



Promoting Better Management of Migration in Nigeria

NEEDS ASSESSMENT IN THE NIGERIAN EDUCATION SECTOR

INTERNATIONAL ORGANIZATION FOR MIGRATION
ABUJA, NIGERIA

MAY 2014



This project is funded by the
European Union



International Organization for Migration (IOM)

This project is implemented by the
International Organization for Migration

The opinions expressed in the report are those of the authors and do not necessarily reflect the views of the International Organization for Migration (IOM). The designations employed and the presentation of material throughout the report do not imply the expression of any opinion whatsoever on the part of IOM concerning the legal status of any country, territory, city or area, or of its authorities, or concerning its frontiers or boundaries.

IOM is committed to the principle that humane and orderly migration benefits migrants and society. As an intergovernmental organization, IOM acts with its partners in the international community to: assist in meeting the operational challenges of migration; advance understanding of migration issues; encourage social and economic development through migration; and uphold the human dignity and well-being of migrants.

Publisher: International Organization for Migration
No. 11 Haile-selassie Street
Asokoro District
Abuja
Tel.: +234 814 067 11 27
Fax: +234 807 209 31 33
E-mail: iomnigeria@iom.int
Website: www.iom.int

© 2014 International Organization for Migration (IOM)

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without the prior written permission of the publisher.



Promoting Better Management of Migration in Nigeria

NEEDS ASSESSMENT IN THE NIGERIAN EDUCATION SECTOR

INTERNATIONAL ORGANIZATION FOR MIGRATION
ABUJA, NIGERIA

MAY 2014



This project is funded by the
European Union



International Organization for Migration (IOM)

This project is implemented by the
International Organization for Migration

CONTENTS

List of Tables	7
List of Figures.....	7
Acronyms and Abbreviations	9
Executive Summary	11

CHAPTER 1

Introduction.....	13
1.1 Background	13
1.2 Purpose and Objectives	14
1.3 Specific Objectives of the Needs Assessment.....	14
1.4 Specific Activities	14

CHAPTER 2

Methodology.....	15
2.1 Study Design	15
2.2 In-depth Interviews with Key Informants.....	16
2.3 Briefs on Agencies Selected for Data Collection	16
2.4 Desk Review of Documents	17
2.5 Needs Assessment Tools	18
2.6 Study Limitations and Challenges	19

CHAPTER 3

Overview of the Nigerian Education Sector	21
3.1 Structure of the Nigerian Education Sector	21
3.2 Access to Quality Education	23
3.3 Administration of the Nigerian Education Sector.....	25
3.4 Challenges of Quality Education	26
3.5 Teacher Education and Preparation	27

CHAPTER 4

Review of Documents and Policies	29
4.1 Nigeria’s Vision 20:2020	29
4.2 National Economic Empowerment and Development Strategy.....	29
4.3 National Policy on Education	30
4.4 National Road Map for the Education Sector.....	30

4.5 Labour Migration Policy for Nigeria	30
4.6 World Bank Analysis of the Nigerian Education Sector	31
4.7 UNESCO Reports on Nigerian Education	32
4.8 Report on Needs Assessment of Nigerian Public Universities	32
4.9 Research on Teachers' Skills and Competencies	33
4.10 Diaspora Skills and Competency Exchange Programmes	34
4.11 Administrative Structures for Managing Diaspora Issues in Nigerian Universities	35

CHAPTER 5

Results and Discussion	39
5.1 Number, Composition and Qualifications of Personnel in the Education Sector	39
5.2 Skill and Competency Gaps in the Education Sector	42
5.3 Addressing Skill and Competency Gaps	43
5.4 Existing Diaspora Skills Exchange Programmes in Tertiary Education	45

CHAPTER 6

Conclusion and Recommendations	49
6.1 Policy Environment for Diaspora Engagement in Education	49
6.2 Need for Diaspora Engagement in the Education Sector	49
6.3 Modalities for Diaspora Engagement in Education	49
6.4 Disciplines and Competencies Requiring Diaspora Engagement	50
6.5 Leveraging Existing Diaspora Engagement Programmes	50
6.6 Difficulties in Attracting Diaspora to Engage in Education	50
6.7 Improving Working Conditions for Nigerian Academics	50
6.8 Insecurity and Diaspora Engagement	50
6.9 Diaspora Engagement through Virtual Participation	51
6.10 Establishment of a Diaspora Office in Tertiary Institutions	51
6.11 Establishment of a Reliable National Diaspora Database	51
Bibliography	53
Appendix 1	57
Appendix 2	61



LIST OF TABLES

- 2.1 Data collection regimen 15
- 2.2 Schedule of key-informant interviews 16
- 3.1 Growth in the number of universities in Nigeria 24
- 3.2 Unified Tertiary Matriculation Examination applicants and tertiary admissions, 2004–2013 25
- 5.1 Number and composition of personnel in the education sector 39
- 5.2 Qualifications of teachers 40
- 5.3 Distribution of qualified and unqualified teachers 40
- 5.4 Teacher shortage in Nigeria 41
- 5.5 Qualitative analysis of extent and areas of teacher shortage 42
- 5.6 Proportion of teachers with professional competencies 43



LIST OF FIGURES

- 3.1 Structure of the Nigerian education system 21



ACRONYMS AND ABBREVIATIONS

ADF	African Diaspora Fellow
DFID	Department for International Development
EFA	Education for All
EU	European Union
FME	Federal Ministry of Education
HND	Higher National Diploma
ICT	Information and Communications Technology
ILO	International Labour Organization
IOM	International Organization for Migration
LEADS	Linkages with Experts and Academics in the Diaspora Scheme
MDG	Millennium Development Goals
MIDA	Migration for Development in Africa
MoE	Ministry of Education
NBTE	National Board for Technical Education
NCCE	National Commission for Colleges of Education
NCE	Nigeria Certificate in Education
NEEDS	National Economic Empowerment and Development Strategy
NIS	Nigeria Immigration Service
NNVS	Nigerian National Volunteer Service
NPE	National Policy on Education
NUC	National Universities Commission
OAU	Obafemi Awolowo University
OIP	Office of International Programmes
SUBEB	State Universal Basic Education Board
UI	University of Ibadan
UBEC	Universal Basic Education Commission
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNILAG	University of Lagos
UTME	Unified Tertiary Matriculation Examination

EXECUTIVE SUMMARY

This report presents the results of a needs assessment survey of the education sector in Nigeria. The survey was conceptualized to identify skill and competency gaps in the education sector. The goal of the assessment was to provide the Government with recommendations on how identified skill and competency gaps in education could be addressed. It was envisaged that the outcome of this assessment would provide the Government with necessary information on existing skill and competency gaps in the education sector in order to support the Nigeria National Volunteer Service (NNVS) to develop its outreach to identify Nigerians in diaspora who are willing to contribute their competencies and skills towards the development of the education sector.

The needs assessment utilized a research design of a mix-method of data collection procedures. These include a comprehensive desk review of relevant needs assessment documents in the education sector, a survey questionnaire responded to by relevant government officials, and semi-structured in-depth interviews with chief executives of commissions or agencies which superintend the three strata of the Nigerian education sector.

The results of the needs assessment survey indicate the presence of an enabling policy environment for diaspora engagement in the Nigerian education sector. The results show that there are currently debilitating skill and competency gaps in the nation's education sector. Analysis of both qualitative and quantitative data reveals acute skill gaps in the core disciplines of science, foreign languages, mathematics and basic technology at the basic and post-basic education levels while special education, computer science, technology, law, engineering, medicine and surgery were identified as domains of skills shortage in tertiary education. Results of the assessment further reveal that teachers at all levels of education generally lack information and communications technology (ICT), counselling and pedagogical competencies. The results also show that lack of modern infrastructure, scarcity of teaching materials and inadequate research equipment in Nigerian educational institutions are push factors for the exodus of Nigerian academics to other countries in search of greener pastures.

Based on the results of the assessment, it is clear that diaspora engagement in Nigerian education should be restricted, at least for now, to interventions at the tertiary level of education. Though skill shortages requiring diaspora intervention were found at the lower levels of education, institutional administrative structures were lacking to manage diaspora engagement at the basic and secondary education levels. General improvement in working conditions of workers in the sector is crucial if those in the diaspora are to be persuaded to return home to contribute to educational development even on a short-term basis.

Consequent upon the results of the assessment, it is recommended that the Government, educational institutions, development partners and other stakeholders in the education sector should explore diaspora virtual participation as an intervention strategy to target diaspora who are willing to contribute their knowledge, skills and competence to the Nigerian education sector but are not willing to return to Nigeria. The Federal Ministry of Education (FME) should direct all tertiary institutions to set up offices mandated with the mission of working closely with diasporas. The Government should collaborate with relevant organizations and agencies to obtain current and accurate data on Nigerian academics in the diaspora in order to facilitate their engagement in the education sector. IOM should increase its technical assistance to Nigeria to enable it to generate and update its national diaspora database.

INTRODUCTION

1.1 Background

Nigeria has the largest population of African people in the world. With a population of approximately 167 million people,¹ the country has networks of diaspora communities spread across many countries. It is estimated that about 15 million Nigerians work abroad and attract high volumes of remittances to Nigeria yearly. In 2012, statistics from the Central Bank of Nigeria on official remittances indicate that Nigerians in the diaspora remitted about 21 billion dollars,² with the possibility that the figure might increase in subsequent years as a result of current interventions to engage Nigeria diaspora for national development.

There had been increasing evidence of Nigeria's huge diaspora population constituting a potent force for national development. Such evidence generally focused on financial contributions of remittances and investments. Of recent, however, is the growing awareness of the diaspora population's non-financial contributions to national development. In addition to remittances, it is recognized that diaspora members can be encouraged to contribute their competencies and skills to national development, especially in the critical sector of education.

It has been recognized also that Nigerians in the diaspora who attract remittances to the country contribute mainly to short-term economic empowerment of relatives and immediate family members. Though remittances may have some impact on national economy, there is a need to fashion out strategies by which Nigerian diaspora communities are encouraged to contribute to national development through sustainable and well-coordinated platforms of knowledge and skills transfer. The process of encouraging skills and knowledge flow from the diaspora to Nigeria for the development of the education sector is in recognition of the relevance and usefulness of diaspora's skills and competencies in that sector.

In its concerted efforts to leverage the knowledge, skills and experience of Nigerian professionals abroad for national development, the Nigerian Government began in 1999 the process of effectively engaging Nigerians in the diaspora to contribute to various sectors of the nation's development. In the education sector, the highest level of government initiative to mobilize Nigerians in the diaspora to revitalize the nation's higher education system was the appointment of three Nigerian diaspora academics as Vice Chancellors of three newly established universities in 2011. The immediate consequence of the appointments was the ease at which the new Vice Chancellors were able to attract other eminent Nigerian professors in the diaspora to return home to work as pioneer professors in the new universities.

It is apparent that the strength and sustainability of the process of engaging diaspora in Nigeria's education sector depend, to a large extent, on the technical assistance of international development partners in improving the capacity of the Government to manage migration in order to maximize its development potentials. The International Organization for Migration (IOM), among other State actors in Nigeria, is taking a lead in this process.

In 2012, IOM Nigeria began the implementation of a project funded by the European Union which aimed at promoting better management of migration in Nigeria. The overall objective of the project was to enhance the capacity of the Government to manage migration in order to maximize its development potentials. With diaspora mobilization being a key component of the project, IOM has been providing technical support to the Nigerian National Volunteer Service (NNVS) to strengthen its capacity to fulfill its mandate of mobilizing the Nigerian diaspora for national development. The current project is part of IOM's efforts to enhance the capacity of the NNVS to engage and mobilize diasporas for development through investment schemes and temporary return of highly qualified diaspora members to Nigeria.

¹ National Population Commission, 2012.

² World Bank, 2012.

One major type of technical support which IOM has provided to the NNVS to achieve its mandate is the development of an online portal to facilitate a system for registration of Nigerians in the diaspora. The portal was developed to enable the NNVS to secure substantial information on sociodemographic characteristics, geographic location and professional profiles, as well as gauge their willingness to invest in Nigeria. While registration was intended to create a database of all Nigerians in the diaspora, the mapping targeted Nigerians in the health and education sectors in three pilot countries, namely South Africa, the United Kingdom and the United States.

To complement the outcome of the mapping exercise, it became expedient for IOM to conduct a needs assessment of Nigeria's education sector to identify skill and competency gaps in the sector. It was envisaged that the outcome of this process would provide the Government of Nigeria with necessary information on the existing skill gaps in its education sector in order to support the NNVS to develop its outreach capacity to identify Nigerians who were willing to contribute their competencies and skills towards national development in the sector. Encouraging skills and knowledge flow from the diaspora to the country of origin for national development, otherwise called *brain gain*, is in recognition of the presence of relevant skills and competencies in the diaspora that could be harnessed for national development alongside remittances sent by the diaspora.

1.2 Purpose and Objectives

The main purpose of the needs assessment of the education sector was to identify skill and competency gaps in the sector and provide the Government with recommendations on how the gaps could be addressed. The data gathered would assist the Government to establish a matching system to mobilize the diaspora for national development through a pilot scheme to encourage the temporary or permanent return of highly skilled diaspora members to contribute to national development in the education sector.

1.3 Specific Objectives of the Needs Assessment

The needs assessment was designed to:

- Determine the number, composition, qualifications of personnel in the education sector;
- Analyse available skills and competencies in the education sector;
- Identify skill and competency gaps in the education sector;
- Determine how identified skill and competency gaps in the education sector can be addressed;
- Identify strengths, challenges and weaknesses of existing skills and competency exchange programmes with the Nigerian diaspora.

1.4 Specific Activities

To achieve the objectives of the needs assessment, the following specific activities were carried out at different stages:

- Development of assessment tools and a work plan for the needs assessment exercise;
- Development of a questionnaire to gather data on the number, composition and qualifications of personnel in the education sector;
- Visit to stakeholders implementing similar programmes, such as the National Universities Commission;
- Identifying the strengths, challenges and weaknesses of existing skills and competency exchange programmes with the Nigerian diaspora;
- Briefing and debriefing meetings with IOM throughout the period of the project.

METHODOLOGY

2.1 Study Design

The needs assessment utilized a research design of a mix-method of data collection procedures. These include:

- (i) A comprehensive desk review of relevant needs assessment documents in the education sector;
- (ii) A survey questionnaire responded to by relevant officials of the supervising commissions or agencies saddled with the responsibilities of managing the three strata of the education sector (primary, secondary and tertiary);
- (iii) Semi-structured and in-depth interviews with representatives of the supervising commissions of each stratum of the education sector.

The data gathering procedures involved three stages. In the first stage, a survey questionnaire was sent in advance to relevant officials of the selected commissions, agencies or educational institutions for completion. This was followed by a visit to each organization or institution for verification of the information supplied in the survey questionnaire. The third stage involved face-to-face, semi-structured in-depth interviews with representatives of the commissions, agencies or institutions. The information sought at all stages of the project was guided by the objectives of the assessment as indicated in Table 2.1.

Table 2.1: Data collection regimen

Specific objective	Data collection tool	Target organization	Target official
Determine the number, composition and qualifications of personnel in the education sector	Survey questionnaire	UBEC FME NCCE NBTE NUC	Director of Personnel of each agency
Analyse available skills and competencies in the education sector	Survey questionnaire + in-depth interview	UBEC FME NCCE NBTE NUC	Director of Personnel or Head of each agency
Identify skill and competency gaps in the education sector	Survey questionnaire + in-depth interview	UBEC FME NCCE NBTE NUC	Director of Personnel or Head of each agency
Determine how identified skill and competency gaps in the education sector can be addressed	Survey questionnaire + in-depth interview	UBEC FME NCCE NBTE NUC	Director of Personnel or Head of each agency
Identify strengths, challenges, and weaknesses of existing skills and competency exchange programmes with the Nigerian diaspora	In-depth interview	FME NCCE NBTE NUC NNVS	Head of each agency

2.2 In-depth Interviews with Key Informants

In addition to quantitative data collected through the administration of the survey questionnaire, in-depth interviews were conducted to obtain qualitative data from officials of the agencies charged with monitoring of different strata of education at the federal level. A total of 14 interviews were conducted. The schedule of the in-depth interviews conducted with selected government officials is as presented in Table 2.2.

Table 2.2: Schedule of key-informant interviews

Education stratum	Monitoring agency	Official interviewed	Number of interviews
Primary	UBEC	Executive Secretary	1
		Directors	2
Secondary	FME	Director of School	1
		Director of Personnel	2
Tertiary	NUC	Secretary/Directors	2
	NCCE	Secretary/Directors	3
	NBTE	Secretary/Directors	3
Total			14

2.3 Briefs on Agencies Selected for Data Collection

Data for the needs assessment was collected from organizations which, at the time of the assessment, were serving as monitoring agencies for different tiers of the Nigerian education sector. Three universities were included in the assessment to examine existing structures for academic linkages and skill exchange programmes in Nigerian universities. Briefs on all agencies and institutions that participated in assessment are presented below.

2.3.1 Federal Ministry of Education

The FME is the government body that directs education in Nigeria. The Minister of the FME is appointed by the President. Functions of the FME include formulating a national policy on education, collecting and collating data for purposes of educational planning and financing, maintaining uniform standards of education throughout the country, and controlling the quality of education in the country through the supervisory role of its Inspectorate Services Department. The FME harmonizes educational policies and procedures of all the states of the federation through the instrumentality of the National Council on Education. It also effects cooperation in educational matters on an international scale. The FME coordinates the activities of a number of parastatals under it such as the National Universities Commission (NUC), the National Commission for Colleges of Education (NCCE), the National Board for Technical Education (NBTE) and the Universal Basic Education Commission (UBEC).

2.3.1.1 National Universities Commission

The NUC is a parastatal under the FME. The Commission was established in 1962 with the task of developing and managing university education in Nigeria. Its functions include: granting approval for all academic programmes in Nigerian universities; granting approval for the establishment of all higher educational institutions offering degree programmes; and ensuring quality assurance, through regular accreditation, of all academic programmes in universities. The Commission currently regulates the academic programmes of 40 federal, 38 state and 51 private universities in Nigeria.

2.3.1.2 National Commission for Colleges of Education

The NCCE is a parastatal of the FME established by Decree 13 of 1989. The establishment of the Commission was a resultant effect of the utmost importance accorded to quality teacher education by the Federal Government of Nigeria. Since its inception, the Commission has continuously pursued the goals of quality assurance in teacher education. It has continuously reviewed and standardized the curriculum of colleges of education in the country through programme accreditation, which is carried out once in five years for all the 20 federal colleges of education, 41 state colleges of education and 5 private colleges of education under the Commission.

2.3.1.3 National Board for Technical Education

Established by Act No. 9 of 1977, the NBTE is a parastatal of the FME specifically created to handle all aspects of technical and vocational education falling outside university education. The Board supervises and regulates, through an accreditation process, the programmes offered by technical institutions at secondary and post-secondary school levels. It is also involved in funding of polytechnics owned by the Government of Nigeria.

2.3.1.4 Universal Basic Education Commission

The UBEC is a federal government agency charged with the responsibility for coordinating all aspects of universal basic education programmes in Nigeria in order to promote uniform, qualitative and functional basic education in all states of Nigeria. In recognition of the multisectoral and cross-cutting nature of universal basic education programme implementation, the UBEC pursues and implements critical subsector-related programmes in collaboration with other agencies that have distinct responsibilities within the FME. The Commission is responsible for the production and distribution of the new nine-year basic education curriculum to all public primary and junior secondary schools in Nigeria. It also organizes regular training programmes for teachers and other personnel involved in the implementation of the nine-year basic education curriculum.

2.3.2 Nigerian National Volunteer Service

The NNVS is a volunteer management institution set up by the Government of Nigeria to complement national development effort by encouraging, harnessing, managing and effectively deploying volunteer services and activities of both Nigerians in diaspora and those at home. The NNVS was established in 2002, on the premise that Nigeria has a vast reservoir of human capital, technical expertise and investment potentials, which – if properly mobilized – could fast-track developmental processes, especially in rural communities. The Government’s initiative in setting up the NNVS is supported by the desire of Nigerians abroad to be involved in national development.

2.4 Desk Review of Documents

The needs assessment was guided by a rigorous desk review of research and assessment reports on manpower needs in the Nigerian education sector. The purpose of the review was to generate a knowledge base about the current state of Nigeria’s three tiers of education. In this regard, existing literature, government documents and reports were reviewed in addition to information obtained from websites of some organizations.

The desk review leveraged information from previous needs assessment reports on the education sector from government and other organizations. Statistical digests on education and other government documents on the composition of the personnel in the education sector were collated and reviewed. In instances where sufficient data was not available, relevant calculations were made to estimate projected skill needs and competency gaps in the sector. Also, the review drew upon documents and reports produced by diaspora organizations and other institutions and agencies. Specifically, the following issues were explored in the desk review of documents for the needs assessment:

- Description of Nigeria’s education system;
- Assessment of each source and selection of the most accurate information on current manpower needs of the sector;
- Identification of skill and competency gaps;
- Factors related to the shortage of education professionals;
- Policies and responses proposed and/or implemented to fill gaps in existing needs assessment;
- Strengths and weaknesses of existing needs assessment.

2.5 Needs Assessment Tools

Both quantitative and qualitative data were collected for the needs assessment. Quantitative data was sourced through the administration of a survey questionnaire for officials of the commissions, agencies and institutions selected for the study. On the other hand, qualitative data was obtained through in-depth interviews with the selected officials.

2.5.1 Survey Questionnaire

The items in the questionnaire were sourced from a comprehensive review of literature on issues relating to skills and competencies in education as well as the analysis of documents dealing with diasporas. The questionnaire contains both structured and unstructured items to give respondents the opportunity for further elaboration. The items in the questionnaire were structured to obtain existing data on the number, composition and qualifications of personnel in the education sector to identify skill and competency gaps in the sector.

2.5.2 Interview Schedule

An interview schedule was used to generate ideas on how identified skill and competency gaps in each tier of education could be addressed. The in-depth interview focused on existing gap and skill exchange programmes in the education sector with a view to analysing the strengths and weaknesses of these programmes.

2.5.3 Officials Interviewed in Selected Agencies/Institutions

In order to identify skill and competency gaps in the education sector and provide the Government with recommendations on how the gaps could be addressed, various stakeholders were contacted and interviewed. Respondents were the following:

IOM Nigeria

- Ms Lily Sanya, Programme Officer
- Mr Tarsoo Ade, National Officer

Nigerian National Volunteer Service

- Mrs Umma Amina Abdullahi, Director
- Mrs Nmaemego Obiechina, Principal Executive Officer

National University Commission

- Prof Julius Okogie, Executive Secretary
- Dr Chris Maiyaki, Chief of Staff to the Executive Secretary

National Commission for Colleges of Education

- Prof Muhammad Junaid, Executive Secretary
- Dr Sanni Aliyu, Director, Academic Programmes

Universal Basic Education Commission

- Alh. Dr Dikko Suleiman, Executive Secretary

Federal Ministry of Education

- Mrs J.N. Ibe, Director, Education Support Services Department
- Mrs M.O. Oludoun, Migration Desk Officer

2.6 Study Limitations and Challenges

The vastness of Nigeria's education sector comprising federal, state and local levels made the conduct of a comprehensive field research on education needs assessment extremely challenging within the timeframe of this project. Considering the scope of the current assessment vis-à-vis the vastness of the entire education sector, it is reasonable to describe this report as a snapshot of Nigeria's education sector. A more elaborate study of specific subsectors of the education system would no doubt yield more detailed assessment of education in Nigeria.

The robustness of this report, especially on how to address skill and competency gaps in the education sector, was limited by the small sample of key informants interviewed from selected government establishments. Nevertheless, considering the high status of the few government officials who provided information for the assessment, the report constitutes a reliable snapshot of the status of Nigerian education usable for IOM's pilot project for diaspora engagement in the education sector.

It was challenging to obtain data with current statistics for the assessment mainly due to the fact that current data on the education sector was generally not available in the public domain. The assessment therefore relied on available data, some of which was more than three years old and had not been updated at the time of the study. The assessment was also limited by the reluctance of government officials to release data or respond to surveys and inquiries despite several follow-up visits, contacts and reminders.

Another major limitation of the report is the non-availability of qualitative data on polytechnic education. Though contacted, the Executive Secretary of the NBTE, who is the head of government parastatal in charge of polytechnic education in Nigeria, could not participate in the key information interview used to gather qualitative data for the assessment. It was difficult to visit the head office of the Board in Kaduna because of the security situation in northern Nigeria at the time the needs assessment was carried out. Thus, qualitative data for the needs assessment for the tertiary education subsector covered colleges of education and universities. Notwithstanding, this report provides an adequate assessment of Nigerian tertiary education, as the assessment of polytechnic education is not likely to be different from those of the two subsectors of tertiary education covered in this report.

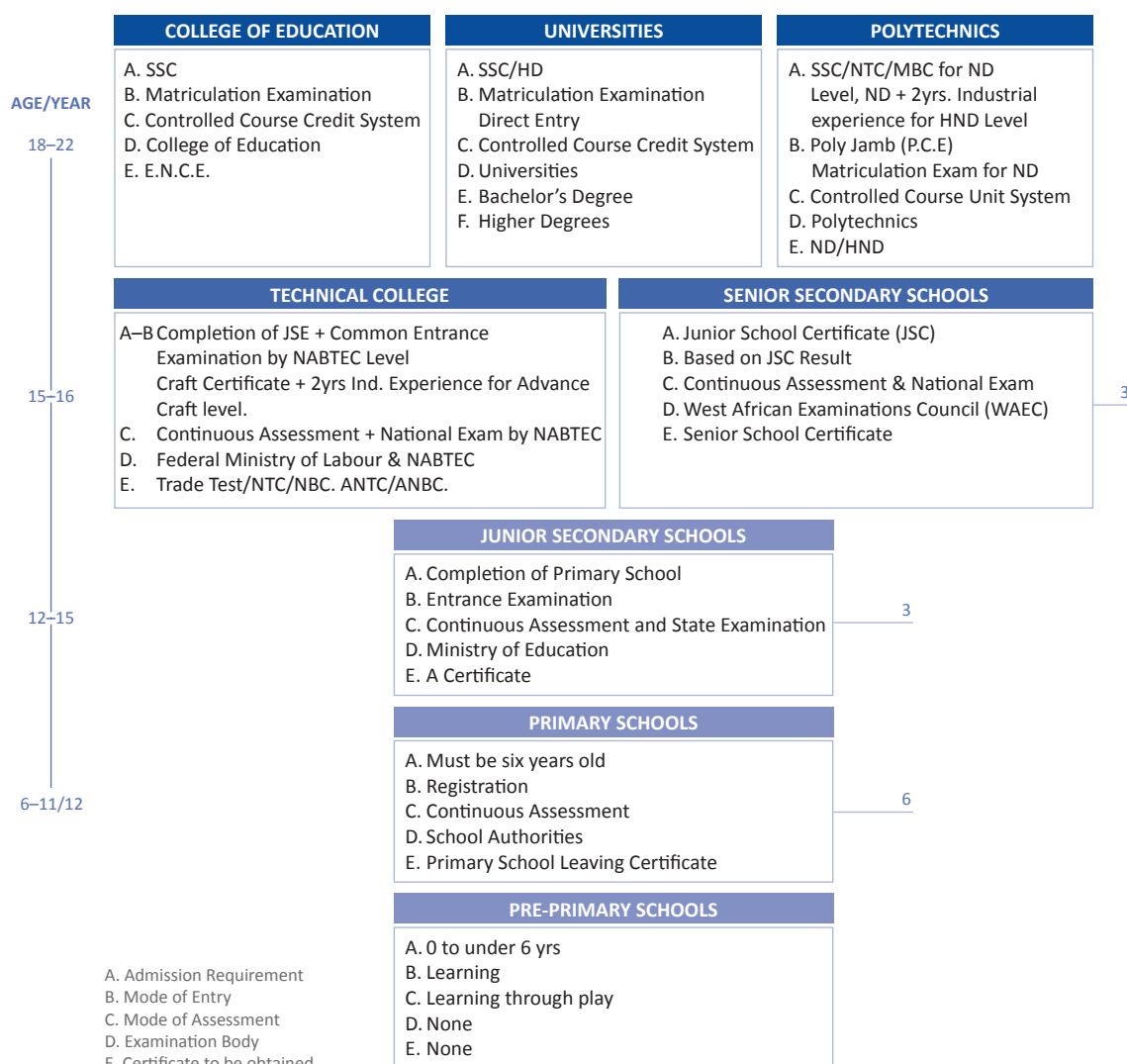
OVERVIEW OF THE NIGERIAN EDUCATION SECTOR

This chapter presents an overview of Nigeria’s education sector, with the aim of identifying suitable issues for diaspora intervention and engagement. The review of the status of Nigerian education as presented in the chapter relies partially on data from the International Bureau on Education, a UNESCO institute specializing in educational content methods and structures (UNESCO, 2011). The review covers topics among which are the structure, administration and quality of the Nigerian education system.

3.1 Structure of the Nigerian Education Sector

Education in Nigeria is generally stratified into three sectors, which are basic, post-basic/senior secondary, and tertiary education. However, another stratification based on the horizontal division of education into types is also available (National Planning Commission, 2009b). In this regard, early childhood care and development (or pre-primary education) is viewed as part of basic education but is specialized for younger children who are not yet of primary school age. Similarly, nomadic education is part of basic education but is for special groups of migrants. Adult and non-formal education may be part of basic education or may transcend it, as it can go as high as the post-basic level. Within basic, post-basic and even tertiary education, technical/vocational education is a subset. Teacher education is also a subset of tertiary education. Figure 3.1 shows the structure of the Nigerian education system based on the general stratification into three sectors.

Figure 3.1: Structure of the Nigerian education system



Source: UNESCO World Data on Education, 2011.

3.1.1 Basic Education

Basic education is expected to be free and compulsory for Nigerian children. It begins at the age of six and consists of six years of primary schooling and three years of junior secondary schooling. Subjects taught at the primary level include mathematics, English, religious knowledge, basic science and technology, and one of the three major Nigerian languages (Hausa, Igbo and Yoruba). The goal of primary education is to inculcate functional literacy and numeracy, develop the ability to communicate effectively, and enhance positive attitudes towards cooperation, work, community, national development and continuing learning (UNESCO, 2011). The curriculum for the first six years of basic education is discipline-based, and addresses the goals of primary education. Seven main subjects are specified in the curriculum. These are language arts, elementary science, mathematics, social studies, cultural arts, agriculture and home economics. Student evaluation at the primary education level is now carried out by a system of continuous assessment, as the primary school leaving certificate examination has been abolished. Consequently, Nigerian children are expected to have a continuous, uninterrupted stretch of education for nine years from primary school to the third year of the junior secondary school (Labo-Popoola, Bello and Atanda, 2009).

The junior secondary school level comprises three years of schooling after the primary school education. The curriculum at this level is both pre-vocational and academic. It is designed to enable pupils to acquire further knowledge and develop skills. The core curriculum includes English French mathematics language of the environment taught as first language one major Nigerian language taught as second language integrated science social studies and citizenship education, and introduction to technology. Pre-vocational electives include agriculture, home economics, business studies, local crafts and computer education. Non-prevocational electives include creative arts (music and fine art), religious and moral education, physical and health education, and Arabic. Students are expected to take a minimum of 10 and a maximum of 13 subjects, including all the core subjects. Students will have to take assessment tests for all these subjects; after which those who will pass the tests will be awarded Junior School Certificates. Students who complete junior secondary education can then enrol in senior secondary schools, technical colleges or vocational training centres offering three-year programmes in which they can earn National Technical/Commercial Certificates. The students' next levels of education will be based on the results of the assessment tests to determine their academic ability, aptitude and vocational interest. However, most students and parents prefer senior secondary schools to technical colleges or vocational schools.

3.1.2 Post-basic or Senior Secondary Education

The broad aim of secondary education within the overall national objectives is to prepare the students for higher education and for living a responsible life in society. Upon completion of nine years of basic education, most students proceed to the post-basic level, known as senior secondary education, for a period of three years.

Senior secondary education has a diversified curriculum, with subjects designed to broaden students' knowledge and outlook in life. The language of instruction is English for all secondary school grades, except for special courses that require another language. Every student takes six core subjects, plus a minimum of two and a maximum of three from the list of elective subjects. In summary, they have to take a minimum of eight subjects but not more than nine. The core subjects are English; mathematics; one major Nigerian language; one elective out of biology, chemistry, physics or integrated science; one elective out of English literature, history, geography or social studies; and agricultural science or a vocational subject. One of the three elective subjects may be dropped in the last year of the senior secondary course. The promotion of students from one class to another is determined by a combination of continuous assessment scores and end-of-term examinations. The Senior School Certificate examination is taken in the last year of senior secondary education and a certificate is awarded on successful completion and passing of a national examination, which is conducted by the West African Examinations Council or the National Examinations Council.

3.1.3 Tertiary Education

Tertiary education in Nigeria is provided by universities, colleges of education and polytechnics. The duration of studies in universities ranges from three to seven academic sessions, depending on the nature of the programme. An academic session consists of nine months, divided into two semesters of 15–18 weeks each. First-year entry requirement into most universities is a minimum of Senior School Certificate Examination/General Certificate of Education Ordinary Level Credits at a maximum of two sittings. In addition, minimum cutoff marks of 180 and above out of a maximum of 400 marks in Joint Admission and Matriculation Board Entrance Examination (JAMB) are required.

Universities produce high-level manpower in various fields. There are conventional universities that produce graduates in the fields of pure and applied sciences and arts. There are also specialized universities that produce graduates in their areas of specialization. In the latter category, there are technology universities, agriculture universities and one military university. By the end of 2013, there were 129 universities in Nigeria, of which 40 were federal-owned, 39 were state-owned and 50 were private.

Polytechnics train middle-level technical manpower. They award national certificates and diplomas, namely: the National Diploma (ND), awarded after two years of study following the senior secondary school; and the Higher National Diploma (HND), awarded after a further two-year course. Students are expected to have at least one year industrial attachment after obtaining the ND and before pursuing the HND course. As at the end of 2013, there were 81 polytechnics in Nigeria recognized by the National Board of Technical Education. Twenty-one of the polytechnics were owned by the Federal Government, 38 by state governments, and 22 by private individuals or organizations.

Colleges of education produce middle manpower in teacher education. The colleges, under the supervision of the National Commission for Colleges of Education, offer three-year programmes. Those who finish the programme earn the Nigeria Certificate in Education (NCE), which is the minimum teaching qualification in the country. As at 2013, there were 21 federal, 43 state-owned, 24 privately owned colleges of education in the country. In addition, the National Teachers Institute and some polytechnics in the country offer teacher education programmes for an NCE qualification. Furthermore, all conventional universities offer teacher education programmes for a bachelor's degree in education with majors in different teaching subjects.

3.2 Access to Quality Education

In realization of the important role of education as an agent of development, there has been agitation for more functional and qualitative education all over the world. This agitation and concern for quality education is reflected in the resolutions of the Education for All (EFA) Conference in Jomtien (Thailand) in 1995 and Dakar in 2000. This was followed by resolutions during the 56th session of the United Nations General Assembly, which stressed the importance of quality education in the implementation of the Millennium Development Goals (MDGs).

3.2.1 Access to Primary Education

Primary education is the foundation for further educational activities. Primary education in Nigeria is for children aged between 6 and 11 years, with six years of compulsory education for every child. Aremu (2014) observed that the revolution witnessed in the education sector in the early 1970s gave rise to enrolment of school-age children between 1970 and 1984; while the period from 1985 to 1990 witnessed unstable decline in enrolment. Thus, the gross enrolment ratio (GER) reduced sharply from 82 per cent in 1985 to 68 per cent in 1990; it rose to 86 per cent in 1993 and slumped to 70 per cent in 1996 (Aremu, 2014). According to the 2010 Nigeria DHS Education Data Survey, 61 per cent of children aged six to eleven years attended primary schools (National Population Commission (Nigeria) and RTI International, 2011).

There are regional disparities in primary school enrolment between the southern and northern zones, with the north having lower access to primary education than the south. For instance, the enrolment rate in 2010 was as high as 95 per cent in the southern zones and as low as 19.91 per cent in the northern zones. According to Aremu (2014), in some northern states, such as Jigawa, Kebbi, Katsina, Sokoto and Yobe, primary school enrolment is less than 25 per cent. This is in contrast to more than 80 per cent enrolment in the southern states such as Akwa Ibom, Anambra, Cross River, Edo, Delta, Imo, Lagos, Ogun, Oyo, Osun and Rivers. Gender disparities exist and are also similar to the general patterns for enrolment in different regions. Female enrolment is lower than male enrolment in the north, while in the southeast, female enrolment is generally higher than male enrolment and is on a par with male enrolment in the south-west (Moja, 2000).

Also, there are disparities between rural and urban environments in enrolment and performance patterns. Due to space shortages, there are higher attendance rates and more overcrowding of classes in the urban areas than in the rural areas.

Statistics on access to primary education from international agencies appear worrisome. According to UNESCO's Education for All (EFA) Global Monitoring Report (2010), one in five Nigerian children is out of school, making Nigeria the country with the largest population of out-of-school children in the world at 10.5 million as of 2010, a figure that has risen almost 3 million since 1999. Indeed, the net enrolment ratio (NER) at the primary level (number of primary-age children enrolled in school as a percentage of the total primary-age population) has fallen since 1999, from 61 per cent to 58 per cent (2010). Over the same period, the regional average has increased from 58 per cent to 76 per cent. Of recent, some states in the south-west have recorded large enrolments of pupils occasioned by their educational policies.

3.2.2 Access to Secondary Education

Secondary education holds a critical spot in Nigeria's educational system. It is designed to prepare students for entry into the tertiary level of education or groom them to join the labour market. In 2010, there were 7,104 secondary schools in the country with 4,448,981 students. The teacher-to-student ratio was approximately 1:32. The World Bank's 2000 report titled *Education Sector Analysis* shows that total enrolment in the country's senior secondary schools was 2,773,418 students (of whom 43% were girls). The GER at the secondary school level was estimated at 31.4 per cent, with an estimated 7.2 million young persons (aged 15–19+ years) not enrolled in school. There is also the problem of low transition rates, around 16 per cent, from junior to senior secondary school. This picture is even more daunting with respect to technical and vocational education and training, where the shortfall in enrolment is over 80 per cent.

3.2.3 Access to Tertiary Education

According to World Education News and Reviews (2013), about 1.7 million candidates registered for Nigeria's centralized tertiary admission examinations in 2013, all competing for the half million slots available. By implication, over a million qualified college-age young Nigerians will be left without a post-secondary education in just one year. Though the number of available slots has grown significantly in recent years as the Government has established more institutions, the nation is far from satisfactorily meeting the demand for tertiary education (Aremu, 2014). Since 2005, the number of universities has grown from 51 to 128 (see Table 3.1), while the capacity at existing universities has been stretched to its limits.

Table 3.1: Growth in the number of universities in Nigeria

Year	Number of universities
2005	51
2006	94
2007	117
2012	122
2013	128

Source: Aremu, 2014.

The rapid increase in the number of Nigerian universities, as shown in Table 3.1, has attracted comments from some international organizations in their assessment of the Nigerian education. For instance, the World Education News and Reviews (WENR) (2013) observed that even though the increase in number of universities could be perceived as generally positive for access in absolute terms, it has created issues with serious implications for instructional quality. According to WENR, physical infrastructure such as lecture halls and hostel accommodation are severely overcrowded. Teacher-to-student ratios have skyrocketed and faculty shortages have become a major problem, with an estimated 40 per cent of university positions and 60 per cent of polytechnic positions currently unstaffed. High unemployment among university graduates is also a major problem, but this does not appear to be a deterrent to those seeking admission to institutions of higher learning.

The expansion effort in Nigerian university education, which is necessitated by the growth in demand for university places, is viewed as a function of Nigeria's rapidly growing youth population. According to the report by WENR (2013), the rapid growth in demand for tertiary education comes despite a school system that is failing to educate a large percentage of its youth. The report further indicated that the literacy rate for 15- to 24-year-olds stands

at 72.1 per cent, which is just 11 percentage points higher than the adult literacy rate of 61.3 per cent. In the secondary level, the GER (the total enrolment in that level as a percentage of the total secondary-age population) is only 44 per cent, or 21 percentage points below the global average (but 4 percentage points higher than the sub-Saharan Africa average), while the lower secondary ratio is just 47 per cent (versus a global average of 82%). This means that significantly less than half of Nigeria's youth are currently making it through basic education, which helps explain the extremely low literacy rate among the youth. In the tertiary level, the GER is just 10 per cent, which is on a par with the sub-Saharan Africa average but well below the global average.

Table 3.2 shows the percentage of applicants admitted to Nigerian tertiary institutions from 2004 to 2013.

Table 3.2: Unified Tertiary Matriculation Examination applicants and tertiary admissions, 2004–2013

Academic year	Number of applicants	Number of applicants admitted	Percentage of applicants admitted
2004/2005	841,878	122,492	14.5
2005/2006	916,371	76,984	8.4
2006/2007	803,472	88,524	11.0
2007/2008	911,653	107,370	11.8
2008/2009	1,054,060	n.a.	n.a.
2009/2010	1,182,381	148,000	12.5
2010/2011	1,375,652	360,000	26.2
2011/2012	1,493,604	400,000	26.8
2012/2013	1,503,889	500,000	33.3
2013/2014	1,670,833	520,000	31.1

Source: Aremu, 2014.

Note: Since 2010, the education sector has been using the Unified Tertiary Matriculation Examination (UTME) for admission to universities, polytechnics and colleges of education. Prior to 2010, the UTME was only used for university admission.

As the figures in Table 3.1 reveal, the available slots are fewer than the number of applicants for tertiary education, as represented by the UTME test takers. Currently, just one in three applicants is admitted to a Nigerian tertiary institution, although this is a significant improvement from 10 years ago when only one in 10 applicants was admitted to a university.

While the capacity of Nigerian universities has improved in recent years with the establishment of new institutions and the upgrade of some colleges of education and polytechnics to degree-awarding institutions, only one fifth of the 1.5 million qualified applicants are admitted yearly into first-degree programmes. Consequent upon the massive expansion, quality issues have arisen related to overcrowding and inadequate lecturer qualifications. According to a 2013 report from the Nigerian Universities Needs Assessment Committee established by the Federal Government to look into the problems of universities, just 43 per cent of Nigeria's 37,504 university lecturers have a PhD degree. The report also notes that Nigeria has one of the worst lecturer-to-student ratios in the world, with the National Open University, the University of Abuja and Lagos State University having ratios of 1:363, 1:122 and 1:114, respectively (Federal Ministry of Education, 2012).

3.3 Administration of the Nigerian Education Sector

The responsibility for administering the education sector in Nigeria is shared among the federal, state and local governments. Thus, in the country's constitution, education is on the concurrent list, but the Federal Government is empowered to regulate all its sectors, engage in policy formation and ensure quality control. Also, the provisions of the constitution allow each tier of government to focus its responsibilities mainly on a sector of education. The Federal Government is involved directly in tertiary education. The states take care of secondary education, while the local governments handle primary education. Despite this arrangement, the Federal Government is expected to support the state and local governments in counterpart funding to enhance the quality of education in the country. The administration of the education system is shared mainly among the education ministries at the federal and

state levels, as well as statutory bodies referred to as commissions. There are commissions established for different subsectors of the education system and are charged with various responsibilities for the subsectors. The FME is responsible for the coherence of the national policy and procedures and for ensuring that the states' policies operate within the parameters of the national policy as adapted for local needs (Moja, 2000). Coordination of policy at the political level is handled by the National Council of Education, the highest policymaking body chaired by the Federal Minister of Education and includes all the State Commissioners of Education. This body is advised by the Joint Consultative Committee on Education, which consists of all the Federal and State Directors of Education, Chief Executives of education statutory bodies, and Directors of University Institutes of Education.

The state-level education ministries are responsible for the development and implementation of educational policies, management and supervision of educational institutions in their respective states. Specifically, the responsibilities for maintaining all public elementary and secondary schools are vested in the education ministry. Such responsibilities include: determining the salaries of teachers; recruitment, appointment, promotion and discipline of staff; and provision of guidelines on the establishment of new schools and training and re-training of teaching and non-teaching staff. The oversight functions of the Ministry of Education are carried out through a number of agencies. For instance, the State Universal Basic Education Board (SUBEB) is responsible for the management of basic education, while the Teaching Service Commission takes charge of senior secondary education at the state level.

Tertiary education is under the supervision of commissions set up by law and which operate as parastatals of the FME. For instance, universities are supervised by the NUC, while colleges of education are supervised by the NCCE. The NBTE oversees polytechnic education. These commissions are responsible for policy decisions affecting institutions under their supervision, maintenance of standards through a system of periodic accreditation of courses, distribution and monitoring of government funding, appointment of members of governing councils, and the day-to-day running of the institutions.

3.4 Challenges of Quality Education

A number of challenges have been identified as clogs in the realization of good access, equity and quality of education in Nigeria. One of these is the critical issue of teacher shortage at all levels of education. For instance, at the basic education level, the UBEC's 2012 National Personnel Audit Report revealed gross inadequacy in the quality and quantity of teaching personnel in the nation's primary and secondary schools. According to the report, there were 564,569 teachers in 59,007 primary schools in the country in 2012, of whom 297,960 were males and 266,609 were females. Also, there were a total of 133,338 teachers, comprising 68,085 males and 65,253 females, in 11,295 junior secondary schools in Nigeria. Considering that there were 20,291,709 and 4,313,164 enrollees in primary and junior secondary schools, respectively, during the personnel audit period, the teacher-to-pupil ratios of 1:60 and 1:37 were obtained for the nation's primary and secondary schools, respectively (UBEC, 2012). There is no doubt that the inadequacy of qualified teachers has negative impacts on the general quality of basic education in the country. In addition to teacher shortage, many other challenges militate against the realization of quality education in Nigeria. According to the US Embassy in Nigeria (2012), access to quality education is hampered by the non-enrolment in school of about 10 million out of the 30 million school-age children. The Embassy posits that Nigerian education system suffers from deteriorating quality and insufficient investment to keep pace with the country's burgeoning school-age population.

The challenge of declining quality of education has attracted research attention and comments from many social and educational researchers in Nigeria. Aremu (2014) summarized the problems affecting the quality of Nigeria's education:

- Gender disparity, especially of regional dimension, is obviously an issue at all levels of education. In spite of the increasing advocacy for the education of the girl child by the Government and some NGOs, the gap in enrolment in most schools, especially in the north, is still negatively skewed to girls, while ironically in the eastern part of the country there are more girls than boys enrolled in schools.
- Geographical differences remain a significant issue in Nigerian education. Obviously because of state autonomy and regional integration and drive, there are still fundamental gaps in primary school enrolment: in the southwest, enrolment is 83 per cent; in the south-south, 82 per cent; in the south-east, 80 per cent; in the north-west, 42 per cent; and in the north-east, 44 per cent.

- Access to formal schooling still poses a problem. It is estimated that 7.5 million children, of whom 60 per cent are girls, are not in school. The phenomenon of dropouts is more pronounced in grade 6, as more than 17 per cent of children drop out of school annually. The dropout issue is still a multidimensional problem. More girls drop out of school in the north and are forced into early marriage, while more boys than girls in the east have been indoctrinated to undertake commercial activities early in life.
- Funding of education remains a great challenge in Nigeria. This has been a recurring decimal in the national polity. Budget allocation for the education sector falls abysmally below the United Nations' recommended 26 per cent of the total budget. With the total deregulation of the educational sector in Nigeria at all levels, funding remains a great challenge to the sector.

3.5 Teacher Education and Preparation

Teachers serve as catalysts for the intellectual, socioeconomic, scientific and technological growth, as well as development of society (Nwogu and Esobhawan, 2014). Thus, teacher education and preparation for quality service delivery are vital components of the nation's education system.

The NCE is responsible for teacher education in Nigeria. The NCE was established in 1990 to oversee all colleges of education and set minimum standards for all teacher education programmes. The World Bank (2000) provided an apt summary of the status of teacher education in the country. According to the World Bank report, three levels of pre-service teacher training existed in the country:

- Teacher training colleges, which used to be part of the secondary education programme. These colleges awarded the Teacher Certificate Grade II, which in the past was the qualification required for primary school teaching across the country. However, since the National Policy on Education made the Nigeria Certificate in Education (NCE) the minimum qualification for teaching in the country, Grade II colleges are now being phased out.
- Colleges of education offering post-secondary NCE training programmes. The NCE qualification is also required for teaching in junior secondary schools and technical colleges. Colleges of education used to train teachers for junior secondary school education, but now they also train primary school teachers. The NCE became the minimum qualification for primary school teaching in 1998. Some of the colleges also offer NCE pre-primary courses in order to produce teachers for the pre-primary level of education.
- Universities in Nigeria offering bachelor of education degree programmes to both senior secondary school graduates and senior secondary school teachers who already have an NCE qualification.

The requirements for admission to teacher training institutions differ from one level to another in terms of academic qualifications. For admission to colleges of education, prospective candidates must have at least three credits and two passes in the senior school certificate examination. At the university level, the entry requirement is five credits, which must include the chosen major teaching subjects. Prospective colleges of education students are required to sit for and pass the Polytechnic and College of Education Matriculation Examination, while prospective university students are required to pass the Joint Admission and Matriculation Board Examination.

The NCE is the minimum basic qualification for entry into teaching at the basic education level. This came about in an attempt to create uniformity of standards. Teaching at the senior secondary education level requires a bachelor's degree in education or a single-subject bachelor's degree plus a post-graduate diploma in education. However, holders of specialized qualifications like the ND awarded by polytechnics can be employed to teach in secondary schools and technical colleges. For teaching in colleges of education, at least a master's degree is required, while a doctor's degree is required for teaching in universities. Lecturers in colleges of education are required to have a teaching qualification, in addition to their degree. According to the same World Bank report in 2000, some of the major issues in Nigeria's teacher education that need attention are as follows:

- There is a shortage of primary school teachers needed to attain the proposed 1:30 (1:40 in the transition years) teacher-to-pupil ratio. This ratio is far from being met as the current ratio is 1:76.

- The low number of graduates going into the teaching profession is of grave concern. The major factors are the inadequate funding levels and low salaries. The fact is that teachers have become marginalized and the profession is the most impoverished of all sectors of the labour force in Nigeria. In almost every area of the system, conditions of the work environment, access to information, resources needed for supplies and equipment, salaries and benefits are extremely poor. Access to new technologies is virtually non-existent.
- Teacher quality throughout the 36 states in Nigeria is unequal. There are also inequities in the availability of qualified teachers in different states.
- Most primary school teachers at present are yet to attain the minimum qualification (i.e. the NCE) as required by the National Policy on Education.
- Most colleges of education offer courses which are neither appropriate nor relevant to the level and needs of most primary teachers. Teacher trainees in the colleges largely receive an education that is suited more for the junior secondary level than the primary level. The courses are largely of an academic nature as opposed to the development of processes, skills and career geared towards the primary school.
- There is an oversupply of the NCE-qualified and graduate teachers in some disciplines and subject combinations, while there is a general shortage of teachers in physics, mathematics, home economics, business education, technical education, primary education studies, nursery education and computer science.
- Leadership in colleges needs to be streamlined by the NCCE. Not all colleges are led by professionally qualified and competent staff with at least a higher degree in education.
- The serious gender imbalance in some states is of concern, particularly the decline in the number of male teachers and their importance as role models.

REVIEW OF DOCUMENTS AND POLICIES

The aim of this chapter is to review existing documents and policies that guide the education sector in Nigeria, and that have concomitant implications for diaspora intervention and engagement. The following national and international documents, protocols and policies are considered:

- Nigeria's Vision 20:2020
- National Economic Empowerment and Development Strategy (NEEDS)
- National Policy on Education
- *Roadmap for the Nigerian Education Sector*
- Labour Migration Policy for Nigeria
- World Bank's analysis of the Nigerian education sector
- UNESCO reports on Nigerian education
- Report on needs assessment of Nigerian public universities
- Research on teachers' skills and competencies
- Diaspora skills and competency exchange programmes
- Administrative structures for managing diaspora issues in Nigerian universities

4.1 Nigeria's Vision 20:2020

The Vision 20:2020 is Nigeria's blueprint for economic transformation. Launched in 2003, it is Nigeria's long-term development agenda aimed at repositioning Nigeria to become one of the 20 largest economies in the world by the year 2020 (National Planning Commission, 2009a). The National Vision of Nigeria expresses the country's aspiration to improve the quality of life of its people through the development of an information- and knowledge-based economy, which the people can use to gain social, economic and educational benefits, and fulfill their potentials. The vision is all-encompassing and recognizes the need to develop not only economically but also for transformation and advancements in the social, political, educational and cultural aspects.

To attain the overarching goal of reaching the top 20 economies by year 2020, the Government realized the need to enhance development in key sectors such as education. In education, the goal is to develop a modern and vibrant education system that will give every Nigerian the opportunity and facility to achieve his or her maximum potential and provide the country with adequate and competent manpower.

4.2 National Economic Empowerment and Development Strategy

The National Economic Empowerment Development Strategy (NEEDS) is an initiative set up by the Federal Government in 2003. It was designed to achieve macroeconomic stability, wealth creation and employment generation (National Planning Commission, 2004). A key component of the initiative is poverty alleviation.

NEEDS redefines the role of the private and public sectors within the Nigerian economy. The public sector is expected to provide enabling environment for the private sector to grow the economy and drive socioeconomic development. NEEDS provides a framework for nationally coordinated programmes of action by the federal, state and local governments. In addition to programmes initiated by the Federal Government, state and local governments are encouraged to design and implement equivalent programmes based on the objectives of NEEDS.

4.3 National Policy on Education

Nigeria's National Policy on Education was released in 1977. It was revised in 1981 to ensure that the policy addressed the perceived needs of the Government in power and also to ensure that the education sector was supportive of government development goals. In 1990, the Government once again acknowledged the need to review and update the policy, following political changes that saw the reintroduction of democracy in the country. The fourth edition of the policy was published in 2004.

Nigeria's vision of education as an instrument for national development is reflected in the National Policy on Education, which states that "no nation can rise above the quality of its education system." The Government relies on education as a springboard for its development and reform agenda. Thus, five main national objectives have been endorsed as the necessary foundation for the National Policy on Education:

- To build a free and democratic society;
- To build a just and egalitarian society;
- To build a united, strong and self-reliant nation;
- To build a great and dynamic economy;
- To build a land of bright and full opportunities for all citizens.

The National Policy on Education defines the structure of Nigeria's education. The published document of the Policy consists of 13 sections that cover critical issues about the educational sector. As stipulated in the National Policy on Education (2004), basic education covers nine years of formal (compulsory) schooling consisting of six years of primary and three years of junior secondary education. Post-basic education comprises three years of senior secondary education in either an academic or technical stream. In the tertiary level, the system consists of the university, polytechnic and college of education subsectors.

The National Policy on Education addresses the issues of imbalance in the provision of education in different parts of the country with regard to access, quality of resources and girls' education. Education is organized into nine years of basic education, three years of senior secondary education, and four years of university/polytechnic/college education.

4.4 National Road Map for the Education Sector

In 2009, the FME published the *Roadmap for the Nigerian Education Sector*. This was developed to address issues in the education sector related to mismanagement and inadequacy of resources commensurate with national needs, population growth and demand. As a result of these challenges, education as a strategic priority of the Government has not been well positioned as a transformational tool and a pillar for socioeconomic empowerment and development (FME, 2009).

Roadmap for the Nigerian Education Sector outlines improvement and turnaround strategies for each of the subsectors of education, namely basic, post-basic and tertiary. The plan is to use a representative sample of schools and institutions across the country as demonstration projects.

4.5 Labour Migration Policy for Nigeria

In 2004, at the request of the Federal Ministry of Labour and Productivity, the International Labour Organization (ILO) provided technical support in setting up the International Labour Migration Desk at the Ministry, and in October 2008, the Minister of Labour formally requested both the ILO and IOM to assist in preparing a national labour migration policy and to help establish bilateral arrangements for employment of Nigerians abroad (Federal Ministry of Labour and Productivity, 2010).

The Labour Migration Policy addresses three broad objectives, namely: promote good governance of labour migration; protect migrant workers and promote their welfare and that of their families left behind; and optimize the benefits of labour migration on development while mitigating its adverse impact.

This policy is divided into three parts. Part 1 deals with promoting good governance in labour migration, which aims to facilitate rights protection and to achieve equitable social and economic outcomes. Part 2 is about protection of migrant workers and promotion of their welfare, which includes that of their families. Part 3, covering optimizing the benefits of labour migration for development, deals with how migration contributions can be mainstreamed into national development plans.

The Labour Migration Policy for Nigeria has been developed with the active involvement of key stakeholders such as relevant ministries, departments and agencies. The Federal Ministry of Labour and Productivity is responsible for coordinating and monitoring the implementation of the policy, in collaboration with the identified key stakeholders, especially the social partners such as labour unions and employers' associations. It is also responsible for periodic evaluation of the process to ensure that labour migration from and to Nigeria upholds and respects the freedom, dignity and rights of workers.

4.6 World Bank Analysis of the Nigerian Education Sector

The World Bank is a major international development partner that has supported the education sector in Nigeria. Its role is focused on supporting the implementation of the universal basic education. The World Bank provided financial assistance to support Nigeria's Primary Education Project, which was aimed at upgrading and monitoring the quality of primary education, improving planning and research capacities, and contributing to the improvement of resource allocations (Moja, 2000).

The first phase of the project was more of a consolidation phase that provided support for planning the universal basic education. The second phase was more focused and concentrated on a limited number of schools throughout Nigeria, addressing five main issues: human resource capacity, access and equity, quality of education and information for decision-making. These choices were strategic and based upon the experience gained in the first phase, such as the capacity of schools within the country, costs of interventions, the need to make an early and visible impact, and the contribution that could be made by all levels of government and local communities (Moja, 2000).

According to the Nigerian education sector analysis report produced for the World Bank, some of the major issues related to Nigerian teacher education that need attention are:

- The shortage of primary school teachers required to meet the projected population of primary school pupils;
- The extremely high number of pupils in a class for a teacher, which puts the current teacher-to-pupil ratio at 1:76;
- The low number of graduates going into the teaching profession;
- Teachers have become marginalized and the profession is the most impoverished of all sectors of the labour force in Nigeria;
- Poor salaries and benefits for teachers, poor conditions of the work environment, unimpressive access to information and new technology;
- Inequities in the availability of qualified teachers in different states;
- Most current primary school teachers have yet to attain the minimum qualification (i.e. the NCE) as required by the National Policy on Education;
- Most colleges of education offering courses that are neither appropriate nor relevant to the level and needs of most primary school teachers;
- Oversupply of NCE-qualified and graduate teachers in some disciplines and subject combinations while there is a general shortage of teachers in other areas such as physics, mathematics, home economics, business education, technical education, primary education studies, nursery education and computer science;
- Lack of professionally qualified and competent staff in management positions in tertiary institutions;
- The serious gender imbalance in some states, particularly the decline in the number of male teachers and their importance as role models.

4.7 UNESCO Reports on Nigerian Education

UNESCO is another international development partner which has contributed significantly to the development of Nigeria's education sector. Periodically, the organization carries out a situational analysis of the state of Nigerian education, pointing out necessary areas for intervention. The latest of such efforts is *Teaching and Learning: Achieving Quality for All*, the 2013/2014 EFA Global Monitoring Report of the International Bureau of Education, an agency of UNESCO.

The aforementioned UNESCO report, published in 2014, tells a very sad tale of Nigerian education. According to the report, Nigeria has some of the worst education indicators globally. The report indicates that Nigeria has about 10.5 million out-of-school children, which is the largest in Africa in absolute terms. It also identifies inequity and education costs as indices that have contributed to the damning evidence of the state of education. From these indications, it is obvious that Nigeria might not achieve the MDGs of the EFA by the 2015 global timeline in spite of the commitment and efforts of the Federal Government towards the attainment of such goal (UNESCO, 2014).

The report proposes a pathway that is seen as a template or framework for governments to address the basic, transferable and technical skills of the youth, as well as the challenges in relation to access, equity, quality, gender and poverty trap. The report *Teaching and Learning: Achieving Quality for All* indicates that Nigeria is among the 37 countries that are losing money spent on education, because children are not learning. UNESCO disclosed that the menace is already costing governments USD 129 billion a year. It stressed further that despite the money being spent, rejuvenation of primary education is not in the near future because of poor-quality education that fails to ensure that children learn.

The bleak future that Nigeria's education sector faces means that it would not be able to meet the EFA's Goals 1, 2 and 4 by 2015. According to the UNESCO 2014 report, Nigeria is one of the only 15 countries that are projected to have less than 80 per cent of its primary school-age children enrolled in school by 2015. Nigeria's out-of-school population grew the most worldwide since 2004–2005 by 3.4 million; the country also had the fourth highest growth rate of out-of-school population in the world (UNESCO, 2014).

4.8 Report on Needs Assessment of Nigerian Public Universities

The Government – through its agencies and commissions – carries out periodic needs assessment of different sectors of education. It is believed that periodic appraisal of government institutions is the best way to reposition and transform them (Federal Ministry of Education, 2012).

The most recent assessment of manpower needs of Nigerian public universities was conducted in 2012 by an interministerial committee set up by the Federal Government. The purpose of the assessment was to elicit information on issues of concern to university education in order to formulate policies and take decisions for addressing such issues. The exercise was conducted to determine, among other issues, the quantity and quality of academic staff required for effective teaching and learning in Nigerian universities. It was intended to be an appraisal of the existing situation in the university subsector with a view to determining what was needed for revitalization and transformation.

The needs assessment summary report was presented to the Federal Government in November 2012. It identified manpower shortage as one of the reasons why Nigerian universities have been unable to compete favourably with universities in many other parts of the world. According to the report, a combination of infrastructural and manpower challenges is responsible for the sharp decline in scholarship in Nigerian universities.

On manpower challenges, the report indicated that as at November 2012, there were 37,504 academic staff in 74 public universities in Nigeria. Considering the number of staff vis-à-vis the student population, the report revealed an unmanageable lecturer-to-student ratio. For example, at the National Open University the academic staff-to-student ratio was 1:363, at Lagos State University the ratio was 1:144, and at the University of Abuja the ratio was 1:122. Kano State University, which was 11 years old at the time of the needs assessment period, had one professor and 25 lecturers with PhD degrees, while Kebbi State University had two professors and five lecturers with doctorate degrees. These statistics revealed wide disparities between Nigerian universities and their counterparts in other parts of the world. For instance, the staff-to-student ratio in Harvard University is 1:4, Massachusetts Institute of Technology has 1:9 ratio and the University of Cambridge has 1:3.

Gender disparities were also found in the distribution of academic staff. About 83 per cent of academic staff in the universities were men and 16 per cent were women. Further classification of academic staff by qualification and rank indicated that the university system was experiencing a staffing or manpower crisis. For instance, only about 16,127 academic staff in the universities have doctorate degrees, representing 43 per cent of all university academic staff instead of 75 per cent recommended by the NUC. Only about 16,502 (44%) are within the bracket of senior lecturers and professors. Surprisingly, only seven in 74 public universities in Nigeria have up to 60 per cent of their teaching staff with PhD qualifications. These deficiencies have led to a situation in which many universities have to rely exclusively on part-time and underqualified academics with negative implications for quality education in the institutions.

4.9 Research on Teachers' Skills and Competencies

An understanding of skills and competencies required for effective teaching is necessary to be able to identify skill and competency gaps in the education sector. A number of social and educational researchers such as Olatunji (2013), Boyer (1990), Oldsjo (2010), and Apelgren and Giertz (2010) have identified a list of teaching skills and core competencies that teachers must have to be able to function effectively at all levels of education.

Olatunji (2013) examined skills and competencies required for effective teaching and learning in the classroom, most especially in higher educational institutions in Africa. He came up with the concept of pedagogical competence as a comprehensive definition of teaching skills and competencies, in which the teacher is expected to have a scholarly attitude towards the teaching task and in that way contribute to the formation of knowledge of teaching and learning. Though pedagogical competence includes teaching skills and the scholarship of teaching, it goes beyond them. According to Oldsjo (2010), the traditional view of pedagogical competence is primarily a question of practice "in the classroom" whereby a skillful teacher – through knowledge, methods, actions and ability to communicate – gets teaching situation to function and creates conditions for learning. He, however, pointed out that this view is deficient in the sense that it does not include a scientific attitude towards teaching and learning. He opined that the teacher's ability lies primarily in a scientifically based subject competence and the practical teaching skills that the teacher has acquired and continued to develop.

In agreement with Magin (1998), Olsson et al. (2010) also confirmed that pedagogical competence is a broader concept than teaching skills. They opined that pedagogical competence presupposes good, broad and deep knowledge of the subject of teaching. A pedagogically proficient teacher would demonstrate in different contexts the ability to use subject knowledge in research-related, practical, pedagogical actions with student learning in focus.

In the same vein, Apelgren and Giertz (2010) defined teaching competence as "the ability and will to regularly apply the attitude, the knowledge, and the skills that promote students' learning in the best way." This shall be in agreement with the goals that apply and within the framework available and presupposes continuous development of the teacher's own competence and instructional design. They highlighted a number of aspects in their definition which they deem to be of importance for the teacher's pedagogical competence. These include attitude, knowledge, ability, adaptation, perseverance and continuous development.

Several international research studies emphasized three major aspects when defining teaching skills and competencies. These are:

- What teachers do (i.e., different kinds of abilities);
- Knowledge that teachers need to be able to act in the best possible way;
- Attitudes and underpinning values that teachers embrace and apply in the classroom.

In consonance with these aspects of competencies, Melrose (2011), in his research on competencies of university teachers in the Philippines, identified instructional planning, strategies and techniques; communication with learners; learner-reinforcement involvement; and adherence to professional standards as competencies of instructors which affect students' academic performance.

As reported by Oldsjo (2010), the Uppsala University published 11 major criteria for determining the skills and competencies of University teachers. According to the University, these criteria were based on research in higher education and were formulated in consultation with teachers from different academic disciplines. The criteria are summarized as follows:

- Attitude that furthers students' learning;
- Scientific approach to teaching;
- Broad and appropriate subject knowledge;
- Knowledge about how students learn;
- Knowledge about teaching;
- Knowledge about educational goals and organization;
- A holistic view of teaching and learning;
- Application of teaching skills;
- Striving for continuous improvement;
- Excellent leadership and administrative skills;
- Cooperation with others and contacts with the surrounding society.

In Nigeria, skills and competencies of university teachers are traditionally evaluated in three domains of teaching, research and services. Most universities emphasize scholarly research publications as a major determinant of lecturers' academic competencies. Though teaching or pedagogical competencies are required for elevation from one cadre to another, these are rarely scientifically evaluated. Competencies in the domain of services are evaluated in terms of a lecturer's contributions to the administrative functioning of the institution such as membership of committees, participation in students' mentoring and advisory services. Thus, the three domains of teaching, research and services can be considered core competencies necessary for teachers in Nigerian higher education.

From the foregoing review of literature on teaching skills and competencies, six basic areas can be considered core competencies or skills of teachers that are necessary for effective teaching at all levels of education. These are subject matter, pedagogical, communication, evaluation, ICT and counselling competencies. The six core competencies were investigated in this study to determine skill and competency gaps in the Nigerian education sector.

4.10 Diaspora Skills and Competency Exchange Programmes

There are various diaspora engagement programmes spread across tertiary institutions in many countries in Africa. The aim of such programmes is to facilitate knowledge and skill transfer from the diaspora towards building the capacity of academics in African universities. Ferede (n.d.) provided an apt summary of some of these programmes as presented below.

4.10.1 Carnegie African Diaspora Fellowship Programme

The African Diaspora Fellowship (ADF) Programme is a scholar exchange programme in which African-born academics from Canada and the United States working in higher education can register to participate in short-term exchanges in universities in partner countries Ghana, Kenya, Nigeria, South Africa, United Republic of Tanzania and Uganda. Universities in partner countries, with priority given to public institutions, also register to host an academic. The ADF is funded for two years by a grant from Carnegie Corporation of New York in partnership with Quinnipiac University and managed by the Institute for International Education. Public and private higher education institutions in Ghana, Kenya, Nigeria, South Africa, United Republic of Tanzania and Uganda, accredited by the national agency in their respective countries, qualify to host a scholar. The programme is designed to meet the needs identified by host universities by bringing short-term faculty exchange fellows to Africa to co-develop curriculum, collaborate on research, and train, teach and mentor graduate students. Projects can be conducted in the African host country for periods of time ranging from two weeks to one semester. During the ADF programme, the scholar receives a daily stipend plus health insurance coverage and money for transportation and visa expenses. Host institutions are required to contribute to the fellow's meals, lodging and in-country transportation during the project.

4.10.2 UNESCO–HP Brain Gain Initiative

The UNESCO–HP Brain Gain initiative, with the aim of advancing science and technology, currently connects 19 African and Arab universities in Burkina Faso, Cameroon, Côte d’Ivoire, Ethiopia, Ghana, Kenya, Kuwait, Lebanon, Morocco, Nigeria, Senegal, Tunisia, Uganda and Zimbabwe. Researchers at these institutions propose projects that are chosen following a highly competitive process. Selected researchers conduct joint research projects with experts in the diaspora using grid computing-shared computing facilities networked online with software that allows for access and use of the grid. An IT grant provides servers, workstations, training and operational funds to update infrastructure and computing knowledge.

4.10.3 IOM Migration for Development in Africa

IOM’s Migration for Development in Africa (MIDA) programme, developed in 2001 and a successor to the Return of Qualified African Nationals (RQAN) programme, aims to develop capacity in Africa by harnessing the skills of the African professional diaspora. In addition to other activities, IOM manages a diaspora database of those willing to contribute to their homelands through permanent, sequenced/repeated short-term or virtual returns in the areas of technology, education, health and business. Governments and public and private sectors are able to access the database.

4.10.4 World Bank African Diaspora Programme

In 2010, as part of its African Diaspora Programme, the World Bank launched its Database of Skilled Professionals. The Database was designed – as a long-term goal – to make it available to African governments and donor partners so that they may utilize the skills of the diaspora in meeting Africa’s development challenges in the health, education and technology sectors.

4.10.5 Academics Without Borders Canada

Academics Without Borders Canada has a mission to build the capacity of higher-education institutions in developing countries (including those in Africa) by mobilizing a volunteer network of academics for advising, teaching, research and administrative projects. Volunteer academics are not limited to, but can be, members of the diaspora.

4.10.6 Royal Society–Department for International Development Africa Capacity-Building Initiative

This initiative of the Royal Society–Department for International Development’s stated mission is to “strengthen the research capacity of universities and research institutions in sub-Saharan Africa by supporting the development of sustainable research networks.” Scientists in sub-Saharan Africa collaborate with scientists in the United Kingdom for mentorships, training of PhD candidates and institutional research capacity-building. Scientists in the United Kingdom are not limited to but can include members of the diaspora.

4.10.7 Royal Association of Universities and Colleges of Canada, and International Development Research Centre Canada-Africa Research Exchange Grants

The Canada-Africa Research Exchange Grants (CAREG) is a grant programme funded by the International Development Research Centre and managed by the Association of Universities and Colleges of Canada to support short-term exchanges for research and graduate student training between African and Canadian universities. The exchanges facilitate research on the developmental priorities of agriculture, social and economic policy, science and economics, and global health policy. Applicants from Canada are not limited to but can include members of the diaspora.

4.11 Administrative Structures for Managing Diaspora Issues in Nigerian Universities

Most Nigerian universities do not have well-established administrative structures specifically devoted to the management of diaspora engagement issues. However, many public universities have departments or units headed by professors with the mandate of promoting linkages with academics and agencies from foreign institutions. The mandate of such units can be extended to include the management of diaspora engagements in the institutions. This section provides briefs on selected Nigerian universities and existing administrative structures for managing academic linkages with the diaspora.

4.11.1 University of Lagos

The University of Lagos, founded in 1962, is a federal-owned university in Lagos state. It is one of the largest and most competitive universities in Nigeria in terms of admissions. For over five decades, the University of Lagos has provided qualitative and research-oriented education to Nigerians and all those who have entered its domain in search of knowledge (University of Lagos, 2014). The University has a student population of approximately 23,000. It has 967 academic staff and 1,725 non-academic staff.

The administrative structure of the University of Lagos for managing academic linkages and collaboration with the diaspora and foreign institutions is known as the Office of International Relations, Partnerships and Prospects. The Office is a unit under the Vice-Chancellor's office. It has a Professor of International Law and Jurisprudence as the Chairman and three other professors as members. The Office is responsible for:

- Central coordination of the university's various international initiatives, projects and undertakings; and encouraging collaboration among faculty members and among various schools and colleges;
- Maintenance of a central database containing information on all international undertakings of the university, including mission, personnel, budget, activities and programmes;
- Development of opportunities for the university's students to engage in international service, undertake international internships and study abroad through student exchange programmes;
- Facilitation of and support for faculty and staff participation in international projects, programmes, research and scholarly pursuits, as well as faculty/staff exchange programmes;
- Providing assistance to faculty and staff in sourcing of grant support for international endeavours;
- Establishment and maintenance of information resources, including an active and dynamic website that will inform faculty, staff and students of international resources and opportunities.

The Office of International Relations, Partnerships and Prospects has considered and recommended to the management of the University of Lagos a number of memorandums of understanding (MoUs) between the university and many foreign universities and institutions for beneficial partnerships and collaboration. The Office can be given an additional mandate of managing diaspora issues in the University.

4.11.2 University of Ibadan

Established in 1948, the University of Ibadan is the oldest and one of the most prestigious universities in Nigeria. The university runs undergraduate and postgraduate programmes in 13 faculties. At present, it has a student population of about 30,000. The university is reputed for its graduate studies programmes, which produce high-level manpower of about 3,000 yearly. The university has 1,149 academic staff and 1,611 non-academic staff.

The university's Office of International Programmes (OIP) is responsible for managing international collaborations. The OIP, established in 2009, has a mandate to expand the University of Ibadan's frontiers of international relations. It coordinates all activities relating to foreign nationals intending to visit or study at the university. It also oversees the activities of any foreign national who has been invited by any unit of the university for academic-related activities such as research, teaching, exchange activities, programme development, training, teaching of courses, conferences, meetings, sports, arts and the like. It also handles welfare matters relating to international visiting lecturers, research scholars, specialists and short-term visitors (University of Ibadan, 2014).

To accomplish its mission, the OIP engages in activities such as promoting the university's vision of internationalization, coordinating and supporting international academic programmes and promoting and sustaining international partnerships. The OIP can take on additional tasks of managing diaspora engagements for the university.

4.11.3 Obafemi Awolowo University, Ile Ife

The Obafemi Awolowo University (OAU) is owned by the Federal Government of Nigeria. It was founded in 1962 as the University of Ife by the regional government of western Nigeria. The university has 13 faculties and two colleges with 1,343 academic staff and 1,626 non-academic staff. It also has a student population of about 26,000. The university offers undergraduate and post-graduate programmes in the fields of specialization spanning the humanities, arts, natural sciences, social sciences, medical sciences, engineering and technology.

The Linkages Office of the OAU is in charge of academic linkages and collaboration with foreign institutions. The Linkages Office was established with a mandate to coordinate the university's external relations to enable it to optimize the benefits of local and global partnerships, which will help the OAU to be among the world's best universities. The goal of the Linkages Office is to connect the university to institutions, organizations and communities at various levels as a means of enriching the university's curricula, promoting research and generating funds (Obafemi Awolowo University, 2014).

The OAU Linkages Office has, over the years, succeeded in harnessing the rewards and benefits of developing academic and industrial linkages and networks with other educational institutions, funding bodies, and private and public sector organizations both within and outside Nigeria. In broader terms, the Linkages Office has strategically expanded the university's global and community development programmes in order to enhance their impact and relevance. The Linkages Office can take on additional tasks of managing diaspora issues in the university.

RESULTS AND DISCUSSION

The chapter presents the analyses of data collected for the needs assessment of the Nigerian education sector. The presentation of results is organized thematically to cover the five specific objectives of the assessment. Both quantitative and qualitative data obtained from relevant stakeholders are analysed and inferences are made about the education sector.

5.1 Number, Composition and Qualifications of Personnel in the Education Sector

Data on personnel in the education sector was obtained from government agencies that superintend each subsector of the education system in the country. Available data on personnel consisted of reports from the most recent staff audit conducted by the monitoring agencies for each subsector of the education system. Generally, two types of personnel, namely teaching and non-teaching staff, were identified in each subsector, as shown in Table 5.1.

Table 5.1: Number and composition of personnel in the education sector

Sector and subsector		Number of schools	Student enrolment	Composition of personnel							TOTAL
				Teaching staff				Non-teaching staff			
				Male	Female	Total	Teacher-to-student ratio	Male	Female	Total	
Basic	Pry	61,305	24,278,332	285,968 (53.8%)	255,878 (47.2%)	541,846	1:45	40,603 (69.1%)	16,531 (28.9%)	57,134	598,980
	JSS	10,090	4,313,164	68,085 (51.8%)	65,253 (48.2%)	133,338	1:32	12,927 (57.7%)	9,477 (42.3%)	22,404	155,742
Post-basic		9,212	2,981,387	2,981,387 (61.6%)	43,358 (38.4%)	112,840	1:26	Not available	Not available	Not available	112,840
Tertiary	COE	95	338,237	11,656 (76.0%)	3,688 (24.0%)	15,344	1:22	14,063 (59.2%)	9,699 (40.8%)	23,762	39,106
	Poly	45	166,121	4,721 (84.0%)	915 (16.0%)	5,636	1:30	Not available	Not available	Not available	5,636
	Univ.	79	1,252,913	31,128 (83.0%)	6,376 (17.0%)	37,504	1:33	Not available	Not available	77,511	115,015

Sources: FME, 2011; UBEC, 2012; NCCE, 2011.

The data in Table 5.1 suggests an acute shortage of teaching staff at all education levels. The primary education subsector has only 541,846 teachers for its student population of 24,278,332 in 61,305 schools. These figures represent a national teacher-to-student ratio of 1:45, which is one of the lowest in Africa. The data also reveals an acute teacher shortage at the tertiary level. For instance, there are 37,504 teachers in the nation's public universities with a student enrolment of 1,252,913, representing a teacher-to-student ratio of 1:33.

Statistics on teacher shortage as presented in Table 5.1 are corroborated with the data obtained from other secondary sources such as the report on the needs assessment of Nigerian public universities presented by the FME to the Federal Executive Council in 2012. According to the report, the faculty-to-student ratio is very low in many Nigerian universities. For instance, the National Open University of Nigeria was reported to have a faculty-to-student ratio of 1:363; the University of Abuja, 1:122; and Lagos State University, 1:114. When compared with the faculty-to-student ratio of some highly rated universities such as Harvard University (1:4), Massachusetts Institute of Technology (1:9), Yale University (1:4) and Cambridge University (1:3), the reports concluded that the majority of universities in Nigeria were grossly understaffed.

Similar reports on the education sector in Nigeria have indicated that the primary and secondary subsectors also experience the problem of teacher shortage. Addressing the shortfall in the number of available teachers at the basic education level, the Executive Secretary of the NCCE disclosed that Nigeria needed 1,320,135 teachers to meet the demands of basic education by 2015. To this end, the nation needed to produce a total of 330,033 teachers annually in order to achieve the EFA goal by 2015 (Junaid, 2013).

Research findings have also shown that Nigerian teachers are almost always in short supply in schools, and their turnover is high because they tend to leave the teaching profession if and when more attractive jobs become available in government, politics or private enterprises (Aghenta, 2001; Adeyemi, 2008).

The data in Table 5.1 also reveals some facts about the composition of personnel in the education sector. As shown in the table, there is more support or non-teaching staff than lecturers in the tertiary education subsector. However, in the basic education subsector, the teaching staff tend to outnumber the non-teaching staff. The composition of personnel with regard to gender distribution shows significant gender disparities in favour of male staff at all levels of education. In basic education, 53.8 per cent and 51.8.2 per cent of available staff in primary and junior secondary schools, respectively, are male teachers. Gender disparities in favour of male teachers are more pronounced in tertiary education, as only 24 per cent and 17 per cent of lecturers in colleges of education and universities, respectively, are female teachers.

The distribution of teachers in the education sector according to qualifications is presented in Table 5.2, while Table 5.3 shows the proportion of qualified and unqualified teachers in the sector.

Table 5.2: Qualifications of teachers

Sector and subsector		Teachers' qualifications						Total
		With qualification lower than NCE	With NCE qualification	With HND	Bachelor's degree holder	Master's degree holder	PhD holder	
Basic	Pry	150,740 (27.8%)	301,817 (55.7%)	6,831 (1.3%)	76,007 (14.0%)	6,451 (1.19%)	–	541,846
	JSS	8,054 (6.0%)	62,131 (46.6%)	6,223 (4.7%)	50,985 (38.3%)	5,945 (4.5%)	–	133,338
Post-basic		27,964 (24.8%)	13,818 (12.2%)	5,565 (4.9%)	63,185 (56.0%)	2,308 (2.0%)	–	112,840
Tertiary	COE	–	–	969 (6.3%)	7,099 (46.2%)	6,048 (39.4%)	802 (5.2%)	15,344
	Poly	Not available	Not available	Not available	Not available	Not available	Not available	Not available
	Univ.	–	–	–	–	21,377 (57.0%)	16,126 (43.0%)	37,504

Sources: FME, 2011; UBEC, 2012; NCCE, 2011.

Table 5.3: Distribution of qualified and unqualified teachers

Sector and subsector		Number of students	Total number of teachers	Qualified teachers		Unqualified teachers	
				Number of teachers	%	Number of teachers	%
Basic	Pry	24,278,332	541,846	363,510	67.1	178,336	32.9
	JSS	4,313,164	133,338	115,059	86.39	18,279	13.7
Post-basic		2,981,387	112,840	65,466	58.0	47,374	42.0
Tertiary	COE	338,237	15,344	6,850	44.6	8,494	55.4
	Poly	Not available	Not available	Not available	Not available	Not available	Not available
	Univ.	1,252,913	37,504	16,126	43.0	21,377	57.0

Sources: FME, 2011; UBEC, 2012; NCCE, 2011.

Data shown in Tables 5.2 and 5.3 indicates that the shortage of personnel in the education sector transcends the issue of quantity. As shown in Table 5.3, about 176,336 teachers, representing 32.91 per cent of teachers in primary schools, did not have the minimum NCE qualifications prescribed in the National Policy on Education for primary school teachers. The proportion of unqualified teachers is higher in the tertiary level. More than 50 per cent of teachers in colleges of education and universities did not possess the minimum qualifications for teaching at these levels.

Shortage of qualified teachers in Nigerian universities is well articulated in the reports of the Federal Government’s needs assessment of Nigerian public universities carried out in 2012. According to the reports, only about 43 per cent of university lecturers have PhD qualifications. The remaining 57 per cent have qualifications below PhD. Only seven universities have up to 60 per cent of their teaching staff with PhD qualifications. There are universities with fewer than five professors. For instance, the Kano State University of Science and Technology, Wudil, established 11 years ago and has been turning out graduates, has only one teaching staff with a professor ranking and 25 lecturers who are PhD degree holders. Similarly, the Kebbi State University of Science and Technology, established in 2006, has only two teaching staff in the professor category and five lecturers who have PhD qualifications.

The understaffing of universities in Nigeria has serious implications for quality instruction and academic productivity in the institutions. The situation has led to an increasing culture of visiting lecturership in the system. The few available qualified lecturers are recycled as visiting, adjunct, sabbatical and contract lecturers to work in many universities at the same time. Many of them are always on the road travelling from one university town to another and unable to meet their primary obligations with their tenure-employer (Federal Ministry of Education, 2012).

Efforts at resolving teacher shortage require accurate data not only on the extent of the shortage but also on the number of teachers required for effectiveness in the sector. Table 5.4 provides an estimate of the number of teachers required at all levels of Nigeria’s education.

Table 5.4: Teacher shortage in Nigeria

Sector and subsector		Number of students	Total number of available teachers	Total number of teachers required	Shortage
Basic	Pry	24,278,332	541,846	601,789	59,944
	JSS	4,313,164	133,338	170,672	37,334
Post-basic		2,981,387	112,840	117,353	4,513
Tertiary	COE	338,237	15,344	16,878	1,534
	Poly	166,121	5,636	8,454	2,818
	Univ.	1,252,913	37,504	61,881	24,377

Sources: FME, 2011; UBEC, 2012; NCCE, 2011.

From Table 5.4, it is apparent that the problem of staff shortage in the education sector is enormous. The primary education subsector requires 59,944 teachers, which is more than the capacities of all the teacher training institutions in the country. It has been estimated that additional 22,496 teachers will be required to improve quality of teaching and academic productivity in Nigerian universities.

It would seem that the problem of teacher shortage, in terms of quantity and quality, require both short- and long-term solutions. To be able to do this, there is a need to identify critical areas or disciplines where teacher shortage is most acute and short-term interventions can be made to yield positive results. The data presented in Table 5.5 summarizes the view of selected government officials on disciplines in which teacher shortage is experienced in Nigeria.

Table 5.5: Qualitative analysis of extent and areas of teacher shortage

Subsector	Extent of teacher shortage			
	None	Mild	Acute	Very acute
Primary	Local languages	Arts, social sciences	English, mathematics, sciences, business studies, basic technology	Foreign language (French)
Junior secondary	Local languages, arts	Business studies, social sciences	English, mathematics, sciences	Foreign language (French), basic technology
Senior secondary	Local languages, arts	Social sciences, business studies	English, mathematics, sciences	Foreign language (French), basic technology
College of education		Primary education, technical education, physical and health education, business studies, social science education, arts education, science education, vocational education	Computer education	Early childhood education, special education
Polytechnic	Business studies, finance and related studies	Engineering technology, hospitality studies	Environmental design studies	Health and related technology
University	Administration, management, arts, education, social sciences	Agriculture, sciences, environmental sciences	Computer science, technology	Law, engineering, medicine, surgery

Source: Field Survey, 2014.

As shown in Table 5.5, the basic education subsector, which comprises primary and junior secondary schools, experiences an acute shortage of teachers in mathematics, English and the sciences. The French language and basic technology were identified as subjects in which teacher shortage is very acute in primary and junior secondary school levels. In the tertiary level, the subsector of colleges of education experiences a very acute teaching staff shortage in disciplines such as special education and early childhood development, while the polytechnic subsector reported a very acute shortage of teaching staff in health technology. Data from the NUC revealed that universities experience an acute shortage of teaching staff in computer science and technology-based disciplines, but teaching staff shortage is very acute in disciplines such as law, engineering, medicine and surgery. These shortages are attributed to several reasons, such as poor incentives for serving teachers, inadequate turnout of teachers in these subjects by teacher-training institutions in the country, and the exodus of lecturers to Western countries in search of greener pastures.

5.2 Skill and Competency Gaps in the Education Sector

Skill and competency gaps in the education sector were investigated from two dimensions. First, quantitative data on the number of teachers who were professionally trained for service delivery in the different subsectors of the education system was obtained from government agencies and commissions that superintend the education sector. Data on the distribution of qualified and unqualified teachers in Nigeria’s education sector is presented in Table 5.3. The second dimension was to determine the proportion of teachers with specific specialized abilities, skills or competencies considered necessary for effective service delivery at all levels of education. Data from this dimension is presented in Table 5.6.

Table 5.6: Proportion of teachers with professional competencies

Sector and subsector		Types of professional competency					
		Mastery of subject area	Pedagogy	Communication	Evaluation	ICT	Counselling
Basic	Pry	25–50%	51–75%	51–75%	25–50%	Below 25%	51–75%
	JSS	25–50%	51–75%	25–50%	25–50%	Below 25%	51–75%
Post-basic		25–50%	51–75%	51–75%	25–50%	25–50%	25–50%
Tertiary	COE	Above 75%	51–75%	51–75%	51–75%	25–50%	25–50%
	Poly	Above 75%	51–75%	51–75%	Above 75%	51–75%	51–75%
	Univ.	Above 75%	25–50%	51–75%	51–75%	25–50%	25–50%

Source: Field Survey, 2014.

From a review of research on teachers' skills and competencies, six major competencies were identified as paramount to effective teaching and learning at all levels of education. These were investigated in the current study. They included mastery of subject area, pedagogy, communication, evaluation, ICT and counselling. Data presented in Table 5.6 shows that less than 50 per cent of Nigerian teachers in primary, junior and senior secondary schools were found to be competent in the subject areas that they teach; about 50 per cent to 75 per cent had pedagogical and counselling competencies. However, evaluation and ICT competencies were very low among the teachers, as less than 50 per cent demonstrated these competencies. Data from tertiary institutions tends to follow the same trend. Teachers in colleges of education were perceived to be deficient in evaluation skills, pedagogical and ICT competencies, with less than 50 per cent of them being competent in these areas. More than 50 per cent of university teachers did not have pedagogical skills, counselling and ICT competencies required for efficient service delivery in tertiary institutions.

5.3 Addressing Skill and Competency Gaps

The major objective of the needs assessment was to determine how to address skill and competency gaps in the education sector. In this regard, in-depth interviews were conducted with selected stakeholders in the education sector. The stakeholders were interviewed on issues relating to skill shortage and competency of personnel in the sector.

Findings from the interviews revealed three types of skill or personnel shortage in the education sector. The first type is *overt shortage*, measured by the number of subjects in a school without teachers. The second type is referred to as *hidden shortage*, in which some subjects are taught in a school by teachers who are inadequately qualified or who lack the pedagogical skills required for effective teaching. The third type is described as *suppressed shortage*, in which some subjects do not feature on the school curriculum because there are no suitable teachers for them. Respondents were of the opinion that skill shortage, in whatever form, has a negative impact on the quality of education at all levels of schooling. If urgent actions are not taken, the Nigerian education sector might be heading for the worst as student enrolment continues to increase without a commensurate increase in manpower supply to the sector.

Stakeholders attributed skill and personnel shortage to a number of factors, among which are poor salaries and low social prestige accorded teachers especially at the basic level of the education sector. Respondents expressed the view that teaching is generally viewed as the last resort of job-seekers because of the harsh economic realities and poor prestige accorded teachers in the society. Most newly recruited teachers would not mind leaving the profession if and when more attractive jobs become available in the public and private sectors.

Suggestions by stakeholders for addressing skill shortage in the education sector vary according to levels of schooling. Below is a snapshot of opinions on how skill and personnel shortage that characterize each level of education in Nigeria can be addressed.

5.3.1 Skill Gaps at the Basic Education Level

At the basic education level, respondents identified the need to strengthen the existing nationwide capacity-building workshops for teachers to serve as in-service professional development programmes for primary school teachers. This will contribute to the improvement of the teachers' professional competencies and knowledge of teaching subjects on a regular basis. Such programmes will also enable teachers of basic education to update their pedagogical skills, and acquire new management techniques, teaching methodology, and improve their instructional competence and computer literacy. Professional teachers' associations, such as the Teachers' Registration Council of Nigeria (TRCN), should be mobilized in helping to develop professional competencies and regulate standards and practices.

Since the demand for qualified teachers after the introduction of the universal basic education programme has outpaced the supply, respondents expressed the need for a virile programme of re-training the old teachers for better effectiveness while attempting to recruit new ones. The current national teacher-to-pupil ratio of 1:45 should be reduced significantly with the employment of new teachers in disciplines such as science, technology and foreign languages in which there is a very acute shortage of teachers.

The need for the Government to overhaul teacher education programmes was perceived as crucial to bridging skill gaps at the basic education level. To improve the quality of teaching at this level, efforts must be made to ensure skilled teacher production by improving the curriculum of various college of education where NCE-qualified teachers are produced for the primary and junior secondary schools. Curriculum improvement should focus on developing the skills of teacher-trainees in modern pedagogical skills for effective delivery of instruction. In particular, there is an urgent need for curriculum improvement to equip teacher-trainees with new skills in science teaching and ICT, for which the majority of Nigerian teachers have not been adequately prepared.

The engagement of Nigerian professionals in the diaspora to bridge skill gaps in basic and senior secondary education was not seen as crucial by key informants. They expressed the view that the absence of formal institutions to realize such engagements and the poor working conditions at these levels make it expedient to restrict diaspora engagement to the tertiary level of education. The strategies needed to address skill and competency gaps at the basic and senior secondary education levels are capacity-building initiatives targeted at assisting teachers to upgrade their knowledge and pedagogical skills and competencies.

5.3.2 Skill Gaps at the Secondary School Level

This study identified science and technical education as subjects experiencing acute skill shortage at the senior secondary school level. Study participants were of the opinion that teachers in these subjects should be exposed to in-service training in order to correct their skill deficiencies. They also expressed the need for the Government to provide facilities, necessary tools and well-equipped workshops for teachers of technical subjects to practise technical skills acquired during their professional training. Adequate provision of facilities, laboratories and workshops would enhance practical work and bridge the gap between theory and practice.

The results of the assessment also indicate that personnel shortage in science and technical subjects could be addressed by the recruitment of more qualified teachers for the secondary school subsector. The recruitment of more teachers should be accompanied with a virile programme of continuous training and professional development of practising teachers. Secondary school teachers should be encouraged to regularly update their knowledge. However, such enhancement should not only involve subject-based knowledge but also professional competencies in communication, pedagogy, counselling and ICT.

5.3.3 Skill Gaps at the Tertiary Education Level

Findings from quantitative data and analysis of in-depth interviews with key informants reveal that in the majority of tertiary educational institutions in Nigeria there is a scarcity of qualified academic staff to undertake quality research and effective teaching. Skill gaps in this regard were more pronounced in science-based than humanity-based disciplines. Data from the NUC indicates that less than 50 per cent of university staff had adequate counselling, pedagogical and ICT competencies required of teachers at the tertiary level of education.

A number of strategies for addressing skill and competency gaps at the tertiary education subsector were suggested. The strategies can be classified into short- and long-term measures. Short-term measures include the provision of incentives and other motivating factors for practising teachers, such as enhanced salaries and general improvement in conditions of service. Staff should be provided with a constant supply of electricity and water, adequate teaching and research materials, and Internet connectivity with subscription to online journals and e-resources – all of which contribute to making the work environment conducive to providing quality education. Provision of incentives and good working conditions will not only ensure that existing academics are retained in the system but also help to attract international scholars into Nigeria’s tertiary education.

Findings from key informant interviews reveal that Nigerian tertiary institutions can bridge skill gaps in the system by leveraging initiatives aimed at facilitating knowledge and transfer of skills of international scholars from the diaspora. To do this, the institutions must identify their capacity-building priorities and areas of diaspora engagement, following Ferede’s (n.d.) suggested possible areas of diaspora engagement in African universities:

- Short-term or summer teaching and research visitations;
- Facilitation of seminars, workshops and conferences;
- Partnerships and collaborations on research projects;
- Access to funding, data, research and technology;
- Serving as mentors and advisers;
- Co-creation and review of teaching curricula and PhD training materials;
- Investment in institutional advancement initiatives.

As a long-term measure, special training and a variety of staff development programmes, both within and outside the country, are required to improve the competencies of academic staff in tertiary institutions. It has become expedient for institutions to embark on sustainable staff development programmes to improve academic staff competencies and qualifications. In order to meet the requirement of PhD as the minimum qualification for teaching in tertiary institutions, academic staff without doctoral degrees or who are currently pursuing one should be encouraged to start or complete their studies. The provision of scholarship for staff will serve as an impetus for speedy completion and acquisition of their doctoral degrees.

Findings from the assessment reveal that problems of skill shortage and competency gaps in tertiary education can be solved through the adoption of the e-learning platform. Where physical presence of international scholars and experts cannot be attained, teaching and research collaboration could take place through distance learning using modern information technologies.

5.4 Existing Diaspora Skills Exchange Programmes in Tertiary Education

Diaspora engagement in Nigeria’s education sector is a recent development. For many years, the Government has made frantic but unsuccessful efforts through many of its parastatals to transform the education sector by collaborating with Nigerians in the diaspora. To date, the NUC is the only government parastatal with a well-articulated programme of diaspora collaboration in the tertiary education subsector.

The NUC’s diaspora engagement programme, known as the Linkages with Experts and Academics in the Diaspora Scheme (LEADS), was established in 2007. The main goal of LEADS is to attract experts and academics of Nigerian origin in the diaspora to contribute to the development of Nigerian universities through short-term academic appointments. The specific objectives of the programme are as follows:

- To encourage the relocation to Nigeria, on a short-term basis, of academics and experts of Nigerian origin in the diaspora to contribute to National development through engagement in teaching, research and community service activities in the Nigerian university system;
- To tap the expertise of Nigerians based outside the country for the improvement of the delivery of quality university education in Nigeria;

- To encourage healthy staff movement, interaction and collaboration across and between Nigerian Universities using these experts and academics in the diaspora and with other sectors of education and national development;
- To encourage experts in industry to participate in teaching and research in Nigerian universities. (NUC, 2014)

To ensure equitable participation in the diaspora engagement programme, the NUC made provision for experts and academics in the diaspora to serve at the Nigerian federal, state and private universities in positions such as visiting lecturers, visiting professors and researchers over a period of three, six and 12 months. Eligibility criteria for participation include:

- Terminal degree at doctoral or professional level;
- At least five years of experience in the relevant field;
- Academic, teaching and/or research experience at a globally recognized university;
- Article publications in referred journals;
- Other relevant skills, discoveries, patents or experience deemed useful in target fields or national development. (NUC, 2014)

At its inception, LEADS was limited to some disciplines that experienced and are still experiencing acute shortage of personnel at the tertiary education level. These were ICT, management science and business administration, mathematics, medicine and dentistry, mining engineering, natural sciences, and oil and gas engineering.

To ensure successful implementation of LEADS, the NUC coordinates the responses of the host universities and monitors the activities of the experts and academics who have been selected to work in the universities. In addition to its administrative responsibilities, the NUC provides financial support to participants including return economy-class plane ticket and a monthly stipend of USD 2,500. On the other hand, the host university is expected to provide accommodation for the duration of a participant's stay in Nigeria as well as local travel expenses relevant to the programme. According to statistics from the NUC website, by 2010/2011, about 23 million naira (about USD 144,000) had been spent on the scheme, in which 35 diaspora scholars had participated. By 2012/2013, 41 scholars from six countries had participated in the scheme.

Diaspora scholars who are elected to participate in the scheme are expected to carry out a number of academic and administrative responsibilities. Specifically, they are required to:

- Teach at least two courses in their areas of expertise at the host institution;
- Conduct research and develop a framework for authoring or co-authoring of research papers, in collaboration with partners at host institutions in globally recognized journals;
- Assist in the development of linkages and collaboration between the host university in Nigeria and their counterparts overseas;
- Supervise PhD and MSC candidates or groups of undergraduate research students at the host institution.

Among its achievements, LEADS has attracted Nigerian experts and academics in the diaspora back home to contribute to the education system, some of who have relocated to Nigeria permanently.

The scheme has succeeded in helping to bridge skill gaps and enhance skills acquisition in rare areas of expertise. It has encouraged experts in the industry to participate in teaching, research and cross-fertilization in Nigerian universities, enriching curriculum review process with modern, high-tech and new trends in the relevant discipline, and promoting re-union and re-integration of experts into their heritage and community life (Zezeza, n.d.).

5.4.1 Strengths of LEADS

A critical review of the structure and implementation of the LEADS programme revealed its strengths and achievements as highlighted below:

- LEADS has been able to attract Nigerian experts and academics in diaspora back home to contribute to education system in Nigeria. According to the NUC (2013), many academics who participated in the programme have relocated permanently back to Nigeria. Though the programme provides opportunity for temporary return, the exposure of participants to academic and social life of host institutions is capable of setting the stage for permanent return to Nigeria.
- The programme has been able to create appropriate engagement positions and job satisfaction for Nigerian academics and experts. The opportunity provided by the programme for participants to conduct research during their stay enables the academic community to benefit from the flow of knowledge from the diaspora, thereby turning the brain drain to brain gain for the nation.
- LEADS has the capability to enhance skills acquisition in rare areas of expertise. According to the NUC, the programme has been able to bring experts who provided support in the installation of digital X-ray machines for panoramic and cephalometric radiographs in some hospitals in Nigeria.
- The programme has been able to encourage the experts in the industry to participate in teaching, research and cross-fertilization in Nigerian universities.
- It has contributed to the enrichment of tertiary education curriculum review process with modern, high-tech and new trends in the relevant discipline.

(NUC, 2013)

5.4.2 Weaknesses of LEADS

Despite the contributions of LEADS to the development of Nigerian university education, there are significant challenges confronting the programme. From the interviews conducted, five major challenges were isolated. First, the scheme is restricted to seven disciplines which are believed to experience acute shortage of personnel in Nigerian universities. This imposes a limitation on Nigerians in diaspora who are willing to participate in the scheme but are not experts in the selected disciplines.

Inadequate funding was identified as a major challenge facing the implementation of the scheme. The NUC is expected to shoulder all the expenses, while the host institutions provide accommodation and travel expenses. The monthly stipend of USD 2,500 paid to participants by the NUC can be described as inadequate in the face of rising inflation and cost of living in the country. It is also inappropriate that participants are paid the same amount of stipend irrespective of their cadre. Though the NUC has acknowledged the importance of diaspora engagement in the tertiary education sector, it lacks adequate financial resources with which to make LEADS more attractive to the diaspora.

Another major challenge of the programme is the unsatisfactory state of facilities for research and teaching in most Nigerian universities. The infrastructure to support diaspora academics and enhance their engagement, such as constant supply of electricity and water, is lacking in many Nigerian universities.

The negative attitude of academics at host institutions to their diaspora colleagues was identified as a big challenge to implementation of diaspora engagement programmes in tertiary education. According to a director in the NUC, it is not uncommon to find diaspora academics facing resentment and uncooperative attitude by their counterparts at home. The general feeling that diaspora academics abandoned the system when things were tough could lead to friction in building enduring academic relationships with colleagues in host institutions.

Finally, general instability in the academic systems and calendars of Nigerian universities was isolated as a major challenge to diaspora engagement programmes in the education sector. Of recent, the academic calendars of many universities remain unpredictable as a result of incessant closure of universities due to industrial actions by academic and non-academic staff. Irregularity in academic calendars makes it extremely difficult for academics in diaspora to use their vacation for programmes of temporary engagement in Nigerian universities.

CONCLUSION AND RECOMMENDATIONS

This needs assessment was conceptualized to identify skill and competency gaps in Nigerian education and to determine how Nigerians in the diaspora could be engaged to contribute to the development of the sector. Based on this conceptualization, and from the desk review of relevant literature, and more crucially from the in-depth interviews conducted with government functionaries, some conclusions are reached and recommendations made. These are organized into themes as presented in this section.

6.1 Policy Environment for Diaspora Engagement in Education

Findings from the needs assessment survey of the education sector indicate the presence of an enabling policy environment for diaspora engagement in the sector. Nigeria currently has a robust labour migration policy developed with technical assistance from IOM. The policy, revised in 2013, addresses the broad objectives of promoting good governance of labour migration and promotion of the welfare of migrant workers and optimizing the benefits of labour migration on development while mitigating its adverse impact. In addition, there is a government institution on ground, the NNVS, charged with the task of managing and effectively deploying volunteer services and activities of both Nigerians in diaspora and at home. With formal structures and a policy framework in place, there is a policy environment conducive to diaspora engagement in the education sector. International development partners should leverage the existing diaspora policy framework to launch diaspora engagement and participation programmes in the education sector.

6.2 Need for Diaspora Engagement in the Education Sector

The results of the needs assessment have shown that there are currently debilitating skill and competency gaps in the nation's education sector. The education sector currently operates in a resource-trapped environment; hence, the requirement for additional resources and interventions such as diaspora engagement. In a resource-strapped environment, the nation must draw on all its resources, among which are its citizens in the diaspora. The exodus of Nigeria's skilled professionals to the western world until now, referred to as brain drain, can be reversed to the nation's advantage and turned into brain gain or brain mobility. Thus, it is recommended that the education sector requires an urgent need for intervention to bridge the existing skill and competency gaps in the sector and enhance the quality of education for its citizens.

6.3 Modalities for Diaspora Engagement in Education

From the interviews conducted for the needs assessment study, it was clear that diaspora engagement in Nigerian education should be restricted, at least for now, to interventions at the tertiary level of education. Though skill shortages requiring diaspora intervention exist at the lower levels of education, there are currently no institutional structures available at these levels for the implementation of diaspora engagement programmes. The consensus among key informants centres on the necessity to work out the modalities for diaspora engagement in the education sector and restrict its implementation to universities and other tertiary institutions.

Modalities for diaspora engagement in tertiary education would take various forms organized around the three core competencies of teaching, research and services. Thus, diaspora engagement in tertiary education would include activities such as short courses, summer classes, curriculum development and supervision of graduate-student dissertations. Other modalities for engagement would include joint research and grants, publishing and manuscript reviews, building databases and digital archives, and giving advice and mentoring.

6.4 Disciplines and Competencies Requiring Diaspora Engagement

Both qualitative and quantitative data collected for the needs assessment reveal general skills shortage in the core disciplines of science, foreign languages, mathematics and basic technology at the basic and post-basic education levels. Areas of skills shortage at the tertiary education level include special education, computer science, technology, law, engineering, medicine and surgery. Also, the assessment reveals that teachers at all levels of education generally lack ICT, counselling and pedagogical competencies. The identified disciplines and areas of competency gaps should be prioritized in diaspora engagement programmes, though opportunities for engagement may vary according to discipline.

6.5 Leveraging Existing Diaspora Engagement Programmes

The results of the assessment have identified LEADS as a good platform to launch IOM's intervention programme of diaspora engagement in Nigerian education. The strengths of the programmes should be identified and its weak points improved upon. A major area where improvement is desirable is the stipend paid to participants, which may be increased from USD 2,500 to USD 3,000 depending on the status of the participants.

Programmes of diaspora engagement in education are currently non-existent in colleges of education and polytechnics. Since the results of this assessment attest to the need for interventions to bridge skill and competency gaps at all levels of tertiary education, it is recommended that the diaspora engagement programme should be extended to colleges of education and polytechnics to enhance the quality of education and promote international mentoring for students in these institutions. The suitability of polytechnics and colleges of education as institutional counterparts with potential for robust diaspora engagement programmes is high.

6.6 Difficulties in Attracting Diaspora to Engage in Education

Lack of modern infrastructure, scarcity of teaching materials and inadequate research equipment in Nigerian institutions are push factors for the exodus of Nigerian academics to other countries in search of greener pastures. Basic facilities such as furniture, office accommodation, classrooms and laboratory equipment are lacking or are overstretched in capacity in many institutions. Key informants argued that these inadequacies make it impossible for academics to engage in any cutting-edge research that can advance the frontiers of knowledge. The situation poses a big challenge to efforts targeted at persuading academics in diaspora to return home to contribute to national development. It is recommended that the nation's institutions undergo massive infrastructural upgrade and maintenance to set the stage for the return of diaspora academics and professionals.

6.7 Improving Working Conditions for Nigerian Academics

General improvements in working conditions of Nigerian academics are crucial if those in the diaspora are to be persuaded to return home to contribute to educational development even on a short-term basis. Prompt payment of staff salaries and other entitlements would not only minimize systemic crisis in the education sector but also serve as motivation and incentive for diaspora academics to return home. Incentive packages to entice temporary or permanent home return may include enhanced salaries, transport facilities, accommodation or rent allowance, medical insurance and tax rebates.

6.8 Insecurity and Diaspora Engagement

Political instability, insecurity, and threat to life and property do not promote an environment conducive to diaspora engagement. Also, irregularity in academic calendars of educational institutions, occasioned by workers' frequent industrial actions, make it extremely difficult for academics in diaspora to use their vacation for programmes of temporary engagement in Nigerian education. The Government should tackle problems of insecurity and systemic crisis in the education sector to attract the intellectual diaspora back to their home country.

6.9 Diaspora Engagement through Virtual Participation

Diaspora virtual participation in education is the involvement of diaspora professionals in the education sector without requiring any physical relocation to their home country (Adefusika, 2010). With the use of modern ICT facilities, Nigerians living abroad can share their knowledge and expertise with stakeholders in the education sector. This can be achieved through various platforms such as e-learning, online teaching, and collaborations to execute research and academic projects. It is recommended that the Government, educational institutions and development partners in the education sector explore diaspora virtual participation as an intervention strategy to target professionals in diaspora who are willing to contribute their knowledge, skills and competence to Nigerian education but are not willing to return to Nigeria.

6.10 Establishment of a Diaspora Office in Tertiary Institutions

Some Nigerian universities already have institutional structures for managing diaspora engagement issues. It is recommended that the FME direct all tertiary institutions to set up offices mandated with the mission of working closely with the diaspora. This will formally integrate diaspora affairs in the structures of tertiary institutions and foster knowledge and skills transfer for national development. There is a need for periodic evaluation of diaspora-related activities in higher education to assess their effectiveness.

6.11 Establishment of a Reliable National Diaspora Database

Effective management of diaspora engagements requires a reliable database of intellectual diaspora. The Government should collaborate with relevant organizations and agencies to collect current and accurate data on Nigerian academics in the diaspora. IOM should increase its technical assistance to the country to enable it to generate and update its national diaspora database.

BIBLIOGRAPHY

Adefusika, J.A.

- 2010 Understanding the brain-drain in the African diaspora: Focusing on Nigeria. Senior Honors Project Paper 161, University of Rhode Island. Available from <http://digitalcommons.uri.edu/cgi/viewcontent.cgi?article=1166&context=srhonorsprog>.

Adeyemi, T.O.

- 2008 The supply of science teachers to secondary schools in Ondo State, Nigeria: A critical analysis. *American-Eurasian Journal of Scientific Research*, 3(2):228–240.

Aghenta, J.A.

- 2001 Educational planning: A turning point in education and development in Nigeria. Inaugural Lecture Series No. 58, University of Benin.

Apelgren, K. and B. Giertz

- 2010 Pedagogical competence: A key to pedagogical development and quality in higher education. In: *A Swedish Perspective on Pedagogical Competence* (A. Ryegård, K. Apelgreen and T.A. Olsson, eds.). Uppsala University, Division for Development of Teaching and Learning, Uppsala.

Aremu, A.O.

- 2014 Improving access and quality education at the sub-national level. Paper presented at the Third Retreat of Nigeria Governors' Forum, Eko Hotel and Suites, Nigeria, 14 March.

Boyer, E.L.

- 1990 *Scholarship Reconsidered: Priorities of the Professoriate*. The Carnegie Foundation, New York.

Chee-Leong, C. et al.

- 2000 A practical model for identifying and assessing work competencies. *Management Development Forum*, 3(1).

Clark, N. and C. Ausukuya

- 2013 Education in Nigeria. *World Education News and Reviews*, 1 July. Available from <http://wenr.wes.org/2013/07/an-overview-of-education-in-nigeria/>.

Ferede, M.K.

- n.d. Policy brief: Engaging the diaspora: Potential for sub-Saharan African universities. Available from www.oecd.org/sti/Engaging%20the%20DiasporaFerede.pdf.

Gbenu, J.P.

- 2012 State of Nigerian secondary education and the need for quality sustenance. *Greener Journal of Educational Research*, 2(1):7–12.

Green, F., S. Machin and D. Wilkinson

- 1998 The meaning and determinant of skill shortages. *Oxford Bulletin of Economics and Statistics*, 60(2):165–187.

Hooker, M., E. Mwiyeria and A. Verma

- 2011 *ICT Competency Framework for Teachers in Nigeria*. Report of the National Commission for Colleges of Education Nigeria, the World Bank and the Global e-Schools and Communities Initiative (GESCI).

- International Organization for Migration and European Union
 2012 Presentation of the findings of institutional needs assessment for International Labour Migration Desk (ILMD), Federal Ministry of Labour and Productivity (FMLP), Nigeria National Volunteer Service (NNVS) and Nigerian Diaspora Organizations, by Ivan Martin.
- Junaid, I.M.
 2013 Education: Quality, standards and control in Nigeria transformation agenda. Lecture delivered at the 35th convocation ceremony of the Federal College of Education (Technical), Akoka, Lagos.
- Labo-Popoola, S.O., A.A. Bello and F.A. Atanda
 2009 Universal basic education in Nigeria: Challenges and way forward. *The Social Sciences*, 4:614–621.
- Magin, D.J.
 1998 Rewarding good teaching: A matter of demonstrated proficiency or documented achievement? *The International Journal for Academic Development*, 3(2):124–135.
- Moja, T.
 2000 *Nigeria Education Sector Analysis: An Analytical Synthesis of Performance and Main Issues*. Report produced for the World Bank.
- Morgan, W.J., A. Sives and S. Appleton
 2006 Teacher mobility, ‘brain drain’, labour markets and educational resources in the Commonwealth. Educational Papers Series, Department for International Development, London.
- National Population Commission (NPC) of Nigeria and RTI International
 2011 *Nigeria DHS Ed Data Survey 2010: Education Data for Decision-making*. NPC and RTI International, Washington, D.C.
- Nigeria, Federal Ministry of Education (FME)
 2011 *Digest of Educational Statistics*. FME, Abuja.
 2012 *Reports on Need Assessment of Nigerian Public Universities*. FME, Abuja.
- Nigeria, Federal Ministry of Labour and Productivity
 2010 *Labour Migration Policy for Nigeria*. Federal Ministry of Labour and Productivity, Abuja.
- Nigeria, National Commission for Colleges of Education (NCCE)
 2011 *Digest of Statistics on Colleges of Education and other NCE Awarding Institutions in Nigeria*. NCCE, Abuja.
- Nigeria, National Commission for Refugees, Migrants and Internally Displaced Persons (NCFRMI)
 2007 *Draft National Policy on Migration*. NCFRMI, Abuja.
- Nigeria, National Planning Commission
 1999 Vision 20:2020. National Planning Commission, Abuja.
 2004 *National Economic Empowerment and Development Strategy (NEEDS)*. National Planning Commission, Abuja.
 2009a *Nigeria Vision 20-2020: Economic Transformation Blueprint*. National Planning Commission, Abuja.
 2009b *Report of the Vision 2020 National Technical Working Group on Education Sector*. National Planning Commission, Abuja.
- Nigeria, National Universities Commission (NUC)
 2013 *Brief Update on Linkages with Experts and Academics in the Diaspora Scheme (LEADS)*. NUC, Abuja. Available from www.nuc.edu.ng/pages/pages.asp?id=54.
 2014 Linkage with experts and academics in the diaspora scheme (LEADS). Available from www.nuc.edu.ng/nucsite/File/LEAD/LEADS%20ADVERTISMENT.pdf.

- Nigeria, Nigerian Educational Research and Development (NERDC)
2008 *National Policy on Education*. NERDC, Abuja.
- Nigeria, Universal Basic Education Commission (UBEC)
2012 *2010 National Personnel Audit Report*. UBEC, Abuja.
- Nwogu, U.J. and B.I. Esobhawan
2014 Teacher quality and quantity: Implications for the implementation of Universal Basic Education in Nigeria. *Academic Research International*, 5(1):199–208.
- Obafemi Awolowo University
2014 Mission of the Linkages Office. Available from www.oauife.edu.ng/alumni-partners/linkages-office/mission/.
- Olatunji, M.O.
2013 Ensuring and promoting the pedagogical competence of university lecturers in Africa. *Journal of Educational and Instructional Studies in the World*, 3(3):73–85.
- Oldsjö, F.
2010 Some thoughts from a pedagogical expert. In: *A Swedish Perspective on Pedagogical Competence* (A. Ryegård, K. Apelgren and T. Olsson, eds.). Uppsala University, Division for Development of Teaching and Learning, Uppsala.
- Olsson, T., K. Mårtensson and T. Roxå
2010 Pedagogical competence: A development perspective from Lund University. In: *A Swedish Perspective on Pedagogical Competence* (A. Ryegård, K. Apelgren and T. Olsson, eds.). Uppsala University, Division for Development of Teaching and Learning, Uppsala.
- Sali-ot, M.A.
2011 Competencies of instructors: Its correlation to the factors affecting the academic performance of students. *JPAIR Multidisciplinary Journal*, 6(1):31–51.
- United Kingdom, Department for International Development (DFID)
2012 *DFID's Education Programmes in Nigeria*. Available from <http://icai.independent.gov.uk/wp-content/uploads/2010/11/ICAI-Nigeria-Education-report.pdf>.
- United Nations Educational, Scientific and Cultural Organization (UNESCO)
2010 *EFA Global Monitoring Report: Reaching the Marginalized*. UNESCO, Paris. Available from <http://unesdoc.unesco.org/images/0018/001865/186525e.pdf>.
2014 *EFA Global Monitoring Report 2013/4 - Teaching and Learning: Achieving Quality for All*. UNESCO, Paris.
- United States Embassy in Nigeria
2012 Nigeria education fact sheet. Available from <http://photos.state.gov/libraries/nigeria/487468/pdfs/January%20Education%20Fact%20Sheet.pdf>.
- University of Ibadan
2014 About us: Office of International Programmes. Available from <http://oip.ui.edu.ng/about-us>.
- University of Lagos
2014 Our history. Available from www.unilag.edu.ng/pages.php?page=our-history.
- Zeleza, P.T.
n.d. *Engagements between African Diaspora Academics in the U.S. and Canada and African Institutions of Higher Education: Perspectives from North America and Africa*. Report for the Carnegie Corporation of New York.

SURVEY QUESTIONNAIRE ON EDUCATION NEEDS ASSESSMENT

(PRIMARY EDUCATION SECTOR)

Sir/Madam,

This questionnaire seeks to obtain data for a project on education needs assessment by the International Organization for Migration (IOM). The purpose of the needs assessment is to identify skill and competency gaps in Nigeria's education sector and provide government with recommendations on how the gaps can be addressed. Your response will be used only for the purpose of research and will be treated with utmost confidentiality.

Name of your Board _____
 Education sector supervised by your Board _____
 Your current position _____
 No. of years spent in current position _____

SECTION A: DATA ON NIGERIA'S PRIMARY EDUCATION SECTOR

This section is meant to collect existing data or documents from your office on Nigeria's primary education sector. It is expected that the requested documents will provide national data or statistics on the primary education sector. Kindly make available documents or official publications from which the items listed below can be extracted. Attach the documents to this questionnaire.

1. Documents/Data on Primary Education Sector

REQUESTED DOCUMENT	AVAILABLE	NOT AVAILABLE
Distribution of primary schools in Nigeria according to states		
Pupil Enrolment in Nigerian Primary Schools		
Distribution of Primary School Teachers by States		
Distribution of Primary School Teachers according to length of service		
Distribution of Primary School Teachers by Sex, Age and Academic Qualifications		
Distribution of Nigeria's Primary School Teachers by Subject Specializations		
Teacher shortage in Nigerian Primary Schools by Subject Areas		
Number of Primary School Teachers with Minimum Teaching Qualifications (NCE or Below NCE)		
Teacher-Pupil Ratio by states		
Teacher shortage in Primary Schools by States		
Hard-to-Fill Teaching Vacancies in Primary Schools		
Number of Non-teaching staff by categories of work		
Non-teaching Staff Vacancies in Nigerian Primary Schools		
Present salary structure of Nigerian Primary School Teachers		

2. Rate the extent of teacher shortage in Nigeria’s primary education sector in each of the following discipline

DISCIPLINE	EXTENT OF TEACHER SHORTAGE			
	NONE	MILD	ACUTE	VERY ACUTE
English Language				
Foreign Language (French)				
Local Languages				
Mathematics				
Sciences				
Social Sciences				
Arts				
Business Studies				
Basic Technology				
Others (Please specify)				

SECTION B: COMPETENCIES IN NIGERIA’S PRIMARY EDUCATION SECTOR

The purpose of this section is to seek your opinion on available competencies in Nigeria’s primary education sector. In this context, competencies are specialized abilities, skills or proficiencies that are necessary for effective teaching in schools. Kindly respond to each item by providing as much details as you can.

1. What proportion of primary school teachers in Nigeria possesses each of the following competencies?
(Mark X as appropriate)

TYPE OF COMPETENCY	PROPORTION OF TEACHERS WITH COMPETENCY			
	Below 25%	25–50%	51–75%	Above 75%
Subject-matter Knowledge				
Pedagogical Knowledge				
Communication Skills				
Student Evaluation				
Information Communication Technology				
Pupil Counselling Skills				
Others (Please specify)				

2. In your opinion, in which of the disciplines is teacher shortage most acute?

3. What do you think is responsible for the acute shortage in (3) above?

4. What proportion of primary school teachers in Nigeria has professional training to work in the nation’s primary education sector?

5. What do you think is the effect of professional training or lack of it on teachers' competence in Nigeria?

SECTION C: ADDRESSING SKILL AND COMPETENCY GAPS IN PRIMARY EDUCATION

This section seeks your opinion on how to address skill and competency gaps in the Nigeria's primary education sector. Kindly respond to each item by providing as much details as you can.

1. Do you think the present salary of primary school teachers in Nigeria is attractive motivation for teachers?

2. What in your opinion is the best way to motivate Nigerian primary school teachers to improve their productivity?

3. In your opinion, what should be done to address the problem of teacher shortage in Nigerian primary schools?

4. What, in your opinion, should be done to improve the quality of new entrants into the teaching profession in Nigeria?

5. In subject areas where teacher shortage is pronounced, what incentives can be introduced to attract prospective teachers?

6. Describe any programme(s) of international assistance to your Board toward meeting the country's demand for teachers in the primary education sector.

7. In your opinion, how can Nigerians in diaspora be integrated and made to contribute to the development of Nigeria's primary education sector?

8. Briefly describe your board's current skill and competency exchange programme with Nigerians in Diaspora (if any)

9. What are the benefits of your Board's current skill and competency exchange programme to the primary education sector in Nigeria?

10. Identify the challenges facing the skill and competency exchange programme with Nigerians in Diaspora.

11. Provide recommendations on how the challenges in (10) can be addressed.

12. Kindly suggest who else in your Agency to talk to about skill and competency gaps in the primary education sector.

SURVEY QUESTIONNAIRE ON EDUCATION NEEDS ASSESSMENT

(TERTIARY EDUCATION SECTOR)

This questionnaire seeks to obtain data for a project on education needs assessment by the International Organization for Migration (IOM). The purpose of the needs assessment is to identify skill and competency gaps in Nigeria’s education sector and provide government with recommendations on how the gaps can be addressed. Your response will be used only for the purpose of research and will be treated with utmost confidentiality.

Name of your University/College _____
 Your current position _____
 No. of years spent in current position _____

SECTION A: COMPETENCIES IN NIGERIA’S TERTIARY EDUCATION SECTOR

The purpose of this section is to seek your opinion on available competencies in your University/College. In this context, competencies are specialized abilities, skills or proficiencies that are necessary for effective teaching. Kindly respond to each item by providing as much details as you can.

1. What proportion of lecturers in your University/College possess each of the following competencies?
 (Mark X as appropriate)

TYPE OF COMPETENCY	PROPORTION OF TEACHERS WITH COMPETENCY			
	Below 25%	25–50%	51–75%	Above 75%
Subject-matter Knowledge				
Pedagogical Knowledge				
Research Skills				
Communication Skills				
Student Evaluation				
Information Com. Technology				
Student Counselling Skills				
Others (Please specify)				

2. In your opinion, in which of the disciplines is lecturer shortage most acute?

3. What do you think is responsible for the acute shortage in (3) above?

4. What do you think is the effect of lack of professional training on university teachers' competence in Nigeria?

SECTION B: ADDRESSING SKILL AND COMPETENCY GAPS IN TERTIARY EDUCATION

This section seeks your opinion on how to address skill and competency gaps in the University. Kindly respond to each item by providing as much details as you can.

1. Do you think the present salary of teachers in Nigeria is attractive motivation for teachers in your University/ College?

2. What in your opinion is the best way to motivate Nigerian tertiary education teachers to improve their productivity?

3. In your opinion, what should be done to address the problem of teacher shortage in your University/College?

4. What, in your opinion, should be done to improve the quality of new entrants into teaching in Nigerian tertiary institutions?

5. In disciplines where teacher shortage is pronounced, what incentives can be introduced to attract prospective teachers?

6. Describe any staff exchange or linkage programme in your University for staff development.

7. Briefly describe the strength of the staff exchange or linkage programme in (6) above.

8. Identify the challenges facing the staff exchange/linkage programmes in your University/College.

9. Provide recommendations on how the challenges in (7) can be addressed.



International Organization for Migration (IOM)