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**LAYING THE FOUNDATION
FOR AN ENDURING STM EDUCATION
IN THE UNIVERSAL BASIC EDUCATION PROGRAMME**

**A KEYNOTE ADDRESS DELIVERED BY DR. AHMED MODIBBO MOHAMMED,
EXECUTIVE SECRETARY, UNIVERSAL BASIC EDUCATION COMMISSION (UBEC),
AT THE 53RD ANNUAL CONFERENCE OF SCIENCE TEACHERS' ASSOCIATION OF
NIGERIA (STAN), HELD ON THE 6TH -11TH AUGUST, 2012 IN FCT, ABUJA.**

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1.0 INTRODUCTION

I am pleased to be in attendance at this 53rd Annual Conference of the Science Teachers' Association of Nigeria holding in Abuja. In this regard, I feel highly honoured to be invited to present a keynote address on the theme of the Conference **'Meeting the Challenges of UBE through STM Education'**. As we are all aware, teachers and education managers are in the forefront of ensuring the achievement of the aims and objectives of UBE especially through imparting Science, Technology and Mathematical skills into pupils, students and UBE Administrators/Managers.

The perception of STM by pupils/students, most especially science, as an elite, eurocentric, laboratory-based subject which demands a higher level of intelligence and skills put many learners off the subject or discourage them from any rigorous attempt to pursue STM further. The 2004 National Policy on Education recognizes the importance of STM education by its copious reference to it. However, the creation of enabling physical, psychological and intellectual environments for STM to thrive has been the thrust of the Federal Government's efforts in reviving STM education. This has led to the establishment of institutions to support STM Education such as the National Mathematical Centre (NMC), National Board for Technical Education (NBTE),

Technology Business Incubator Centres (TBICs), National Science Equipment Manufacturing Centres, among others. Recently, increasing interest in STM education has been shown by other Agencies such as the National Office for Technology Acquisition and Promotion (NOTAP), National Agency for Science and Engineering Infrastructure (NASENI), Nigeria Information Technology Development Agency (NITDA), etc. Other Agencies charged with the development and implementation of STM curricula and capacity building at the basic education level have increased the tempo of reform and implementation through innovative and concerted strategies to provide the policy and implementation frameworks for accelerated STM education.

The provision of the enabling environment for STM education or the context of STM Education is an important foundation upon which other activities greatly depend at the basic education level. Consequently, this has been a major thrust of the Federal Government's intervention in basic education.

1.1 The Context of Universal Basic Education

Section 18 of the amended 1999 Constitution seeks to ensure equal and adequate educational opportunities, promote science and technology, as well as eradicate illiteracy through the provision of Free, Compulsory and Universal Basic Education for all Nigerians. Thus, the Constitution has taken cognizance of basic education as a fundamental human right. This is in tandem with the various international conventions and protocols aimed at evolving a new prosperous and peaceful world order which Nigeria has been a signatory to. These include the United Nations Millennium Development

Goals (MDGs) (2005), the United Nations Literacy Decade (2003-2012), the United Nations Decade on Education for Sustainable Development (2005-2014), the World Summit on the Information Society (WSIS), the World Summit for Sustainable Development (WSSD), the 1990 World Conference on Education for All (EFA) in Jomtien, Thailand, to mention only the major frameworks. These and subsequent follow-up Conferences have shaped thoughts and practices in all aspects of education in Nigeria, and notably for our purpose here, is the Dakar Framework for Action on Education for All (EFA) (2000).

1.1.1 The Dakar EFA goals

Paragraph 7 of the Dakar Framework for Action on EFA defines the EFA goals which the governments, organizations, agencies, groups and associations represented at the World Education Forum (2000), pledged themselves to achieve. They are:

- i. expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children;*
- ii. ensuring that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to and complete, free and compulsory primary education of good quality;*
- iii. ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life-skills programmes;*

iv. achieving a 50 per cent improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for adults;

v. eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality;

vi. improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills.

Highlighted is Goal 6: the life-skills and quality dimension to ensure that whichever education is provided is adequately addressing all its objectives, as defined by qualities in established minimum standards.

2.0 INSTITUTIONAL FOUNDATION FOR STM EDUCATION

Apart from the Constitution, the **National Policy on Education** and derived Policies to guide STM Education, various institutions such as Nigerian Educational Research and Development Council (NERDC), National Mathematical Centre (NMC), National Board for Technical Education (NBTE), National Commission for Colleges of Education (NCCE), etc, have been established with mandates wholly or partially focused on STM thus helping to fast-track the implementation of STM at the basic education level. The professional organizations such as the Science Teachers' Association of

Nigeria (STAN), Mathematics Association of Nigeria (MAN), etc, have shown increased commitment to STM education especially at the basic education level. Many other Federal Ministries, Departments and Parastatals have also shown interest in incorporating relevant STM components of their operations in the basic education curriculum.

3.0 RESOURCES FOR UBE AND STM EDUCATION

Education is on the concurrent legislative list, with the States and Local Governments assigned the responsibility for basic education. Thus, the major burden of implementation of all aspects of the universal basic education (UBE) programme lies on the States and Local Governments. However, to ensure the achievement of EFA with Special attention to STM education, the Federal Government decided to assist States to fund UBE through the dedication of 2 % of its Consolidated Revenue Fund (CRF). However, all other sources of funds obtained for UBE are also utilized for the funding of STM education, in addition to other aspects of the programme.

3.1 Federal Government Support to Financing of the UBE Programme

The major sources of funding UBE and STM education programmes are the States (owners of the schools), Federal Government's conditional and non-conditional Grants, Funds or contributions in form of Federal guaranteed credits, Local and international donor grants, corporate and private sector assistance in cash and kind.

For sustainability of Federal Government's support to States for basic education, the UBE enabling law, the UBE Act (2004), has provided for the sourcing of funds for the programme. Part III, Section 11 sub-section 1 of the UBE Act stipulates that:

"The implementation of the Universal Basic Education Programme shall be financed from:

- I. Federal Government block grant of not less than 2% of its Consolidated Revenue Fund (CRF)
- II. Funds or contributions in form of Federal guaranteed credits; and
- III. Local and international donor grants."

The Federal Government, through UBEC, in accordance with the UBE Act (2004), thus provides support grant to States for the implementation of the UBE programme. In disbursing funds, UBEC is guided by a Federal Executive Council Approved Sharing Formula as required by Section 9(b) of the Act.

The current Disbursement Formula in use is as follows:

• Infrastructure/facilities provision as Matching Grants	-	50%
• Educational Imbalance	-	14%
• Special Needs Education	-	2%
• Grants for Good Performance	-	5%
• Provision of Instructional Materials	-	15%
• Teacher Professional Development	-	10%
• UBE Programme Monitoring	-	2%
• UBE Implementation	-	2%
Total	=	100%

The tables showing the releases and disbursements as at 31st July 2012 are attached as Appendices.

Other sources of funding come from MDGs Fund for the Federal Teachers' Scheme (FTS) and training of teachers as well as 30% of ETF's annual budget before it exited funding of basic education, International Development Partners (IDPs), NGOs and Foundations.

3.1.1 Provision of Infrastructure and Facilities for STM Education at the Basic Education Level

A conducive school environment is important for effective STM teaching and learning. The elements of the school environment include infrastructural facilities (such as classrooms, furniture, toilets, water supply, laboratories, workshops, etc), instructional materials, qualified and competent teachers, etc. To overcome the challenges of shortage of and unconducive infrastructure, 50 % of the 2% CRF is devoted to UBE Matching Grant for the provision of infrastructure and facilities for basic education. This Fund is disbursed on equality of States basis to address issues of access, equity and quality in basic education delivery. Each State contributes 100% of the total amount received, as its Counterpart Fund, to implement approved infrastructural development activities based on State priorities. This fund has assisted in creating new infrastructure and renovation/rehabilitation of existing infrastructure across the country. Apart from the provision of classrooms, laboratories, workshops, studios, other STM facilities have been provided in furtherance of STM education.

The deliverables of infrastructure from this fund from 2005 to 2010 include: 20,049 new classrooms, 9,092 renovated classrooms, 14,871 toilets, 366 boreholes, 884,315 furniture items, etc.

Measures put in place to ensure the judicious use of the fund include the following:

(a) States are required to submit Action Plans to UBEC on how the fund will be utilized, including architectural drawings, bills of quantities and specifications before the application of the fund. This is to ensure quality and accountability and facilitate monitoring.

(b) Contract Awards using the fund are made by SUBEBs and must follow Due Process.

(c) The Projects are supervised by State Universal Basic Education Boards (SUBEBs) and monitored by UBEC as well as Civil Society Groups.

(d) Benefitting schools and communities are also expected to monitor the construction work and report to their respective SUBEBs.

The massive infrastructural provisions since 2005 have enabled the provision of more conducive environment for STM education in our schools.

3.1.2 Addressing the Imbalance in the Provision for STM in Basic Education

The Educational Imbalance Fund which is 14 % of the FGN-UBE Intervention Fund was instituted in recognition of the disparity in the provisions for basic education (including STM Education) between States, between LGAs in a State and between communities. The Educational Imbalance Fund, is used to support disadvantaged communities in the execution of projects in schools with the disadvantaged States being allocated more projects. In the same

vein, the disadvantaged Local Governments have more of their communities benefitting from the fund. The projects are those that will improve access, equity and quality of basic education as well as build the capacity of communities to execute projects in schools. At the moment, each project attracts a grant of ₦1,000,000.00 while the benefitting community is expected to contribute 10 % of the grant which is the equivalent of ₦100,000.00 in cash or kind. The communities are expected to take ownership of the projects after completion. The SUBEB is expected to participate actively in the selection and monitoring of these projects to ensure that the communities adhere to the guidelines and ensure quality project execution. The fund has been used to provide new infrastructure, renovate/rehabilitate dilapidated classrooms, and provide furniture, equipment, instructional materials, etc, in various communities across the country.

The Commission has disbursed support funds amounting to ₦28,402,600,000.00 for this purpose and the breakdown of the deliverables is as follows:

Table 3.1.2: Self-Help Projects Measurable Impact and Effect (2005-2011)

S/N	ITEM	QUANTITY	DIRECT BENEFICIARIES
1	Construction of new classrooms	22,060	887,000 Pupils/Students
2	Renovation of classrooms	53,315	2,137,600 Pupils/Students
3	Provision of Pupils'/ Teachers' furniture	419,056	836,996 Pupils/Students
4	Construction of deep wells/boreholes	527	210,000 Pupils/Students
5	Provision of electricity/Computers	862 Schools/ Communities	406,000 Pupils/students
6	Construction of VIP toilets	13,194	6,426,000 Pupils/Students
7	Others including fences	832	

For the 2011 funds alone a total of 5,066 projects are now at various levels of execution and are expected to be completed by July, 2012.

It is pertinent to mention here that it is the policy of the Federal Government that all impediments to pupils'/students' participation in UBE are removed. One of such measures, being implemented, on pilot basis by the MDG Office, is the Conditional Cash Transfer Scheme. The Scheme targets indigent parents to ensure their children participate in basic education. States are also expected to put in place programmes to address educational imbalance. In the same vein, school communities, through the School-Based Management Committees (SBMCs) should be able to identify parents/wards of the poor in their midst for the purpose of special support. It is worthy to note that SBMCs are being established for all schools in the federation in order to engender community participation and ownership of their schools, thus enabling them to contribute to specific areas of STM and other needs in the schools.

3.1.3 Special Needs Education

The Special Education Grant, which is 2 % of FGN-UBE Intervention Fund, is a non-conditional grant to expand access and provide instructional materials for the education of children with special needs. Since June 2006, thirty percent (30 %) of the fund has been used to support Private Providers of Special Education; because of the humanitarian nature of the service they provide while 70 % is used to support the States and FCT. The 70 % of the fund is disbursed to States on equality basis while Private Providers, nominated by

the SUBEBs as well as those who apply directly to UBEC, compete for the remaining 30 %. Tied to this is the policy of inclusiveness in order to mainstream children with special needs into the regular schools while at the same time meeting their special educational needs. This has helped in the provisions for STM education for children with special needs.

The disbursements for the education of children with special needs from 2005 to 2011 were as follows:

Table 3.1.4: FGN/UBEC Special Education Funds Disbursement to 36 States and FCT, and Private Providers.

YEAR	SUBEBs (70 %)	PRIVATE PROVIDERS (30 %)
2005	396,149,898.00	78,000,000.00
2006	418,185,581.00	182,000,000.00
2007	494,199,999.00	211,500,000.00
2008	599,351,323.00	258,000,000.00
2009	401,527,943.00	235,000,000.00
2010	383,633,690.00	289,000,000.00
2011	122,153,820.00	387,000,000.00

NB: Some SUBEBs are lagging behind in the draw-down/implementation of the fund hence the 70 % allocated to them yearly are yet to be fully utilized.

This support has helped the benefitting public and private institutions to provide essential facilities for the education of children with special needs, which include buildings, Braille machines and accessories, hearing aids, wheel chairs, instructional materials, computers, furniture, etc. The fund has also helped States and Private Providers to facilitate the training and re-training of teachers to update their knowledge in providing STM education for children with special needs.

3.1.4 Grants for Good Performance

The Good Performance Award is used to reward deserving States which are adjudged to excel in the implementation of basic education using some objective criteria. The national and zonal Awards are in monetary terms but must be used for identified projects for which Action Plans must be submitted to UBEC before executing such projects. It is expected that the reward structure would be instituted at all levels and aspects of basic education to encourage hard work, commitment, quality service delivery and performance of both the institutions, schools, personnel and pupils/students. Since 2005, the sum of ₦7,777,724,221.00 has been disbursed to States as reward for good performance.

3.1.5 Provision of Instructional Materials

A minimum of 11 subjects, 12 subjects and 13 subjects are compulsory for lower primary, upper primary and junior secondary schools respectively. Each level includes a minimum of 4 to 5 STM subjects from mathematics, basic science, basic science and technology, basic technology, physical and health education, computer studies/ICT, agriculture, and home economics. The instructional materials fund, which is 15 % of the CRF for UBE, is used to support the States to provide instructional materials in the schools. These include curricular materials, textbooks in four core subjects, supplementary reading materials, equipment and various kits needed for teaching and learning. The goal is to achieve adequate instructional materials provision in the shortest possible time, particularly pupil:textbook ratios of 1:1 in the core subjects at the primary level. From 2009 to 2010, over

34,619,580 free copies of textbooks in the four core subjects were procured for pupils in primary schools while 6,474,120 assorted library resource materials were provided for the junior secondary schools. In 2011 alone, the following procurements were made:

2011 Primaries 1 and 2 Textbooks and JSS Library Resource Materials Supply	
SUBJECT	TEXTBOOK
English Language	2,800,000
Mathematics	2,800,000
Science**	8,260,000
Social Studies	2,800,000
JSS Library Resource Materials	4,144,000

** Including 2,500,000 "Think and Do Series" books.

States are to complement this federal government effort while the schools are to ensure that these materials are effectively utilized and protected. However, only few of the States have complemented this free textbooks supply by the Federal Government to attain a 1:1 pupil:textbook ratio in these subjects.

3.1.6 Teacher Professional Development

The training of teachers and education managers has been on a consistent basis. This is because of the realization that no education system can rise above the quality of the personnel, particularly the education managers and teachers. The Commission has ensured that only reputable Training Providers are engaged by the SUBEBs for this purpose.

One of the key areas the Commission has focused on is the **Strengthening of Mathematics and Science Education Project** (SMASE) In-service Teacher Education (INSET), which has introduced the **Activity, Student-Centred, Experiment and Improvisation-Plan, Do, See and Improve** (ASEI-PDSI) training for mathematics and science teachers, etc. The SMASE Project is aimed at exposing teachers to have a paradigm shift from teacher-centred to learner-centred teaching and learning activities in the classrooms. SMASE INSET is an initiative of the Federal Ministry of Education (FME) and Japan International Cooperation Agency (JICA). Training on these best practices has been adopted by the three pilot States under the Phase I of the Project namely Kaduna, Niger and Plateau States. The remaining 33 States and FCT have either keyed into or are in the process of keying into the Project which commenced in 2009. Training on these best practices is to be cascaded down from those already trained until all the relevant personnel are trained. Other areas of training include mathematics, ICT, English language and phonics, guidance and counseling, continuous assessment, social studies, record-keeping, curriculum implementation, etc. UBEC insists that only the demonstrated best practices of training should be adopted by the SUBEBs.

UBEC and other independent bodies consistently monitor these training activities in order to assure quality.

Impact assessment of the training activities on the trainees will be carried out by UBEC. The States are also expected to carry out impact assessment of the

training activities in order to determine the best and most cost-effective training modalities that suit them.

Since the UBEC Act of 2004 was enacted, many STM trainings have been conducted for teachers and education managers. For example, between 2009 and 2011, when capacity building was centralized for effective coordination and quality control, 511,675 teachers and education managers were trained with the sum of ₦16,036,886,543.33. For the 2012 training programme which was flagged-off on 9th of July, an estimated 150,000 teachers and education managers are expected to be trained with the sum of ₦5,550,000,000.00 (Five billion, Five Hundred and Fifty Million Naira only).

However, it should be noted that the enabling environment and follow-up activities for the translation of the knowledge and skills gained during the training must be provided for the trainees to make the required impact in the world of work.

3.1.7 National Continuous Assessment Programme and Continuous Assessment Framework

One of the mandates of the Commission is to ensure even and balanced quality basic education across the States in the country. One way of ensuring this is to assure standardized and uniform continuous assessment practices in our school system. To this end, the Commission has developed and made available to States, soft and hard copies of continuous assessment materials, including test items in five core subject areas under school-based Unified National Continuous Assessment Programme (UNCAP). Plans are on to develop instruments for the other subjects in the curriculum. Training

manuals were developed and 50 Master-Trainers were trained in five core subjects for each State. Training on the practice of continuous assessment has been done up to State level in all the States and school level in many of the States. States are allowed to utilize the Teacher Professional Development Component of the Intervention Fund to carry out this training from the State level and down to the school level. The States are to domesticate this exemplary practice by ensuring that they train all school personnel on continuous assessment and develop standardized test item banks for the purpose of quality continuous assessment in the school system. All continuous assessment on the national curriculum are based on the National Curriculum Assessment Framework (NERDC, 2007).

The implementation of the continuous assessment had some challenges which are being addressed. One of these is that the curriculum was designed with the hope that teachers with a minimum qualification of NCE are to implement it. There is at the moment an insufficient number of NCE teachers in all the subjects. Coupled with this, is the teacher capacity to implement CA fully, comparability of assessment procedures and standards, application of the affective domain in making decisions on class mobility and provision of resources for effective school-based-assessment.

In addition, the National Assessment of Learning Achievements in Basic Education (NALABE) has been put in place in order to monitor achievements in basic education, including the normative aspects of education.

3.1.8 National Assessment of Learning Achievements in Basic Education (NALABE)

The National Assessment of Learning Achievements in Basic Education (NALABE) is a triennial assessment of pupil'/students' performance in basic education. The result of the studies has been used to determine the state of basic education in relation to efficiency and quality of performance of primary and Junior Secondary Schooling in Nigeria. As at today, reports on three editions of the national assessment conducted in 2001, 2003 and 2006 respectively have been published. The 2003 assessment was carried out on primaries 4, 5 and 6 pupils while 2006 was for primary 6 and JS 1-3 students. That for 2011 was for primaries 4- 6 and JS 1.

The national averages of the NALABE for 2003 and 2006 are indicated in Tables 3.1.8.1 and 3.8.1.2 respectively:

Table 3.1.8.1 2003 NALABE Performance

S/N	Classes	Subject	2003 Average Performance
1	Pry 4	English	24.70
2	Pry 4	Mathematics	36.95
3	Pry 4	Primary Science	40.33
4	Pry 5	English	25.33
5	Pry 5	Mathematics	36.73
6	Pry 5	Primary Science	39.05
7	Pry 6	English	20.78
8	Pry 6	Mathematics	35.98
9	Pry 6	Primary Science	40.40

Table 3.1.8.2 2006 NALABE Performance

S/N	Classes	Subject	2006 Average Performance
1	Pry 6	English	48.80
2	Pry 6	Mathematics	42.87
3	Pry 6	Primary Science	40.78
4	JSS 1	English	40.45
5	JSS 2	English	40.45
6	JSS 3	English	42.26
	JSS 1	Integrated Science	22.38
7	JSS 2	Integrated Science	21.05
8	JSS 3	Integrated Science	27.83
9	JSS 1	Mathematics	37.68
10	JSS 2	Mathematics	32.42
11	JSS 3	Mathematics	33.61
12	JSS 1	Introductory Technology	45.08
13	JSS 2	Introductory Technology	50.00
14	JSS 3	Introductory Technology	23.40

The two tables show that the national performance for both pupils and students in all the subjects were below 50 percent, except in JS 2 Introductory Technology, with worst performance observed in JS 3. It should be noted, however, that the JSS was introduced into the UBE Programme much later than the primary component.

This poor performance is of major concern to Stakeholders who must continuously evolve ways to enhance the quality of STM education in order to improve pupils' and students' achievements.

3.1.9 Federal Teachers' Scheme (FTS)

The Federal Government of Nigeria introduced the Federal Teachers' Scheme (FTS) in 2006 to address problems associated with teacher shortage in the basic education sub-sector nationwide. This Scheme is funded from the Federal Government's Millennium Development Goals (MDGs) funds. So far,

105,000 participants have been enlisted for the Scheme. The break-down is as follows:

SET	YEAR	COMPONENT	NUMBER	REMARK
1 st	November 2006	Primary	40,000	Including STM
1 st	January 2008	JSS	5,000	STM only
2 nd	February 2009	Primary	34,000	Including STM
2 nd	October 2010	JSS	5,000	STM only
3 rd	October 2011	Primary	21,000	Including STM
Total			105,000	

The FTS gives priority to recruitment of specialists in English language, mathematics, science and technological subjects for the JSS component.

3.1.10 Almajiri Education Programme

In view of the importance of developing a comprehensive system of education that will cater for all Nigerian children of school age, the integration of Qur'anic schools into the UBE programme became imperative. This is in view of the fact that the UBE Act 2004 mandates UBEC to provide facilities for basic education, for a duration of 9 years, to all classes of children irrespective of their social, religious and physical circumstances. More importantly, the Act makes special mention of the Almajiri as a critical class of school-age children to be provided basic education towards the attainment of EFA and MDG goals.

A recent study conducted by the Ministerial Committee on Madrasah Education revealed that the population of Almajirai is about 10 million. Therefore, it becomes obvious for the Commission to come up with intervention strategies that will cater for this special group of children.

3.1.10.1 Intervention Strategies

The National Implementation Committee on Almajiri Education Programme has identified and adopted three Models of intervention.

Model I: Integration of Traditional Tsangaya/Qur'anic School within its original location. This entails the following;

- (i) Construction of a block of 2 classrooms with office and store with furniture
- (ii) Construction of a block of 50-pupil dormitory with furniture.
- (iii) Provision of a borehole with hand-pump.
- (iv) Provision of VIP toilets.

Model II: Model Almajiri Schools. This involves the establishment of a Model Almajiri School to serve a group of Tsangaya/Qur'anic Schools with the following facilities:

- (i) Two blocks of 6 classrooms with office and store, including furniture.
- (ii) A Recitation Hall and office with furniture.
- (iii) Mallam's Residence.
- (iv) Borehole with hand-pump.
- (v) VIP toilets

Model III: Integration of basic education into established Islamiyyah and Ma'ahad Schools. This will involve the provision of infrastructure and other facilities based on the needs of specific schools.

The Commission is currently undertaking the construction of 66 Almajiri in Models I and II schools in 22 States, namely Adamawa, Bauchi, Borno, Edo,

Ekiti, Gombe, Jigawa, Kaduna, Kano, Katsina, Kebbi, Lagos, Niger, Ogun, Ondo, Osun, Oyo, Rivers, Sokoto, Taraba, Yobe and Zamfara.

Contracts for another 23 school projects consisting of 20 Model I and 3 Model II schools had been awarded from both MDGs and UBEC fund for 2012. The benefitting States are Bauchi, Benue, Gombe, Kaduna, Kano, Kebbi, Kogi, Kwara, Nasarawa, Niger, Osun, Oyo, Plateau, Taraba, Zamfara and FCT. Also, 18 Islamiyya/Quoranic Schools located in 10 States had been provided with grants to improve their infrastructural facilities in order to provide more access to almajirai.

3.1.11 New Basic Education Curriculum

The Commission in collaboration with the NERDC produced and distributed one set of the new basic education curriculum to every public Primary and Junior Secondary School in Nigeria. The teachers and education managers were also trained on how to use these curriculum modules. This was a major step in assuring uniform and quality basic education delivery in the country as it emphasizes literacy, numeracy, life skills and effective citizenship education. This has helped in ensuring the standardization of STM curriculum implementation in our schools.

In order to ensure adequate exposure of teachers to the requirements of basic education while in pre-service training, the curriculum of the Colleges of Education has been re-structured to cater for the needs of STM teachers at all the basic education levels. Thus, the new NCE graduates are more prepared to teach STM at the basic education levels than the earlier ones produced.

3.1.12 Advocacy, Sensitization and Mobilization

In addition to other activities of the Commission, a strong premium is placed on advocacy and sensitization which is aimed at bringing about a sustained and gradual awareness of the events that are crucial to the effective delivery of the UBE process. Such advocacies have helped the States to focus more attention on areas of need including STM education.

3.1.13 National Personnel Audit

In pursuance of the mandate enshrined in Part 2, Schedule 9 (f) of the UBE Act of 2004, the Commission conducted National Personnel Audit exercises in 2006 and 2010 for teaching and non-teaching staff in all public basic education institutions in Nigeria. The report of the 2010 audit revealed that there are a total of 59,007 public primary schools with an enrolment figure of 20,291,709 and 11,295 JSS with an enrolment of 4,313,164. While gender disparity between the male and female is still wide in favour of the male in Northern States, it is near parity in the Southern States. The incidence of un-qualified teachers is still prevalent in the North where those below minimum teaching qualification constitute about 40%. On the other hand, the percentage of qualified teachers in the Southern States is about 85%.

The Audit has also helped to identify capacity gaps in STM, ICT and other subjects.

3.1.14 International Development Partners' (IDPs) Support

The Commission has received support from Japan International Cooperation Agency (JICA), Korea International Cooperation Agency (KOICA) and the Peoples' Republic of China in the area of construction of classrooms,

administrative blocks, toilets, boreholes, pupils' and teachers' furniture and school fencing.

The table below shows the contributions made by each Development Partner.

S/N	DESCRIPTION	JICA	KOICA	CHINA	TOTAL
1	Classrooms	807	97	16	929
2	Teacher furniture	287	-	-	287
3	Pupils' furniture	11,557	1,940	1,200	1,697
4	Toilets	538	16	24	578
5	Boreholes	19	-	4	23
6	Chalk board	807	97	16	920
7	Admin block	-	4	4	8
8	Car Park	-	-	4	4
9	School Fencing	-	-	4	4
10	Notice Board	807	30	-	837

Other projects are on going. This is in addition to capacity building supports provided in the areas of planning (ESSPIN, in particular), teacher capacity building and system reviews and restructuring for more effective basic education delivery.

4.0 CHALLENGES OF STM EDUCATION IN UBE IMPLEMENTATION

4.1 Shortage of Qualified Personnel

One of the key roles expected from STM education is the laying of the foundation for vocational, technical and technological development. The availability of well-trained and motivated teaching staff remains a single most difficult obstacle in STM education irrespective of other resources put into it. The low interest in STM education by potential trainees and the high turnover of qualified STM trainers through migration to other vocations and countries

has contributed in no small way to the observed shortages of qualified teachers.

Aspirations of many countries, Nigeria inclusive, to enhance their STM education for eventual economic prosperity are hampered by a severe shortage of skilled and trained staff in this area. This challenge is not only faced by the developing nations; the developed nations have long recruited teachers, ICT experts and other professionals from the developing nations adding to the 'brain drain' syndrome. It is to be noted that this challenge can only be understood by knowing that there is no quick solution to staff shortages and that it requires a medium to long-term strategy, which needs to be systematic and sustainable. This should go far beyond simply training or retraining of staff by employing wider strategies, different routes into teaching, remuneration and career structures, etc.

The 2010 National Personnel Audit shows the high percentage of unqualified teachers in the basic education sub-system. The national average for qualified teachers was 68 %, 60 % and 86 % for ECD, primary and JSS respectively with one geopolitical zone having 1 qualified teacher to 132 pupils at ECD level. The non-absorption of FTS teachers in some States of the Federation has compounded the situation.

4.2 The Role of ICT in the Education Sector

Information and Communication Technology (ICT), *especially the internet* in the education sector plays an important role, particularly in the process of infusing technology into educational activities. The education sector is the most effective sector to harness the advantages and eliminate the negative

impact of ICT in the minds of teachers in basic education schools in the country. In another way, ICT is one of the most effective ways to increase teacher productivity in content delivery, testing, record-keeping, administration, etc. Learners' participation, skills acquisition, understanding and self development (e.g. teach-yourself programmes) are all enhanced by available information on the World Wide Web which can only be accessed and utilized with adequate knowledge of ICT by both teachers and learners alike. However, the 2010 National Personnel Audit revealed that only 30, 18 and 10 % respectively of SUBEB staff, LGEA Staff and teachers have even rudimentary knowledge and skills in ICT. Summary of the results obtained revealed that the national average for computer literacy of teachers in ECD/Primary and JSS were 9.9 and 17 percents respectively. This represents a very high level of inadequacy of teachers in our schools having the required ICT knowledge in basic education.

This is more worrisome as the ICT competencies required for teachers' instructional function goes beyond the general knowledge. The problem is exacerbated by the low level of acquisition of the technology (Laptop computers, etc) by teachers and the poor ICT infrastructure in place in most school locations, especially in rural areas.

Being aware of the significant role of ICT (internet) in our lives, especially in the learning activities, education administrators should ensure that various strategies are employed in order to empower teachers and learners to use ICT (Internet) in the teaching and learning processes in the classrooms, etc. This will engender effective and meaningful teaching and learning in schools.

The main purpose of the Strategy for Information and Communication Technology Implementation in Education is to provide the prospects and trends of integrating information and communication technology (ICT) into the general educational activities.

There are many reasons why teachers need to be knowledgeable in ICT in modern education. Among other reasons are the following:

- ICT has been developing very rapidly nowadays. Therefore, in order to balance it, the entire educational system should be reformed with ICT integrated into teaching and learning activities.
- Influence of ICT (internet) cannot be ignored in pupils'/students' lives. As a result, the learning activities should be reoriented and reformulated, from the manual source-centered to open source-centred, so that the wide use of internet access is anticipated by school authorities.
- Implementation of ICT in education has not been a priority trend of educational reforms and education stakeholders pay little attention to it. Therefore, there should be an active participation, initiative and goodwill of the schools and the government institutions to enhance ICT implementation at the school level.
- Teachers should be the main motivators and initiators of ICT implementation in schools. Thus teachers should be aware of the social and technological changes in their teaching activities. They should be the agents of change from the traditional method to modern one. They must also be part of the global change in various

learning and teaching methods. They should see this as a responsibility they have to shoulder largely by themselves alone because nobody can do it for them without their commitment and intrinsic motivation.

Consequently, emphasis has to be placed on ICT for teachers undergoing training for NCE and on-the-job training. This will require additional funding support to basic education institutions, especially at the State level.

4.3 Funding

The current funding of the programme is grossly inadequate and cannot meet up with the demands of ICT-driven STM programmes so that they can aspire to international best practices. This is caused by the general collapse in the maintenance of infrastructure in all schools throughout the country, as a result of the long-term neglect of provisions of infrastructure, inadequate maintenance and inadequate capacity development. Though significant funds has been expended by UBEC to restore many of the dilapidated structures in schools and in the area of capacity development, more funds are still required, especially from many of the States, if meaningful and sustained change, required for national development, is to be achieved generally.

The present low level of budgetary allocation to basic education by most States and Local Governments for the provision of infrastructure, instructional materials, capacity building, etc, is definitely inadequate to meet target commitments such as the Education for All and Millennium Development Goals.

The exit of the Education Trust Fund (ETF), now Tertiary Education Trust Fund (TET Fund), from basic education funding has depleted the total resources available to the basic education sub-sector by at least N22.0 bn annually. This funding gap needs to be plugged in order to maintain the level of funding before the exit of TET Fund.

4.4 Low Political Will and Low Level of Commitment to Basic Education in the Society

There have been improvements in the commitment by most of the States, Local Governments and Communities to the implementation of the UBE Programme. However, more commitment is required at the lower level of governance, i.e. Local Governments and communities. A situation where most communities still see the schools in their domains as belonging to “Government” will not release the community goodwill to see to the effective management of the schools. Hence, the Commission is pursuing the institutionalization of the School-Based Management Committees (SBMCs) vigorously. Coupled with these are the low level of commitment of some parents, NGOs and the Private sector to issues relating to basic education

4.5 Out-of-School Children

There is still a large number of out-of-school children and youths, including the almajirai and children with special needs estimated at about 10 million. While the Federal Government is targeting their mop-up through various strategies such as the Almaajiri Programme, many other innovative programmes have to be put in place to address the peculiarities and circumstances hindering their access to basic education. It is pertinent to mention here that it is the

policy of the Federal Government that all impediments to pupils'/students' participation in UBE are removed. One of such measures being implemented, on a pilot basis by the MDG Office, is the Conditional Cash Transfer Scheme. The Scheme ensures that targeted indigent parents are supported to ensure their children's participation in basic education. States are also expected to put in place programmes to address educational imbalance. In the same vein, school communities, through the SBMCs should be able to identify parents/wards of the poor in their midst for the purpose of special support.

4.6 Low Level of Quality Assurance at the School Levels

The inability of the Inspectorate Division of State Ministries of Education in ensuring quality of teaching and learning in Schools is a major challenge. For effective quality assurance, certain things are imperative. These include a major paradigm shift from the earlier external-based evaluation involving inspection, monitoring and evaluation and supervision to quality assurance with emphasis on whole school evaluation including School Self-evaluation; the establishment of functional Quality Assurance Departments and Agencies with staff trained in the practice of quality assurance. In addition, a functional quality assurance practice requires adequate funding and necessary equipment, such as vehicles. Also, the enabling legal backing to give teeth to the proposed revolutionary quality assurance agencies is still very much being awaited.

4.7 Accountability, Transparency and Integrity in Action

The UBE Programme has prompted other initiatives from the Federal Ministry of Education such as Community Accountability and Transparency Initiative (CATI); and from other parastatals like NDLEA, NAFDAC, Federal Road Safety Commission, as well as States, Local Governments, Corporate Bodies, NGOs, CBOs, FBOs, International Donors, etc. CATI documents on projects executed by States in collaboration with UBEC have been published in order for the public to verify and ascertain their quality. This has helped to provide valuable feedback on projects, transparency and accountability. All these are geared towards assuring quality provisions/standard practices that will lead to attainment of Vision 20-2020, the Transformation Agenda and the MDGs for education. This is in conformity with the mission and vision statements as well as the core values of UBEC. It is worthy of note that the Civil Society/Stakeholders' Roundtable on Education organized by Independent Services Delivery Monitoring Group (ISDMG), in Abuja in March 2012 commended UBEC for applying due process in project execution which has eliminated the “**abandoned project syndrome**” and recommended other Ministries, Departments and Agencies to emulate the contract award mechanism of UBEC. This is encouraging to us in the implementation of the UBE Programme.

5.0 CONCLUSION

The business of STM education is the responsibility of all. Let us join hands together to forge viable partnerships that will ensure an enabling environment for the practice of STM education to thrive as UBEC motto states

“Education for all is the Responsibility of All”.

Thank you for listening.

Appendix I

National Continuous Assessment Framework for Basic Education Curriculum

Issue/Component	Focus/Assessment
Cognitive domain	Subject matter (concepts, principles, generalizations, skills)
Psychomotor domain	Participation, resourcefulness, initiative, creativity, skill (as specified in the curriculum)
Affective domain	Character, behavioural traits, values, ethics
Frequency	3 within term assessment; 3 end-of-term assessments
Instruments	Class assignments, within term/end-of-term projects, TMT, rating scales, checklist, observations, anecdotes
Norms	National, state, LG, school-based
Class promotion	Based on 3 term weighted score for cognitive and psychomotor domain. Acceptable affective disposition. Weighting: 60 % school-based within the term, 40 % end of term. 40 % minimum score in the core subjects/electives.
Transition from primary 6 to JSS 1	Based on each year's score from primary 4 weighted as follows: 10 % (primary 4); 20 % (primary 5); 30 % (primary 6); 40 % (within term school-based-assessment)
Decision makers	Classroom teachers (promote pupils based on class records). Head teachers (Issue testimonials at end of each year/term as applicable). MOE/Private operators (place pupils in JSS 1 based on the successful completion of primary 6). Examination Bodies (Conduct and award BECE). Inspectorate (quality assurance of instrument, assessment procedures and standards)

APPENDIX-III

DISBURSEMENTS OF MATCHING GRANT TO STATES FROM 2005 - 2011 AS AT 11TH APRIL, 2012.

s/no	STATE	2005-2006	2007	2008	2009	2010	2011	2012	TOTAL
1	ABIA	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	468,878,378.38	-	3,501,175,673.00	
2	ADAMAWA	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	872,527,306.70	4,527,606,566.96	
3	AKWA IBOM	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	-	3,655,079,260.26	
4	ANAMBRA	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	654,395,480.02	4,309,474,740.28	
5	BAUCHI	1,036,378,377.00	631,999,999.00	832,432,432.00	531,121,621.62	622,781,965.64	872,527,306.00	4,527,241,701.26	
6	BAYELSA	1,036,378,377.00	632,364,864.00	667,635,136.00	0.00	0.00	-	2,336,378,377.00	
7	BENUE	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	317,481,548.74	3,972,560,809.00	
8	BORNO	1,014,475,387.70	632,364,275.00	832,432,432.00	531,121,621.62	622,781,965.64	436,263,653.35	4,069,439,335.31	
9	C/ RIVER	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	0.00	-	3,032,297,294.62	
10	DELTA	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	859,988,340.73	4,515,067,600.99	
11	EBONYI	1,036,378,377.00	632,364,864.00	832,432,432.00	0.00	0.00	-	2,501,175,673.00	
12	EDO	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	436,203,656.07	4,091,282,916.33	
13	EKITI	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	-	3,655,079,260.26	
14	ENUGU	1,036,378,376.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	646,096,412.74	4,301,175,672.00	
15	GOMBE	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	436,263,653.35	4,091,342,913.61	
16	IMO	1,036,378,377.00	632,364,864.00	832,432,432.00	236,321,621.66	0.00	-	2,737,497,294.66	
17	JIGAWA	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	436,263,653.35	4,091,342,913.61	
18	KADUNA	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	436,263,653.35	4,091,342,913.61	
19	KANO	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	872,527,306.70	4,527,606,566.96	
20	KATSINA	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	872,527,306.70	4,527,606,566.96	
21	KEBBI	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	436,263,653.35	4,091,342,913.61	
22	KOGI	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	-	3,655,079,260.26	
23	KWARA	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	436,263,653.35	4,091,342,913.61	
24	LAGOS	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	299,604,046.64	-	3,331,901,341.26	
25	NASARAWA	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	0.00	-	3,032,297,294.62	
26	NIGER	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	-	3,655,079,260.26	
27	OGUN	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	0.00	-	3,032,297,294.62	
28	ONDO	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	436,263,653.35	4,091,342,913.61	
29	OSUN	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	-	3,655,079,260.26	
30	OYO	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	-	3,655,079,260.26	
31	PLATEAU	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	299,604,064.20	-	3,331,901,358.82	
32	RIVERS	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	872,527,306.70	4,527,606,566.96	
33	SOKOTO	1,036,378,377.00	352,000,000.00	832,432,432.00	531,121,621.62	622,781,965.64	-	3,374,714,396.26	
34	TARABA	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	872,527,306.70	4,527,606,566.96	
35	YOBE	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	436,263,653.35	4,091,342,913.61	
36	ZAMFARA	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.62	622,781,965.64	872,527,306.70	4,527,606,566.96	
37	F.C.T. ABUJA	1,036,378,377.00	632,364,864.00	832,432,432.00	531,121,621.00	622,781,965.64	-	3,655,079,259.64	
	CURRICULUM	0.00	1,312,500,000.00	-	-	-	-	1,312,500,000.00	
	TOTAL	38,324,096,958.70	24,429,269,650.00	30,635,202,688.00	18,294,456,756.12	18,505,981,527.14	12,511,965,811.30	142,700,973,391.26	

APPENDIX-IV

UN-ACCESSED MATCHING GRANT FROM 2005 - 2011 AS AT 11TH APRIL, 2012.

S/N	STATE	2005-2006	2007	2008	2009	2010	2011	2012	TOTAL
1	ABIA	1.38	0.90	0.44	0.00	153,903,587.26	872,527,306.70	218,131,826.67	1,244,562,723.35
2	ADAMAWA	1.38	0.90	0.44	0.00	0.00	0.00	218,131,826.67	218,131,829.39
3	AKWA IBOM	1.38	0.90	0.44	0.00	0.00	872,527,306.70	218,131,826.67	1,090,659,136.09
4	ANAMBRA	1.38	0.90	0.44	0.00	0.00	218,131,826.68	218,131,826.67	436,263,656.07
5	BAUCHI	1.38	364,865.90	0.44	0.00	0.00	0.70	218,131,826.67	218,496,695.09
6	BAYELSA	1.38	0.90	164,797,296.44	531,121,621.62	622,781,965.64	872,527,306.70	218,131,826.67	2,409,360,019.35
7	BENUE	1.38	0.90	0.44	0.00	0.00	555,045,757.96	218,131,826.67	773,177,587.35
8	BORNO	21,902,990.68	589.90	0.44	0.00	0.00	436,263,653.35	218,131,826.67	676,299,061.04
9	C/ RIVER	1.38	0.90	0.44	0.00	622,781,965.64	872,527,306.70	218,131,826.67	1,713,441,101.73
10	DELTA	1.38	0.90	0.44	0.00	0.00	12,538,965.97	218,131,826.67	230,670,795.36
11	EBONYI	1.38	0.90	0.44	531,121,621.62	622,781,965.64	872,527,306.70	218,131,826.67	2,244,562,723.35
12	EDO	1.38	0.90	0.44	0.00	0.00	436,323,650.63	218,131,826.67	654,455,480.02
13	EKITI	1.38	0.90	0.44	0.00	0.00	872,527,306.70	218,131,826.67	1,090,659,136.09
14	ENUGU	2.38	0.90	0.44	0.00	0.00	226,430,893.96	218,131,826.67	444,562,724.35
15	GOMBE	1.38	0.90	0.44	0.00	0.00	436,263,653.35	218,131,826.67	654,395,482.74
16	IMO	1.38	0.90	0.44	294,799,999.96	622,781,965.64	872,527,306.70	218,131,826.67	2,008,241,101.69
17	JIGAWA	1.38	0.90	0.44	0.00	0.00	436,263,653.35	218,131,826.67	654,395,482.74
18	KADUNA	1.38	0.90	0.44	0.00	0.00	436,263,653.35	218,131,826.67	654,395,482.74
19	KANO	1.38	0.90	0.44	0.00	0.00	0.00	218,131,826.67	218,131,829.39
20	KATSINA	1.38	0.90	0.44	0.00	0.00	0.00	218,131,826.67	218,131,829.39
21	KEBBI	1.38	0.90	0.44	0.00	0.00	436,263,653.35	218,131,826.67	654,395,482.74
22	KOGI	1.38	0.90	0.44	0.00	0.00	872,527,306.70	218,131,826.67	1,090,659,136.09
23	KWARA	1.38	0.90	0.44	0.00	0.00	436,263,653.35	218,131,826.67	654,395,482.74
24	LAGOS	1.38	0.90	0.44	0.00	323,177,919.00	872,527,306.70	218,131,826.67	1,413,837,055.09
25	NASARAWA	1.38	0.90	0.44	0.00	622,781,965.64	872,527,306.70	218,131,826.67	1,713,441,101.73
26	NIGER	1.38	0.90	0.44	0.00	0.00	872,527,306.70	218,131,826.67	1,090,659,136.09
27	OGUN	1.38	0.90	0.44	0.00	622,781,965.64	872,527,306.70	218,131,826.67	1,713,441,101.73
28	ONDO	1.38	0.90	0.44	0.00	0.00	436,263,653.35	218,131,826.67	654,395,482.74
29	OSUN	1.38	0.90	0.44	0.00	0.00	872,527,306.70	218,131,826.67	1,090,659,136.09
30	OYO	1.38	0.90	0.44	0.00	0.00	872,527,306.70	218,131,826.67	1,090,659,136.09
31	PLATEAU	1.38	0.90	0.44	0.00	323,177,901.44	872,527,306.70	218,131,826.67	1,413,837,037.53
32	RIVERS	1.38	0.90	0.44	0.00	0.00	0.00	218,131,826.67	218,131,829.39
33	SOKOTO	1.38	280,364,864.90	0.44	0.00	0.00	872,527,306.70	218,131,826.67	1,371,024,000.09
34	TARABA	1.38	0.90	0.44	0.00	0.00	0.00	218,131,826.67	218,131,829.39
35	YOBE	1.38	0.90	0.44	0.00	0.00	436,263,653.35	218,131,826.67	654,395,482.74
36	ZAMFARA	1.38	0.50	0.44	0.00	0.00	0.00	218,131,826.67	218,131,828.99
37	F.C.T. ABUJA	1.37	0.00	0.16	0.68	0.00	872,527,306.70	218,131,826.67	1,090,659,135.58
	CURRICULUM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
	GRAND TOTAL	21,903,041.35	280,730,350.00	164,797,312.00	1,357,043,243.88	4,536,951,201.54	19,771,544,536.60	8,070,877,586.79	34,203,847,272.16

REFERENCES

1. Federal Republic of Nigeria (1999). Constitution of the Federal Republic of Nigeria.
2. Federal Government of Nigeria (2007). National Minimum Standards for Early Childhood Care Centers in Nigeria.
3. Federal Government of Nigeria (2007). National Policy for Integrated Early Childhood Development in Nigeria.
4. Federal Ministry of Education (2008) National Quality Assurance Model for Education Below the Tertiary Level.
5. Federal Republic of Nigeria (2004). National Policy on Education (Revised 2004).
6. Federal Ministry of Education (2007). National Policy on Gender in Basic Education.
7. Federal Republic of Nigeria – International Labour Organization (ILO) (2005). Action Programme for Education 2004 – 2005, Teachers for the Future: meeting teacher shortages to achieve Education for All.
8. Federal Republic of Nigeria – National Planning Commission (2004). National Economic Empowerment and Development Strategy (NEEDS).
9. Isyaku, Kabiru (2006) Teacher Training Initiative for Sub-Saharan Africa (TISSA): - Priority Action for Nigeria.
10. Jerusha Philip Danjuma *Fostering Girl-child Participation in Science, Technology and Mathematics Education for Sustainable Development in Nigeria*. Nigerian Journal of Science, Technology and Environmental Education (NIJOSTEE), Vol. 3, No. 1, July 2010
11. Kalu, Iroha and C.O. Ekwueme (2010) Assessment of Teachers Level of Literacy and Attitude Towards Information and Communication Technology Application in Science, Technology and Mathematics Education. http://www.ascilite.org.au/ajet/e-ijst/docs/Vol7_No1/MeltingPot/teach_lev_lit.htm
12. Medinat Folorunso Salman, Florence Ademola Olawoye and Lasiele Alabi Yahaya (2011) Education reforms in nigeria: implications for the girl-child participation in sciences, technology and mathematics (STM). Education Research Journal Vol 1(1) pp. 1 – 8 June 2011
13. NIGERIA Educational Research and Development Council (NERDC) (2007). The 9-Year Basic Education Curriculum at a Glance, Lagos: NERDC Press.
14. Northern Education Research Project, Arewa House, Kaduna (2005). Report of Survey on Tsangaya (Qu'aranic) Schools in some Northern States.
15. Obioma, Godswill and Grace A. Ajagun (2006). Establishing New Assessment Standards in the Context of Curriculum Change: - Paper Presented at the 32nd Annual Conference of International Association of Educational Assessment (IAEA) held at Copthorne Hotel, Singapore on May 21 – 26, 2006.

16. Obomanu, B. J. and M. O. Adaramola (2011) Factors Related to Under Achievement in Science, Technology and Mathematics Education (STME) in Secondary Schools in Rivers State, Nigeria. World Journal of Education, Vol 1 No. 1, April 2011.
17. Oyelekan, Oloyode Solomon. (2008) An Overview of Information and Communication Technology (ICT) in Nigerian Education System. The African Symposium, Vol 8 No. 2, December 2008.
18. Suleiman Sa'adu Matazu (2010) The Relevance of Science, Technology and Mathematics Education (STME) in Developing Skills for Self Reliance: the Nigerian Experience. African Journal of Teacher Education, Volume 1 No. 1 * Pages 222-229 * October 2010.
19. Teachers' Registration Council of Nigeria (2004). Teachers Code of Conduct.
20. UNESCO (2000) World **Education Forum** Dakar, Senegal, 26-28 April 2000.
21. Universal Basic Education Commission (2010) Activities of the Ministerial Committee on Madrasah Education in Nigeria.
22. Universal Basic Education Commission (UBEC) (2006). Approved Guidelines for Disbursement of Fund for the Education of the Physically and Mentally Challenged Children.
23. Universal Basic Education Commission (UBEC) (2006). Federal Government Approved Guidelines for Accessing and Utilization of the FGN-UBE Intervention Fund.
24. Universal Basic Education Commission (2009). Guidelines for Quality Assurance in Basic Education in Nigeria.
25. Universal Basic Education Commission (2003). Handbook for Paraconsellers.
26. Universal Basic Education Commission (2008). Handbook on Guidance and Counseling for Universal Basic Education.
27. Universal Basic Education Commission (2008). Implementation Manual for Unified Continuous Assessment Programme in Nigeria.
28. Universal Basic Education Commission (2002). Self-Help Project Implementation Manual (Phase 2)..
29. Universal Basic Education Commission (UBEC) (2004). The Compulsory, Free, Universal Basic Education Act, 2004 and Other Related Matters.