong (and sometimes unmet) demands for higher level skills, as well as basic job-readiness in low-wage labor markets (United States Department of Labor, 1991). Similarly, in the United Kingdom, Frogner (2002) showed that the shift in the occupational structure from manual to non-manual labor over the past 30 years has implied a shift in the demand for skills from manual skills to skills related to cognitive ability. Also, in Nigeria, there has been a recent change in the demands of the labor market in terms of skills. The labor market wants graduates who are already “made to perform”, i.e. those who have up-to-date technical and generic skills combined.

Reasons for change in the skills demand have been identified as changes in output demand, sector reforms, change in the nature of work, technological changes and globalization (Pumphrey & Slater, 2002, pp. 22-23; Hager, Holland, & Beckett, 2002), to which workers have difficulty adjusting. Such changes alter the structure and the total demand for labor, which gives rise to what economists refer to as

“structural unemployment”. Proponents of this theory believe that unemployment results when the composition of the labor force does not respond quickly or completely to the new structure of job opportunities (McConnell, Brue, & Flynn, 1999). Some workers thus find that they have no marketable talents; their skills and experience have become obsolete or unneeded.

In Nigeria, another reason for change in the demand for skills, apart from those listed above, is the exploitation of the high incidence of unemployment. Employers now subtly introduce increased requirements for job applicants, requiring them to possess multiple skills or demonstrate a plurality of skills. The qualifications for almost every job are steeply raised within short periods of time. This escalation of requirements is just an attempt to eliminate the unwanted segment of the rather large pool of available candidates for every advertised position (National Initiative on Youth Employment Programme (NIYEAP), 2008).

Evidence from past studies, such as by Pitan & Adejebi (2012), Dabalen, Oni, & Adekola (2000), and the National Universities Commission (NUC) (2004), show that the nature of the unemployment existing in Nigeria is structural, as many graduates are unemployable because they lack high level skills. Employers’ assessment of Nigerian university graduates in a World Bank study (Dabalen et al., 2000, p. 3) revealed that employers believe that “university graduates are poorly trained and unproductive on the job, and shortcomings are particularly severe in oral and written communication and in applied technical skills”.

The ideal is that a change in the demand for skills by different sectors of the labor market should bring about a corresponding change in the type of skills

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acquired by university graduates, but the results of these studies have shown the contrary. Graduates are found to be deficient in the skills requirements of firms. One major reason for this, according to Phillips Consulting (2014), is that there is disparity between the views of graduates and employers about the skill demands of their jobs. The graduates did not have appropriate knowledge of and orientation to the expectations of the world of work, which may contribute to the lack of acquisition of these skills.

Lack of appropriate skills among graduates has severe consequences for individuals, firms, and government. Among firms, it has been found to increase recruitment costs. On the average, according to a study by Career Builder (2014) in the USA, a company loses more than US\$14,000 for every job that stays vacant for three months or longer. In their study of employers, one out of four employers stated that they have experienced losses in revenue as a result of delays in filling open positions. An implication of this is that some of the big companies compensate for insufficient academic preparation by committing huge sums of money and effort to the training and retraining of their newly employed graduates to maintain the quality of their products and services (Pitan, 2010). According to Dabalén et al. (2000), “an illustrative but possibly extreme case is that of Shell Petroleum, which spends \$12,000 per trainee per year”. But, it has been observed that many companies no longer want to commit resources to retraining because it increases their operating costs and reduces their profitability, and for ‘fear of poaching’ (Price, 2007, p. 503). On the part of the graduates, they suffer from underemployment and unemployment and its consequences, such as unfulfilled dreams, an impaired financial position, delinquent behavior and suicidal tendencies (Pitan, 2010). At the national level, lack of appropriate skills contributes to an increase in the dependency rate, to unemployment and to low productivity, which represents an underutilization of the country’s human resources and a poor social return on investment in university education.

As a result of ongoing sectoral reforms and as the country diversifies into other non-oil sectors such as the agricultural and manufacturing sectors, the labor market is expected to change significantly and become even more competitive over the coming years. One major implication of these reforms is that employers are still going to expect an increase in the quality of skills of new entrants to the labor market. The onus then rests on the universities and potential labor market entrants to meet these demands.

Although, there have been studies, such as those by Dabalén et al. (2000), NUC (2004), Olusoji & Magbagbeola (2005), and Pitan & Adedeji (2012), on the

skills demand and supply in the labor market in Nigeria, only very few studies, such as that by Olusoji & Magbagbeola (2005), have explored the particular skills demanded by specific sectors in the labor market. This specific knowledge is considered necessary at this time when a “high skills related knowledge advantage is one of the requirements of the knowledge economy” (Green, 2009).

With all the attendant consequences of the deficiency of skills among graduates and the reforms that are taking place, and given the limited research in the Nigerian context, it becomes imperative to investigate the skills demand of some sectors in the Nigerian labor market. This information will equip the new entrants to the world of work with knowledge of the generic skills demanded by the particular sector in which they want to work, and in line with this they will adequately prepare themselves for the task ahead.

For the organization of this article, the first theme is the introduction which discusses the background to the study, the statement of the problem and the purpose of the study. This is followed by a review of related literature in specific areas of meaning and nature of generic skills, demand for generic skills and generic skills profile. The third theme is the methodology adopted for the study and ethical issues followed by the presentation of results obtained for the research questions. The last three themes focused on discussion of the results in the light of existing relevant work, conclusion and recommendations based on the findings of the study.

**Statement of the problem.** The major concern of this paper is the identification of the generic skills required by the agriculture, education, health, manufacturing and banking sectors where government reforms are taking place. This becomes necessary in the light of the evidence of the inadequacy of skills possessed by recent university graduates in the labor market as a result of which many of them could not be employed because they lack marketable skills. It is also evident from the literature review that many of the graduates fall victim to this deficit because they are ignorant of the generic skills demand of the labor market.

#### **Research questions:**

1. Is there any significant difference in the demand for generic skills among the five sectors considered in the study?
2. What is the relative importance of each of the generic skills in the five sectors of the Nigerian labor market?

**Purpose of the study.** The purpose of this study is to analyze the skills demand in the agriculture, education, health, manufacturing and banking sectors.

Specifically, it is to: (1) identify the different generic skills associated with the five sectors; and, (2) determine the relative importance of these skills in the five sectors. The results are expected to serve as feedback to the universities, students and all potential labor market entrants on how to improve the quality and quantity of generic skills being developed.

## 1. Literature review

**1.1. Meaning and nature of generic skills.** Generic skills are skills, knowledge and attributes that go beyond disciplinary knowledge, which are applicable in a range of contexts (Luk, Ho, Yeung, & Chan, 2014), as against vocational, technical or academic skills. According to Lee & Edwards (1997), these skills are incidental and subservient to technical skills which are subject specific. Generic skills are required not only to gain employment but also to progress within an organization. That is, as Expert Group on Future Skills Needs (2006) noted, they contribute to an individual's overall employability, and as a result of their importance, they are required by all workers. But, Expert Group on Future Skills Needs (2006) also added that the extent to which generic skills are required by workers varies considerably. The variation in the requirement of generic skills may be explained by the contextual nature of generic skills (Hager et al., 2002). Some researchers, such as Hager et al. (2002, pp. 7-8) and Murdoch-Eaton and Whittle (2012, p. 1), have argued that there is a need to contextualize generic skills to the particular profession or discipline area. Their argument is based on the fact that different professions and occupations have different generic skills profiles, particularly when they are practiced in many different sorts of contexts. Murdoch-Eaton & Whittle (2012, p. 1) in particular believe that the "development of generic skills that underpin effectiveness and adaptability in graduates is highly context-dependent and is shaped by the discipline within which these skills are conceptualized, valued and taught". This seems to explain why undergraduates need to identify, modify and acquire the particular generic skills that are related to the sector in which they aspire to work.

Another important feature of generic skills is that they are holistic in nature (Hager et al., 2002). Though, as these authors noted, it is helpful to consider generic skills individually in developing our understanding of them, in practice they overlap and interweave. For example, a worker who demonstrates the ability to work in teams concurrently demonstrates interpersonal and communication skills. Also, answering the telephone effectively may be good for customer relations, but it can also at the same time involve communication, gathering of information, analytical reasoning, and problem

solving, all of a high skills order. Therefore, Hager et al. (2002) concluded that having well-developed generic skills may also have the effect of improving self-esteem and self-confidence.

As Clanchy & Ballard (1995) and Hager et al. (2002) rightly noted, many researchers use the word 'generic skills' interchangeably with 'complementary skills', 'core skills', 'soft skills', 'attributes', 'transferable skills', 'key skills', 'essential skills', 'competencies', and 'qualities'. But Pumphrey & Slater (2002) pointed out that all these terms only reflect the numerous dimensions inherent in generic skills and reflect the broad nature of non-technical skills needs. For the purpose of this study, 'generic skills' are used.

**1.2. Demand for generic skills.** In recent times, there are increasing comments from employers of university graduates on the need for their recruits to possess abilities other than those relating to the academic or technical knowledge of the discipline they studied as students. For example, employers place a high value on graduates being able to communicate effectively, work in teams, be self-starters and be critical thinkers and problem solvers.

Brown, Halsey, Lauder, and Wells (1997), while considering social conflict and the changing nature of skills, noted that most employers now emphasize the need for employees to have good personal and social skills, together with any technical knowhow which may be required. At least among core workers, there is an expectation that employees will be able to work in a rapidly changing environment, to engage in 'rule making' rather than 'rule following' behavior, to work in project teams, and to share the same 'personal chemistry' as others in the organization (Atkinson, 1985). The authors further stressed the fact that academic qualifications now tell employers less about what they need to know about potential recruits, given that they convey information about individuals' abilities and motivation to jump through the appropriate test and examination hoops, rather than students' potential to work in teams or their social and personal skills.

As Green (2009) noted, this increased demand is very broadly consistent with the theory of skill-biased technological change. According to him, this is the idea that prevailing new technologies has tended to complement (and hence lead to rising demand for) high-skilled labor, while reducing the demand for low-skilled labor. Other changes that accompanied change in technology which further increased the demand for skills have been identified by different authors. Pumphrey and Slater (2002), whose work was based in the United Kingdom (UK), identified globalization of markets and the pressures of international competition, the drive for productivity growth, specialization and sub-

contracting, a steep increase in the use of technology across all occupations, and trends in consumer demand on a national and global scale.

Hager et al. (2002) also identified economic considerations which have drawn attention to generic skills, as being the change (and continuous change) in the nature of work and a shift to a service economy where information and social skills are increasingly important. Hager et al. were of the opinion that these rapid changes in the nature of work were also leading to the concept of a “portfolio career” and a growing interest in lifelong learning. Murdoch-Eaton and Whittle (2012) added that the increasing diversity of the student population, arising from widening participation initiatives and expansions in higher education provision, highlighted the need to make explicit generic skills which were previously tacitly acknowledged.

These changes in the labor market and the consequent changing skills levels indisputably, suggest that in order to be able to compete well in the graduate labor market, especially for the ‘better’ jobs, students need to develop and package themselves in a desirable way to employers. These changes are so fundamental that prospective graduate employees need to be proficient in the broad range of generic skills which are basic tools of the new ‘knowledge economy’ worker.

But unfortunately, despite the recognized importance of generic skills for employment, undergraduates in Nigeria are not explicitly aware of them – maybe because they are nonchalant or because these skills are not taught as part of undergraduate courses where the focus is on the content of the subject. This deficiency is obvious from complaints from employers about the inadequate competencies and skills acquired by recent university graduates in Nigeria. Many employers concur that Nigerian university graduates are not entirely deficient in technical skills, but that they do not possess adequate generic skills (Dabalén et al., 2000; and Pitan and Adedeji, 2012). Specifically, Babalola (2008) noted that although many employers confirm that graduates possess a broad and respectable understanding of the basic knowledge of technical disciplines, they, however, expressed disappointment with the preparation of graduates in those applied technical skills necessary for problem solving and enhancing business productivity.

**1.3. Generic skills profile.** While there is general agreement that generic skills are important there is no one definitive list of such skills; instead a wide range of lists has been developed either from surveys, dialogues and consultations with employers/employees, or advertised vacancies (see for example, Hager, Holland & Beckett, 2002; Pumphrey & Slater, 2002; Olusoji & Magbegbeola, 2005;

University of Kent, 2011; International Labor Organization (ILO), 2013; Sodipo, 2014; and Lee & Edwards 1997). And as Lee & Edwards (1997) pointed out, it is quite absurd to attempt an exhaustive list of generic skills because it is a list without an end. They stressed that what is needed is a list of the most important skills which should be given immediate attention.

Therefore, for the purpose of this study, the following generic skills (which are adapted from the essential skills on lists previously consulted) were used:

**Analytical skills/problem-solving skills:** the ability to visualize, articulate, and solve complex problems and concepts, and make decisions that make sense based on available information.

**Critical-thinking skills:** the ability to draw out meaning from given data or statements, to generate and evaluate arguments, and make one’s own judgment.

**Communication skills:** the ability to transfer information from one entity to another. In other words, it is the ability to impart or interchange thoughts, opinions, or information through speech, writing, or signs.

**Entrepreneurial skills:** the ability to own an enterprise or venture, and to assume significant accountability for the inherent risks and the outcomes.

**Decision-making skills:** the ability to produce an outcome of mental processes (cognitive processes) leading to the selection of a course of action among several alternatives. Every decision-making process produces a final choice. It might be regarded as a problem-solving activity which is terminated when a satisfactory solution is found.

**Information technology (IT) skills:** the ability to use electronic computers and computer software to convert, store, protect, process, transmit, and securely retrieve information.

**Interpersonal skills** refer to the measure of a person’s ability to operate within business organizations through social communication and interactions, i.e. how people relate to one another.

**Self-directed learning skill** is self-education. It is the ability to learn by oneself or to be a self-taught person, as opposed to learning in a school setting or from a full-time tutor or mentor.

**Technical skills:** are subject or discipline-specific skills, otherwise known as academic skills.

**Numeracy skills** help individuals to master basic computation in daily life, use basic mathematical concepts in practical situations, make reasonable estimates, and understand and interpret graphs, charts and data.

## 2. Methodology and ethical issues

**2.1. Methodology.** A descriptive survey research design of the “ex post facto” type was adopted for the study and a purposive sampling technique was used to select one town each from the six geopolitical zones in Nigeria. In purposive sampling, specific elements which satisfy some pre-determined criteria are selected (Nworgu, 2006). This technique is suitable for the purpose of this research as it makes it possible to select the members of the group based on the researcher’s judgment in relation to what constitutes a representative sample with respect to the research purpose. The selection of the towns was based largely on their economic characteristics, which are relevant to the study. These towns are the economic centers where the majority of business activities in the zones are located. Also, many of the target respondents are concentrated in these towns because of the usual influx of graduates from different parts of the zones and beyond.

After choosing the towns, the purposive sampling technique was used again to select 10 organizations from each of the 5 sectors per town making 300 public and private organizations in all. These sectors were: manufacturing, agriculture, health, education, and banking (in both the private and the public sectors). In each of the organizations, two management staff members were randomly selected as respondents, making the total sample in the six zones to be 600 management staff. Questionnaires were used to elicit relevant information from employers of labor (management staff or bosses of graduate employees) as to the current labor market skill demands. Out of the 600 questionnaires that were distributed, 421 (70%) were returned.

The Cronbach’s alpha method was used to test the reliability of the instrument (Cronbach, 1951). The reliability coefficient was 0.83, which confirmed that the instrument was reliable (Santos, 1999). Two research questions were answered and data were analyzed using descriptive statistics.

**2.2. Ethical issues.** The researcher obtained a letter of authorization confirming that the research was meant solely for academic purpose from the Department of Educational Management, University of Ibadan, Nigeria. The letter was distributed to the respondents in the selected organizations to inform them ahead about the visit by the research assistants and the researcher. The six trained research assistants and the researcher administered the questionnaires. All participants were assured that the information gathered would be kept in confidence and only used for the purposes of the study.

## 3. Results

**Research question 1:** Is there any significant difference in the demand for generic skills among the five sectors considered in the study.

Table 1. Analysis of variance (ANOVA) showing differences in the demand for skills among the five sectors

Source	Sum of squares	Df	Mean square	F	Sig.
Between groups	2199.568	4	549.892	18.693*	.000
Within groups	12237.348	416	29.417		
Total	14436.917	420			

Note: \*Significant at  $p < 0.05$ .

The ANOVA result in Table 1 revealed that the mean scores for the different sectors differed significantly ( $F = 18.69$ ;  $p < .05$ ). It can be inferred from this that the demand for skills among the various sectors were significantly different from one another.

Table 2. Descriptive statistics for the demand for skills among the five different sectors

Sectors	N	Mean	Std deviation	Std error
Manufacturing	77	29.43	8.60	0.98
Agricultural	60	33.58	5.11	0.66
Health	88	32.50	3.30	0.35
Banking	94	33.14	4.43	0.46
Education	102	36.41	4.77	0.47
Total	421	33.18	5.86	0.29

The results in Table 2 show that the education sector had the highest mean score (36.41) followed by the agricultural sector (33.58), banking (33.14), and health (32.50) sectors in that order. The manufacturing sector had the least score of 29.43. The implication of this is that education had the highest demand for skills followed by the agricultural sector while the manufacturing sector had the least demand for skills.

Table 3. Comparisons of the mean scores on the demand for skills among the five sectors.

Sectors	N	Subset for alpha = .05	Sectors	N
		1	2	3
Manufacturing	77	29.4286		
Health	88		32.5000	
Sectors	N	Subset for alpha = .05	Sectors	N
		1	2	3
Banking	94		33.1383	
Agric./forestry	60		33.5833	
Education	102			36.4118
Sig.		1.000	.805	1.000

Table 3 shows the Scheffe post hoc mean separation test, which was conducted to determine which of the sectors were statistically and significantly different. The results indicated that the demand for skills by the education sector was statistically different from the demand for skills in all other sectors. The demand for skills in the health, banking and agricultural sectors was not significantly diffe-

rent across these sectors, while the demand for skills in the manufacturing sector was statistically different from the demand for skills in all the other sectors.

**Research question 2:** What is the relative importance of each of the generic skills in the five sectors of the Nigerian labor market?

Table 4. Comparison of the demand for generic skills among the five sectors

Skills demanded	Manufacturing	Agric./forestry	Health	Banking	Education
Analytical	3.268	3.229	3.353	3.717	3.250
Entrepreneurial	3.268	3.143	2.824	3.391	2.886
Critical thinking	3.098	3.286	3.235	3.522	3.302
Communication	3.268	3.314	3.382	3.630	3.295
Decision making	3.244	3.286	3.324	3.500	3.159
IT	3.171	3.400	3.265	3.348	3.256
Interpersonal	3.195	3.200	3.324	3.478	3.091
Problem solving	3.195	3.086	3.382	3.391	3.159
Self-directed learning	3.146	3.171	3.147	3.348	3.045
Technical	3.195	3.143	2.941	3.196	2.977
Numeracy	2.854	3.086	2.941	3.565	2.860

Note:  $X \geq 2.50$  is critical;  $N = 421$ .

From Table 4, all the listed generic skills were considered to be essential in the five sectors.

Table 5. Ranking of the skills demand by the sectors in a descending order of importance

Rank	Education	Banking	Health	Agric/forestry	Manufacturing
1	Critical thinking	Analytical	Communication	Information technology	Communication
2	Communication	Communication	Problem solving	Communication	Analytical
3	Information technology	Numeracy	Analytical	Decision making	Entrepreneurial
4	Analytical	Critical thinking	Decision making	Critical thinking	Decision Making
5	Decision making	Decision making	Interpersonal	Analytical	Interpersonal
6	Problem solving	Interpersonal	Information technology	Interpersonal	Technical skill
7	Interpersonal	Problem solving	Critical thinking skills	Self-directed learning skills	Problem solving
8	Self-directed learning skills	Entrepreneurial skills	Self-directed learning skills	Technical skills	Information technology
9	Technical	Information technology	Numeracy	Entrepreneurial	Self-directed learning skills
10	Entrepreneurial	Self-directed learning skills	Technical skills	Problem solving	Critical thinking
11	Numeracy	Technical skills	Entrepreneurial skills	Numeracy	Numeracy

Table 5, which is derived from Table 4 shows the order of importance of each of the generic skills to the five sectors considered in the study. From the table it can be seen that communication and analytical skills were commonly in high demand by all the five sectors.

#### 4. Discussion

The results from research question 1 in Table 1 can be compared with the results in Table 4 that were derived from research question 2. The analysis in Table 1 reveals that there is a significant difference in the demand for each of the skills among the five sectors, while the result in Table 4 shows that all the skills considered in the study are regarded as very essential by all the sectors. This means that though all the skills are important to the employers, the degree to which each of the skills is important differs

across the different sectors. These differences could be because not all jobs require all the generic skills to the same extent, which implies that all employees are not expected to have and demonstrate all the generic skills to the same extent. This serves as an addition to the existing body of knowledge (Murdoch-Eaton & Whittle, 2012; Hager et al., 2002) that supports the context-dependency of generic skills. The implication of this result is that all the generic skills are essential, but at the same time they are context-specific. It is therefore important for students to prepare themselves generally and more specifically for a particular workplace.

Another result obtained from research question 1 (Table 2) is that the education sector has the highest demand for generic skills, while the manufacturing sector had the lowest demand. It may not be a sur-

prise that the education sector has the highest demand for these skills considering the fact that education is a broad profession which needs all-round, competent individuals from different fields to instruct and impart knowledge. Teachers are expected to have general knowledge of certain concepts, such as counseling, psychology, and sociology, as well as specific knowledge of their teaching subjects. They are also required to be competent and proficient in many of the generic skills. But, the manufacturing sector is profession specific, with each specific area requiring people who are skilled in a particular line of production which has to do with practical technological work.

Nevertheless, communication and analytical skills were commonly rated high by all the sectors. There seems to be a slight variation between this finding and that of Olusoji & Magbagbeola (2005) who examined the impact of economic reforms on poverty and the unemployment situation in Nigeria using advertised vacancies. Their results show that the advertised vacancies were skewed towards requiring high-level skills and that computer and analytical skills were highly rated. The reason for the slight variation may be as a result of a time lag between the two studies. In more recent time, much communication is done through the use of electronic mail, PowerPoint presentations, conference calls and meetings which involve the use of computers. On the other hand, there is agreement between the present result and that of Green (2009) which was carried out in the UK. He discovered that influence skills (which Green categorized as an aspect of communication skills) appear to be the fastest-growing required skills set in the British economy. According to Green (2009), organizational change in response to the changes in technology made possible by computers was one of the factors responsible for the rising demand for communication skills.

At a time when the agricultural sector in Nigeria is undergoing reforms, the generic skills considered by employers as the most important were information technology, communication, decision making, critical thinking, and analytical skills. One of the reasons for the rising demand for information technology skills in the agricultural sector would probably be as a result of the reforms taking place in the sector whereby the introduction of new technologies has reduced the need for manual skills which used to be in demand in agriculture-related jobs. In their dialogue with employers in the UK about skills required, Pumphrey & Slater (2002) found that current and predicted skill requirements in the agricultural sector include better information and communication technology (ICT) skills, communication, initiative, and problem-solving and customer care skills.

In the banking sector, the top five skills (out of eleven) identified by employers were: analytical skills, communication, numeracy, critical thinking and decision-making skills. However, in a research study by Allen Consulting Group (2009), employers in Bahrain rated highly important work-related skills as being customer communication skills, management skills, problem-solving skills and persuasive skills. According to Pumphrey & Slater (2002), employees in the financial sector in the UK were expected to have communication, team-working, problem-solving, organization and management generic skills.

In this study, the top five generic skills (out of eleven) identified by employers in the education sector in Nigeria were critical thinking, communication, information technology, analytical and problem-solving skills. In Allen Consulting Group's (2009) skills-gap study, it was found that private education organizations in Bahrain identified the top five skills as being communication, leadership and management, teaching, interpersonal and emotional skills. In the same report, the teachers themselves highlighted literacy, work communication, checking skills, problem-solving skills, and customer communication as the top five skills keeping employees in their jobs.

The top five generic skills (out of eleven) required in the health sector were communication skills, problem-solving skills, analytical skills, decision-making skills, and interpersonal skills. This result perhaps reflects the opinion that the most pressing skills needed for carers often relate to communication skills, such as listening to clients; reflecting back clients thoughts, feelings, understanding emotions etc. (Employers Skill Survey: Case Study Health and Social Care, 2000, cited in Pumphrey & Slater, 2002). However, in the UK the top three skills demanded by health and social care workers were: critical thinking, professional judgment, and coping skills (Pumphrey & Slater, 2002).

The generic skills that were rated the top five (among eleven) by Nigerian employers in the manufacturing sector were: communication, analytical, entrepreneurial, decision-making, and interpersonal skills. This seems to concur with previous findings (with little variation) on the skills needs of engineering students who are potential entrants into the manufacturing industry. A review of generic skills amongst graduates related to engineering employability skills in four countries in Asia (i.e., Malaysia, Japan, Singapore, and Hong Kong) showed that employers identified three important generic skills, namely, communication skills, problem-solving and interpersonal skills (Selvadurai, Choy & Maros,

2012). Also, in the UK, when assessing skills needed in the engineering sector, Pumphrey & Slater (2002) found that employees were expected to be able to demonstrate problem-solving and diagnostic skills as well as greater abilities for forward thinking and 'whole system' thinking (which could mean analytical skills as in this study).

### Recommendations

The fact that all the generic skills considered in this study are essential implies that university curricula should reflect the identified need for these skills (especially communication and analytical skills) in the modern-day labor market. Also, undergraduates themselves should aspire to develop and have these skills to a reasonable extent before they transit into the labor market. Secondly, the various departments in the universities should identify the particular generic skills which have been considered to be essential by related sectors and ensure that these skills are imparted to students either directly or indirectly.

With the highest demand for generic skills, the education sector indicates the need for undergraduates in the faculties of education to be better equipped with these generic skills than their counterparts from other faculties if they are to compete well in the labor market.

Since generic skills are context-specific, not all jobs will require them to the same extent and therefore everyone is not expected to have them all to the same extent. What employers want is determined by the needs of their specific sector. It is therefore important for students to prepare themselves generally

for the labor market and, more specifically, for a particular workplace.

### Conclusion

The study was carried out to investigate the relative importance of generic skills demanded by the agricultural, banking, education, health, and manufacturing sectors in the Nigerian labor market. Through a survey of employers, the results of the study show that there is a significant difference in the demand for generic skills among the five sectors considered in the study, but all these skills are deemed to be essential by all of them. However, communication and analytical skills were generally rated highest among all the sectors.

The implication of these findings is that there is a need for undergraduates and all new labor market entrants to be equipped with knowledge of all the generic skills to a reasonable extent, and, particularly with the specific skills demanded by the particular sector in which they want to work. It is also hoped that these results will serve as feedback to the universities and their various departments on the identified needs of the labor market which they need to lay more emphasis on.

It should be clarified that this study only emphasized the relative importance of generic skills and the need to acquire them by undergraduates; it did not consider ways by which they can be embedded into the Nigerian universities' curricula. Future studies should therefore endeavor to do this and also find other possible ways by which students can adequately acquire these skills which will give them a competitive edge in the labor market.

### References

1. Allen Consulting Group (2009). Sectoral and Skills Gaps Analysis, Skills gaps Research Study: Report 2. Report to Tamkeen, Kingdom of Bahrain, available at: <http://www.lf.bh/reports/Skills%20Gaps%20Study.pdf>.
2. Atkinson, J. (1985). *Flexibility, uncertainty and manpower management*. Brighton: University of Sussex, Institute for Employment Studies.
3. Babalola, J.B. (2008). *Modelling Nigerian university system for effective learning and global relevance: Past, present and perspective*. Calabar: Awemark Publishers.
4. Brown, P., Halsey, A.H., Lauder, H. and Wells, A.S. (1997). The transformation of education and society: an introduction, *Education: Culture, economy, and society*, pp. 1-44.
5. Career Builder (2014). Companies Losing Money to the Skills Gap, According to Career Builder Study. <http://www.careerbuilder.com/share/aboutus/pressreleasesdetail.aspx?sd=3%2F6%2F2014&id=pr807&ed=12%2F31%2F2014>. Accessed on 10 March 2015.
6. Clanchy, J. and Ballard, B. (1995). Generic skills in the context of higher education, *Higher Education Research and Development*, 14, pp. 155-166.
7. Cronbach, L.J. (1951). Coefficient alpha and the internal structure of tests, *Psychometrika*, 16 (3), pp. 297-334.
8. Dabalena, A., Oni, B. and Adekola, O.A. (2000). Labor market prospects for university graduates in Nigeria, *Higher Education Policy*, 14 (2), pp. 141-159.
9. Expert Group on Future Skills Needs (2006). The changing nature of generic skills, available at: <http://www.skillsstrategy.ie/pdfs/TheChangingNatureofGenericSkills.pdf>.
10. Frogner, M.L. (2002). Skills Shortages. Labor Market Trends, *Office for National Statistics Publications, SWIV 2002*, 110 (1), pp. 17-27.
11. Green, F. (2009). The growing importance of generic skills Beyond Current Horizons: Work and employment. Department for Children, Schools and Families, London, available at: [www.beyondcurrenthorizons.org.uk](http://www.beyondcurrenthorizons.org.uk).

12. Hager, P., Holland, S. and Beckett, D. (2002). *Enhancing the learning and employability of graduates: The role of generic skills*. Business/Higher Education Round Table (B-HERT).
13. International Labor Organization (I.L.O.) (2013). *Enhancing youth Employability: The Importance of Core Work Skills*. Skills for Employment Policy Brief. Available at: [http://www.ilo.org/skills/pubs/WCMS\\_234467/lang-en/index.htm](http://www.ilo.org/skills/pubs/WCMS_234467/lang-en/index.htm).
14. Lee, D. and Edwards, T. (1997). Teaching of Generic Skills to Undergraduate Engineering Students, *Research and Development in Higher Education*, pp. 415-419. Available at: <http://www.herdsa.org.au/wp-content/uploads/conference/1997/leed01.pdf>.
15. Luk, L., Ho, R., Yeung, C. and Chan, C. (2014). Engineering Undergraduates' Perception of Transferable Skills in Hong Kong. Paper presented at the 8th International Technology, Education and Development Conference (IN-TED 2014) Valencia, Spain, March 10-12 In INTED 2014 Proceedings, pp. 796-802.
16. McConnell, C.R., Brue, S.L. and Flynn, S.M. (2011). *Economics: Principles, problems and Policies* (19th ed.) NY: McGraw-Hill/Irwin.
17. Murdoch-Eaton, D. and Whittle, S. (2012). Generic skills in medical education: developing the tools for successful lifelong learning, *Medical Education*, 46 (1), pp. 120-128. DOI: 10.1111/j.1365-2923.2011.04065.x.
18. National Initiative on Youth Employment Programme (NIYEAP). (2008). *Handbook on youth empowerment and employment generation for Nigerian youth*. No 4.
19. National Universities Commission (NUC) 2004. *Labor market expectations of Nigerian graduates*. Report of National Needs Assessment Surveys.
20. Nworgu, B.G. (2006). *Educational research – basic issues and methodology*. Owerri, Nigeria: Wisdom Publishers Limited.
21. Olusoji, M.O. and Magbagbeola, N.O. (2005). Empirical Analysis of Labor Market Demand in Nigeria, *Journal of Research in National Development*, 3 (1), pp. 63-74.
22. Pitan, O.S. (2010). *Assessment of skills mismatch among employed university graduates in Nigeria labor market*. Ph.D. Dissertation. Nigeria: University of Ibadan.
23. Pitan, O.S. and Adedeji, S.O. (2012). Skills mismatch among university graduates in Nigeria labor market, *US – China Education Review*, 2 (1), pp. 90-98.
24. Phillips Consulting. (2014). *Education and Employability Survey Report*. Available at: [www.phillipsconsulting.net/files/education\\_survey\\_report\\_mar2014.pdf](http://www.phillipsconsulting.net/files/education_survey_report_mar2014.pdf).
25. Price, A. (2007). *Human Resource Management in a Business Context* (3<sup>rd</sup> ed), Andover, Hampshire: Cengage Learning EMEA.
26. Pumphrey, J. & Slater, J. (2002). Skills Dialogue: “A comprehensive summary of generic skills requirements”. Department for Education and Skills, UK. Available at: [www.dfes.gov.uk/skillsdialoguereports](http://www.dfes.gov.uk/skillsdialoguereports).
27. Santos, J.R.A. (1999). Cronbach's Alpha: a tool for assessing the reliability of scales, *Journal of Extension*, 37, pp. 1-4.
28. Selvadurai, S., Choy, E. and Maros, M. (2012). Generic Skills of Prospective Graduates from the Employers' Perspectives. *Journal of Asian Social Science*, 8 (12), pp. 295-303.
29. Sodipo, O. (2014). Employability of Tertiary Education Graduates in Nigeria: Closing The Skills-Gap, *Global Journal of Human Resource Management*, 2 (3), pp. 28-36.
30. United States Department of Labor (1991). “What Work Requires of Schools”: A SCANS Report For America Washington DC. Available at: <http://wdr.doleta.gov/SCANS/whatwork/whatwork.pdf>.
31. University of Kent (2011). Career and Employability Service “What are the top ten skills that employers want” Retrieved from: <http://www.kent.ac.uk/careers/sk/top-ten-skills.htm>.