

10TH INAUGURAL LECTURE SERIES

**NIGERIA'S LEGACY IN EDUCATION, NIGERIA'S EDUCATION
SYSTEM AND SUSTAINABLE NATIONAL DEVELOPMENT:
THOUGHT FOR FOOD**

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Introduction

What is legacy?

There are many definitions of legacy but in this context, we are talking about the noun definition as something left by or handed down from a predecessor or an ancestor, or from the past to the present. It could denote something immaterial such as a tradition or custom or practice that is passed from one generation to another. Legacy in this context is also synonymous with heritage, product, by-product, outcome, and result. As we explore, dissect, discover, recover, analyse, and synthesise this topic together, the meanings of these synonyms of legacy as used here will be useful in understanding this topic, Nigeria's Legacy in Education, Nigeria's Education System and Sustainable National Development: **Thought for Food.**

Heritage, denotes a tradition, or a practice, or a set of values that is handed down from the past or from preceding generations by whatever means. Practice here refers to the knowledge and application of how something is usually done in a given circumstance; **Product**, something or substance produced during a natural or induced process. It could be a thing or person that is the result of a process or action; **By-product**, an incidental or secondary product probably unintended but inevitably a secondary result of a process or action; **Outcome**, the way something or somebody finally turns out to be as a result of some previous event, phenomena, action or process; **Result**, something that is produced or caused by something else.

What is Education?

People have defined and described Education in various related ways, categorizing it into formal, informal and non-formal situations. I would say that from all those definitions and descriptions, Education is simply the continuous process of discovering who you are and becoming who you ought to be through effective and efficient access to relevant and essential information, knowledge, and skills.

The essence is that education, in whatever category and whether classical or vocational purports the central notion of preparing man to face and overcome the challenges of life. It prepares human beings for a worthwhile living. This is to say that education is both for life and for living, and therefore not absolutely an end in itself but also largely a means to other ends for attaining life's ultimate objectives. The implication is that education covers a wide area both in form and content. The form varies from the general formal and informal types of schooling to the most specific kinds of non-formal education, and from the simplest levels of education in literacy and numeracy to the most advanced graduate academic

disciplines. The content can range from basic knowledge acquisition to advanced philosophies, theories and research, and from training in basic living skills to highly sophisticated and technological production skills (Duze, 2002, 1988; Ibeh, 1987). If what makes a man to live and function is the concern of education, then education should be of functional value to man, the extent of which would depend on the time, the place and the prevailing circumstances which in effect ensures man's happiness and contentment. The crux of functional education is that every experience to which the learner is exposed to must be justified on grounds of utility and significance. This is to say that not all education is functional and if that education is not functional, then, let it find its place in the trashcan! Yes, **thought for food!** Yes, education should be acquired for their use rather than for their own sake, as a means rather than an end (Ezeocha, 1988; Udofot, 2002).

What is Sustainable National Development?

Sustainable national development could be described as a synergy of coordinated, participatory and iterative processes of thoughts and actions geared towards the achievement of economic growth and sustained development of a nation.

What is Nigeria's Legacy in Education?

History has it that the British, Nigeria's colonial masters, left us with the English education system. This is not an off-shoot of our culture (Fafunwa, 1967, Duze, 1999, 2012). They left us a legacy in the tune of formal education oriented to reading and writing, grammar schools, foreign language, examinations oriented to certification, literary assessments, etc (Duze, 1999; Fafunwa, 1967, 1984, Thompson, 1981; Udofot, 2002). The British themselves did not plan their own education system in the past in the sense that they had what could be called a *laissez-faire* situation. Then, you cannot find a national curriculum of Britain. Each school handled its own affairs and grades. They only passed legislation from time to time to change from modern schools to grammar schools to comprehensive schools to name it that suited their time and age. These also happened in Nigeria during the colonial years and well into the early years of her independence on 1st October 1960 (Fafunwa, 1967, 1984; Iziren, 1987).

Today, it seems that as a result of our legacy and the inherent poverty of means, Nigeria is not able to carry out the planning and administration of her education system effectively and efficiently to the teeming masses of Nigeria. It seems that to a large extent, the *laissez-faire* in implementing educational policies and programmes in Nigeria has become part of our legacy from the old British education system in our current education system. It appears that the Nigerian government plans for low retention in schools since there is an assumption

that it would be difficult to cater for everybody if there were such plans for effectiveness and efficiency in schools. Besides, the meager funds, far below the 26% UNESCO benchmark, budgeted for the Education Sector in Nigeria over the years (Fafunwa,1984; aghenta,1987; Coombs, 1968; Coombs and Hallak, 1972) seem to still find way into private pockets (Duze, 2010, 2011; Duze and Young 2011; Duze and Okosun, 2011; Duze, 2012).

Furthermore, from obvious and observable indications, backed by empirical findings, Nigeria's investments in education could be said to be going from stagnation to negative, a situation that could be termed investment in frustration (Duze, 2005; Iziren, 1987; Fafunwa, 1984; Thompson, 1981). Planning and administration in education is aimed at increasing the retention rate but it appears retention is obviously not in the interest of our government. This is evidenced in the incessant strike actions over the years by several labour unions in the Education Sector at all levels of education while the government as well as her Education Bodies and Agencies keep deaf ears. They put all kinds of obstacles to see that there is attrition. There are so many obstacles in the education system to drastically reduce the number that should move into the next stage (Duze, 1997; Oyeyinka & Adeniyi, 2005; Thompson, 1981; Umanah, 2002). This is grievous wastage and represents an investment in frustration. This is worrisome to me as an educational manager because in all their lofty education philosophy, goals, objectives, curriculum plans, policies and programmes, the word "efficient" is sadly missing!

The imposition of fees, for example, on the primary school level of education is seen globally as the greatest sap on the economic progress of a nation. Fees, sometimes exorbitant and outrageous, are charged at all levels of education in Nigeria in both public and private schools. Yet, it is written in Nigeria's curriculum statements that education is free at the lower levels, and yet still, you don't have education in Nigeria unless you have the pre-primary, primary, secondary, post-secondary, and university certificates lined up! (Fafunwa, 1967, 1984)

Again, the government places much emphasis on certificates in Nigeria yet, puts plenty hurdles in the path to acquiring the certificates, and hopes that if there are not many certificates, then not much headache for the government in trying to provide employment for the certified ones. Today in Nigeria, millions of certified school leavers at all levels of education are roaming the streets looking for unavailable collar jobs, while at the same time, most of school output is unemployable at both the public and private sectors of the economy, with attendant vices and crimes mounting up due to idleness. (Duze, 1999; 2005, Fafunwa, 1967, 1984; Udofot, 2005).

Compare this situation with the educational output of the United Kingdom (UK) today and decide what or who is to blame. Compare the attainments at sustainable national development for both countries and decide what or who the culprit is: the education system, the colonial masters or Nigerians themselves? **This is thought for food!** Nevertheless, we are not hunting for culprits but rather attempting to explore the entirety of the education system in Nigeria with a view to finding better ways to cause it to contribute effectively and efficiently to Nigeria's sustainable national development.

Efficiency in Education

In the face of overwhelming odds that plague the Nigerian school system today, it becomes necessary here to highlight the production line in education. A lot of Nigerian people believe that formal education is there just for social consumption, and not concerned about the cost-benefit aspects that should indeed produce "profit" in education. This is perhaps one of the reasons why wastage abounds in education, enhanced by explosions in school population at all levels, grossly inadequate human and physical resources, students; unwillingness to study effectively, as well as greed fostered by the "get-rich-quick" syndrome that is now eating up Nigerian adults and youths (Aghenta, 1993).

Today, Efficiency is now being matched with effectiveness in education. The education system is now being managed like the industrial businesses where efficiency must be deliberately sought in the production line. So the educational administrator besides organizing men and materials to achieve set goals with the resources made available to him, must also pursue efficiency in a forceful fashion to ensure wastages are eliminated to control the deteriorating educational system. Thus, a sound knowledge and application of the Production Theory in education becomes imperative for all concerned.

The Production Theory in Education

The Production Theory portrays a technical relationship between the inputs and outputs of a production line. Blaug (1970) stated that a production function defines a boundary in the input-output space, specifying the maximum physical output that can be obtained from every possible combination of physical inputs, given the existing level of technical knowledge. The Theory highlights two major points: (1) that quality of output is a direct function of quality of inputs and (2) that there is a maximum output that can be obtained from every possible combination of input. This implies that it is possible to have points of diminishing returns and also points of negative returns. This brings in the question of efficiency of the system. Levin (1971) identified two types of efficiency – allocative and technical. Allocative efficiency requires the production unit to choose a combination of

inputs in such a way that the marginal product per unit cost of input is the same for all inputs. Technical efficiency requires the organizing of available resources in such a way that the maximum feasible output is produced by the enterprise. This is the efficiency that is applicable to the educational system because it is difficult to define inputs and outputs in education in any real measurable terms as it is done in profit-oriented business ventures (Oguntoye, 1983; Omoregie, 1984; Blaug, 1970; Levin, 1971; Pauli and Brimer, 1971).

Education System of the United Kingdom (UK)

In the United Kingdom (UK) today, there is a National Curriculum. The National Curriculum for England was first introduced by the Education Reform Act of 1988. At the time of its introduction the legislation applied to both England and Wales. However, education later became a devolved matter for the Welsh government. The National Curriculum is a set of subjects and standards used by primary and secondary schools so children all over can learn the same things. It covers what subjects are taught and the standards children should reach in each subject. The current statutory National Curriculum dates from 2014 at which point it was introduced to most year groups across primary and secondary education. Some elements were introduced in September of 2015. The National Curriculum sets out the current subject matter which must be taught in a number of subjects in the Local Authority-maintained Schools (Government fully-funded schools). This means that this National Curriculum excludes teaching and learning at all other higher levels in the UK.

Aims

There are two main aims presented in the statutory documentation for National Curriculum, stating:

1. The national curriculum provides pupils with an introduction to the essential knowledge they require to be educated citizens. It introduces pupils to the best that has been thought and said, and helps engender an appreciation of human creativity and achievements.
2. The national curriculum is just one of the many elements in the education of the child. There is time and space in the school day and in each week, term and year to range beyond the national curriculum specifications. The national curriculum provides an outline of core knowledge around which teachers can develop exciting and stimulating lessons to promote the development of pupils' knowledge, understanding and skills as part of the wider school curriculum ("Main provisions of the Education Act 2002". **TeacherNet. 2002-09-17**)

These aims set out to support the statutory duties of schools to offer a curriculum which is balanced and broadly based and which promotes the spiritual, moral, cultural, mental and physical development of pupils at the school and of society, while preparing pupils at the school for the opportunities, responsibilities and experiences of later life, as set out in the Education Act 2002. The Education Act 2002 (c.32) is an Act of the Parliament of the United Kingdom that gave schools greater autonomy to implement experimental teaching methods (“Main provisions of the Education Act 2002”. **TeacherNet. 2002-09-17**)

Structure

The National Curriculum as released in 2014 is set out for all year groups for pupils aged between 5 and 16. Within these ages, the curriculum is structured into four Key Stages, for each of which a prescribed list of subjects must be taught. The table below sets out the statutory list of subjects to be taught at each Key Stage (“Main provisions of the Education Act 2002”. **TeacherNet. 2002-09-17**).

Subject	Key stage 1(age5-7)	Key stage 2(age 7-11)	Key stage 3(age11-14)	Key stage 4(age14-16)
English	✓	✓	✓	✓
Mathematics	✓	✓	✓	✓
Science	✓	✓	✓	✓
Art & Design	✓	✓	✓	
Citizenship			✓	✓
Computing	✓	✓	✓	✓
Design & Technology	✓	✓	✓	
Languages		✓	✓	
Geography	✓	✓	✓	
History	✓	✓	✓	
Music	✓	✓	✓	
Physical education	✓	✓	✓	✓

For each of the statutory curriculum subjects, the Secretary of State for Education is required to set out a Programme of Study which outlines the content and matters which must be taught in those subjects at the relevant Key Stages. In addition, children in all Key Stages must be provided with a curriculum of Religious Education, and for Key Stages 3 and 4, a curriculum of Sex and Relationships Education must also be provided.

In addition to the compulsory subjects, students at Key Stage 4 have statutory entitlement to be able to study at least one subject from the arts (comprising Art and Design; Music; Photography; Dance; Drama and Media Arts), Design and Technology (comprising Design and Technology; Electronics; Engineering; Food Preparation and Nutrition), the Humanities (comprising Geography; History), Business and Enterprise (comprising Business Studies; Economics), and one Modern Language. Thus, the British Basic School Curriculum includes the National Curriculum as well as Religious Education and Sex Education. (Source: Government Digital Service. “The national curriculum: key stage 3 and 4”).

Assessments

The assessment for the National Curriculum, organized into four blocks of years, according to age, called Key Stages (KS) is shown in the Table below. At the end of each key Stage, the teacher will formally assess the child’s performance. Also, by the end of each summer term the school must write a report on the child’s progress and talk it through with the parent.

Child’s Age	Year	Key Stage	Assessment
3 to 4		Early years	
4 to 5	Reception	Early years	Assessment of pupils’ starting points in language, communication, literacy and maths and teacher assessments
5 to 6	Year 1	KS 1	Phonics screening check
6 to 7	Year 2	KS 1	National tests in English and Math. Teacher assessments in Math, Science, and English reading and writing
7 to 8	Year 3	KS 2	
8 to 9	Year 4	KS 2	Multiplication tables check
9 to 10	Year 5	KS 2	
10 to 11	Year 6	KS 2	National tests in English reading, maths, and grammar, punctuation and spelling. Teacher assessments in English writing and science
11 to 12	Year 7	KS 3	
12 to 13	Year 8	KS 3	
13 to 14	Year 9	KS 3	
14 to 15	Year 10	KS 4	Some children take GCSEs
15 to 16	Year 11	KS 4	Most children take GCSEs or other national examination

Other Types of School at Primary and Secondary levels

Other types of school are Faith Schools, Free Schools, Academies, City Technology Colleges, State Boarding Schools, and Private Schools. These are schools not fully-funded and run by government. They do not have to follow strictly the National Curriculum.

Faith Schools have to follow the national curriculum, but they can choose what they teach in religious studies. They may have different admissions criteria/processes and staffing policies to State Schools, and anyone can apply for a place.

Free Schools are funded by the government but are not run by the Local Authority. They have more control over how they do things. They are ‘all-ability’ schools, so can not use academic selection processes like the grammar school. They can set their own pay and conditions for staff, and can change the length of school terms and the school day. They do not have to follow the National Curriculum. They are run on a not-for-profit basis and can be set up by groups like charities; universities; independent schools; community and faith groups; teachers; parents; businesses.

Academies receive funding directly from the government and are run by an Academy Trust not the Local Authority. They have more control over how they do things than community schools run by Local Authority. For example they do not have to follow the National Curriculum and can set their own term times. They do not charge fees. They have to follow the same rules on admissions, special education needs and exclusions as other State Schools and students sit the same exams. They must teach a broad and balanced curriculum including English, Math, Science and Religious Education. They are inspected by “**Ofsted**” (an organization for “raising standards and improving lives”).

City Technology Colleges are independent schools in urban areas. They are funded by the central government with contributions from companies and private entrepreneurs. They emphasize on teaching mainly Science and Technology.

State Boarding Schools provide free education but charge fees for boarding. Most are Academies, some are Free Schools, and some are run by Local Authorities. They give priority to children who have a particular need to board and will assess children’s suitability for boarding.

Private Schools (also known as Independent Schools) charge fees to attend and not funded by the government. They do not have to follow the National Curriculum. All private schools must be registered with the government and are inspected regularly especially by **Ofsted**. All school reports are published online by the organization responsible for

inspecting them. There are also private schools which specialize in teaching children with special educational needs.

Today, these different types of schools at the lower levels have their distinguished status and their stipulated modus operandi strictly articulated and adhered to. They are regularly inspected by credible bodies chosen by government to ensure they are doing what they ought to do with room for **blacklisting**. Yes, **blacklisting!** Today, they could be said to be accomplishing their various goals and objectives and contributing effectively and efficiently to sustainable national development with their quality outputs from their educational system. The UK is a member of the seven most developed economies of the world, termed the G7 countries of USA, UK, Germany, Canada, Italy, Japan, and France. It is well known that the bourgeoisies in Nigeria have since been educating their children and grand children and great grand children and great-great grand children in these countries while deliberately killing quality educational outputs in Nigeria.

Education System of Nigeria

The Education System of Nigeria first published by the Federal Government of Nigeria in 1977 in a document titled the National Policy on Education (NPE) has undergone several revisions to arrive at the current 6th Edition (2013). This is best captured by the Foreword and Preface written by Prof. Ruqayyatu Ahmed Fufai (Hon. Minister of Education) and Prof. Godswill Obioma (Executive Secretary, Nigerian Educational Research and Development Council, NERDC and Chairman, High Level Policy Committee on the Review of the National Policy on Education, NPE respectively.

The Foreword writes: (Federal Republic of Nigeria. National Policy on Education, 6th Edition 2013: ii)

The National Policy on Education (NPE) is the national guideline for the effective administration, management and implementation of education at all tiers of government. The national policy on Education therefore, is a statement of intentions, expectations, goals, prescriptions, standards and requirements for quality education delivery in Nigeria. Nigeria like most other countries of the world is undergoing rapid social, economic and political reforms. Fundamental changes in socio-economic and political structures wholly dictate the need for a change in policy trust of the education system and vice-versa. Thus, given the tempo of development activities on-going in both the global and local contexts, a review of the National Policy on Education becomes imperative. This will help the nation align its education system with her current developmental goals and that of the emergent global village.

*The impetus for these changes derive from the nation’s commitment to the implementation of such international protocols as the Education for All (EFA), the United Nations Millennium Development Goals (MDGs), as well as her own home-grown medium-term development plan, the National Economic Empowerment and Development Strategy (NEEDS) which commenced in 2004. Thus, the 2004 edition of the NPE was revised in 2007 to accommodate these changes, although that draft edition was not published. In 2011, the President of the Federal Republic of Nigeria initiated a Transformation Agenda to drive the NEEDS as well as consolidate its gains. One of the strategic goals of the Transformation Agenda is Human Development. In order to meet the ideals of Human Development, the Federal Ministry of Education had earlier prepared a **Roadmap of the Nigerian Education Sector** in 2009. This was followed by the **1 (One) Year Strategy for the Development of the Education Sector (May 2010-April 2011)**, and the **4 (Four) Year Strategic Plan for the Development of the Education Sector (2011-2015)**. This 2013 NPE Edition was prepared to update the 2007 Draft edition and in the process accommodate the above recent developments in the context of the Transformation Agenda and the ensuing Strategic Plan in education.*

These strategic plans in education have engendered an expanded role for education as an investment for economic, social and political development; an aggregate tool of empowerment for the poor, and the socially marginalised groups; an effective means of developing the full capacities and potentials of human resource, as well as the development of competent work force through the acquisition of practical life skills relevant to the world of work as a veritable means of developing sound intelligent learning societies fit and relevant to the 21st century. All these can be achieved through strategic and collaborative partnerships with key stakeholders.

Our covenant with every Nigerian child therefore, is access to quality education relevant to the need of the Nigerian Economy. We will NUTURE the MIND to create a Good Society that can compete globally. YES WE CAN”.

The Preface writes: (Federal Republic of Nigeria. National Policy on Education, 6th Edition 2013: iii- vi)

“Nigeria is a country of rich ethno-cultural diversity of over 350 distinct ethnic groups and over 500 indigenous languages with an estimated population of over 170 million...Evolving as a nation-state from the amalgamation of the British Protectorates of Northern and Southern Nigeria in 1914 and colonial rule up to 1st October, 1960 when it gained independence, the nation is now a democratic federation of 36 States and a Federal Capital Territory (FCT), Abuja.

The Nigerian education sector has the advantage of ample constitutional provisions and legislative support for the three tiers of government (Federal, State and Local) and all other stakeholders to participate in the delivery of education at all levels. As a result, the private sector, Civil Societr Organisations (CSOs), Non-Governmental Organisations (NGOs), International Development Partners (IDPs), communities and private individuals are very active in the sector. The key challenges are to effectively coordinate activities and interventions, as well as to strengthen and deepen collaboration through appropriate policy guidelines, monitoring and quality control.

The Constitution of the Federal Republic of Nigeria stipulates the direction of national policy towards ensuring equal and adequate educational opportunities at all levels of education and the provision of free, compulsory and universal education; free university education; and free adult literacy programme as soon as practicable. It provides the basic legal framework for all the three tiers of government – Federal, State and Local – to participate in the management and provision of education. The Second Schedule, Part II, paragraphs 27 to 30 of the Constitution includes education in the Concurrent list in which both the Federal and State governments can engage. The provision and maintenance of primary, adult and vocational education is listed in paragraph 29a) of the Fourth Schedule as one of the functions that Local governments can perform.

The educational responsibilities of the Federal government are carried out through the Federal Ministry of Education (FME), the 36 State Ministries of Education (SMOEs) and the FCT Education Secretariat as well as the 774 Local Government Education Authorities (LGEAs).

The National Council on Education (NCE) comprises of the Minister of Education as Chair, State Commissioners of Education and the FCT Education Secretary as members; and is the highest body for formulating education policies. The NCE provides a forum for consensus building on education policy directions to be implemented at different levels of education with varying degrees of adaptations to suit specific State and local peculiarities.

The Joint Consultative Committee on Education (JCCE) comprises of professional officers of the Federal and State Ministries of Education and FCT Education Secretariat and their parastatals, as well as other relevant Stakeholders. The JCCE provides the necessary framework and recommendations for consideration by the NCE. The FME has overall responsibility of formulating national education policies, coordinating implementation of policy provisions and quality control in service delivery, in accordance with NCE resolutions and directives.

The Nigerian education system is structured into:

- *Early Child Care and Development aged 0 – 4 years;*
- *Basic Education aged 5 – 15 years. It encompasses Kindergarten I year, 6 years of Primary Education and 3 years of Junior Secondary Education;*
- *Post-Basic Education of 3 years in Senior Secondary School and Technical Colleges; and*
- *Tertiary Education provided in Colleges of Education, Polytechnics, Monotechnics and the Universities*

Pursuant to the commitment to global Education for All (EFA) initiative, the Millennium Development Goals (MDGs) as well as national development goals encapsulated in the National Economic Empowerment and Development Strategy (NEEDS) document, Basic Education is, by law, compulsory for all children of school age in Nigeria. In public schools, it is provided free through the Universal Basic Education Act, 2004. A Home-Grown School Feeding and Health Programme (HGSFHP) that provides basic health services and a free balanced meal per day for every child that attends public primary or junior secondary school is being implemented to facilitate the success of the UBE.

The need for the articulation of policy guidelines on standards, procedures, strategies and for the coordination of roles to ensure and sustain the delivery of qualitative education in Nigeria was given impetus by the outcomes of the 1969 National Curriculum Conference. Follow-up activities included wide national consultations, a seminar of experts from government educational ministries and establishments, voluntary agencies and international organizations in 1973 developed a draft document that culminated in the emergence and publication of the first National Policy on Education in 1977. The first edition of the NPE in 1977 has been successfully followed by revised 2nd, 3rd, and 4th editions published in 1981, 1988 and 2004, respectively, as well as a draft 2007 5th edition. Revisions of the national Policy on Education have been necessitated by the need to address noticeable gaps in content and provisions that emerged in the course of implementation, maintain currency, relevance and give adequate attention to new opportunities, issues and challenges....

The 6th edition of the National Policy on Education restates Nigeria's national goals and the philosophy of education, specifies the goals and objectives of education, specifies the goals and objectives education should accomplish, defines the structure and strategies for its provision, sets guidelines and required standards for its delivery, management and for quality assurance. It further clarifies the responsibilities of the three tiers of government,

their agencies and all other education stakeholders. This edition highlights and emphasizes;

- a. The consolidation of Kindergarten, Primary, Junior Secondary Education to a 10-year Basic Education in line with UBE and its establishment Act;*
- b. Improved quality assurance, restructuring and enhancing the capacities of Federal and States/FCT Inspectorate Services through effective programme evaluation;*
- c. The development and maintenance of a credible up-to-date National Education Management and Information System (NEMIS) and corresponding State Education Management System (SEMIS);*
- d. The effective use of strategic planning to improve the quality of education provision and service delivery;*
- e. Improving teacher quality through professionalizing the teaching profession in Nigeria and the provision of more in-service training opportunities and other incentives for teachers; and*
- f. Better coordination, collaboration and networking of activities, programmes and interventions of all tiers of government, development partners and all other stakeholders in the Nigerian education sector to eliminate overlaps, achieve and sustain synergy.*

To effectively address persistent gaps in education policy provisions and implementation in Nigeria, the process of the development and articulation of the 6th edition of the National Policy on Education involved collective and wide consultations coordinated by the Nigerian Educational Research and Development Council (NERDC) through the High Level Policy Committee comprising State Commissioners of Education/FCT Education Secretary, Directors in the Federal Ministry of Education and their Parastatals, Professional Bodies, International Development Partners and other relevant bodies...It is therefore expected that the national Policy on Education will be publicly owned, internalized and complied with by all. To leverage this expectation, Federal/State/FCT and Local governments shall establish and adequately empower Special Policy Implementation Monitoring Units within the appropriate existing structures in their Ministries of Education and Local Government Education Authorities and diligently monitor and provide necessary feedback on compliance”.

The philosophy of Nigeria education is based on the development of the individual into a sound and effective citizen and the provision of equal opportunities for all citizens of the nation at the basic, secondary and tertiary levels both inside and outside the formal school system, with goals of education:

- a. Development of the individual into a morally sound, patriotic and effective citizen;
- b. Total integration of the individual into the immediate community, the Nigerian society and the world;
- c. Provision of equal access to qualitative educational opportunities for all citizens at all levels of education, within and outside the formal school system;
- d. Inculcation of national consciousness, values and national unity; and
- e. Development of appropriate skills, mental, physical, and social abilities and competencies to empower the individual to live in and contribute positively to the society. (Federal Republic of Nigeria. National Policy on Education, 6th Edition, 2013: 1-2).

The Status Quo in Nigeria's Education System

Nigeria, in the bid to attain these standards, has since embarked on massive investments in education. But at the same time, those she put through school are unemployed. Today, Nigeria's over 200 million population is still greatly rural, her per capita income is still very low, unemployment is mounting at an alarming rate, agriculture is still largely subsistence, and inflation is at cut-throat level. The masses are becoming poorer and poorer, the manpower environment is becoming more and more turbulent and frustrating, and her economy is tending from stagnant to negative. Where then is the economic value of education in Nigeria? What is responsible for this reverse situation? Why has education failed to promote economic development in Nigeria? **Thought for Food!**

In the early 1960s, most LDCs including Nigeria, inspired by the UNESCO regional targets, committed themselves to achieving universal primary education but many soon realized that the practical problems involved apart from the huge costs, were far more formidable than they had bargained for, yet they plunged ahead into massive education expansion. Also, the objectives of education are often broadly stated and are usually not adhered to in most developing countries. Thus, frequently, an educational system's objectives differ considerable from its actual operating objectives. For instance, an officially proclaimed goal may be to acquaint learners with the history, geography and culture of their own country and region whereas they may spend inordinate time trying to master their language and learn about the history, geography and culture of a distant colonial master country. The point here is that inputs into education derive from the objectives and an educational system cannot exist without inputs. Therefore an educational system which is not clear about its objectives and priorities lacks any rational basis and starting point for implementation, for appraising and improving its performance, for planning its future, and for making good use of cost analysis in carrying out these purposes.

The bare truth is that it has failed before starting. This situation could be likened to Coombs and Hallak's (1972) analogy of a ship at sea without a compass, and as such, would have no clear notion of where it is going or how to get there. Another problem is that many LDC educators and administrators often seem to operate on the assumption that the only way of doing education's work properly is to apply that which has been imported from industrialized countries. For instance, the endemic high turn-over rates of teachers (Duze and Ogbah, 2013) could be arrested by better incentives and better conditions of service without necessarily increasing their basic salaries; curriculum materials could be improvised with local ones, e.g. using kerosene stoves instead of sophisticated gas cookers for the time being until there is enough funds for that, but this does not imply we should be going back to the Stone Age. The implication is that if a nation is to accelerate its economic growth, it must increase its rate of saving.

Coombs and Hallak (1972), also noted that some education such as work-oriented training programmes related to real employment needs and opportunities can have a prompt and substantial payoff in terms of early economic growth. But because the LDCs including Nigeria run the social demand approach to education they tend to miss this. For instance when Shultz's idea of human capital became accepted, there was a mad rush for expansion of education in the LDCs who saw it as the panacea for economic development. Balogh (1965), because of the way it was pursued described LDC's understanding of it as amorphous. He argues that education is not and cannot be a homogenous input in economic growth, because some kinds of education will promote while some others will inhibit economic growth. In other words, education should be specific because not every kind of education can solve the problems of a given society. He further argues that a curriculum which allows a large content of skill formation, rather than a classical one enhances economic growth. Coombs (1968) also portrayed the international idea about education being based within the real world, not imitation world, for the real world. Nigeria and most LDCs have educated their children in the imitation world, only to bring the products back to the real world of work where they seem to be mis-fits. The implication is that a large proportion of the output is not involved in productive activities and so long as they remain so, their contribution to economic growth varies from zero to negative. Thus, the educated unemployed and the educated malemployed, instead of adding to economic development for which schooling was originally planned, remove from it, a situation likened to investment in frustration – frustration for the client, frustration for the public sector, and frustration for the private sector who together bear the cost of education. Foster (1965) also noted that African leaders are bent on catching up with the developed world but the obsessive preoccupation with expanding student populations blinds them to the real educational issues of Africa. He argues that the dynamics of education are far more

complex than education statesmen in Africa believe. Development according to him, is far more often than not, a reflection of the articulation (or lack of it) between educational structures and other societal sub-systems. **Thought for Food!** It is quite disheartening that these observations made in the mid-sixties and early seventies have not been properly addressed by most African countries including Nigeria, hence this over-loaded lecture seeking for panacea and possible solutions in the discussions that follow.

The thought for Food!

Since Britain is the colonial master of Nigeria, the Nigerian education system has had a long historical link with the colonial educational practices. Thus, years after the exit of the colonial masters, there remain observable practices of the British in our education system that no longer delight the Nigerian people, hence the hues and cries here and there that the British education system handed down to us is irrelevant, literary, classic, elitist and non-functional. This is to say that our legacy in education is bad! Is there any resemblance or link between Nigeria's national curriculum, documented in the National Policy on Education (NPE) and the British national curriculum? If the answer is yes, and the British national curriculum is doing good for the United Kingdom, then why is it not the case for Nigeria? If the answer is No, then where do we go from here? These questions constitute the **"Thought for Food!"** We may have to continuously ask ourselves this question literally in this lecture: **Do we swallow food before chewing? ("Food for Thought") or do we chew food before swallowing? ("Thought for Food")**

Approaches to Educational Planning

The four major approaches to educational planning namely, the Social Demand Approach, the Manpower Forecasting Approach, the Cost-Benefit or Rate of Returns Approach, and the Synthetic Approach have been employed variously by the OECD (EED) countries, and in some instances a combination of these in planning their working education systems while we still wonder exactly what approach or forms of approaches the LDC (ECOWAS) countries, including Nigeria, have employed or have adopted in their plans for their various education systems (Duzé, 1997, 2002; Aghenta, 1987; Iziren, 1987, Thomas, 1981, Fafunwa, 1984, Foster, 1965)

The planning approach we are using in Nigeria seems to be the Social Demand Approach, unannounced! This approach opens the door to acquiring education by whoever desires it at whatever level and discipline without actually considering benefits to costs (Iziren, 1987). The question to be asked is: Has this approach delivered the expected outcomes in the past? Is it delivering the expected outcomes in the present? Will it deliver the expected

outcomes in the future? This is **“thought for food!”** In times in which the entire world is now, is it still wisdom to depend on just the Social Demand approach alone to administer effective and efficient education in Nigeria for sustainable national development? This again is **“thought for Food!”**

The synthetic approach is the systems approach to educational planning. A system consists of interrelated components that unite for a goal. It must grow out of an environment before it can be called a system because all the component parts must interact in order to establish some logic. Every society is made up of systems and it is when you depart from this system that you get into trouble! This is the case in Nigeria! The component parts of our education system are increasingly becoming dis-interrelated parts emanating from all sorts of separate or dis-connected environments and therefore, losing the supposed logic. Shall we continue to swallow before chewing (**Food for Thought**) or begin to chew before swallowing (**Thought for Food**)? This lecture is meant to sensitize our brains and quicken our bodies, souls, and spirits into systemic synergies to salvage our education system that is tending to entropy. It is not a one-man job! It is not only the job of the leaders but also the job of the followers! We are all stakeholders in education in one form or the other. All hands must be on deck!

***I therefore enjoin you to listen attentively to what will follow as we explore avenues that could wedge entropy. I will also ask that the projector be turned off at this point with the permission of my Vice chancellor. My VC Sir, after this lecture I would like to hold a seminar to propose my theory about the “Bermuda Triangle” in Teaching and Learning, where every information gotten disappears in the triangle of listening, seeing, and comprehending at the same time.

The “wahala” in Nigeria’s Education System

“Wahala” here represents the following:

1. Mis-match between output and the real world
2. Inadequate knowledge gained in school
3. Poor skills acquisition
4. Teacher retention
5. Learner attrition
6. Exorbitant fees charged in schools
7. Unemployment, mal-employment, and under-employment, at graduation

Dividends of Education on Sustainable National Development

The Systems Approach may be defined as a type of logical problem-solving approach which is applied to identifying and resolving complex social problems. As a mode of thinking, it emphasizes problem identification and problem resolution utilizing logical problem-solving techniques that have become useful in the sciences and in human communication. Scientists in different fields – social, natural, basic, applied sciences – have noted that there is a discernable linkage among all the sciences and that, that discernable linkage is a system. A system is an aggregation of parts, elements, components or persons that interact with one another. Every system derives from an environment and has a boundary that separates the components of that system to some extent from its environment.

A school is primarily a social system. A system of schools constitutes an educational system. Some of the techniques that management science has developed for business social systems are applicable to some extent to school social systems. Every social system has sub-systems, and although all social systems are technically classified as open systems, they differ greatly in the degree of openness. This means that social systems send outputs into their environment and in return receive feedback from the environment.

All systems seek equilibrium but have a tendency toward entropy or disorganization. While every system has its own goals or outcomes, in seeking equilibrium, a system tends to resist change. Also, the persons in the system endeavour to seek fulfillment of their own personal goals too as a form of seeking equilibrium. Is there a clash of interests here that could burst the system? There is pressure towards conformity in our educational system but if this pressure is not autochthonous, i.e. not arising from the environment, could this burst the system? This is another **thought for food!**

Problems associated with educational planning and administration can be minimized when professional educational engineers amongst others, aspire to acquire a fuller understanding of the planning and administrative processes and are allowed as well as prepared to participate more effectively in the process of making decisions in the areas of their professional competence. In doing this, they should thoroughly have the understanding:

1. of how the present educational system works
2. of the interrelationships and efficiency of their separate parts
3. of the way in which different combinations of general education and training in formal, informal, and non-formal arrangements may meet our needs

4. of the extent to which economic goals may be combined with political and social goals
5. of the extent to which client aspirations and background can be purposefully modified
6. of how the impact of changes in structure, institutional patterns, curriculum, examinations, staff development, and support services may be maximized to accomplish not only set goals but other useful not-before-considered additions.

In order to use means to obtain goals, we have to do some good homework to plan, design, decide, choose, etc. Because wants are usually unlimited and insatiable, we have to make prioritized choices i.e. we rank our wants. We have to continue to economize and manage resources in order to use means to get goals (ends). If means were unlimited, there would be no need to choose, decide, plan, etc. but because means are always limited, even in the G7 countries, you have to, at every stage, make the right decisions because you cannot afford to waste your limited means in driving towards your goals. In the society of any country you find that the means to achieve educational goals are always limited. You can only miss the goal when you have not done proper homework. Is it that we are not aware of this truth or that the laissez-faire legacy syndrome in Nigeria still plagues us today in planning and administering our educational system effectively and efficiently? This is yet another **thought for food!**

In talking about means, we can use words like adequate, inadequate, abundant, surplus, plentiful, scarce, limited, available, etc. In talking about goals, we can use the words like wants, ends, outcomes, unlimited, plentiful, and abundant. Systems approach managers use outcomes, philosophers use ends, educational engineers use goals. Whatever the nomenclature used, it is expedient to explore, discover and adopt those “means” and “goals” of those countries that have achieved significant economic growth and development, in order to recover.

Systems Approach

Systems Approach is a process for effective and efficient achievement of desired educational outcomes. You can be efficient without being effective and the reverse is also true. It is very rare to get the two perfectly combined unless you are a real genius. This is why intensive training is required for the production of such geniuses which I would call “educational engineers” for our educational system. If we have agricultural engineers, chemical engineers, civil engineers, mechanical engineers, electrical engineers, production engineers, etc, what stops us from educating and training educational engineers for the Nigerian Educational System? This would be a morale-booster in our Faculties of

Education in Nigeria in producing geniuses termed “educational engineers” to begin to man our education system. Reforms in teacher training aimed at producing self-esteeming Educational engineers, not “looked-down-upon” Nigerian teachers I believe would take care of these. Nigeria could also set a global pace of producing Educational engineers in higher institutions.

It is again emphasized at this point that systems approach focuses greatly on problem identification and problem resolution utilizing logical problem-solving techniques. The outcomes of the process depend on (1) the validity of the data used to identify and resolve the specific educational problem and (2) the expertise and objectivity of the personnel using the approach and its associated tools. Thus, the systems approach can only be as functional and as valid as the people using it require and allow. Furthermore, the tools of systems approach focus on the learner and assure that each one’s ambitions, capabilities, and aspirations are considered and maintained. The approach ensures that learners are not forced into arbitrary categories either by ignorance on the part of stakeholders or by lack of appropriate models for making education individually responsive.

The Structure of Systems Approach

In business management process, we can identify six main mutually related stages which also apply to educational management process:

1. System project selection
2. Feasibility study
3. Selection of solution strategies
4. Design phase and implementation strategy
5. Determination of performance effectiveness
6. Feedback

We might collapse these six into just two items (1) problem identification and (2) problem resolution. A popular truth has it that if the problem is identified you have solved almost half of the problem. How then do we identify a problem in our education system? What do you think is the most rational way of selecting a project in Education? How do we assess the needs of the community and society which actually should be the first step in problem identification?

It is relevant to ask: Assuming that the words knowledge and ignorance were personified, which of them rules the world? The world is ruled by ignorance! Yes, what we think we know is only an aspect of our ignorance! If knowledge ruled the world then there would be no problems! No developed world and no underdeveloped world! If knowledge ruled the

world, there would be no findings, no research, no renovations, no innovations, no capitalism, no socialism, no nothing! It was Dr. Iziren, a Nigerian lecturer at the University of Benin and an astute scholar of Harvard University, USA, who declared that “Education in Nigeria is more visited by ignorance than by knowledge.” According to him, “problems or challenges cannot exist in isolation and you cannot know your problems or challenges without knowing your needs. Problems can only exist with respect to unsatisfied needs. So if you can identify your needs then you can find where your problems – the unmet needs – lie!” (Iziren, 1987).

The Needs of Education

How do we determine the needs of Education? Who has planned a curriculum in Nigeria by asking the consumers what kind of it they need? Who are the consumers of educational projects and programmes? The consumers of educational projects and programmes are the learners, the parents, and the community or society. Educators often think they are the elites and will do the thinking of the consumers for them, tell them what their needs are, and go ahead to plan the curriculum the way they think it should be. Elites decide, not towards the needs of the masses but towards what they think the needs of the masses are. Many a time, the elites are wrong for thinking and acting on behalf of the masses hence the eventual failure of plans, policies, projects, programmes, and schemes because the consumers were not consulted. An example is the Nigeria’s curriculum documented in the National Policy on Education (NPE). As laudable and as plausible as this document is, I make bold to say that it has failed to deliver education in Nigeria for sustainable national development.

In Systems analysis for educational design, any attempt to determine needs that fails to include all the partners in education runs the risk of presenting a bias starting point. In other words, when you want to design an educational programme and you fail to include all the stakeholders, i.e. all the people involved in the educational system, you are biased right from the beginning! All the opinions, perceptions, observations gathered from the field should therefore be matched with empirical data collected from the operational world through the setting up of committees, panels, conferences to ensure no stone is left unturned and no child is left behind in our educational systems design.

One model for assessing needs for a responsive educational system is related to three important foci of curriculum, namely, nature of knowledge, nature of learner, and nature of society. These three properly integrated influence or determine the educational design of any nation. Of these three, the logical entry point is through the dimension of nature of society, followed by nature of knowledge, and then nature of learner. This model

emphasizes the interactive nature of several sources of needs in a responsive educational system.

When needs are properly documented, we are provided with the basic information for setting valid goals which then give us the assurance that our educational product is relevant. We can then decide the most effective and efficient way to meet the actual identified needs which result in the map of action or a blueprint of action to guide our efforts in implementation and our available resources towards accomplishing relevant set goals.

If a problem is poorly identified and defined (project selection), you will have an infinite number of possible solutions and a solution will be created in which we treat only the symptoms and never really solve the problems. When you define a problem poorly, then you have started in ignorance immediately and subsequently go from error to error! This is why in conducting research the starting point must be good problem identification and definition or else we end up committing type I or type II errors that lead to false rejection or retention of tested hypotheses and eventual unreal findings that may not be generalized.

Currently, the way we determine our needs in education in Nigeria is faulty. The leaders and politicians who lack educational substance simply gather, discuss, administer changes, etc, but ask the consumers. This is probably because they think Education has no marketable value unlike the Industry. The Industry always consults the consumers before action because without them their goods will not be delivered. The consumers are their market hence they ensure they take a market survey. One may ask, is a market survey feasible in Education? The answer is a solid Yes! Therefore, in determining educational needs we have to survey all the groups of people we have in education – government (public sector), private sector, educators, teachers, learners, parents, guardians, community members, to determine from them directly what their educational needs are. This is what is called Needs Assessment.

Needs Assessment may be explained as a kind of discrepancy between two polar positions. You may ask at one pole, where are we now in respect of a particular project or programme? The other question at the other pole will be where are we supposed to be? The needs will specify the measurable discrepancy between these two poles. In other words, between the two questions of where are we now and where are we supposed to be is a gap which is indeed the problem, the unmet need. Thus, the problem is identified as the discrepancy between “what is” and “what ought to be” in any situation or circumstance. This is the need.

The success of any educational design requires that the data for making these two poles should be as valid and as representative as ever. An assessment of needs must have at least three characteristics:

1. The data must represent the actual world of learners and related people both as it exists now and as it will or could or should exist in the future.
2. Any statement of needs is in fact tentative (subject to change and changeable) and we should constantly question the validity of our statement of needs. The determination of needs therefore is never final and complete. What happens as at now in our educational system is that our so-called determination of needs is final and complete not tentative. For example when students fail in examinations, we blame them and not the curriculum. Maybe those who are failing now would pass in the future. Systems may fail but individuals hardly fail completely. Something, no matter how intangible must have been learnt or achieved in school! Something, no matter how inconsequential may have constituted the stumbling-block!
3. Discrepancies should be identified in terms of products or results or outcomes or actual behaviours or actual attainments (ends) not in terms of processes or procedures used (means). The confusion of ends and means frequently leads to poor learning opportunities.

What to understand here is that one's education should influence his or her behaviour. For example, if your child continually scores high marks in mathematics, as far as you are concerned, that is the "end". It should bother you if your child continues to make excellent grades in mathematics, without any observable mathematical behaviour. There are people who have Ph.D. Economics but will not behave economically! A vivid example is the case of a village illiterate mother whose daughter was excelling in science subjects in school but kept asking her daughter who never had any patience for anything at all how she hopes to be a nurse, which is her future aspiration. She got so bothered that she came to seek for advice in the school where I was the Principal.

Thought for Food!

Education as a management process

Education occurs in a context of values and therefore must be managed to eliminate wastages of all sorts, meaning that efficiency must be pursued religiously in the production of educated persons. It may be viewed as a process of providing learners with basic skills, knowledge, and attitudes so that they may live usefully and produce abundantly in the society when they become adult citizens. The "product" of education is more than the mere achievement of basic skills, knowledge, and attitudes. It moulds

behaviour thus making it that function that determines or helps to determine whether the “product” has been actually produced as per the aims, objectives, and goals. What is the gain in sending children to school when they return as cultists, drug addicts, terrorists, bandits, unknown gunmen, murderers, killers, assassins, kidnappers, armed robbers, herdsmen carrying AK 47!

Experience reveals that it is particularly difficult to set the goals of any educational operation because of the multi-dimensional nature of education. Education is known to affect the whole future of individuals and of society. Opinions differ widely as to the relative importance of each ultimate aim involved, be it economic, social, political, cultural, religious, or ethical. Opinions also differ as to the proper course to be taken in order to achieve or even articulate educational objectives. Furthermore, aims and goals still have to be considered from a number of angles: (1) the internal aims of the development of education proper and (2) the ultimate external goals of the educational undertaking which has to be reflected in the integration of educational planning/administration with overall economic and social planning/administration. Moreover, some objectives can be expressed in terms of quantity e.g. school attendance rates at different levels, planned minimum output, and expected maximum costs, while other aims and objectives cannot always be explained precisely. These other aims include promotion of attitudes conducive to development, promotion of democratic ideas, fostering of creativity and fulfillment of the individual, fostering of international understanding, fostering of unity, patriotism, empathy, team-work, etc. Again, some of these objectives are temporary or short-term while others are permanent or long-term. Putting all these into proper working activities is the job of the educational manager. We may think of the educational manager as the administrator, the planner, the teacher, the counselor, the curriculum specialist, the instructional director of the teaching/learning process or as the Educational engineer.

A systems approach is a closed loop such that it advocates that even after training, you must follow up the products in their places of work and obtain feedback and use it to improve the system so that the next batch of product will be better. It has become stylish globally to refer to graduating students according to their year of corporate graduation e.g. “The Class of 2020”. Thus in systems approach preceding “Classes” (products) should be of better quality than previous “Classes”. Thus the “Class of 2021” must be a better product than the “Class of 2020”. Sadly in Nigeria, the reverse seems to be the case. It was rumoured sometime around the late eighties or so that the globe considers all Nigerian university certificates after 1984 or so best for the trashcan! Rumour or

not, if we are sincere to ourselves, we would agree that there is a great truth in this assertion. **Thought for Food!**

Educational Implications of the Systems Approach

The continuous process of designing, developing, evaluating, planning, administrating and implementing improved educational programmes has resulted in new applications of the systems theory. Education itself has become a basic component of sustainable national development. It is through the educational process that the young are instructed about the world and the local and international society, and hopefully provided with some of the concepts and skills needed for the improvement of the world. Education is a man-made synthetic organism with a special purpose and function that should be integrated with and influenced by society. Many educators in advanced economies recognize the potential of systems approach to disentangle complex educational problems. They employ the applications of systems approach in the modern world education system, which enhance school quality and good productivity sustainability. They include:

1. Computer Assisted Instruction (CAI)
2. Management Information System (MIS)
3. Performance-Based Teacher Education (PBTE)
4. Needs Assessment
5. Performance Evaluation Review Techniques (PERT)
6. Management By Objectives (MBO)
7. Cost-Benefit Analysis
8. Cost Effectiveness Analysis
9. Planning, Programming, Budgeting System (PPBS)

To this extent, the top 10 countries with the best education systems in the world include: New Zealand 10th; Iceland 9th; Norway 8th; Sweden 7th; The Netherlands 6th; Denmark 5th; Germany 4th; USA 3rd; Switzerland 2nd; Finland 1st. The systems approach, however, has not become solidly entrenched in educational decision-making and problem-solving in the less developed economies, though attempts so far made in some of these countries are considered encouraging (Duze, 2002). Today, the top 10 African countries in a descending order are Seychelles, South Africa, Mauritius, Tunisia, Kenya, Algeria, Ghana, Egypt, Namibia, and Libya. The government of these countries is expending significant portion of their various budgets on educational development (<http://naijaquest.com/best-education-sy>). Where is Nigeria, the giant of Africa? This is a **thought for food!**

Seychelles has the best education system in Africa scoring 69.3 points on a scale of 0 to 100. It is the only African country that has attained the UNESCO Education for All (EFA) objectives. To date, free education is mandatory for all children in Seychelles till age 18 except for purchase of school uniforms. It is rated in terms of best education systems by the World Education Forum as the only African country in the world's top 50 countries with the best education system. This assessment involved 140 countries including 38 African countries on a scale of 0 to 100. Criteria include: developing digital literacy, interpersonal skills, and the ability to think critically and creatively. Libya, though occupying the 10th position on the rank of best African education systems is the only African country that charges no fees at all at primary education which is also mandatory. (<http://www.aftreschoolafrica>)

Analysis of the Operations of a School System

The school system can be said to be the micro-educational system. The analysis of the operations of a school system is a very complex process because of the multiplicity of its goals and outputs. Pupils, students, teachers, parents, guardians, school administrators and planners, education bodies and agencies, politicians, economists, governments, pressure-groups, policy-makers, and the general public make various demands on schools and their expectations from the school system could be varied.

The school system is usually conceptualized as a production unit consisting of workers, buildings, equipment, and materials, with inputs of money, teachers, and students, while the output is in form of human material that has been “processed” i.e. developed and improved by the educational services provided. This model is an over simplification of the school system whose operations are really very complex. But the model reveals the similarity of the school organization to the business organization.

Input → Process → Output

In a factory, after processing, we expect the product to be of standard quality. It is this standard product that drives education to conduct examinations and anybody that passes the examination is said to be good quality. However quality of product in the school system is categorized and classified and is not to be analogized to that of factory because (1) the school does not have the power to choose its clients and (2) outputs are individuals, with the processing not absorbed at the same rate and therefore outputs are bound to be of different quality. Due to the imitation of the school of a factory, there is a pressure towards conformity on the school system. In the industries, poor quality can be crushed and recycled as many times as can be done to obtain good quality which is an abomination in

education. Do we then throw away any child who doesn't pass the examination? Are examinations after all a myth? **Thought for Food!**

The Special Features of Nigeria

If we follow in detail the progress of our education system, we see that it is rather expansive in nature. While development is qualitative, expansion in education is quantitative. It is like having a product of bad quality which you continue to produce more and more in numbers without any attempt to improve on the quality. The main indices of educational quality development often neglected in Nigeria include:

1. Relevance of programmes
2. Balance among the levels of schooling
3. Efficiency of the system (The system's holding power)
4. Teacher quality and retention

Since these indicators are in one way or the other inputs themselves, any scarcity of them, will amount to a lowering of these and therefore further limits educational development. In addition, poor management of the already scarce inputs will affect productivity adversely. Furthermore, Nigeria as a developing country has peculiar problems which have made the process of development slow. These peculiar problems include social, economic, and political problems.

Socially, Nigeria diversified into several ethnic groups who differ widely in language, religion, educational attainment, occupational characteristics, socio-economic status, etc. English language is, for instance, the defacto national language which is not spoken or written by many Nigerians especially the old ones. Since many of the activities at the national level are carried out in English language, many Nigerians are cut off from the current events in their country. The young Nigerians even at the primary school level are made to acquire knowledge in English and this is usually a great disadvantage to them. Efforts through the National Policy on Education (NPE) to ameliorate this problem have also failed at implementation due to inadequate needs assessment.

Nigeria is also sharply divided into Christian and Islamic spheres with traditional religious groups as a buffer. The influence of the first two groups extends to social, economic, and political aspects of our lives, while members of the traditional groups resist cultural changes. The three groups often do not see eye to eye on many issues touching the

development of this country, usually seeing the other as having a secret agenda to the detriment of their own group.

There are also wide differences in educational attainments between parts of the country and these differences accentuate our development problems. The North is seen to be educationally backward compared to the South, with government educational policies and programmes made to favour the North.

Another feature of our national life is the marked division of the entire country into urban and rural sectors. The urban sector though smaller in size and in population has the concentration of modern amenities and higher literacy rate. Generally, Nigerians, whether in the urban or rural areas lack national commitment, patriotism, and discipline and engulfed in greedy materialism, selfishness, ethnicism, nepotism, parochialism, bribery and corruption (Fafunwa, 1984, Aghenta, 1993, Duze 2008).

Politically, Nigeria is yet to find her feet on the ground. Democracy is toyed with. There is hardly a national citizenship, instead we hear of Edo, Igbo, Yoruba, Ijaw, Hausa, Fulani, etc groups, whereas the fostering of a genuine sense of national unity and the involvement of all Nigerians in the task of nation building is a precondition for development.

Economically, Nigeria is performing poorly in different sectors such as Education, Health, Transportation, Agriculture, Industry, etc. (Duze, 2002, 2008, 2013). For example agricultural programmes tagged Operation Feed the Nation, The Green Revolution, etc have died without achieving any goals. Recently bandits and terrorists, unknown gunmen, lockdowns, and cattle herdsman would not allow workers to get to their offices, traders to get to their market stalls, businessmen/entrepreneurs to travel safely to seek for productivity inputs, farmers to get to their farms not to talk of do any form of farming!

Thought for Food!

The Human Capital

In essence, all these tend to address the manpower status, production, and sustainability via a country's education system. Manpower, in a general sense, is individuals, people, humanity, and society with all its aspirations, needs, and capacities, but in economic sense, it represents the aggregate of skills and attributes resulting from education and training which equip a labour force with the capacity to plan, administer, and execute economic processes as allocated. It is the useful labour force. It is the effective, efficient, and diligent workman. It is the concept of the critical resource upon which the economic future of any nation depends. It is the human capital. In an economic sense, a wasteful man may not be regarded as manpower.

The human capital formation is the investment in human beings. We invest to get good returns and the returns obtained from human investment is more than any other returns from land, money, etc. (Schultz, 1959, Smith, 1937; Marshal, 1930) The Ashby Commission of 1960 in Nigeria brought to the fore the idea of human investment in the area of education. Education is basic in forming human capital and no country that wants to grow in all ramifications can dare to toy with the education and training of its citizens.

The human capital, as critical as it is to production, must however be matched with other forms of capital, land and money, in a continuous process of allocation between alternative uses because supply is scarcer than needs (Duze, 1988, 1999, 2002; Coombs and Hallak, 1972). For instance, there is an allocation every time a student makes a career choice or when a school changes its curriculum. Since human beings are not rigid and are not inanimate there are bound to be changes, and if these changes are not properly monitored, there could be serious chaos (Duze, Ogbah, and Okosun, 2012).

Training gives specific skill. For example, a neophyte medical doctor can be trained as a surgeon, a gynaecologist, a paediatrician, an ophthalmologist, or an oncologist; a dentist can be trained to be a prosthodontist; a science teacher who proceeds to specialize in pedagogy (methodology of teaching) becomes trained. Therefore, an educated man may not necessarily be a trained man but a trained man is really an educated man. Depending on the knowledge and skills you want acquired, the syllabus is always tuned to accomplish that. It could be said that while education provides knowledge, training gives specific skill. A good training, however, needs some educational background and that is why the two are intricately tied, they ought to go together. Therefore when an educational institution is set up, its function should be educating and training.

Manpower Environment

Manpower environment has to do with the entire labour market and the institutions of manpower training. A labour force is the working population of a country e.g. the teaching force. The labour force can be classified as active and inactive. In Nigeria, anybody between 15 and 55 years of age is in the active labour force but the participatory labour force are the employed ones i.e. the ones that are actually working.

In Nigeria, the manpower environment is turbulent and frustrating because of the growing unemployment, mal-employment and under-employment of school-leavers, poor performance on the job, shortage of persons with critical skills, surplus of persons with unneeded skills, etc. In other words, there is shortage and surplus of manpower at the same time. The labour market is saturated with certain types and levels of personnel while others

are in critical short supply. There are industrial unrests, lockouts, lockdowns, work-to-rule, sit-at-home, action strikes, etc in work situations. There is a breakdown of work ethics, high turnover rates of experienced and skillful workers, retrenchments, layoffs, retirements, terminations, dismissals, sacks, injustices at appointments and promotions, “god-fatheritism”, partiality, favouritism, ethnicism, nepotism, tribalism, “as-man-know-man” (Aghenta, 1983; Duze, 1999, 2008).

Salaries are poor and not paid punctually and regularly, conditions of service are poor, no appreciable or tangible incentives/motivation to workers especially in the private sector. For instance, it is known that most private schools in the cities and villages pay peanuts as salaries to their teachers and school principals while at the same time charge exorbitant fees. Also salaries are not paid to teachers during the holiday months in most private schools. A survey recently carried out in thirty private schools in Benin-City metropolis and also thirty private schools in Warri metropolis showed that the average monthly salary for a university graduate secondary school principal, primary school headmaster, and classroom teacher in the sixty private schools surveyed is N32,000, N23,000, and N16,000 respectively. This is indeed poor compared to the average school fees of N108,000, N92,000 and N90,000 charged per student per term in secondary, primary and preprimary sections of the sampled schools respectively. These findings indicate that education in private hands, most of the school owners being unschooled rich shylock businessmen and women, is becoming increasingly “profiterized” and out of reach to the poor masses in Nigeria (Duze, 2021). At the same time, public schools in these areas are an eye-saw and in dare need of renovation and maintenance. It rains inside the classrooms as leaking roofs abound, the pupils are packed in classrooms as sardines with most of them sitting on the bare floor and with most of the rickety furniture broken and harmful to sit on. Nobody seems to care. **Thought for Food!**

There is shortage of training facilities, poor training methods, and poor remunerations for additionally acquired skills for teachers and school administrators. Both public and private sectors are in difficulties in changing easily to corresponding changes in global manpower environment. This is so because not much of manpower planning is being done, and the government in particular does not seem to consider that manpower planning is the greatest factor in developing work/business strategies. They forget that the role of manpower planning is to provide knowledge about current manpower resources and capabilities with a view to placing them in appropriate places. Instead, workers are recruited indiscriminately, retired or dismissed without regard to the health of the organization. To say the least, there is serious deterioration in the manpower environment in Nigeria education system, definitely not in the interest of sustainable national development!

The manpower environment in Nigeria is beset with rapid changes some of which have drastic effects on the country. Since by law manpower environment is always affected by other changes, we must be observant so as to be able to predict likely changes and recognize the causes. Some of such causes or factors include technological, social, economic, and political. Developments in all these areas are bound to affect the education manpower environment (Duze, Ogbah, and Okosun, 2012).

Technological factors affect manpower environment through changes in skill formation. For instance, we were in Nigeria basically an agriculture country therefore our skills were tuned to agriculture. Suddenly when the oil came, new kinds of people and new ideas and knowledge evolved leading to new sets of skills. We must look for people who possess such skills. Today knowledge increases at alarming rates, so there is always room for new things. Micro-electronics can displace some occupations and can therefore require new skills in the area of Design Engineering for instance; it will affect quality control, maintenance, and production. In the area of Energy, I remember the world-wide oil crisis in 1973 that led to finding new sources of energy and how to conserve what is available. In this case, new geological skills for oil reconstruction and others came up for trial. Information/communication technology also has its own effects on manpower environment as regards clerical, administrative, production skills particularly with respect to printing, mass media, use of machines, video screens, car telephones, etc. Material technology and Bio-technology are synthesis of new materials combined for great strength, lightness, improved plasticity, resulting in new products and new skills. Bio-technology in particular develops mass capacity to create new jobs which can bring about changes in skills. Therefore curricular changes or transformation, not just reforms in education and training are expedient in the formation of the new skills. Is Nigeria on board? **Thought for Food!**

Making Effective Use of Human Resources

1. There should be a greater correspondence between supply of labour and available work placing
2. There should be concern for skill development and skill utilization
3. There should be creation of more jobs, improvement of working conditions and working environment, job content, work organization, working time, and employee participation in decision-making.
4. The job content should reflect developmental needs.
5. There should be accurate determination of current manpower situation (i.e. manpower inventory and skill inventory/skill utilization).

The United States of America is best for (2) above. In the USA, you can obtain a B.Sc. degree in “Eba-making” or “egg-boiling” followed by Germany, Japan, and France. They all use the 6-3-3-4 System of Education. Today in Nigeria, everybody is confused about the System of Education we are using! **Thought for Food!**

The essence of determining accurate current manpower needs is to be able to know what is available in order to know what more is needed and to tune the education system towards the production of what is needed. In countries where national population census is a non-controversial issue but a periodic exercise meant for determining the accurate data with respect to the political, economic, and social lives of the people, the determination of manpower needs is very easy. But in countries where the population census is of public controversy and where accurate data are not obtained, such as Nigeria, the determination of manpower needs is difficult and the data unrealistic for any efficient usage.

The analysis starts with a review of all the available facts about the population and an inventory of the current labour force of the economic sector. The economic sector forms the basis of any Development Plan. In Nigeria, the national economy is divided into major sectors of Agriculture (Life-stock, Forestry, and Fishery); Building and Construction (Engineering and Architecture); Manufacturing (Basic Steel and Metallurgical Products, Building Materials, Chemicals, Agro-allied Industries, Small-scale industries, Refineries, Petrochemicals, etc); Mining and Quarrying (Mineral Exploration, Export of Petroleum Products, utilization of Gas, Geological Survey, etc); Producer of Government Services (Education or Teaching Service, Health Service, Police Service); Transport and Communication; Utilities; Wholesale and Retail Trade; Other Services. Each sector must be broken down into occupations and occupations broken down into establishments in which there is a hierarchy of workers. Each establishment has to be surveyed, analyzed, and interpreted on the basis of its total needs, what is available, and what more is needed. Thus, all sectors of the economy are analyzed, and within each sector, an estimate of total employment, unemployment, under-employment, and over-employment is made. Then, the education system runs with this information. Economic development is a result of productivity. If more jobs are created in identified productive areas more money will be generated, and thereby enhancing the economy. You can now export some products and get foreign currency for more economic improvement that leads to national wealth.

In the Education (Teaching) Service, schools are the establishments with a hierarchy of workers as principals, vice-principals, heads of subject areas, classroom teachers, and the supportive staff (bursar, typist, librarian, messengers, gatemen, security men, gardeners and cleaners). A general appraisal of the school system is made and analysis of the various levels of manpower is done under four categories including:

1. All occupations requiring university education and its equivalents
2. All occupations requiring two to three years of education beyond secondary level of education and its equivalents
3. All occupations requiring secondary education
4. All other occupations not included in 1 to 3 above.

The approach is usually to carry out a national census, labour sample surveys, or industrial surveys. We can also rely on monthly pay rolls and administrative statistics from operating records. The data so collected are analyzed statistically for reliable estimates of:

1. The number of workers by occupations, age, sex, qualifications, experience, skill-level, task, marital status, hours worked, etc.
2. The number of un-filled jobs (i.e. vacancies)
3. The number of persons actively seeking work
4. The trends in wages, salaries, productivity, incentives, motivation, training, etc.

Models have been presented for determining manpower needs. Models are a kind of representation, in some cases mathematically, of what happens in the work situation. The most important characteristic of a model is its preciseness in form and focus. One model that best applies to the education system in determining manpower needs is the Labour Balance Model. This is a model for ensuring that each sector, industry or occupation, where people are currently employed and where additions to the current stocks should be obtained, are indeed obtained, with the type of education required also determined.

Motivation, utilization and stabilization of the work force

Motivating workers is a deliberate device to raise their morale so as to induce higher productivity in them. Motivation comes in different forms, either providing good salary or good allowance or good working environment, adequate leave period and leave bonus or allowance, average workload, humane relationship, kind words, praise, caring for workers even outside working hours, free or subsidized healthcare services, car loans, soft loans, etc. Indeed, anything done to assure the workers that their services are important for the growth and development of the organization is motivation (Duze, 2012).

Retirement benefits include Gratuity and Pension. They vary from organization to organization. They are a kind of motivation for workers because they look forward to them. Pension follows the number of years one has served. They are the hallmark of the Public Service. In the Private Sector they do not pay pension but some of them have National Provident Fund where a worker saves a percentage of his salary plus the company

additional percentage for the worker (Duze and Nyong, 2011; Duze, 2013; Duze and Ogbah, 2013).

Having motivated workers, the next stage is to carefully and appropriately make use of them for achieving the purpose of the organization. This you can do by giving them appropriate workload, supervising them as a help and not a task master, drawing them out so that their hidden talents or potentials would be put into proper and optimum use for the establishment, deploy and redeploy workers to units, sections, or departments where their knowledge and skills will be of utmost advantage to the organization.

The next stage is to ensure that the workers are stabilized in the establishment. They need to feel committed, genuinely interested, and patriotically attached to the establishment even when they discover they earn lower salaries where they are working. The tools for this are pension funds, gratuity, retirement benefits, insurance covers, social security, job confirmation, in-service training, on-the-job-training, promotion, regular salary payment, National Provident Fund.

In-service training for workers is important in three major ways. First, for updating their knowledge and skills; second, for greater productivity for the organization; and third, as an incentive or motivation for the workers themselves. The advantage is that the training given is within the experience of the individual workers and acts to enliven their interests and aptitudes for their jobs.

On-the-job training on the other hand is done to enable workers who have not got the real expertise on particular jobs to do so and acquire the relevant skills. The experience is direct, the training is direct, and the supervision is direct. It is both in the interest of the worker who does not have to go out for training with all the inconveniences and expenses involved and in the interest of the organization which will not be required to dispense with the services of the individual worker at least temporarily. Besides, the training is less expensive and more rewarding because it takes into consideration the work environment. Recyclage is a French term meaning re-training at specific periods because it is assumed that after a time, your knowledge and skill become obsolete. All training is meant for productivity and national development is a result of increased productivity.

Workers need incentives to remain in their jobs. Incentives are kinds of motivation. While motivation is merely abstract, incentives are concrete. Any benefits, of a favourable gesture to workers, particularly outside the normal due to them are incentives. They can come higher salaries, better allowances, copious leave bonuses, allowances for medical treatment, vehicle loans, vehicle allowances, dress allowances, etc.

To get the best from employed personnel we must do proper screening at the level of selection so as to get not only those whose knowledge and skills are relevant to the positions that are to be filled but also to consider aptitudes, attitudes, interests, temperaments, etc which are the elements that make a truly educated worker. Next is to deploy them to appropriate jobs where their knowledge and skills are most relevant and from where we can expect optimum performance. For example, to appoint a teacher to teach Government in a school, we have to appoint somebody who studied Political Science not History.

The Role of Education in Sustainable National Development

Way back in time, the role education plays in national development has been identified by many experts and scholars. A statement credited to Adam Curle in a Book published by London Tavistock Publishers 1970, page 29, titled Educational Strategy for Developing Societies (In Iziren, 1987) says: “In order to develop, a country must have a very considerable proportion of trained educated citizens, not only to act as doctors, engineers, teachers, agriculturists, scientists, and the like but to create a new class sufficiently large and hence sufficiently strong to establish its own values of justice, selection on merit, flexibility, empiricism, and efficiency”.

In explaining the above quote, my opinion is that to fight underdevelopment, a case of Nigeria as a result of her education system, created by Nigeria of today and not a British legacy, is to break traditional inertia and autocratic rule of a non-egalitarian minority! There has to be a good proportion of well trained educated individuals to fight underdevelopment with all the ancient and modern weapons available including ideas, honesty, integrity, efficiency, effectiveness, commitment, diligence, friendliness, tolerance, love, peace, patience, contentment, innovation, invention, creativity, productivity, etc and ICT. Unequivocally, this would put us on the trail of tangible sustainable national development. Our National Policy on Education (NPE), as lofty, laudable and plausible as it looks, despite reviews, reforms, and transforms over the years, has failed (Duze, 2002).

A good system of education, with feasible and realizable aims and objectives, managed by a seasoned team of educational administrators and planners that can bring about drastic changes in the mental, psychological, and physical behaviours of Nigerians should be considered and pursued with passion. In that case, we would begin to reap the benefits of an educational system that is really Nigerian and enjoy what education can do socially, politically, and economically to enhance sustainable national development as follows:

1. Socially, education can bring about literacy which accelerates the process of general enlightenment in the society, and as a result of its many-sided functions, education plays a vital role in socialization, occupational preparation, and the development of self conceptions. It brings about social changes in attitudes and motivation which lead to technological change, invention, innovation, and imitation. Education enlightens the mind and broadens the outlook of the recipients who work for peace and harmony during periods of stress and strain. A good education plays a vital role in the structural integration of a plural society by equalizing occupational and economic opportunities. Self reliance, dedication, responsibility, rationality, loyalty, a sense of co-existence, cooperation, fairplay, and understanding are some of the social behaviours of a good education. Education can also play a part in the provision of social cohesion and the development of a common culture.
2. Politically, a good education can assist greatly in national unity and integration. For national unity and integration can happen if in a plural society like Nigeria its members have a sense of common purpose, national citizenship, and loyalty to the extent that people place the interest of the nation above those of the ethnic groups. It means that in spite of the occasional conflicts, stresses, and strains arising from the differences in language, custom and tradition, ideological, religious, and ethnic differences, etc, the component parts of the system are held together either by consent or by force. Politically, education also plays a vital role in national unity through the spread of literacy which provides the key to wider communication with the people as government policies and programmes are publicized through the various media. Education can also play a major part in national unity if by means of socio-cultural transformation a national way of life which puts a premium on achievement and rewards on merit exists. The task of education is much easier if there is already a common language reinforced by the appropriate social and political norms and practices which reflects the nation's idea of national unity. Education through the process of selection and modification can help in building a strong and national culture with achievement norms which such a culture provides particularly as providing a powerful emotional and psychological basis for integrating diverse ethnic groups.
3. In economic terms, education plays a tremendous role by the provision of skills and techniques designed to improve human competencies. The educated man has been found to provide the society with a much valued human capital as a result of his income which represents not only his earnings but also his potential for further achievement. The direct economic impact of education is upon the quantity and

quality of occupational skills which account for about three-quarters of national output. Education increases the stock of knowledge while ensuring its diffusion.

A quote by a scholar, Roberts (In a Book published by Harper and Role, New York 1957, titled Vocational and Practical Arts Education) reflects what education can do for a nation as follows:

“The amazing expansion of the economic system of the United States of America is due to many factors. Among these are the American system of inventions and patent, the techniques of mass production and increased productivity per worker, efficient business management and the method of distributing profits. The successful use of most of these factors and techniques is conditioned by educational programs and procedures. Workers and prospective workers who are responsible for and responsive to these success factors are in need of education and training that will enable American industry and business to keep pace with increasing demand for consumer goods”.

This is to say that a properly organized education can bring about productivity, creativity, initiative, innovation, invention, etc. These qualities, properly developed in educated Nigerians bring about sustainable national development. This is because educated people are the agents of change and the prime movers of innovation that create ideas particularly at professional, managerial, and administrative positions. Once the education system is well defined and organized, creative and innovative specialists begin to multiply in number and expertise to boost sustainable national development.

Conclusion

Manpower represents the aggregate of knowledge, skills, and attitudes resulting from education and training which equip the labour force with the capacity to plan, organize, and carry out economic processes when properly allocated.

Education is given to ensure diffusion of ideas and acquisition of knowledge, skills, and attitudes at several levels. The ideas and skills are manifested in various specialists who put them into productive uses. The specialists appear in various forms as change designers doing researches, making discoveries and inventions, suggesting new ways of organization, and planning broad synergic strategies. Others are change pushers who are able to persuade, coach, and inspire other people to put ideas to work. The ideas involving the right type of values, attitudes, knowledge and skills so acquired will result in the ability

and capability of individuals bring about sustainable national development (Duze, 2010, 2013).

Economic growth depends upon the alterations in human behaviour patterns as man is the primary catalyst in the production process. Man makes ideas and ideas go into ideals and ideals formulate into ideologies. For instance, it is man who manipulates plants and animals to provide foods and fibres to feed the world; it is man who decides when and where to plant, how to plant, and in what soil to plant, and what tools are most appropriate; It is man who decides what to teach, how to teach it, when to teach it, and who should be taught what. The quality of such decisions depends upon the quality of man's education. Man's quality education unequivocally leads to national sustainable development.

The term development means different things to different people. Politicians regard it as freedom from colonial rule while economists regard it as economic growth in rapid and sustained rise in real output per head and the attendant shift in technological, economic, and demographic characteristics particularly of the developing countries. To the sociologists and anthropologists, development is seen primarily in terms of the process of differentiation that characterizes modern societies, whereas political scientists focus attention on the problems of nation building as modernization occurs. Whatever may be the views of these experts development has come to be associated with modernization, material advancement, industrialization, scientific and technological progress, the emergence of nuclear energy, the electronic and biological revolution, and new knowledge of man and the universe. Development means urbanization, socio-cultural transformation, mass literacy, vertical and horizontal mobility, employment opportunities, and the emergence of specialized and independent occupational roles (Duze, 2002, 2009, 2010, 2011)

Besides the material advancement, development can be described as growth plus change which involves material, mental, physical, psychological, institutional, and organizational innovations. In other words, development is a term that covers a wide range of subjects, where in advanced countries they have the following to their credit – high literacy rate, high retention rate, low attrition rate, ample educational and job opportunities, adequate housing and health facilities, adequate provision of water and energy, reliable transportation and communication networks, etc. As a result of their industrial and technological development they export manufactured goods, have high yielding mechanized agriculture and dependable food processing, storage and distribution facilities which are absent in developing countries. Development therefore means every tangible aspect of progress and improvement in all the manifestations of man's activities (Duze, 2002, 2009, 2010, 2011).

Are we in Nigeria really serious in seeking for education that will give us this kind of development? Are we educating and training our citizens in a manner that will give us this kind of development described above? Nigeria was rated middle level developing country in the mid 1980s. Where is Nigeria in the mid 2022s? Sadly, based on the relevant statistics for best top ten countries with the best education system in Africa, Nigeria, the “giant” of Africa was not found on the High Table of educational attainments where the “grasshoppers” of Africa are proudly seated. **Thought for Food!**

Thank You and God bless.

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