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**DEPARTMENT OF EDUCATION FOUNDATIONS  
FACULTY OF EDUCATION  
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NIGERIAN JOURNAL OF EDUCATIONAL FOUNDATIONS GENERAL  
INFORMATION AND NOTES TO CONTRIBUTORS

**1. General Information**

**Name of journal:** Nigerian Journal of Educational Foundations.

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In preparing articles for publication in the Journal, authors should please note the following:

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2. The words cited in the reference list must contain all the data necessary for identification and library search.
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Professor A.A. Adeyinka

Editor-in-Education

# THE 6-3-3-4 EDUCATION SYSTEMS AND THE DRIVE FOR SELF-EMPLOYMENT IN NIGERIA

By

Prof. A.A. Adeyinka

## Abstract

This study describes the evolution of the current national Policy on Education and the 6-3-3-4 education system emanating from it. The writer argues that Nigeria has always had a distinctive educative system, starting with the African traditional education system in pre colonial Nigeria, then passing through the 8-6-2-3 and 6-5-2-3 systems in colonial and early independence years to the 6-3-3-4 educational system of the 1980s. The main focus of the 6-3-3-4 education system education for self employment. This has led to a change of attitude on the part of the government and people of Nigeria. The white collar job is of longer the only goal or aspiration of Nigerian adolescents or adult. More and more beneficiaries of the country's educational system are now opting for self-employment as Lawyer, medical doctors, surgeons, dentists, pharmacists, farmers, industrialists trades businessmen etc.

In spite of the NUC's recommended 60:40 ratio of universities admissions for sciences and arts respectively, it is clear from JAMB records and more particularly from he records at our disposal in this university that candidates are not always available in sufficient number for admission into some science-based courses, e.g. physics and mathematics, in Nigeria tertiary institutions.

The results have always been a consistent but justifiable violation o this official ratio by many tertiary institutions. How educational institutions, the orientation today is 'education for self-employment and better life'.

## **Introduction: The concept of 'educational system'**

The Collins Dictionary defines 'system' as "a group or combination of interrelated, interdependent, or interacting elements forming a collective entity; a methodical or co-ordinated assemblage of parts, facts, concept etc." (p.1474). We could therefore define 'system' as a way of doing things, the way the people in the society operate and carry out their daily activities. On p.466 of the same dictionary, 'educational' is defined as something "of or relating to education", "providing

knowledge, instructive or informative”.

From the definitions given above, we could define ‘educational system’ as the way the people in a given society carry about all activities relating to education. The ‘given society’ may be a state or region within a nation or country (e.g. England in U.K. or Kwara State of Nigeria) or the nation or country itself (e.g. Nigeria, Britain (England and Wales) or France). The education system of a country, therefore comprises not only the school system but also the administrative machinery set up to ensure the smooth-running of the school system: kindergarten, primary, secondary, tertiary (polytechnic, college of education, university). A synonym for the ‘school system’ is ‘educational ladder’.

Carter Good defines ‘education ladder’ as “a form of educational system in which each level is succeeded by a higher level of public education.” Collins defines it as “an educational system, which provides successive levels of education”.

In the American education system, this succession is in the following order: kindergarten, elementary school, junior high school, senior high school, junior college, and state university. In the United Kingdom (England and Wales), it can be looked at in two ways;

- (1) The public system of education from primary school to various forms of higher education;
- (2) The private sector, from preparatory school to public school (or independent non-public school) to various forms of higher education).

In Nigeria, the school system could be described as follows:

(i) Before the New National Policy on Education: Nursery (kindergarten), primary, secondary (grammar/commercial/technical vocational/teacher training), sixth-form/Advanced College/Polytechnic, University (for undergraduate and post-graduate studies).

(ii) With the launching of the current National Policy on education (i.e. apparently from September 1982): Pre-school (Nursery/kindergarten), primary junior secondary, senior secondary, higher education (poly-

technic, college of education, university).

## **Historical Background**

Nigeria has always had a distinctive educational system. In pre-colonial days, it had the traditional African educational system, which emphasized learning by doing, respect for elders and community participation in educational and other social activities.

Fafunwa has given the seven cardinal goals of traditional African education as follows: (1) the development of the child's latent physical skills; (2) the development of character; (3) respect for elders and peers; (4) intellectual training (including the poetic and prophetic aspects; vocational training (including agricultural education, trade and crafts, and the professions); (5) the acquisition of specific vocational training to develop a healthy attitude towards honest labour; (6) the development of communal spirit; and (7) promotion of cultural heritage. The success or failure of an education system is usually measured in terms of the extent to which the system has satisfied the needs and aspiration of the people - that is, the extent to which it has attained its main objectives.

In so far as traditional African education has adequately achieved' its cardinal goals, it has to that extent satisfied the needs and aspirations of the Africans before the infiltration of Islamic and Western Cultures and, more importantly the formal education component of Western culture.

The coming of the Christian Missions was accompanied by the introduction of formal education into Nigeria. The Christian Missions monopolized all educational activities in Nigerian between 1842 and 1882, with the colonial administration given only meagre financial assistance to the three major Christian Missions operating in Lagos, namely, the C.M.S., the Methodists and the Catholics (Ajayi, 1963, Adeyinka 1973, Fajana 1981). All along, the utilitarian aim of education was emphasized and embodied in successive Education Ordinances and codes, especially those of 1887, 1916, 1926, 1948 and 1952 (Taiwo, 1980). Throughout the colonial period and during the early years of independence, the white-collar job was highly esteemed by the Nigerian society. It was only in recent years that attention is being diverted to agricultural pursuits and other kinds of business or economics activities. During those years, the 8-6-

2-3 first, then the 6-5-2-3 system of education was adopted, that is eight' or six years of primary schooling, followed by six or five years of continuous secondary education, then two years in the Higher School Certificate class, followed by three years of University education. While the 6-5-2-3 system was still in operation, the Federal Government was considering the need for overhauling the country's education system and by 1969 it went into action by calling a National Curriculum Conference at which the foundation of the current National Policy on Education was laid.

### ***The Evolution of the National Policy on Education and the 6-3-3-4 Education System***

The foundation of the current National Policy on Education, which embodies the 6-3-3-4 education system, was laid at the National Curriculum Conference held in Lagos from 8th to 12th September, 1969, under the sponsorship of the Nigerian Educational Research Council (Adaralegbe, 1971: xiii). The 1969 curriculum conference was the first of the three conferences which were intended to deal, respectively, with the objectives of education, the content of the curriculum and the methods, materials, equipment and aids required for implementing the curriculum so as to achieve the stated objectives.

The main purpose of the 1969 curriculum conference was to review the old national goals and to identify new ones for education at all levels (primary, secondary and tertiary). The conference aimed at providing guidelines on what the country's educational system should be accomplishing, particularly with regards to:

1. The needs of youths and adult individuals in our society:
2. The socio-economic needs, values, aspirations and development of our society and
3. The curriculum substance that is the subject content of the system which is the means to the goals (Adaralegbe, 1972: xiii).

Among other things, the curriculum conference of 1969 evolved a national philosophy of education for the country. It also reviewed the educational objectives for the primary, secondary, and tertiary institutions. Further, it stipulated 'the role of science and technology in national development and made recommendations on the control of public education. Finally, it recommended a 6-3-3-4 education system for the country, that is, a six year primary school course, followed by six years of

secondary schooling, divided into a three-year junior and a three-year senior secondary education, and lastly a four-year programme of university education, (Adaralegbe, 1972, p.223).

On the basis of the report of the 1969 curriculum conference, the Federal and State Ministries of Education put up a draft for a national policy on education (Taiwo, 1980: 176). This prompted the then Nigerian Head of State Gen. Yakubu Gowon, to promise the nation a National Policy on Education in his speech at Barewa College, Zaria, on 26th April 1972 (Osokoya, 1984: 79).

In December 1972, the National Council on Education (NCE), a Council of Commissioners of Education, deliberated on the draft national policy on education. The NCE suggested that a seminar should be held to make the proposals for a national policy on education. It was further suggested that the proposals so made should be referred to the state governments for comments, and) finally, that the proposals and comments should be the main item on the agenda of the next meeting of the NCE (Taiwo, 1970; 186-187).

The first arrangement made to hold the seminar at the University of Ife between 26th and 28th February, 1972 was followed by the students' violent demonstrations against some aspects of the National Youth Service Corps Scheme. The seminar was later held at the Institute of International Affairs, Victoria Island, Lagos between 4th and 8th June 1973. The seminar, which was chaired by Chief S.O. Adebo, a former Permanent Representative of Nigeria at the United Nations and at that time' the Chairman of the National Universities Commission, was well attended by Nigerians who were invited for their proven interest in Nigerian education. The participants cut across various interests. They included representatives of the Federal and State Ministries of Education; the Nigerian Union of Teachers; Conference of Secondary School and Teacher Training College Principals; Primary School administrators; the Nigeria Educational Research Council; Nigerian employers Consultative Association; Nigerian Council for Science and Technology; Army Education; Citizenship and Leadership Training Centre; the Christian Council of Nigeria; the Catholic Mission, the Islamic Mission; the National Universities Commission; experts in Adult and Special Education; Ministries of Labour and Agriculture; Nigerian Association of University Women and Representatives of the National Union of Nigerian Students. The seminar was also attended by a number of experts who were released by the

United Nations Educational, Scientific and Cultural Organisation, and the Commonwealth Secretariat in London as observers.

The published report of the seminar, which was handed over to the Federal Ministry of Education on 26th June, 1973, is made up of thirteen main parts. The introductory chapter describes the procedure of the seminar. Chapter two of the report deals with Nigeria's national objectives while chapter three recommends the philosophy and objectives that should guide Nigerian education. Chapters four to thirteen set out in detail what the seminar considered to be the national policy on each level or type of education. The chapters focused attention on the definition of terms and the major objectives and recommendations of the seminar on Pre-Primary Education; Primary Education; Secondary Education; University (including professional) Education; Technical Education; Adult Education and Non-Formal Education; Special Education; Teacher Education; Educational Services; and Administration, Planning and Financing of Education.

The Federal Ministry of Education referred the seminar's report to the State Governments, the Nigeria Educational Research Council and the Joint Consultative Committee (JCC) on Education for their comments. The report and the comments made were later reconsidered by the National Council on Education for ratification. Thereafter, the white paper, titled the *Federal Republic of Nigeria National Policy on Education* was prepared but the military coup of 1975 delayed its publication until March 1977.

The emergence of a new Constitution, which introduced the presidential system of government for Nigeria's Second Republic necessitated the amendment of certain aspects of the National Policy on Education. The revised version of the document was published in 1981. The implementation of the new school system was intended to start by the beginning of the 1982/83 school year.

#### The Drive for Self-Employment

The current 6-3-3-4 education system has provided a unique opportunity for Nigerian adolescents and adults to employ themselves gainfully after their formal education. The role of the National Directorate of Employment is very significant in this process. Nigerian adolescents who are not academically oriented are given the push and financial support for training in certain essential professions or trades, for example, sewing, mechanical and electrical engineering,

vulcanizing, brick-laying, carpentry etc. The issue of drop-out does not arise because the system is expected to cater for all talents and all categories of children with varying degrees of interest and intellectual ability.

The curricula of the various levels of education in the new system are designed in such a way that beneficiaries of the system are prepared both for serving the nation and for employment. Opportunities are given to children who are academically oriented to go on from primary through Junior and Senior Secondary School to Universities or other kinds of tertiary institutions.

For example, the junior secondary school is both pre-vocational and academic and it teaches all the basic subjects which will enable students to acquire further knowledge and develop skills.

The curriculum is structured as follows:

Core Subject	<i>Pre-Vocational Subject</i>	<i>Non-vocational subject</i>
Mathematics	Woodwork	Arabic Studies French
English	Metal work	
Nigerian Languages (2)	Electronics Mechanics	
Science	Local Crafts	
Social Studies	Home Economics	
Art and Music	Business Studies	
Practical Agriculture		
Religious and Moral instructions		
Physical Education		
Pre-vocations! Subjects		

In selecting two Nigerian languages, students should study the language of their own areas in addition to any of the three main Nigerian languages, Hausa, Ibo and Yoruba subject to availability of teachers. Students who terminate their schooling at the junior secondary school stage could then go on to an apprenticeship system or some other scheme for out-of-school vocational training which will enable the learners to employ themselves later. The senior secondary school is for those children who are able and willing to have a complete six-year secondary education. It is comprehensive but has a core curriculum designed to broaden pupils' knowledge and outlook. The core curriculum is the group of subjects which every pupil must take in addition to his or her specialties.

Details of the senior secondary curriculum are as follows:

A. Core Subjects

1. English language
2. One Nigerian language
3. Mathematics
4. One of the following alternative subjects: Physics, Chemistry and Biology.
5. One of literature in English, History and Geography.
6. Agricultural Science or a Vocational Subject.

The core subjects are basic subjects that enable student to offer arts or science subjects in a university or any other tertiary institution.

B. Electives

Every student is expected, to select three of those subject depending on the choice of career up to the end of the year and may drop one of the non compulsory subjects, out of 9 subjects in the last year of the senior secondary school courses.

Biology	Bible Knowledge
Physics	Islamic Study
Additional Maths	Metal Work
Commerce	Electronics
Economics	Technical Drawing
Book-keeping	Wood Work
Type-writing	Auto-Mechanic
Shorthand	Music
History	Art
English Literature	French
Geography	Physical Education
Agricultural Science	Health Science
Home Economics	Government, etc.

The effective date for operating the 6-3-3-4, Education system was October 1982. However, many states did not start to enrol students *for* the new 8-3 secondary education system until 1986. In effect, many schools had their first set of SS1 student only last year (1989).

One way of encouraging self employment at higher level to give opportunities for adult Nigerians to study such subjects as Law, Medicine, Engineering, Pharmacy, Dentistry and Agriculture at university level; but it appears that in spite of the establishment of more universities many aspirants to the university degrees in these disciplines are still unable to gain admission into these institutions. JAMB records of the actual students intakes into first degree courses in Nigerian universities during the 1978/79 and 1985/86 sessions respectively show that for each of these academic years, the total number of candidates offered admission was less than ten percent. It is interesting to note that in both years, only 4.5% of the University places were given to applicants for agriculture, and that in an agrarian society where emphasis should be on agriculture and related activities.

### **Directorates of Rural Development**

In addition to the roles of the universities, the various Directorates of Rural Development and Rural Management Training Institutes are trying to train young farmers for self employment and to offer training opportunities for practising farmers. In Ilorin, Kwara State, for example, the Agricultural and Rural Management Training Institute provides consultancy services to practising farmers and at the same time run training programmes for adults employed by Ministries of Agriculture and the Agro Allied Industries.

Similarly, the Directorate for Rural Development in Oyo State provide training facilities for adult farmers and officers of the State Ministry, of Agriculture. Recently (28th-29th September 1989) (Daily Sketch, Friday 22nd September, 1989 p.12), the Directorate of Rural Development, Oyo State, organized a National Workshop on rapid multiplication of cassavas and the utilization of cassava and Soya beans at the Rural Community Development Centre (RCDC), Awe, near Oyo town. The RCDC is the training wing of the Directorate of Rural Development in Oyo State.

The objectives of the RCDC Awe Workshop were:

- (i) To solve the problem of shortage of planting materials dues to the high demand for cassava cuttings.
- (ii) To enhance food production in rural area.
- (iii) To teach the rural farmers the various uses and methods of preparation of Soya beans and cassava.

- (iv) To initiate the farmers on how cheap it is to obtain protein which is of paramount importance to body building from Soya beans.
- (v) To eliminate malnutrition which is currently threatening our society.

A similar function is being performed by the Kwara State Directorate of Food, Road and Rural Infrastructures (DFRRI).

The Kwara State DFRRI was inaugurated in 1987 following the establishment of the nation-wide body of that name by a Decree of the Federal Government in the same year. The Federal Decree stipulated that "the Directorate shall identify, involve and support viable local community organizations in the effective mobilization of the rural population for sustained rural development activities." (Kwara State DFRRI, 1986-1989, p.2).

The Directorate is also expected to formulate and support a national rural feeder road network programme involving construction, rehabilitation, improvement and maintenance especially in relation to the nation's food self-sufficiency programme as well as general rural development. Further, the directorate is expected to formulate and also support a national rural water supply programme, rural electricity and the introduction of rural housing policy which has to do with the utilization of cheap and affordable building materials and labour. It is in these areas that the idea of self-employment comes in. The concept of cheap and affordable building materials' imply the making of these materials by the local artisans, craftsmen, brick-makers, carpenters etc. Also, the concept of 'cheap labour' implies the use of local masons, carpenters, electricians etc who are running local businesses and trades of their own.

The aims and objectives of DFRRI also embody elements of self-employment nation-wide. These are:

- (i) To identify, involve and support viable local community organizations in the effective mobilization of the rural population for sustained rural development activities, bearing in mind the need for promoting greater community participation and economic self-reliance of the rural community.
- (ii) To encourage the contribution of labour, time and material by local communities to be complemented by matching grants from the

Directorate, Local and State governments.

- (iii) To identify and involve local community leaders and organizations in the effective mobilization of the rural population for sustained development activities, bearing in mind the need for promoting greater social participation and economic self reliance in the community.
- (iv) To prescribe the criteria and determine the *level* of corresponding *financial* grant which *will adequately stimulate* the expansion of food production and processing *rural water Supply*, road construction and maintenance of *rural* roads and the provision of *rural* roads and the provision of other *rural* infrastructures.
- (v) To supervise and monitor On a Continuous or basis the entire range of *rural development* carried out or supported by the Directorate (Kwara State DFRRI, pp. 2 & 3).

### **Directorate for Social Mobilization (MAMSER)**

One of the main objectives of MAMSER was:

to *inculcate* into *all* Nigerians the virtue of hard work, honesty, discipline and economic self-reliance through the proper harnessing of their energies, *talents* and *natural* resources (MAMSER, 1989, p.4).

Thus, one of the roles of MAMSER is to provide for the products of our educational institutions and the public generally a kind of socio-political education which would enable the individual to see the value of hard work in a fast developing society. A gainfully employed citizen would not be a burden to the government or a liability to his own family or local community. Although MAMSER does not directly preach self-employment, the Cultivation of a spirit of hard work implies the development of the ability to set up a job and succeed in it and in that way assist the nation in its economic development. A lazy man can neither follow nor lead; he cannot serve well under a boss, and he cannot be a good boss himself.

## **National Directorate of Employment**

In Some earlier studies (Adeyinka 1973, Adeyinka 1975) attention was drawn to the perennial problem of unemployment among Nigerian adolescent school leavers. The cause was found to be the rapid increase in the number of primary and secondary *schools* and the inability or *unwillingness* of the *Federal* and State Governments to create jobs by establishing industries. The result was that, a majority of adolescent school leavers in Nigeria had to take on any job available to them after a long period of waiting. Far from improving, the situation deteriorated in the late 1970s and early 1980s. By the end of 1985, the unemployment situation in the country had become so serious that it attracted the attention of the federal Government. Subsequently, on 26th March, 1986, the President, General Ibrahim Badamosi Babangida, appointed a committee, under the auspices of the Federal Ministry of Employment, Labour and Productivity, to deliberate on strategies for dealing with the country's mass unemployment problem. The Chukwuma Committee Report, as it became popularly known, was accepted and approved by the Federal Government in October, 1986. Based on its recommendations, the National Directorate of Employment (NDE) was established on 22nd November, 1986 and its initial core programmes were formally launched on 30th January, 1987, by the Chief of General Staff, Vice-Admiral Augustus Aikhomu, on behalf of the President (NDE, 1987, p.2).

The President in his 1987 budget speech directed the NDE to:  
concentrate its efforts on the re-activation of public work, promotion of direct labour, promotion of self-employment, organization of artisans into co-operatives, and encouragement of a culture of maintenance and repairs (NDE, B87, p.3).

To ensure effective implementation of the President's directive, a Board of Directors representing a cross-section of all interest groups from industry, commerce, agriculture, finance, employers, labour and government was set up to define policy and supervise operations. The Board thereafter identified four practical programmes nationwide, each operating as a separate department. These were:

- (1) National Youth Employment and Vocational skills Development Programme.
- (ii) Small-Scale Industries and Graduate Employment Programme.
- (iii) Agricultural Sector Employment Programme.
- (iv) Special Public Works Programme.

These programmes are backed by the necessary administrative, monitoring and support *personnel* which encourages an optimum use of resources and prompt response to the requirements of the public served by the NDE.

**(i) National Youth *Employment and Vocational Skills Development Programme***

This department operates on the assumption that the majority of the unemployed Nigerians are *adolescents* or youths, without productive and marketable *skills*. Therefore, the programme operated by the department covers four distinct schemes which are concerned mainly with the acquisition of *skills*. These are (a) the *National Open Apprenticeship Scheme*, (b) the *Waste to Wealth Scheme*, (c) the *Schools on Wheels Scheme* and (d) *Disabled Work Scheme* (NDE, 1987, pp.3-5).

*The National Open Apprenticeship Scheme* is aimed at providing unemployed Nigerian *adolescents* with the basic *skills* needed for self-employment in the Society. This objective is achieved by attaching them as apprentices to companies, ministries, parastatal and professional craftsmen and women. Some of them are admitted to *vocational* training institutions to *learn* a trade. The NDE *pamphlet* (1987) contains further details of the operation of this scheme:

*All* participants in this scheme are required to register with the *Federal* Ministry of Employment, Labour and Productivity's *labour* exchanges prior to being accepted as trainees. This *formal* registration *enables* accurate tracking of employment trends and *labour* statistics which is required for realistic national planning. Upon completion of their apprenticeships, these participants *will* possess the necessary *skills* that are considered *valuable* by *potential employers* or *enable* those with entrepreneurial *skills* go into self-employment. Approved training organizations and individual craftsmen are paid a fee for imparting their *skills* to the beneficiaries of this scheme. Each participant is paid a monthly stipend towards his or her maintenance *while* in training (NDE, 1987 pp. 3-4).

The NDE goes a bit further by organizing the various artisans in each town or Village into co-operative societies to facilitate the provision of financial and other forms of assistance from the Government and 'the organized private sector. It has been indicated that by December 1987 as many as 70,000 hitherto unemployed.

Nigerian Youths had benefited from the scheme. The skills learned by the beneficiaries included Auto-mechanics, Electrical/Electronic maintenance, Welding/Foundry/Metal fabrication, Plumbing Works, Carpentry and Joinery. Leather Works, photography, interior design, Architectural draughtsmanship, printing, computer operation, catering/Basketry /Confectionary, Hair-dressing/ barbing, Auxiliary nursing, Typing and Shorthand, Tailoring/Fashion designing, Modelling.

The trainer organizations for the various professions include SCOA (Nigeria) Limited (auto-mechanics); Leventis Technical Limited (general maintenance skills); Lexmay Technical (air-conditioner repair and maintenance); Federal Ministry of Works (general maintenance *skills*); Nigeria Ports Authority (Maintenance skills); Nigeria Telecommunications Limited (electrical/ electronic); *U.T.C.* Technical (general technical services); Continental Merchant Bank Limited (Banking operations); Vicy Tailoring, Lagos (sewing and. Fashion design); Julius Berger; and Lagos State Transport Corporation. The NDE is currently in partnership with hundreds of trainers in all major towns in the country and it continues to search for other organizations to join the team. This scheme is clearly the most popular of the four schemes operated by this Department and indeed by the Directorate as a body.

*Waste to Wealth* Scheme. This scheme is intended to encourage the youths to learn, within two weeks, how to convert our hitherto neglected raw materials and other scraps and apparently waste materials into useful and marketable products. By sheer resourcefulness or inventiveness, for example, it is possible for a youth to use ordinary snail shells, coconut *shells*, corals and beads, cane and .palm materials and other kinds of scrap materials to make furniture items, house decorations ash trays, apparels, containers, toys and other varieties of useful items.

Apart from creating employment opportunities for the youths, the scheme has the potential to help in developing a culture of inventiveness and self-reliance in resources use, thereby curtailing wastefulness and importation of items that can be locally produced.

*Schools on Wheel* Scheme. In order to Nigerian youths into the urban centres where the open apprenticeship Scheme operates, the NDE develops the 'schools on wheels Scheme' whereby fully-equipped mobile facilities are taken to the rural areas. The scheme is intended to create a pool of artisans who will eventually develop the

rural areas through self-employment and the training and employment of other villagers.

*Disable Work Scheme.* This scheme is intended to provide the disabled Nigerian youths with special facilities which would enable them acquire appropriate training and skills which would in turn lead to self-employment in their respective local communities.

## **(ii) Small-Scale Industry and Graduate Employment Programme**

This programme was designed to encourage and provide financial assistance to unemployed Nigerian youths so that they can set up and run their own businesses. To help the unemployed youths translate their business ideas into viable commercial ventures, the NDE runs Courses in entrepreneurship for them before giving them loans under its job creation loan guarantee scheme. Additionally, the NDE provides substantial loans (up to #150,000.00) to adults retiring from paid employment under the mature People's Scheme. The beneficiaries must be graduates themselves or employ graduates to work for them. The scheme is intended to enable the participants maintain an economically productive life after the days of their paid employment are over.

Examples of small-scale industry ventures are candle-making, soap and detergent-making, Foundry works/metal fabrication used products recycling, restaurant, Fashion designing/tailoring, refuse collection, agricultural production, agricultural processing, printing and publishing, textile and garment making, poly-thene bag manufacturing, Furniture, cabinet works, timber marketing, auto-engineering services, refrigeration and air-conditioning, services, Block and concrete making, butchering and cold store.

## **(iii) Agricultural Sector Employment Programme**

This programme is designed to provide self-employment in agriculture for school leavers and tertiary institution graduates with Degrees, HND, NCE and OND in agriculture and related discipline. Youths who are interested in farming and related pursuits are given the relevant training and orientation after which they are provided with land and loans to start their work (NDE, 1987, p. 8).

(iv) Special Public Works This programme is intended employment to several unemployed to provide immediate temporary youths. The objective of the programme is to utilize this valuable manpower resources in carrying out necessary public works using labour intensive techniques. In this way, the youths are given temporary employment whilst acquiring new skills and trade experience. This programme encourages the development of a maintenance culture nationwide. Each state government identifies the projects to which participants are deployed usually with the assistance of the Local Government Authorities. Examples of the kinds of public works that have been carried out under this scheme are:

(a) Construction and maintenance of roads, building and other infrastructures; (b) Tree planting; (c) Environmental sanitation; and (d) Land clearing and other farm support services. Both graduates and non-graduates are usually employed under this programme.

#### *The Role of Nigerian Universities in the Self- Employment Drive*

As stated elsewhere (Adeyinka, 1988), the Nigerian universities have a significant role to play in the self-employment drive and records do show that they are playing this role creditably. Most of them run courses in such disciplines as Law, Medicine, Mechanical and Civil Engineering, Accounting and Finance, Business Management etc, disciplines which have the potential of enabling those specializing in them to employ themselves gainfully instead of begging to apply for the once-esteemed white-collar jobs.

For a noble profession like teaching, however, it would appear that the days of self-employment are over. This is because the schools established by private individuals as well as those of other voluntary agencies have been taken over by government and the conditions for opening private schools are becoming more stringent than ever before, apparently unsatisfiable by prospective private school prospectors. Dedicated educationists like Tai Solarin, Adeyeri, Aworeni and Atta, to mention only a few of the pioneers of private school proprietorship, can no longer open and run schools and so employ themselves. The case of Adesoye comprehensive High School, Offa, is a unique one: not many Nigerians can go that far.

In spite of the efforts of Nigerian universities to offer admission to Nigerian

youths for science-based courses, particularly in order to meet the NUC' s 60: 40 ratio for science and arts, a majority of these universities are unable to secure candidates in sufficient numbers for such courses as Physics and Mathematics while the Departments of such courses as Law, Medicine, Economics, Business Administration and Accounting and Finance are usually over flooded with applications (NDC 1984) and 1987. The result is that in spite of the enthusiasm of the NUC to give more opportunity for Nigerian youths to study science and so lay the foundation for specialized courses in technology and related courses, its prescription for a 60:40 ratio in favour of science has not been met by many Nigerian universities.

### ***SAP, FEM and the Self-Employment Drive***

The new job orientation in the country has also been largely influenced by the Structural Adjustment Programme (SAP) and the Foreign Exchange Market (FEM). Nigeria of pre-1986 days is significantly different from that of post 1986 era. Everything now seems to be taking a new turn which, for the minority, is for the better; but far worse for a vast majority of Nigerians, including many denoted university teachers and stay-on-the-job administrators. Apart from taking on manual work on the farms and in government and private offices, products of the school system, at virtually all level all over the country, are now being self employed as drivers and *kabukabu* operators (the Post Office Tanke route is the most popular in Ilorin township)! Jobs which school certificate holders and graduates of tertiary institutions would shun in the late 1970s and the early 1980s.

### ***Conclusion***

The 6-3-3-4 education system focuses on the operation of a series of curricular that have the potential for facilitating the self-employment process in the new Nigerian society. By preaching a sermon of self-awareness and hard work, both MAMSER and DFRRRI have succeeded in directing the attention of the Nigerian youths to the possibilities and values of self-employment after the termination of formal schooling. By providing training opportunities in various trades and professions, the National Directorate of employment has contributed, as it is still contributing, immensely to the self-employment process in Nigeria. The boost given to agriculture and related industries" by the Federal and State Governments, the founding of universities of Agriculture, the nation-wide emphasis on technology and

the continued admission of Nigerian youths for courses in Law, Medicine, Surgery, Dentistry, Pharmacy, Accounting and Finance, Architecture. Engineering etc are some of the effective ways of facilitating the self-employment process in Nigeria.

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# ECONOMICS EDUCATION IN NIGERIAN SECONDARY SCHOOLS

By

Professor J.O. Obemeata

## ABSTRACT

*The purpose of the paper is to examine the reasons for the late coming of economics into the secondary school curriculum in Nigeria and its rapid growth in popularity when eventually it did. Economics was first examined in 1967 it may therefore, be assumed that economics became a secondary school subject in Nigeria in 1966.*

*Economics was late in coming into the secondary school curriculum in Nigeria because of a combination of factors from outside and within Nigeria. In the 1950s; opinion in Britain did not favour the teaching of economics in secondary schools. Since most educational policy makers in Nigeria were British, they were influenced by what obtained in Britain. Furthermore, economic graduates in Nigeria did not stay long enough in teaching to be sufficiently influential to get economics included in the secondary school curriculum.*

*In the early sixties, economics was accepted in Britain as a secondary school subject because of the civic and intellectual value which came to be attached to economics. The acceptance of economics in Britain led to its acceptance in Nigeria as a secondary school subject. After its acceptance, the popularity of economics as a secondary school subject grew rapidly because the first few schools that entered candidates for economics in the West African School Certificate Examination had good results in it. However, economics as a secondary school subject is still to achieve the recognition, which is commensurate with its popularity.*

## **Introduction**

An examination of the annual reports of the West African Examinations Council from 1965 to 1974 (Obemeata, 1980) showed that economics was first taken in the West African School Certificate Examination as a school subject in Nigeria in 1967. Since school Certificate economics was a two year course, it may be said that economics came into the secondary school curriculum in Nigeria in 1966, much later

than most other secondary school subjects Economics was however, taken by private candidates, in the General Certificate in Education at both Ordinary and Advance levels. However, School candidates offered economics in the Higher School Certificate Examination Before economics became a secondary school subject, it was recognized that economic problems were at the heart of modern society and that it was desirable for every Nigerian citizen to know some economics. Since economics was not taught as an organized discipline in Nigerian secondary school subjects such as geography, history, civics and current affairs. However, very little organised knowledge of economics emerged from that form of teaching economics.

Ever since economics was first taken as a school subject in the West African School Certificate Examination in 1967, the number of schools that teach it, and the number of candidates that offer it as school candidates in the West African School Certificate Examination have witnessed a phenomenal increase. Obemeata (1980) showed that in 1967 only 10 candidates offered economics in the West African School Certificate Examination which constituted 0.07% of the total number of candidates in that year. In 1969, it was 12.56%, in 1970 it was 17.16%, in 1974 it was 58.69%, in 1975, 68.52% and by 1976, it has risen to 76.9%. The proportion has continued to increase; this view has been further confirmed by more, recent entries. In 1985, 441,448 school candidates entered for economics, while in the same year, 474,534 school candidates entered for mathematics, 474,061 for English and 373,507 for Biology. In 1986, it was 511,377 for economics, 548,239 for mathematics, 548,984 for English Language and 419,568 for Biology. In 1987, there was a general decline in entries for the West African School Certificate Examination, but the relative position of economics remained unchanged. In that year entries were, economics 393,320, mathematics 422,441, English Language, 422,484 and Biology, 321,200.

Virtually all school candidates in the West African School Certificate Examination offered English Language because it is mandatory for most courses in post-secondary educational institutions and for employment. Mathematics is also more or less compulsory for all students who wish to offer science subjects and some social science subjects. Similarly Biology is taken by, many students because they are usually required to take one science subject at least. By this analysis it is probably understandable that English Language and Mathematics

top the list of entries. It may be said that economics is probably' the most popular subject in the secondary school curriculum. If the number of that may determine the popularity of a secondary school subject school that teach it number of schools *at* teach it and the number of candidates that offer it in the school leaving Certificate examination, it may be said that economic comes after English Language and Mathematic, However, when it is realised that it is mare of an optional subject while English Language and Mathematics are more or less compulsory, it would be correct to say that economics is the most popular subject in the secondary school curriculum in Nigeria. Furthermore, when *it is* appreciated that economics became a secondary school Subject in Nigeria only in about 1966, it may be *said* that the growth in its popularity as a secondary school subject in Nigeria has been momentous.

The purpose of this paper is to examine the reasons for the late coming of economic into the secondary school curriculum in Nigeria and -when it became a secondary school subject, *why* its popularity rose sharply within a short period.

## Late Coming of Economics

The late coming of economics into the secondary school curriculum in Nigeria has been traced to certain factors within and outside Nigeria. Starting with the main factor from outside Nigeria, it should be stated that economics did not become a secondary school Subject in Nigeria earlier than it did, because of the status of economics as a secondary school subject in Great Britain.

In the 1950's in Great Britain, there *was* controversy, over the teaching of economics in secondary school. According to Szreter (1975) the debate was sparked off by Robbins (1955) in a *critical* paper on the teaching of economic in schools and universities. This was followed by counter-arguments in defence of economics in schools by Emmett (1956) and Carr-Saunders (1958). The argument, and counter arguments which were advanced were not so much concerned with whether or not economics *was* desirable as a secondary school subject, as it *was* about *its* teachability to *secondary* school pupils.

It *was* the contention of the leading university teachers of *economics* in Great Britain that economics *was* too difficult for secondary *school* pupils. They maintained that the-nature of economics *was* such that it *was* Suitable only for pupils *who* had reached a certain level of intellectual maturity. It *was* argued that economic involved deduction and abstract reasoning. Since the power of deduction and abstract reasoning does not normally develops significantly and substantially before the age of sixteen years, it *was* contended that economics cannot be taught effectively to pupils before they attain the age of sixteen years. One of the *effects* of the controversy *was* that *doubts* were *raised* in the minds of educational policy makers as to the suitability of economics as a secondary school subject.

The debate in Great Britain over whether or not economics should be taught. in secondary schools led to the exclusion of the subject from the secondary school curriculum in Nigeria. The reason for this is not hard to find. Up to the mix-sixties, the bulk of those who were responsible for the formulation of educational policies of this country were British. As should be expected, their decisions on educational matters were more often than not greatly influenced by what obtained in their home, Great Britain. Since in Great Britain economics as a secondary school subject was viewed with suspicion and the leading university

teachers of economics had indicated that economics was not a suitable subject for secondary schools those who were responsible for the determination of what should be taught in Nigerian secondary schools actively discouraged the teaching of economics in Nigerian secondary schools. They repeated the arguments, which had been put forward in Great Britain against the teaching of economics in British secondary schools. Another factor which contributed to the late introduction of economics into the secondary school curriculum in Nigeria was the nature of secondary school principals in Nigeria. The vast majority of heads of secondary schools in the country up to early sixties and mid-sixties were missionaries. In the main, they had studied classics and divinity. They rarely studied science or social science. Many of them were, suspicious of economics which they claimed was a course of study for radicals and that it could breed communism which at that time was regarded as a great threat to stability in the colonial territories and should, therefore, be kept at bay at all cost. Such heads of secondary schools as these could not have been favourably disposed to the teaching of economics in secondary schools in the country. In fact, they actively discouraged it. When some teachers requested to teach it as a school subject, their principals were known to have refused. In view of this, economics was taught in some secondary schools only at the Higher School Certificate level and as part of some other school subjects.

The cause of economics as a school subject was not helped by the fact that only a few graduates of economics remained for any reasonable length of time as teachers. Graduates of economics were relatively few in the country. When economics was introduced as a course at the University of Ibadan in 1960, only 30 out of a total number of 3000 candidates were admitted. Few Nigerians would seem to have graduated in economics from foreign universities. While the supply of economics graduates was low, there was a high demand for graduates of economics to fill the large number of managerial positions in commerce and industries. Since the demand for economics graduates was higher than supply, graduates of economics had no difficulty in finding jobs in the nation's expanding industry where they were better paid and the job more prestigious than in teaching. In view of this, economics graduates were not inclined to accept offers of appointment as a teachers.

The few graduates of economics who went into teaching used it as a stop gap

pending such time when they would find the job of their choice. The graduates of economics who were in schools were usually deployed to teach subjects other than economics, such as, history, geography and mathematics. Since they did not remain for long as teachers, economics graduates in secondary schools were usually not in a strong position to influence the inclusion of economics on the list of subjects which were taught in secondary schools. They could not convince the principals of their schools who, on the whole, did not study economics, that the subject was suitable as a subject to be taught in secondary schools, and that their pupils would make good certificates result in it.

### **Acceptance of Economics**

As a result of a combination of factors from within and outside Nigeria, economics gradually came to be accepted as a subject that can be taught in secondary schools from the mid-sixties. In Britain, people came to appreciate the civic and educational value of economics. According to Szreter (1975), it was felt that a secondary schools leaver could not be said to have been adequately prepared for life in the modern society if he could not appreciate such economic topic as inflation, national income, population and banking, to mention only a few. It became generally accepted that it was necessary for every citizen to have some knowledge of the economic system and how the economic system worked. It was said to be essential, in the other words, for everyone to acquire some economic understanding. This was said to be necessary in order to enable everyone to be able to follow discussions of the numerous economic problems of the country. For example, in 1985, the Federal Military Government initiate a national debate on whether or not Nigeria should accept a loan from the International Monetary Fund and everyone was expected to contribute intelligently to the debate. It was felt that any educated man should acquire some degree of economic understanding and that this was a necessary and sufficient reason for the inclusion of economics in the secondary school curriculum. It was felt that the teaching of some economic topics as part of such topics as history, geography, mathematics and social studies was not adequate because it would provide only a superficial knowledge of economics and was of only a limited value. It was agreed that in order to have more than the general understanding of economics, one must first acquire the tools of economic analysis. That is, one must first have a thorough grounding in the principles of economics.

Another reason why economics came to be accepted as a secondary school

subject is that it was recognised that it contributed immensely to the intellectual development of its recipients. A great educational value was attached to what had been termed the economic way of thinking, a mode of considering a variety of problems that are far from being easy to define. It was said that the intellectual training offered by economics education led to a critical spirit. It was generally believed in this country in the mid-sixties, that only those who studied economics had all the answers to all the problems of the country. This was said to be so because, they, more than any other group of citizens, could offer solutions to the nation's problems.

Furthermore, economics came to be recognised as a proper study because it could be made a vehicle of a strict intellectual discipline. It involves looking at the world in a way, which is for most, if not all of us, quite new. Szreter (1975) quoted Keynes as saying. That the theory of economics is an apparatus of the mind, a technique of thinking which helps the possessor to draw correct conclusions." Marshall in his inaugural lecture at Cambridge in 1885, was reported 'to have emphasized the view which had been expressed by Keynes when he declared that "economics is not a body of concrete truth but an engine for discovery of concrete truths."

As economics came to be accepted in Great Britain, the situation in Nigeria was changing. The atmosphere in Nigeria became favourable for the inclusion of economics in the secondary school curriculum. Although by the mid-sixties there had been a drastic reduction in the number of the former colonial administrators in the Nigerian public service, those that were left were still very influential. Since in Great Britain economics had come to be accepted as a secondary school subject, expatriates no longer opposed the teaching of economics in Nigerian secondary schools.

Furthermore, the introduction of economic as a secondary school subject in Nigeria was hastened by the sharp rise in the number of economics graduates in the country. With the creation of more universities in Nigeria, there was a corresponding increase in the number of departments of economics and an increase in the number of economics students. Hitherto, economics graduates had little or no difficulty in securing employment in commerce and industry. But with an increase in the number of students of economics in universities, the supply of

economics graduates exceeded the demand for them in commerce and industry. The situation of economics graduates was not helped by the political crisis in the country which assumed serious proportions in 1965 and which culminated in the Nigerian Civil War of 1967 to 1970. As a consequence of the Nigerian Civil War, there was economic stagnation. While the output of university graduates of economics was increasing, the capacity of commerce and industries to absorb university graduates of economics into managerial and other positions was shrinking. As a result of this, there were many university graduates of economics who could not find jobs in industries and as such had to take up appointment as teachers in secondary school.

Teaching ceased to be a stepping-stone for university graduates of economics. At first many of them taught subjects other than economics. However, in due course many of them stayed long enough as teachers to acquire influence. Some became principals and vice-principals and were in a strong position to influence the policies of the schools where they taught. From their position of strength, university graduates of economics who felt that they should teach their, subject of specialisation. Economics and who were convinced that economics was teachable to secondary school pupils had no difficulty in influencing and in some cases determining its inclusion in the curriculum of their schools.

When economics was introduced into the secondary school curriculum, its popularity grew rapidly because the first few schools, which offered it in the West African School Certificate Examination, had unexpectedly good results in it. In a study of the results of economics in the West African School Certificate Examination, Obemeata (1980) found that there was a positive relationship between the quality of results in economics and the number of candidates that offered it in subsequent years in the West African School Certificate Examination. For example, in 1974, 45.8% of all the candidates who offered economics in the West African School Certificate Examination passed at credit level. In 1975, 68.52% of the 74,983 candidates who entered for the West African School Certificate Examination offered economics. In 1974, it was 58.69%. In 1976, 76.95% of the 89,993 candidates, for the examination offered economics. When a sample of secondary school economics pupils asked why they chose economics as one of their school certificate subjects, 63.26% of them responded that they chose economics because it was easy to pass in the West African School Certificate Examination.

In order to ascertain whether or not economics was easy in the West African School Certificate Examination, Obemeata analysed the West African School Certificate Examination reS1 selected secondary schools for a period of ten years and found that the sample of his study did much better in economics than other subjects. He concluded that this probably explained why it was said that economics was easy to pass in the West African School Certificate Examination. Many principals of secondary school came to believe that economics was an easy subject which could be taken successfully by the average to weak students. As a consequence, there was a sharp rise in the number of schools that taught economics and the number of candidates that offered it in the West African School Certificate Examination.

### **The Status of Secondary School Economics**

In view of the tremendous popularity which economics enjoyed among secondary schools and secondary school pupils in Nigeria, one would have expected that the subject would be given a recognition which is commensurate with its popularity. Unfortunately it cannot be claimed that economics has been given its rightful place in the secondary school curriculum in the country. At present economics is still to achieve in Nigeria, the mark of status it should enjoy as a result of the large number of schools that teach it and the large number of candidates that offered it in the West African School Certificate Examination.

A number of features are expected of a secondary school subject, which has acquired some standing and merit as a secondary school subject. In view of the large number of students that offered economics in the West African School Certificate Examination, and because almost all secondary schools in the country teach the subject, one would have expected that as a facet of the recognition of economics as a school subject, the Ministries of Education in Nigeria should show interest in the subject. There was a time when Ministries of Education appointed subject inspectors such as inspectors of mathematics or English Language. A survey was undertaken to determine whether inspectors were appointed for economics by the various state ministries of education. It was found that only three states, Bendel, Rivers and Kwara had inspectors for economics. However, it was not certain whether they were appointed as inspectors of economics or whether they were economics graduates who were appointed as inspectors of schools.

Moreover, Ministries of education in the country have not thought it necessary to organise or sponsor refresher course or workshops or conferences for secondary school teachers of economics. If and when economics is sufficiently recognised as a secondary school subject, the various state ministries of education should sponsor or organise conferences, 'workshop and refresher courses for secondary school teachers of economics as they have done for other secondary school subjects such as Nigerian languages, history and the sciences. A subject which is taught by virtually all schools and which was offered in the West African School Certificate Examination by about 90% of all the candidates for the examination annually, should have been of special interest not only to principals of secondary schools but also to officers of Ministries of Education.

Another evidence that the growth and importance of economics in secondary schools in Nigeria has not been recognised is that the community of teacher trainers has not considered economics to be important enough to have any serious thought to the training of teachers of economics. If, as has been pointed out, economics is the most popular subject in the secondary school curriculum because of the large number of schools that teach it and the large number of school candidates that enter for it in public examinations annually, one would have expected that teacher trainers would pay some attention to the training of teachers of the subject.

Until relatively recently, only one University Department of education and that is, the Department of Teacher Education University of Ibadan, offered Courses in economics methods to under graduate student and students of postgraduate diploma in education. Two other University Departments of Education are known to have since started to offer Courses in economics methods. Yet, it is known that virtually all the University Departments of Education in the country offer economics as a teaching subject Similarly, of the numerous colleges of education in the Country, only about four are known to offer courses in the teaching of economics. It would seem that it is assumed that anyone who has acquired the necessary subject matter of economics should be able to teach the subject at the secondary school level and that it is probably not necessary to train teachers specifically to teach economic.

Like all other academic subject, economics has its philosophy and its methodology, which are peculiar to it. As a general principle, the teaching methods, which should be adopted for any Subjects, are usually, at least partly determined by

the nature of the subject. Those who wish to specialise in the teaching of economics should in addition to acquiring, mastery of the content of economics, be specially taught how to teach economics. It may be suggested, therefore, that all University Departments of Education and colleges of education that offer economics, as a teaching subject should also provide courses in the teaching of economics.

If economics, which is probably, the most popular subject in the, secondary school curriculum had been given its rightful place, there would have been some contact between secondary school teachers of economics and teachers of economics in universities. At present, no such contact has been established and there are no indications that such a contact would be established in the foreseeable future.

In many, if not most of the universities in Nigeria, the departments of economics have refused to recognise secondary school economics as economics. Most university economists tend to ignore secondary school economics partly on the grounds that the secondary school economics syllabus stresses descriptive economics.

In the admission of candidates, most University teachers of economics have expressed the view that prospective University students of economics should not study economics in secondary schools. They contend that it is easier to teach economics to students who had no previous knowledge of the subject than to those who had been taught economics badly in secondary schools. An examination of the Joint Admission and Matriculation Board (JAMB) Brochure 1990-1991 session which contains the Guidelines for Admission to First Degree courses in Nigerian Universities, indicates that for most universities, the requirement for admission into the department of economics is English Language, Mathematics and any other two subject. It can only be hoped that it will not be long before University teachers of economics recognise the importance and growth of economics in secondary schools and that what is taught in secondary schools would be recognized as economics.

As at now, there is no association of secondary school teachers of economics in Nigeria. All secondary school subjects, which are regarded as established and important, have associations. For example, there are associations of Subject masters in the country for such individual Subjects as

English Language, history, geography, biology, chemistry, physics, mathematics and religious studies. Even the teachers of French in Nigeria who are known to have only a few secondary school students and who are themselves few have an *association*.

The associations of subject masters normally discuss the place of their respective disciplines in the secondary school curriculum. They search for ways of improving methods of teaching and they help to raise the status of their various subjects. As the Science Teachers Association of Nigeria has done creditably *well*, associations of subject masters could help to produce teaching materials, especially in those areas where they are scarce.

The teaching of economics in-Nigeria is characterised by many inadequacies Nigerian secondary school teachers of economics have few materials on the teaching of economics to work with. For example, audio-visual aids for the teaching of economics are either not available in sufficient quantity or what is available is usually inappropriate. With the exception of a few, the economics textbooks written in Nigeria are badly written, sketchy, lacking in any in-depth economic analysis and largely descriptive. They are poorly, if at *all* illustrated. They contain factual inaccuracies and they are on the whole badly produced. It seems they are nearly always written and produced in a hurry.

Few researches have been conducted into the various aspects of economics teaching in Nigeria. If the various Ministries of Education in the country do not seem to be interested in organising vacation or refresher course, workshops and conferences for secondary school teachers of economics, then the teachers of economics should do these themselves. It cannot be honestly disputed that they are essential and should be provided in view of the large number of secondary schools and students that teach and learn economics.

Secondary school teachers of economics should, therefore, come together to form an association of economics teachers. When this has been done, the association would be in a position to announce to the nation and probably the whole world that economics and economics education are taught in Nigerian secondary schools and that economics has become about the most popular subject in the secondary school curriculum. The association of secondary school teachers of economics would organise and get the, Ministry of Education to sponsor vacation or refresher courses, workshops and conferences for

secondary school teachers of economic. It should be able to sponsor researches into the teaching of economics and engage in the production of materials and teaching aids for the teaching of economics. An association of secondary school teachers of economic when established would help to raise the status of secondary school teachers of economics and the status of economics as a secondary school subject. It would also help to establish some relationship between secondary school teachers of economics and university teachers of economics in the country.

One major problem of the teaching of economics in Nigeria and which has made it difficult, if not impossible to establish an association of Nigerian secondary school teachers of economics, raise the status of secondary school teachers of economics and the status of economics as a secondary school subject, is the nature of the bulk of those who teach economics in Nigerian secondary schools. A survey of some secondary schools, in Nigeria that teach economics has shown that only 27% of the economics teachers in the sample schools had a degree in education and majored in economics or had a degree in economics. The other 73% of the teachers of economics in the sample schools were either graduates of arts or some social science subjects, other than economics, and offered economics only as a subsidiary subject or non-graduate teachers who offered economics as one of their teaching subjects in other words, the bulk of those who teach economics in Nigerian secondary schools are people who cannot be called economists or qualified economic teachers. They are, therefore, not committed to the promotion of the cause of economics as a discipline or as a secondary school subject. They seem to have no stake in the prospect of economics as a secondary school subject. This largely explains why it has not been possible to establish an association of secondary school teachers of economics in Nigeria.

The only effort, which has so far been made to establish an association of economics teachers, has been among teachers of economics in colleges of education. The solution to this problem of the teaching of economic which has been highlighted is that only graduates of economics or education graduates who have specialised in the teaching of economics, should be employed to teach economics in senior secondary schools. This should not constitute much of a problem since there are many people in that category who are currently

unemployed and are in search of jobs.

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# A SURVEY OF THE PATTERN OF STUDENTS PROBLEMS IN ONDO STATE SECONDARY SCHOOLS

*By*

S.A. Adediran

Abstract

The ever-increasing population of secondary school students in Nigeria had brought in various problems, which the school has not got to cope with. The intensity of these problems among student is the concern of this study because the author believes that adequate information about the degree of concern or priority placed on such problems would help the school in finding solutions.

Because of the constrains of time and funds, the study sample was drawn only from Ondo township. From the analysis of data collected and from cases examined, it was found that both the capable and academically weak students in secondary schools need help from teachers and counselling psychologists to solve most of the problems mentioned and for self actualization.

The findings revealed that most students saw 'problem about the future' as the most serious of all the identified problems in the study while 'financial problems and the material deprivations' had a very low priority attention. Most students also declared that they had no anxiety about their academic problems.

## **Introduction**

The increasing population of school going adolescents in Nigeria has revealed a variety of problems which contemporary Nigerian higher institutions are forced to bear. These problems are diverse and complex because of the students' cultural and home backgrounds, age differences, inequality of educational opportunity, sex differences and instability of government policies, which do not allow for regular growth and development of the educational system. These problems could be analysed into (a) Personal or psychological problems (b) academic problems and (c) vocational problems.

Among the observable personal problems of Nigerian adolescents, particularly those in secondary schools, are unhappiness, annoyance and anger, inability to meet needs, inability to get aspirations into fruition, anxiety neurosis, excessive frustration, lack of knowledge and information and partial or total failure. Also Common among the secondary school students are educational or academic problems such as poor study habits, poor memory, poor performance, lack of interest in the school and fear to disclose their problems to teachers while vocational problems border on poor job motivation, low productivity, tardiness, unskillfulness, poor capacity for work and lack of information.

Though these problems are inherent among the Nigerian school going adolescents, it seems that no attempts had been made to focus on the most recurring problems among these students. This study is intended to fill that gap. It also aims at (a) Assisting in an inquiry into the possible causes of poor academic performance or other learning difficulties, and (b) providing a basis for discussion in a counselling interview.

To bring the study to a focus, it was hypothesized that there was no distinction, in students' patterns of problems (in concentration and in sex) as perceived either by students or teachers.

## **Review of Literature**

In a study carried out among 253 students in Ife, and environs concerning the pattern of students' problems, Makinde (19) found that 85.4% of the students in the sample regarded financial and economic problems as the *most* serious problems they had while 72.7% of the students mentioned family and domestic problems as being for them most serious.

Educational or academic problems came next with 63.4% of the respondents seeing it as their most serious problems at school.

The percentage of students that had psychological and social adjustment problems was, 61.3%.

Strayer (1949), in his study of 2000 junior and senior high school pupils in the District of Columbia schools, observed that heading the list of students' problems were the areas of social and emotional problems including such specifics as friendships,

boy-girl relationship, parent and sibling difficulties as well as educational problems, poor relationship with teachers, time budgeting and scheduling of courses. None of the pupils was, observed to mention pocket money or scholarship needs of which Nigerian students may be particular. The same observation goes for Strang's study (1957) of the responses of 1124 New York City adolescents. The concentrated chief concern of the student ranked from: boy-girl relationship (33.4%), followed by a feeling of increasing dependence and *self-* direction (27.6%).

Other concerns were vocation or future (26.4%), social relationship& (25.6%), marriage and raising family (23.1%), problems of sibling relationships (14.9%) and dissatisfaction with school experiences (12.9%).

All the above studies show that the concerns of adolescents in the U.S.A. may be different from the problems of Nigerian students. However, the problems of finance is very well expressed by Okonji (1970) who himself was a high school student at the time he observed that the pattern of problems revealed by the sample he studied showed that graduate counsellors going out for practicum must be stocked with a lot of information to solve financial and economic problems of students.

With the background provided by the literature, this study intends to find out whether the pattern of problems in the Western World and Nigeria are the same and whether the same approaches for solution could be recommended.

## **Methodology**

### *Subjects*

Two hundred (100 male and 100 female) students of 15 - 18, years of age and in the fourth year (5.5.1) of the grammar school were sampled for the study, One hundred and eighty-seven students (97 boys and 90 girls) returned their questionnaires duly completed. The subjects were randomly drawn from two boys' schools, one girls' school and two mixed schools.

### *Instrument*

The instrument used for this study is the Student Problem Inventory (SPI). Bakare (1977), the author of the instrument stated the instrument is the outcome of over a year's intensive research. It is a self-reporting inventory through which the individual

student describes his personal problems according to his or her awareness of them and according to the extent to which he/she is willing to disclose them. The instrument contains eleven (11) sections of various problems areas. The inventory, which is designed for use on African subjects, is said to have been developed along the same lines as the money Problems Check List which is being widely used in the American setting. The SPI was administered twice to a randomly selected group of 36 form five .male pupils (Mean Age= 15.6 years, S.D. 1.2years) with an interval of six week between the two administrations. The test-retest reliability of the inventory was found to be .64. The reliability coefficient of the instrument when administered twice on 28 form five girls of 15.02 years at six weeks interval was .79. The test-retest reliability of the inventory was considered adequate for the instrument.

Congruent and construct validity have been established for the SPI. The inventory, for instance, has been observed to correlate' with other well known instruments in the expected direction.

It correlates .50 (N =50;  $P < .01$ ) with the Taylor Manifest Anxiety Scale and .45 (N =50;  $P < .01$ ) with the Saranson Test Anxiety Scale. Evidence for the validity of the SPI is also provided by the fact that' correlations among the various sections of the inventory are in the expected direction.

### *Procedure*

The instrument was administered on fifty students from each of the selected five schools. Subjects were not allowed to sit together to, avoid copying and bias. The scoring was done during the, counselling periods of each school under the supervision of the school counsellors.

### *Data Analysis*

Since the study is a survey, data were analysed using the Stanine diagnostic process. This was to reveal the variability in concentration of the students' problems in the area of study. Frequency distribution or the problems areas were also compressed according to the Stanine profile and further expressed pictorially through line graphs.

## Results

Findings were analysed from three angles. These were: (a) the pattern of problems among boys, (b) the pattern of problems among girls, and (c) the pattern of problems among all the students (boys, and girls). Eleven problem areas that had been observed to be present among students were also looked into.

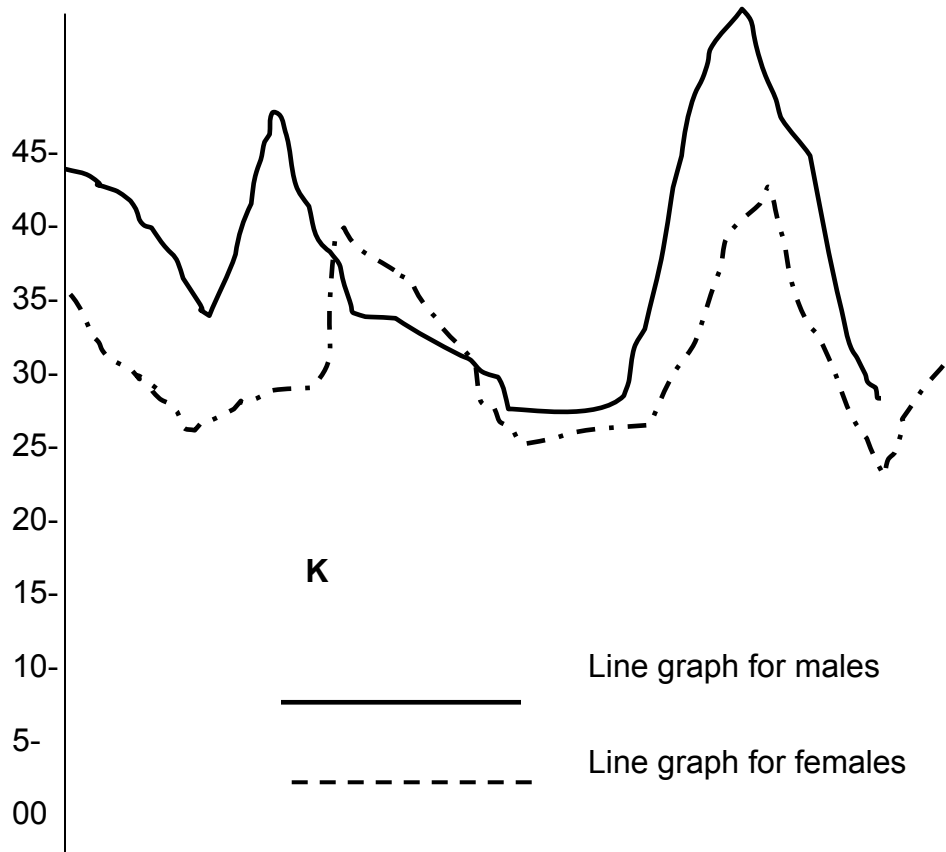
Table 1 shows the pattern of problems observed among the male subjects used for the study. Using the Stanine diagnostic Table 1 and Diagram 1, it was observed that 'problems about the future' had the highest score ( $f = 46$ ) among the eleven problems.





FIG. 1

LINE GRAPH SHOWING PROBLEM DISTRIBUTIONS AMONG MALE AND FEMALE STUDENTS BASED ON STANINE MODEL



This was closely followed by 'Physical and Health problems', 'A', (f = 45). "Social relationship problems, 'C', had f = 39 and come third while "Family problems" 'H' and "Academic, and study problems", 'J' had equal weight (f = 36). School adjustment problems, 'K' came last (f =26) while this was followed by 'Moral religious problems' 'G' and personal and psychological problems 'F' (f = 27) and (f =28) respectively.

In table 2, it is noted that among the girls, "Problems about the future" had the highest concentration of the subjects (f =37) followed by "Social psychological problems" with (f =36) "School adjustment problems" came third (f =33), while the least was "academic and study problems (f =18).

Even though "problems about the future" took the lead among both boys and girls, concentration among boys was f=46 while that of girls was f =37. It was also noticed that while "school adjustment problems" had the least impact among the male students, "Academic and study problems were least recognised among female students.

Table 2

Table showing section scores and frequency distribution of problem areas among female students based on Stanine model

	A		B		C		D		E		F		G		H		I		J		K
ST	FR	RS	FR	RS	FR	RS	FR	RS	FR	RS	FR	RS	FR	RS	FR	RS	FR	RS	FR	RS	FR
7	1	7	4	6	0	6	7	9	3	9	0	8	6	6	4	4	5	11	1	1	0
6	0	5-6	9	5	3	5	9	7-8	3	8	0	6-7	18	5	4	3	11	9-10	4	9-10	5
5	0	4	6	4	6	3-4	25	5-6	9	6-7	15	5	5	4	13	2	15	7-8	16	6-8	12
4	5	3	19	3	22	2	10	4	14	5	8	3-4	21	2-3	30	1	37	5-6	12	4-5	14
3	18	2	19	2	25	1	28	2-3	36	3-4	24	2	17	1	21	0	22	3-4	18	2-3	33
2	19	1	23	1	21	0	9	1	13	2	11	1	12	0	17	-	0	2	10	1	8
1	32	0	10	0	13		2	0	12	1	16	0	11	-	0	-	0	1	14	0	18
0	15	-	0	-	0	-	0	-	0	0	16	-	0	-	0	-	0	0	15	-	0
-	0	-	0	-	0	-	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
	N=90		N=90		N=90		N=90		N=90		N=90		N=90		N=90		N=90		N=90		

KEY

1. ST = STANINE
2. RS = RAW SCORES
3. FR = FREQUENCY
4. N = TOTAL FREQUENCY

FIG.2  
LINE GRAPH SHOWING PROBLEM DISTRIBUTION AMONG ALL STUDENTS OBSEVERD

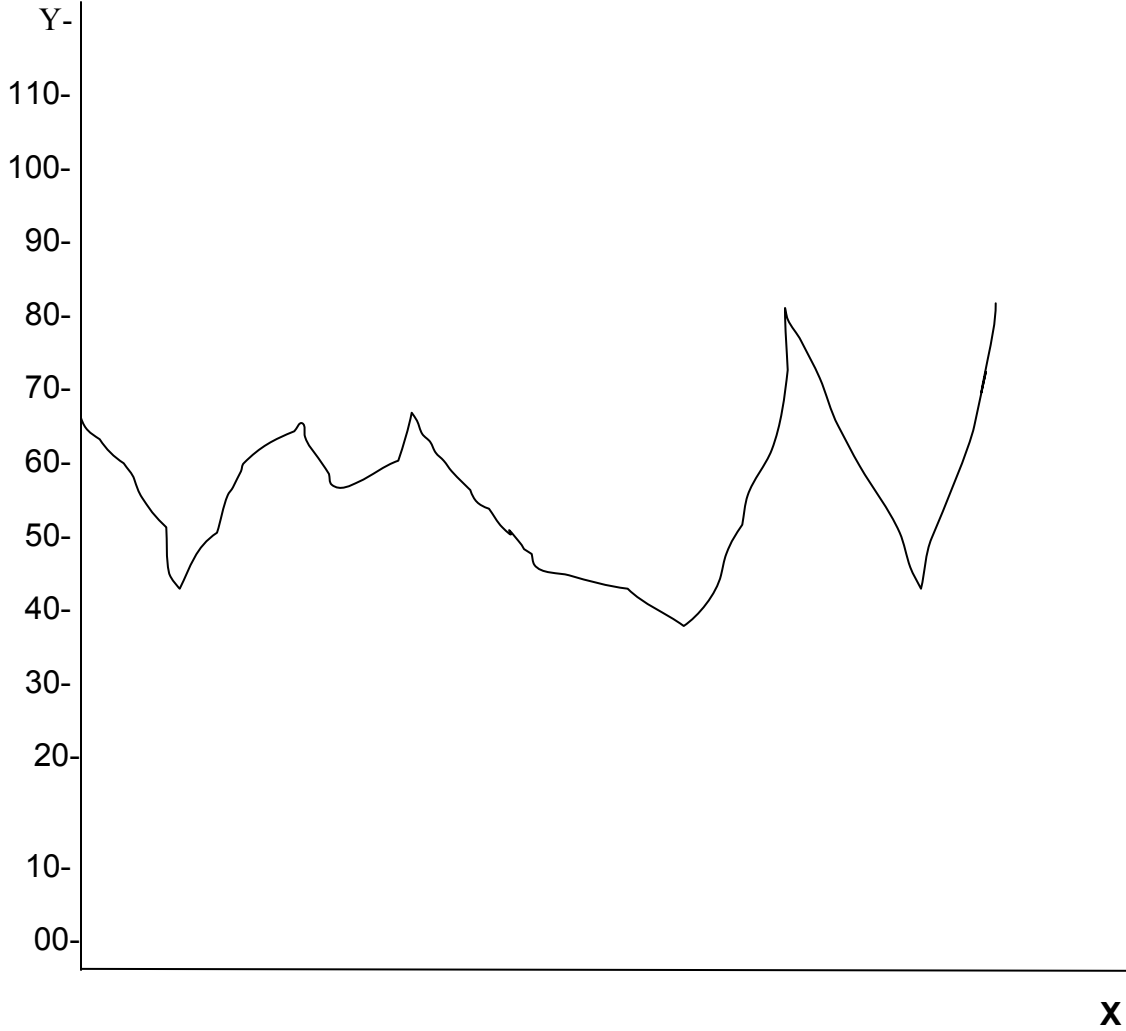


TABLE 3

Table showing frequency distribution of problems areas among students based on Stanine model

ST	A	B	C	D	E	F	G	H	I	J	K
9	2	4	2	7	6	2	12	4	6	6	4
8	1	13	6	13	5	1	24	7	14	9	8
7	7	10	15	30	18	25	11	21	20	21	14
6	11	34	44	18	20	25	32	44	50	17	26
5	32	32	64	58	57	45	30	38	68	42	59
4	64	37	43	36	35	39	23	37	29	27	32
3	55	43	13	25	36	34	29	36	0	50	44
2	15	14	0	0	0	16	26	0	0	15	0
1	0	0	0	0	0	0	0	0	0	0	0

N=187

N=187

N=187

N=187

N=187

N=187

N=187

N=187

N=187

N=187



TABLE 4

Table showing problem dispersion among students

Order of Concentration	Boys	Girls	All Students (N= 187)
1 <sup>st</sup>	I	I	I
2 <sup>nd</sup>	A	E	E
3 <sup>rd</sup>	C	K	A & C
4 <sup>th</sup>	H & J	A	-
5 <sup>th</sup>	-	H	K
6 <sup>th</sup>	B	D	D
7 <sup>th</sup>	E	C	F
8 <sup>th</sup>	D	F	H
9 <sup>th</sup>	F	B	B
10 <sup>th</sup>	G	G	J
11 <sup>th</sup>	K	J	G

A = physical and Health Problems

B = Financial Problems and Material Deprivation

C = Social Relationship Problems

D = Sexual Problems or Sexual Information

E = Social Psychological Problems

F = Personal Psychological Problems.

G = Moral and religious problem

H = Family problems

I = Problems about the future

J = Academic and study problems

K = School Adjustment problems

Table 3 and diagram 2 reveal the pattern of problems among all the subjects used for the study. In table 3, it was revealed that "problems about the future" (f = 68) had the highest concentration of students followed by social Psychological problems with f = 67. Physical and health problems as well as social relationship problems recorded the same concentration. 'f = 64' The least recognised problems were moral and religious problems with f = 32, followed by "Academic and study problems" (f = 45), financial problems and material deprivations (f - 43) and family problems (f - 44).

In table 4, it would be observed that the pattern of problem in boys' schools did not tally with those of girls' school. For instance, while problems about the future took the lead among the boys and the girls. it was realised that physical and health problems was second among boys while the second among the girls was social psychological problems. School adjustment problems came last in concentration among boys while academic and study problems were least emphasized among the girls. "Financial problems and materials deprivation" took the sixth position among boys while it was even more de-emphasized (it took the 9th position) among the girls

## **Discussion**

Looking into the eleven problem areas among the students. This study revealed that there was a great departure from the study cited in the literature. For-instance, while Makinde(1976), found financial and economic problems as the most troubling students, this study observed that problems about the future was regarded as the most serious in the minds of the students. Similarly, the study disagrees with Makinde's (1976) findings which saw family and domestic problems as well as educational or academic problems as most troubling after financial and economic problems respectively. This study further disagrees with Strang's study (1957) which observed that the concentrated chief concerns of the students ranked from boy-girls relationship followed by feeling of increasing dependence and self direction. Neither does Strayer's (1949) study which revealed that heading the students' list of problems were the areas of social and emotional problems including such specifics as friendship, boy-girl

relationship, parent and sibling difficulties as well as educational problems agree with the study .

The investigator believes that a number of reasons could have lead to the above disagreement and to the present pattern of students' problems in Nigeria and more specifically in the area of study. At the time of this study, the political situation in Nigeria had given a radical change to, its socio-economic growth. The structural adjustment programme had affected the labour market and many school leavers, including University graduates, were found unemployed. This situation could probably have been accountable for the priority given to "problems about the future" among students. More often that not, students' discussions with their teachers or school counsellors have been observed to centre on admission to higher institutions, information about what to do after leaving school, types of family they would like to adopt, the usefulness of going to school without job and how to live a happy life after school.

Following students' concern. about their future was the concern given to "social-psychological problems" among the subjects and a majority among the girls while physical and health problems ranked second among the boys. It would be observed that the subjects were in their adolescent stage of development when naturally they have to bother about their social affiliations. In Nigeria, it has been noted that children at this stage form, their age groups, design their pattern of life and lay down their life aspirations.

That physical and health problems ranked high among the boys in the pattern of problems indicated by the study shows that observed concern of the adolescents about their physical and health problems. However, it has been noted that the adolescent years often witness a period of restlessness and exploration. Most students at this stage are observed to be drug-addicted, sexual deviants, tense, less caring about their academic work and unable to set goals for themselves. It has also been observed that most adolescents do not relate their home backgrounds to their attitudes in the society. Most Nigerian students from poor homes are caught up in the peer-group web of anti-social activities and often find it difficult to divorce themselves from this group lest they are rejected and labelled the 'black sheep' of the group. Most of the sampled students

for this study came from *low* socio-economic status background and the inability of parents to cater for the physical and health problems of their children was apparent. This was further compounded by the restless and reckless pattern of life which students live.

The observed non-challant attitudes of that contemporary students to their academic work was revealed by this study. Even though the concern about academic problems ranked fourth among boys, it came last among the girls and second to the last among all the sampled students (see table 4).

This was a revelation that students no longer place much premium on their academic work, but on other areas of life. This attitude might still be influenced by the concern placed on the problems about the future. Hitherto, the present economic crunch in Nigeria (*as in other places*) which had led to graduate unemployment and inflation might have influenced the thinking of students and the shifting of priority attention from academic to problems about the future and other problem areas.

That students placed no priority attention to moral and religious problems as revealed by this study had been Witnessed among students over the past two decades. Students for instance had been observed to have no respect for ethics and norms of the society. Elders are no longer respected, sexual abuse is common among the students, teachers are fast losing control of the school to students and Crisis range supreme on flimsy and unreasonable excuses. The reason for this, however, might be the removal of pressure by *the* government on religious instructions in the contemporary Nigerian schools.

Certainly, these and other problems unidentified are to interest both teachers and school counsellors as well as to find solutions to them. But the observation of the investigator is that goal setting problems, financial and material problems and school adjustment problems are not as highly rated as problems about the future, social-psychological problems, physical and health and social .relationship problems.

## **Implications**

This study has raised a number of issues. One of them is that professional

teachers and guidance counsellors should be prepared to meet the social-psychological needs of their students. The natural expectation of the study would have been a priority placed on financial and material problems among the students; majority of who come from low socio-economic status background; But with this revelation, three assumptions could be made:

(a) That what students revealed might be true. If this is so, then educators should continue to find ways of meeting the social personal needs of students. The school should provide motivation for the cognitive, affective and psychomotor needs of students and be able to make school a worthy place to live in.

(b) That students are in their stages of self-development and had not self-actualised. The study believes that students' concern about their academic work would definitely lead to high motivation toward achievement and in turn lead to future goal setting toward self-enhancement.

(c) That students did not reveal themselves adequately during the survey study.

One would certainly expect that students from poor homes could certainly need money to buy their textbooks, purchase their domestic needs, pay their school fees and keep some amount as pocket money. Though the study revealed no anxiety for financial problems, it could be suspected that the sampled students were probably hiding themselves and would not want to portray their parents as belonging to low-socio-economic background status. This is typical of African culture and, where this happens, the results obtained may not represent the true picture of life among the Nigerian adolescents. However, students need to be informed about the negative implications of refusing to open up when asked questions on vital and pertinent issues that concern them.

### ***Conclusion***

From this study, the following conclusions and inferences are drawn:

1. That 'problems about the future' had the priority of place with the students in the

identified problem areas.

2. 'Social-psychological *problems*' had a high rating among students.
3. 'Financial problems and material deprivations' had a very low priority attention among the sampled students.
4. Only a few students declared anxiety about their academic problems.
5. No priority attention was placed on moral and religious problems.

### **Suggestions for further studies**

In view of the fact that this study was limited to a *small* area of Ondo State and findings may not be the same with other areas of Nigeria, it is suggested that this study be replicated for other states in the Country.

Similar studies could be carried out with primary, teacher training or tertiary institutions as focus.

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# THE CONCEPT OF INTEGRATION OF THE SCIENCES IN NIGERIA

BY

Mrs. A.N. Duyilemi

## Abstract

In this paper, the author discusses the philosophy behind the movement from general science to integrated science, pointing out its relevance to the current National Policy on Education.

Problem associated with the idea of integrated science were highlighted. These range from lack of trial testing of the material for teaching integrated science to the inability of the teachers to effectively cope with the materials. One of the recent research findings in the context of the Nigerian situation was cited to buttress the points.

## Introduction

The type of science where emphasis is placed on the fundamental unity of science is referred to as-Integrated Science.

This is different from the old-fashioned decompartmentalised science where emphasis is very strictly on divisions into Biology, Chemistry and Physics. Nature, Study and Hygiene, which were the vogue in primary schools and teacher training institutions, have also metamorphosed and changed into integrated science. 'This is because the contents of such old subject disciplines were not enough to make the products cope effectively with their environmental problems. More ideas on the definition, philosophy and comparison of integrated science with general science have been given by Bajah (1978,1984). For example, Integrated Science was defined as:

An approach to the teaching of science in which concepts and principles' are presented so as to express the fundamental unity of scientific thought and avoid premature or undue stress on the distinctions between the various scientific fields.

## Historical Perspectives

Integrated Science is not a new name in many parts of the world. However, it is relatively new in some developing countries where general or rural science has been stressed over the years. For instance, General science has been introduced to Nigerian Schools since 1878, whereas integrated science became popular only between 1957 and 1969 (Abdullahi, 1982). This period was characterised by activities generated in

many parts of the world to develop new and suitable science curricula for the primary and junior secondary schools. For example, the Russians launched their space ship, the Sputnik, in 1957, while the Americans put the first man on the moon in 1969.

The first International Conference on Integrated Science teaching took place in Warna (Bulgaria) in 1968. The first publication of the Nigerian Integrated Science Project (N.I.S.P) was in 1970. It spelt out the objectives of Integrated Science and since that time this aspect of science has been better imbibed by relevant cadres of our educational system. Originally meant for the first two years of the secondary school, integrated science is now taught in primary and junior secondary schools in Nigeria, the latter being of three years duration. This is in line with the National Policy of Education, which adopted the 6-3-3-4 system. What happens to integrated science is similar to the case of integrated social studies, both of which resulted from the new "broad field curriculum."

### **The Main Tenets of integrated Science**

In present day Nigeria, children ask some questions which could only be answered by adequately prepared teachers of integrated science. Answers to such questions must be given during and outside school sessions if the realities of the modern world must be faced. Correct answers and discussions on such topics must enable the learners give explanations to scientific occurrences. All these one way or the other have a useful bearing on our cultural environment. For instance, even in the remotest village, answers to the following and similar questions can only be given by learners who are well rooted in the concept of integrated science.

(1) How does a seed grow into a tree?

(2) How is rainbow formed?

(3) In what way does the motor radiator function to play a part in keeping constant temperature and preventing overheating in the car? ,

(4) Biceps and triceps muscles of a human being lift a load from the ground. How do such activities lead to ideas on load, effort, lever under the title "forces"?

(5) what are the steps by step explanations to elementary aspects of the chemistry behind alcohol production from fresh palm-wine or some types of ripe fruits like pineapple?

(6) why does an uncooked piece of yam or cocoyam cause itching in the throat when eaten?

(7) How does the smell or odour of a perfume or rotten egg in one corner of the sitting room get spread and fill the entire surrounding?

Integrated Science encourages scientific attitudes, which in turn lead to possible explanations to the above questions and phenomena. Other similar and even more complex observations can be explained through integrated science.

The approach in this discipline stresses to beginners the general principles which run through the entire world of science. In addition, it impresses it on the teacher to find extra time to lead up those topics with which he/she is not very familiar. In effect, teachers who are being trained to teach integrated science must move away from discriminatory attitudes towards any of the sciences. This means that an integrated science course eliminates the repetition of subject matter from the various sciences (Biology, Chemistry, Physics), in much the same way as a social studies course eliminates repetition of ideas and concepts from History, Geography, Sociology, Economics etc. Also, it does not recognise the traditional subject boundaries when presenting topics or themes.

### **Objectives of Integrated Science**

According to the Nigerian Integrated Science Project (1970), Integrated principles are intended to produce, among other things a course which:

- (a) is relevant to student-needs and experiences;
- (b) stresses the fundamental unity of science;
- (c) lays adequate foundation of subsequent specialist study; and
- (d) adds a cultural dimension to science education.

Based on these objectives and the tenets of integrated science discussed earlier, students should be made to master the following skills:

- (i) Observing carefully and thoroughly;

- (ii) Reporting completely and accurately what is observed;
- (iii) Organizing information acquired by the above processes;
- (iv) Generalising on the basis of acquired information;
- (v) Predicting as a result of these generalisations;
- (vi) Designing experiments (including controls where necessary) to check these predictions;
- (vii) Using models to explain phenomena where appropriate;
- (viii) Continuing the process of inquiry when new data do not conform with predictions.

Following is a flowchart on a theme "You And Your Environment" which needs the knowledge of all aspects of science.

Unless both teachers and learners are ready to approach it from a unified pattern, it may become difficult to study the environment meaningfully.

### **Some Problems of Integrated Science Teaching**

The planning, introduction and implementation of Integrated Science in schools have initial problems. These problems are not very different from those that are common to all innovations in curriculum projects, such problems are political, social, and pedagogical. At the initial stage there was the continued existence of general science with integrated science. To a certain extent, the two titles led to confusion among teachers, some education agencies acting as planners and executors, students and even examiners who were responsible for setting examinations to test learners' knowledge; the situation was so, because while integrated science was introduced at the start in only a few schools with fairly well-informed teachers who have been updated through in-service training, many other schools were left just with the "new" name and uninformed teachers.

There seems to be the perennial argument that integrated science is specialised in either at Nigeria Certificate in Education (N.C.E.) or at degree levels may lead to having shallow knowledge in science. Indeed, the question of "Who is the qualified integrated science teacher?" is yet to be satisfactorily answered. Apart from that, there has been an apparent foot-dragging attitude among the nation's tertiary institutions to include Integrated Science courses in their programmes of study. This was responsible for the 31st Annual Conference of Science Teachers' Association of Nigeria (STAN)

President's address on the theme "Articulation of Integrated Science Paradigm (Ikeobi, 1990). A call had already been made on the National Commission for Colleges Education (NCCE) and the National Universities' Commission (NUC) to direct cur Colleges of Education and Universities respectively to introduce B.Ed or B.Sc (Ed) degree in Integrated Science as we already have in Social Studies. If that call is heeded, perhaps the political and social aspects of the problems may be reduced to a manageable level. On pedagogy, a few studies have been carried out by Nigerians .

Some of them are based on identifying problems in implementing the core curriculum for Integrated Science. Such studies include:

Balogun (1983); Jegede (1983); Fayemi (1986), and Olarewaju (1987). In his own study, Olarewaju (1987) claimed that the core curriculum for integrated science was introduced to schools without any trial-testing. This, according to him, amounted to short-circuiting the curriculum development process. In the investigation, he sought specific answers to the following questions:

- (1) What is the calibre of teachers who teach Integrated Science, in the Junior Secondary Schools?
- (2) Are they able to cover all the themes (including the topics in the curriculum)?
- (3) What topics do they find difficult to teach?
- (4) What topics do they think should be included in the curriculum and why?
- (5) Which topics do they think should not be included in the curriculum and why?

The sample consisted of Integrated Science teachers in Ondo and Oyo States of Nigeria. The research instrument was an open ended Integrated Science Teachers' Questionnaire (ISTQ) constructed by the researcher to collect data. After administration and analysis, results showed that most of the teachers were not adequately prepared to teach the content of the curriculum. They therefore had to encounter problems with the teaching of topics that are not related to their areas of specialisation. Following is a sample of two tables from the research

Table 1

Qualification of integrated science teachers

Qualification	N	%
NCE	26	65
HND	1	2.5
B. Sc	5	12.5
B. Sc Ed.	3	7.5
B. Ed	3	7.5
Not Stated	2	5.0

Table 2

Area of specialisation of the teachers

Specialisation	N	%
Agriculture	4	10.2
Biology	1	2.6
Biology Combinations	13	33.3
Chemistry Combinations	6	15.4
Food Science and Technology	1	2.6
Home Economics	2	5.1
Microbiology	1	2.6
Physical and Health Education	10	25.6
Not Stated	1	2.6

From these data and the results analysed above, it is clear that it is a very wrong notion to think that anybody who has studied a science subject at any level should be able to teach integrated science. It should be pointed out again, as was done by Olarewaju and Balogun, (1984), that such teachers have to be specially prepared and trained to handle Integrated Science in effect, indicates that many of the so-called Integrated Science teachers are not qualified to teach it effectively.

Even though the size of the sample used in the above statistic relatively small, the finding seems to be important. More similar studies can reveal more about the problems involved teaching Integrated Science. Selected topics which teachers find difficult to teach are:

Year I: Electrical circuits, reproduction in mammals, forces, energy, pressure, mirage.

Year II: Laboratory preparation of gases, water, oxygen, hydrogen, and topics in physics.

Year III: Skeletal system, electrical energy, chemical reactions.

These observations are pointers to the need for a revision science education programmes of Universities and Colleges of education. They should be modified and adapted to the needs of Nigerian society.

In conclusion, the idea of Integrated Science in the curriculum is worthwhile. More efforts should now be made to utilise research findings on the problems of implementation, now that the principle the philosophy of Integrated Science has been accepted. More Nigerians should be encouraged to write indigenous textbooks for use within the cultural context of contemporary Nigeria. More in-service trainings should be organised by Colleges of Education and University Institutes of Education for teachers who are on the job.

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Ikeobi

PRINCIPALS, SUPERVISORS AND STUDENTS' ASSESSMENT OF TEACHING  
PRACTICE  
BY  
Dr. E.A. Abe

Abstract

This study tried to compare the scores of students' teaching practice as assessed by school principals, faculty supervisors and students' self-evaluation. A total of one hundred and twenty (120) sandwich students of the Institute of Education, University of Ilorin were used as samples. The instrument was an officially approved teaching practice format. Scores from the three sources of assessment were compared, using the t-test and Pearson's product moment correlation coefficient. Results show that students tended to rate themselves more generously than principals and faculty assessors.

Introduction

Every profession has its practical aspect. The practical aspects of teaching, involves direct knowledge of and contact with students, classroom encounters, actual teaching of subject and classroom management. During teaching practice, the performances of student teachers are normally evaluated by supervisors Little is known about how the students rates himself or how the H. principal of the school to which he is deployed rates him.

Occasionally there is the notion that student teachers put on a 'cosmetic show' when they know that their supervisors are around They again recede to their 'normal' teaching styles devoid of the use of teaching aids, when the supervisors have accomplished their assignments and gone back to their offices. It was for this reason that Maxwell (1987) doubted if supervisors' grade actually reflect the 'true' quality of the instructions receive by students. There is also the submission that the true evaluation of a teacher can only be done, not by a visiting supervise but by both the principal of the school involved and "the actual students of pupils who benefit from the teaching (Norman. 1980).

## **Method**

### *Sample*

The Institute of Education, University of Ilorin organises Sandwich Programmes for Postgraduate and Undergraduate students in Mathematics, Science, Language and Social Studies education courses. The students come to the campus for a ten (10) week

Intensive work during the long vacation after which they go back to their stations in various parts of the country to resume their teaching assignments in their respective schools. All the students involved in the Bachelor of Education degree are holders of the Nigerian Certificate in Education (NCE).

One hundred and twenty (120) such students i.e. B.Ed. Sandwich students randomly selected from a total of about nine hundred (900) who were on their final teaching practice in 1991 were used for the study. The usual practice was to send a team of supervisors from the faculty to visit the various schools. The grades given to them by the faculty supervisors were supplemented with those given to them by the principals of the co-operating schools for their nominees.

The aim of this study was to find out if the assessment given by the faculty supervisors are similar to those given by the principals. In this study, the selected students were specifically instructed to assess themselves on the basis of the assessment criteria used by both the two other assessors (the principal and the faculty supervisors). It is therefore one of the aims of the researcher to ascertain the level of disparity and correlation among the assessment scores of the principals, faculty supervisors and those of the students.

### *Instrument*

The Instrument for data collection was a 10-item Teaching Assessment Format (TAF) which has been designed and approved for assessing students teaching practice in the University of Ilorin' for more than five years. The teaching Assessment Format (TAF) contains three Cardinal Criteria to be assessed lesson notes which carries 15% of the total assessment, the presentation of the lesson which attracts 70% and the teacher's personality 15%. "Each main criterion has a number of items and sub-items which must be evaluated integration with the other to produce a final score for the criteria.

### *Procedure and Data Analysis*

The researcher was among a team of faculty supervisors who went round to assess the students in their various schools where they work as teachers. The researcher had earlier specifically instructed the selected students to assess themselves. They were given all the criteria and possible scores in the Teaching Assessment Format (TAF). They were told to be moderate and objective in their self-assessment. They were not told whether or not their self-assessment will be used for the final computation of their grades.

The scores for each students were got from the principal and supplemented with those in the students self-assessment ~ those of the researcher. The mean and standard deviations of the principals, faulty supervisors and the students' self .. assessments were found and compared, using a 2-tail t-test.' overall scores of the three main criteria for assessment in t' Teaching Assessment Format (TAF) given by the three assessors (self, principal and faculty) were correlated using the Pears, Product-Moment Correlation formula.

### Results and Discussion

Table one (1) shows data on the means, standard deviation and t-test results of principals, faculty supervisors and 3tu' dents' self-ratings on the Teaching Assessment Format. !he results show that students rated themselves more generously t: principals and faculty assessors. The principals were more strict in awarding' scores on the various items than faculty supervisors. Principals were exceptionally strict in assessing students for lesson notes, teaching methods, pupil's participation and neatness. Faculty supervisors were mainly strict on students' participation in the lessons. Generally, the assessment of both faculty supervisors and principals had very insignificant disparity. In other words, the principals and the faculty supervisors were more objective than the students as their scores were closer to one another's but significantly lower than what the students awarded themselves.

Criteria	A		B		C		t-Value		
	Principal		Supervisor		Student		A X B	A X C	B X C
	X	SD	X	SD	X	SD			
i. Lesson notes (15%)	3.66	1.7	4.21	1.6	4.37	1.21	2.00	2.13	0.25
ii. Presentation (70%)									
a) teaching method	3.81	1.5	4.00	1.8	4.50	2.0	0.26	2.31	0.61
b) skills imparted	3.51	1.00	4.66	2.20	4.50	1.55	2.19	1.22	0.62
c) Pupil participation	3.42	2.6	3.11	2.00	4.49	1.22	0.75	2.21	1.00
d) voice and language	4.36	1.5	4.21	2.71	4.69	1.27	0.11	0.60	1.00
e) Use of BB	4.21	2.1	4.30	2.60	4.51	1.20	0.10	0.66	0.21
f) Other teaching aids	4.22	1.00	4.72	2.40	4.61	2.11	0.21	0.7	0.60
g) Equitable dist. Of time	4.11	1.5	4.05	1.40	4.41	2.40	0.72	0.41	1.22
iii. Personality (15%)									
a) Discipline	4.00	2.2	4.71	1.20	4.54	2.66	1.00	1.00	1.00
b) Class control neat	3.16	2.1	4.00	1.22	4.00	3.21	2.00	2.41	0.00



Table Two (2) shows data for the inter correlation of scores for the three main criteria used for assessing the students. The data reflects the disagreement between the assessments of principals on the one hand and that of student/faculty assessors on the other. The lowest correlation co-efficient (.36) occurs for 'self/principal ratings for the assessment of lesson notes. The highest occurs for personality. The principal/faculty supervisor has the highest significant correlation coefficient for the three main criteria used for the assessment.

TABLE 2  
Inter correlation of scores for the three main criteria

Assessor	Lesson notes	Presentation	Personality
Self/Principal	.36	.44	.59
Self/Faculty supervisor	.50	.52	.66
Principal/faculty supervisor	.62	.64	.68

The data on table 1 and 2 clearly show that students self ratings were more generous than those of principals and faculty assessors. In most cases the ratings of principals and faculty assessors seemed to be similar. This result agreed with Royer (1982) who stressed that the ratings of supervisors tend to be lower than self ratings. It can be deduced from this study that students' self-ratings provide less reliable sources of assessment for teaching practice evaluations. It is also suggested that more research be conducted on the causes of rater agreement and disagreement in the appraisal of students' performance in teaching practice and other academic subjects.

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# FOUNDATIONS OF PHYSICAL AND HEALTH EDUCATION RESEARCH IN NIGERIA-

By

Dr. Lasun Emiola

## Abstract

A review of the research activities of Nigerian physical and health educators showed that serious research work did not start in physical and health education in Nigeria until the late sixties and early seventies. Most of the early research work in these fields were mainly on the history and administration of sports and physical education in Nigeria. Recently, physical and health educators in Nigeria have shifted to more scientific aspect of sports performance, physical fitness and healthful living. Proper dissemination of research findings is still very much inadequate in both physical and health education as well as other educational studies. The establishment of a 'Nigerian Educational Research Abstract' published probably by the Nigerian Educational Research and Development council, is therefore advanced.

## Introduction

Inspite of the academic programmes in physical and health education in several higher institutions in Nigeria today, many Nigerians, including the 'academicians', still regard physical and health education as nothing more than 'running and jumping' and 'hygiene'. Thus, it is difficult for many Nigerians to see the need for any theoretical bases for the subjects, much less the need for any research. This attitude is common in developing countries like Nigeria whose first contact with the subjects was through the military form of physical education introduced by their colonial masters. The colonial masters, until a few years back, also shared this opinion.

In the mid-1950s, many physical and health educators began an organized crusade for the establishment of a unique, intellectual discipline. The scholarly and scientific study of human involvement in physical and healthful activities, it was claimed, would enhance the image of the subjects. The establishment of an intellectual discipline was also viewed as a necessity which would allow practitioners to remain abreast of new knowledge in the area of human movement and to alter their practice as theory and research reports so dictate (Morford, 1972).

The importance of research to the viability of a profession, especially an academic profession, is that a profession has a mission to alter, rather than to describe impartially, certain aspects of social and physical reality to improve the humane condition. For physical and health education, it includes attempt to improve the individual's physical well being and his movement skill performance, called sports. Such a commitment requires members of a profession to seek the best procedures and ' modes of organization to accomplish their roles and goals. These are either suggested and/or validated by research into certain aspects of learning or teaching within the profession.

Research, in the present context, is considered to be the search for truthful answers to legitimate questions a formal investigation designed to develop or contribute to generalisable knowledge in the field of study. An underlying tenet might be an intent to publish. According to Pelton (1981), educational research has been conducted in some manner since man became involved in teaching. Research relative to teaching and coaching has now emerged and in various dimensions too, but more is still needed if the "jocks" image is to be dissociated from the profession of physical and health education.

### **Research Areas in Physical and Health Education**

Talking on theory oriented approach to the dimensions for content description of sports science and sports pedagogy - the two broad areas of physical education, Haag (1982), identified the following areas of research concentration:

- Anatomical - physiological- mechanical foundations (sports medicine/sport biomechanics).
- Foundations of social-and behavioural sciences (sport psychology/sport pedagogy/sport sociology) and
- Historical-philosophical foundations (sport history/sport philosophy).

The above list can be expanded to include

Sport administration (sports facilities - construction and maintenance, sports personnel and sports organization). For health education, such areas like public health, personal health and school health -curriculum, can also be identified. The research

areas in physical and health education are as diverse as the nature of the human being and his activities in which the physical or health educator is interested.

Referring to the AAHPER publication for research methods Hubbard (1973), mentioned four basic research methods adopted' by physical and health educators, namely - experimental research descriptive research, the historical method and the philosophical method. Clarke and Clarke (1970), distinguished between "non laboratory studies" (historical methods, philosophical Studies, 'survey and case studies) and "laboratory research" (laboratory experimental research, physiology of exercise, motor leaning, psychological studies, kinesiological research, growth and development). Again, diverse methods are available for the various areas of concentration. Which directions have been taken by Nigerian physical and health educators?

### **Research Activities of Nigerian Physical and Health Educators**

The late sixties saw an unprecedented quest for postgraduate qualifications in physical and health education by Nigerians. Nigerian physical and health educators besieged the United State of America and Canada and according to Adedoja (1985). between 1972 and 1978, more than fifteen Doctoral dissertations were completed by these Nigerians in physical and health education. A lot more completed their masters programmes during the same period. Many more have completed higher degree studies both B home and abroad since then.

An analysis of the completed research works listed by Adedoja and those completed at home shows a 'heavy concentration in certain areas of physical education only namely: sports administration, sociology of sports, history and teacher education. Among researches completed in these areas are: Adedeji (1980), Ajisafe, (1977 and 1980), and Ogunbiyi (1978). All these studies traced the development of physical education as subject in Nigeria and the attendant problems of a new subject The next set of studies· focused on the administration of sport in Nigeria and sociological benefits derived from participation These include Amuche (1977), Eleyae (1974), Okon (1977) and Folawiyo (1979).

The area of teacher-education and curriculum also recorded a good number of research by Nigerian physical and health educators. For example, Ajisafe (1973) studied the physical, psychological and sociological concepts of human movement and

the evaluation for validity and relevance for inclusion in the Nigerian physical education curriculum for secondary school. Anyanwu (1979) studied the problems in the professional preparation of the Nigerian elementary school physical education teachers. Ekanem (1976) evaluated teachers' attitudes towards physical education programmes in Nigeria primary schools and teacher training colleges. Also, Fatile (1974) investigated physical education student-teaching supervision practices in the former Western Nigeria. Finally, Ogunsakin (1984) developed a health knowledge test for Grade II teachers in Nigeria.

Most of the research works listed above have concentrated on the descriptive and historical methods. This is probably rightly 'so, because a majority of the researchers are Nigerian pioneers in the field. They: fall into the category of physical educators who, according to Siedentop (1973), have argued .persistently that a discipline of pedagogy, not a discipline of kinesiology and sport studies, is 'of greater importance in physical education. They have, however, made useful contributions to our knowledge of the origin of the subjects in Nigeria. Indeed they have laid the foundation of research in physical and health education in Nigeria. They tried hard to justify the inclusion of the two subjects in the curriculum of all levels of education in our educational system. Further, they have shown that all is not well with the administration of sports in Nigeria and have put forward intelligent suggestions for improvement.

Within the last few years, however, research in physical and health education has moved towards the scientific aspects of the subjects. Emphasis has now shifted from history and general administration, to sports, medicine, exercise physiology and some health values and problems of physical performance. Among experimental studies conducted by Nigerians in this area are those of Emiola (1978), Adebayo (1978), Pachocinska (1978), Ajiduah (1979), Amusa and Soyibo (1984), Toriola (1983), and Agbonjinmi (1985). These studies concentration On the scientific effect of exercise on bone density, body build, "growth and fitness of children, to the values of physical activity and nutrition on the treatment 'and rehabilitation of coronary heart diseases. No doubt, Nigerian researchers have contributed, in no small way, to further knowledge in these relatively new academic subjects - physical and health education.

## **Future Research Directions**

Research in physical and health education are still in their infant stage in Nigeria. In order for these professions to justify their rightful places in the field of academics, their members need to embark more on scientific studies that will be problem solving oriented. There is a lot of questions in our society requiring answers from physical educators, health educators, exercise physiologists and sports sociologists. For instance, most of the norms we use in assessing the physical fitness of Nigerian are based on surveys of physical fitness of the Americans despite the fact that an averagely fit American may not be a fit Nigerian. Cultural differences in growth, fitness level, eating habits and emotional behaviours, to mention a few, are known to exist' (Ellie 1950, Emiola, 1982). The age determination chart used for our youths is that developed from the data collected on British children; whereas, this has been shown to be inappropriate for Indian children from studies conducted in India (Sidhu and Grewal, 1980) There is thus an urgent need for local norms and standards which are only possible through research .

Nigerian sports sociologists and sports psychologists need to take a look at the behaviour patterns of Nigerian athletes and spectators to find answers to the rampant violence in sports. To find a solution to this problem, we need to identify the causes. The researcher's task is not limited to testing already formulated hypotheses designed to prove or disprove existing theories. He is also expected to generate theories which could help us understand reality. We have to be able to generate theories from observed data rather than the verification of existing theories only. Heroes are now being made of our athletes who are often showered with gifts and various rewards ranging from scholarships to cars, even houses and cash. The positive and negative effects of ungraded rewards is an area that Nigerian sports psychologists must look into.

Nigerian athletes in certain events usually come from particular areas of the country. For example, most of our sprinters come from among the Ibos and Yorubas, while our long distance runners are usually found among the Fulanis and Hausas. Why should this be so? How can we take advantage of these known physiological facts in the selection of our athletes and in scouting for talents? What factors make a clean

environment so difficult to maintain in our cities? These are some of the questions for which answers must be 'provided through research.

Scientific research in physical and health education requires certain modern laboratory equipment. Thus, adequately equipped exercise physiology and psycho-motor laboratories need to be provided if we are to move away from the description of how "physical training" got into Nigeria and the like that dominated the earlier era of research in the profession.

### **Dissemination of Research Reports**

One major problem usually associated with research in physical and health education as in other researches, is that the results are not usually' disseminated to the consumers. In the case of physical and health education, the consumers would include the policy makers, the education ministry, the national sports commission, the states sports council, coaches, health officers, teachers and future researchers.

A look at the references for this paper will show that a majority of the research reports of Nigerians physical and health educators were published overseas. As a result, only a few members of the professions who are members of the international associations have the benefits of reading the reports. Most of the reports of local investigations are published by the Journal of Nigeria Association for Physical, Health Education and Recreation (JONAPHER), which is not regular •. A few physical and health education researchers now publish in other educational journals in the country.

The increase in the number of research reports in physical and health education, coupled with the inadequacy of the JONAPHER, has resulted in the proliferation of physical and health education journals in the country. At present, every department of physical and health education in various universities or colleges of education in the country now wants to have its own journal; if it has not yet got one. So, what used to be students' journals have become departmental journals of various standards. Although this situation might look good to those who just have to publish something, the practice does not allow for adequate quality control and the circulation of such journals is very limited.

Various national educational associations thus need to intensify their efforts in making the publication of their journals regular and widely circulated. Copies pf such

national journals should be made available to the appropriate bodies that need to take actions on the recommendations based on the findings of various studies.

One other effective way of disseminating educational research findings is to establish a National Clearing House for research in education. This could be housed with the Nigerian Educational Research and Development Council. The clearing house should be given the responsibility for publishing what could be called 'Nigerian Educational Research Abstract' after collating data collected from various institutions of higher learning and research centres by means of a standardized questionnaire. This, shall be an annual publication of the Education Research and Development Council. This documentation will hopefully serve three primary functions:

- to provide information on ongoing projects in order to avoid duplication of work;
- to give educational policy makers an overview of what researchers are saying on educational matters;
- to give other researchers access to information on completed empirical studies.

## **Conclusion**

From the above review, it is clear that many studies have been undertaken in the field of physical and health education, although a majority of, those studies were carried out abroad.

The pioneer physical and health educators in Nigeria seemed to have over-flogged, the search for the origin of physical and health education and the general description of the need for -and administration of the two subjects in Nigeria. In .doing so, how, ever, a good foundation has been lard for the new crop of physical and health educators to build on. Through more scientific empirical research, better ways of improving the teaching and learning of the subjects could be proposed. In addition, more effective ways of producing superior athletes, better sports administrators and coaches and a way of making Nigerians live a more healthful life could be found.

There is a greater need now than ever before for a better way of getting research findings across to the consumers. For this, a 'clearing House' that will publish annually a "Nigerian Educational Research Abstract" is being suggested.

The Nigerian Educational Research and Development Council can provide this service. Here research findings in physical and health education will be published along with findings in other areas of leanings. Research is the wheel of progress of any educational profession. Therefore its importance can never be overemphasised.

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# EDUCATION AND AGRICULTURAL DEVELOPMENT IN NIGERIA

By

Dr M.D. Awolola

## Abstract

It is argued in this paper that the impact of education upon rural life cannot possibly be realized by vocational instructors. This is because the needs of modern farmers go further and deeper. It is further argued that only a broad based science:-

## Introduction

All governments, research bodies and international services are instituting 'a wide range of measures to modernize and increase agricultural production. This is because the farmers are consequently faced with new and sophisticated problems of the millions affected by these measures the great majority are individuals. Usually small farmers with their wives and children. In view of this, the farmer must be expected to grasp new opportunities and incentives as soon as production rises above the subsistence level. A higher output usually involves purchased inputs and addition of hired labour. In a word the predominant pattern which can be expected to hold true in the near future is that of the individual who alone or with others must decide how he is going to run farm.

Managerial skills have therefore become overwhelmingly important to modern farming; which is no longer a matter of manual labour and skills alone. Even a man who owns but a few acres must function as an entrepreneur. He must be able to plan several steps ahead of the next harvest and beyond. Consequently, the impact of education upon rural life cannot possibly be realized simply by vocational instructions. The needs of the modern farmer go further and deeper. A broad science oriented education is needed to help create farmers who can respond to the challenges they will undoubtedly meet in future. The lack of scientific approach to farming is a stumbling block even to many of the educated farmers of today. Too often such farmers reject profitable innovations because' they misinterpret their initial trials. We have seen from relevant literature that technical innovations can only take place in a situation where few if any farmers are literate. However, the experience in some selected villages in Kwara State gives but one example of the frustrations that may follow. One technical innovation such

as the adoption of new storage method is enough. For if it is not followed by other innovations, the results may be disappointing while illiterate and adult educated farmers have readily adopted the use of modern storage methods. They seem to have been reluctant to adopt the complementary innovations (i.e. application of chemicals for seed preservation) which would have provided a real break through (Awolola, 1989). Agricultural development involves a sequence of innovations and adjustments which increasingly demand a more sophisticated and hence better educated community. In view of this, the argument in this study centres around the importance of the introduction of agriculture into the primary school curriculum.

### The Role of Primary Education

In countries with rural economy, the primary school is likely to be the only kind of formal education received by a large section of the population. Furthermore, even in areas where further study is more usual, the primary grades still bear the brunt of today's world-wide education explosion. The percentage of children receiving some kind of fundamental education is everywhere constantly increasing. In many countries, primary schools represent one of the largest items in the national budget, if not the single largest occupational groups. It is essential therefore that the maximum benefit should 'be derived' from expenditure on primary education and this outlay should make a better contribution to the welfare of rural areas where educational facilities are scarcer the quality of education poorer, and dropout rates higher than in towns. If it is true that rural areas are generally where economic and social change is most needed, it is there that the role of education as a factor of change is most important.

The crucial point that should be made is that farming in all countries is increasingly becoming a business. Therefore primary education needs to be oriented more towards simple skill of business and this is particularly, important in the developing countries where agriculture will remain the mainstay of their economy. This business orientation is of greater importance than the teaching of detailed agricultural skills. While an extension agent attempts to promote rural development through extension services, farmers' training centres and the use of different mass media, he must still count upon a certain receptivity to new ideas, a desire to improve, and a cognisance, of the fact that true progress can only evolve along coordinated limits. For example, it is noted that as

far as the adoption of new farm practices are concerned, enough evidence has been documented to indicate that Nigerian farmers have shown much willingness to adopt new practices. However, it is also observed that Nigerians are slow in the adoption of these practices because they are conservative in behaviour, valuing elements of traditional culture and customs very highly. The implication here is that the adoption of new farm practices is possible when it is firmly based on rational and enlightened attitudes. This is where primary education comes in.

Having observed the importance of primary education as a factor of change it is however sad to note that western education, as imported to Nigeria, with particular reference to primary and to some extent secondary education, has failed substantially because the goals of Nigerian schools are by and large the same as the goals of education in developed countries (Fafunwa, 1984). Fafunwa also observed that

at the present time, once a child in Nigeria goes to school, almost all other activities are submerged and both parents and relatives tend to exempt him from most of the duties and training given to other children who are not sent to school. Once in the formal education stream, both the child's aspirations and those of his parents are continuous: to achieve, higher earning power by moving away from the drudgery of farming and by going to the city (Fafunwa, 1984 p. 5).

The implication here is that the task of primary education in Nigeria has been to prepare the child for urban employment and have in recent times shifted to that of preparing a child for secondary school. Unfortunately, such traditional concepts are still widely spread and deep, rooted in our educational system.

Agriculture as a primary school subject has been a dismal failure in developing countries. The fault has not been primarily that of the subject itself for the main problems have been the teachers and the way in which the subject has been taught. For years, it was thought that agriculture should be taught very practically to show the dignity of labour, but the practical side lacked interest and children who slaved from their parents at home were not interested in great physical effort at school.

## The Curriculum and its Application

The primary school's broadest responsibility should be to shape and strengthen the child as an individual, 'in relation to his fellow men, to nurture and initiate him into his local and world environment. However, in considering the best approaches to primary education in rural areas, certain guidelines assert themselves if general education is to be effective, the attitudes, skills and knowledge a school instils in its pupils must be in line with both the local and national perspective. Most governments have a single national curriculum and one national standard for all primary schools. The philosophy behind this approach calls for the teaching of a national concept and provides that the same foundations of learning prevail for all students, rural or urban on the other hand, it becomes a sound principle to localize teaching in accordance with the pupils' own experience and personal bias. This does not mean that successful localized teaching prepares the students to live only in a local environment. On the contrary, the primary school must adequately prepare for life those children who live in farms and those who migrate to towns.

To include agriculture in the primary school programme does not necessarily imply the creation of a separate stream in the school or the writing of a separate curriculum, but rather the incorporation of elements of agricultural education into the national primary school curriculum. There is no doubt that agriculture can stand on its own as a primary school subject, but the syllabus should not be designed to produce exclusively skilled farmers. Topics should be selected on the basis of their potential interest to primary school children. It is therefore necessary for economic and education planners to think of reconstructing the structure and-design the type of curriculum that will respond to the needs of the child and his society. These needs do change and the curriculum must be flexible enough to cope with the inevitable changes.

At the primary school level, the task should be undertaken at the earliest stages, with play as a learning experience in the form of pre-science or pre-mathematics education. Such a method begins to familiarize children with the practical possibilities of natural forces and awaken their curiosity. Later, the role of vocabulary as a tool can be introduced. If farmers are to derive full benefit from their contacts with extension agents, for example, they will need a basic vocabulary in such fields as health and the technical

areas, of agricultural science. Primary teaching must relate language and mathematics to the environment and to the pupils' experience, and there must be a concentrated emphasis on-ability to apply the skill for reading, writing and calculation to a variety of common situation. Arithmetic must come an exercise in problem solving the school compound can an excellent teaching aid for out-door mathematics lesson in measuring, marking out plots, or working with simple weighing machines.

#### Conclusion

In conclusion, the need to re-orient primary school education has become more important now that many graduates cannot get paid employment and for the fact that many educated men and women are retiring into full-time farming. We should therefore not allow schools to become obstacles to agricultural development by encouraging unrealistic aspirations. Learning is not a way to escape an environment but a way to transform it. The primary school is the place where a modern commitment to agriculture can originate.

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# THOUGHTS ON THE NOMADIC EDUCATION PROGRAMME WITH SPECIAL REFERENCE TO KWARA STATE

By

Abdul-Rasheed Na'Allah

## Abstract

This paper traces the history of special educational opportunities in Britain and relates it to the Nomadic Education Programme of the federal Government of Nigeria. It touches on why, when and how the programme started in Nigeria. It then examines how Kwara State Government's blue print on Nomadic education. In the light of the letters of the provisions, the paper examines how Kwara State Government has been implementing the program till date. It is highlighted our perceptions of such implementation effort and offers suggestions on how to make the program more successful in the State.

## Introduction

As far back as 1968, an Act of Parliament called 'the Caravan Act of 1968' was created in Great Britain to give special educational opportunities to the wandering gypsies. This was in line with the provision of the British Education Act of 1944. The Act provided for "special arrangements" for any young Briton to attend the traditional school. Further" most countries in the world believe in equal education opportunities for all. In Article 26 of the 1984 Universal Declaration of Human Rights, it is stated that "Everyone has the right to education. This shall be free at 'least in the elementary and primary stages." It is an effort to satisfy this expressive human concern for education that the Nigerian Government inserts in the 1979 Nigerian Constitution that "Government shall direct its policy towards ensuring that there are equal and adequate educational opportunities."

When the Universal Primary Education became a national policy in 1976, the declared intention of the Federal Government was to cater for all sons and daughters of Nigeria." However, all these laudable objectives and programmes of government could effectively accommodate all Nigerians because of certain diversities in culture and occupation. Nomadic Fulanis, are by culture and occupation always on the move. It is

the climate that dictate when they are and at what time. They are scattered all over Nigeria, but they are never stable: hardly could one see a group of Fulani nomads staying for more than five months at a stretch because of frequent changes in weather, except those who have abandoned nomadic life for a settle life in village or town.

These situations satisfy what the British Education Act (1968) describes as 'extraordinary circumstances'. The Nigerian Government, in it day-to day efforts to fulfil the United Nations' declaration on equality of ma to literacy and in order to satisfy the various Nigerian Constitutional Provisions for education for " all son and daughters of Nigeria," introduces measure at various levels of administration to assist the educationally disadvantaged person. For example, in some Local Government Areas or State where parents are unwilling o send their children to schools, the government embarks on mass enlightenment and persuasion and introduces such incentives like free tuition, free boarding facilities, free school uniform, free text and exercise books and free transportation to and from school on resumption and closing days. The Federal Government also identifies some States as Educationally disadvantaged and gives more funds to enable them produce more literate people. We have Federal Character Policy of the Federal Government which aims at closing the gap in the educational development of the various part of the country.

It is also in this light that the Government introduces the Nomadic Education programme to cater for the children of the nomads who have not benefited from the traditional school system because of their entirely different ways of life. This paper therefore intends to critically examine the Federal Government Policy on Nomadic Education and discuss the extent to which it has been implemented in Kwara State.

### **Historical Background to the Nomadic Education Programmes in Nigeria**

The idea of a nomadic Education programme for the country was first discussed at the 1976 meeting of the National Council on Education held in Lagos about the same time that the Universal Primary Education became a Federal Government Policy. However, nothing tangible was done until 12 December, 1987 when the Babangida administration came out with a bold policy on nomad education. Various reasons could be adduced for this sudden action of government. These include:

- (a) the current economic situation in the country which affects animal production;
- (b) emergence of the cattle disease, especially around 1987 when many animals died;
- (c) importation of cattle from neighbouring Niger and Chad republics became more difficult and more expensive; and
- (d) the ever migrating nature of the cattle Fulani and the need to get them settled and educated.

### **Blueprint on Nomadic Education**

In line with the resolution of government to start the programme, the Federal Ministry of Education published a blueprint on Nomadic Education in December 1987 after Federal Government had formally launched the programme in Yola, Gongola State. The ministry distributed the Blueprints to all State Ministries of education in the country. Section one of the Blueprints highlights the aims and objective on Nomadic Education as follows:

- (a) the inculcation of the national consciousness and national unity;
- (b) the inculcation of the right type of values and attitudes for the survival of the individual and the Nigerian society;
- (c) the training of the mind in the understanding of the world around him, (i.e. training in scientific and critical thinking); and
- (d) The acquisition of appropriate skills, abilities, and competence, both mental, social and physical, as equipment for the individual to live in his society and to contribute to its development.

Because of the distinctiveness of the nomads' ways of life, the blueprint further breaks the above objectives into two: Short Term Objectives and Long Term Objective. Those aims and objectives of the programme which are achievable within a short are classified as Short Term while the Long Term one are those which could only be achieved over a relatively longer period of time. For example, the Short Term aims and objectives as identified from the general objectives can be summarised as follows:

- (a) acquisition of functional literacy and numeracy in order to

comprehend the activities.

- (i) about payment of tax
  - (ii) about instruction in health and animal treatment
  - (iii) about information in national dailies
  - (iv) on simple instruction about voting and choices
  - (v) about communication with relatives, agricultural officers and other government agents
  - (vi) about record keeping on statistics of herds, lands, births and deaths.
- (b) development of scientific outlook
- (i) to their problems
  - (ii) to issues affecting their relationship with government and her agencies.

There is no doubt that a great deal of patience; consistence and strong determination are necessary to achieve Long Term objectives.

In ensuring a successful implementation, therefore, provision was made for the setting up of two very powerful bodies. The first is the National Commission on Nomadic Education, which is empowered with the implementation of the programme nationwide. The commission is to be made up of 25 members; one of which is the Chairman appointed, by the President on the recommendation of the Honourable Minister of Education. The second body is the Centre for Nomadic Education. It is expected to conduct researches into the culture of the Nomads to develop and select curriculum contents to train Nomadic Education personnel to evaluate (on regular basis) the Nomadic Education Programme and so on. This centre has, already been established and located in the University of Jos, thus satisfying Section 2.6 of the Blueprint on Nomadic Education which provides that the Centre must be located "in a University with adequate facilities."

### **The Curriculum for Nomadic Education**

Much as the National Policy on Education also relates to the primary education system for the Nomads more specific areas of learning have been identified for the Nomads because of their distinct circumstances.

For example, emphasis is placed on making the Nomadic child develop with this cherished culture of Nomadism. It is thus recommended in these Section 4.3 that the contents of Nomadic Education curriculum be made of:

(a) Language Arts:

1. Fulfulde
2. Hausa .and
3. English.

(b) Arithmetic/Mathematics - simple Mathematics for everyday use.

(c) Social Studies:

1. History of the Nomadic Fulani and Nigeria.
2. The Pullo culture including the Pulaaku
3. The culture of other Nigerians.
4. Civic and
5. Geography

(d) Religious and moral instruction (very vital)

(e) Elementary Science:

1. Animal/Management including cattle rearing; Poultry and Fishing where applicable;
2. Agric Science including pasture regeneration;
3. Physical and health education
4. Nature study.

(f) Creative Arts:

1. Reading
2. Writing and
3. Other creative activities.

(g) Home Economics:

1. House- Keeping and other related activities.
2. Vocational instructions - weaving, sewing, carpentry, etc.

However, Federal Government has not drawn up a Nomadic Education Syllabus which it is believed should be at primary level. The Centre for Nomadic Education which

has been empowered, through the recommendation in the Blueprint, section 2.6 (iii) to "develop and select curriculum contents" for Nomadic Education has, up till date not come out with any approved syllabus. As at the time of writing this paper, therefore, the traditional primary school syllabus are still being followed in educating the nomads in Kwara State. Emphasis is placed on four subjects, namely, Animal husbandry, English, Arithmetic and Religious Knowledge.

### **The Teacher**

According to *Blue print on Nomadic Education*, the Centre for Nomadic Education has the sole responsibility for training teachers for the Nomadic Education programme: The Centre is expected to commence training of Nomadic Teachers soon.

Presently however, the Kwara State Ministry of Education is trying to make do with what it can get. Ten teachers, were initially recruited to teach in the various centres in the State. Eight of them are Grade II Certificated teachers and two are West African School Certificate/G.C.E. (O.L) holders. The Ministry also employed six "Teacher Aids". These are those who teach Arabic and Religious Knowledge. The teacher aids do not have any basic certificate qualification, though very versed in both Arabic and Religious theology. An interview was conducted by the state Ministry of Education in July 1989 and more teachers were recruited. It has, however, been very difficult to get qualified teachers who speak both Hausa and Fulfulde as required by the State Ministry of Education.

**The Blueprint on Nomadic Education** recommends two categories of teachers for the programme. The first, that is the Resident Teachers, are expected to be trained teachers normally T.C. II holders who have some years of teaching experience. It is expected that such teachers are further trained through workshops, seminars etc, so as to make them conversant with the' Nomadic Education Curriculum. The second category, that is the Assistant Teachers, who are also called "Teacher Aids" are recruited from the members of the Nomadic community. According to the Blue print, they should be literate and influential. They are to serve as liaison officers between the Resident Teachers and the Community. It is expected that every Nomadic Resident Teacher has a minimum of two aids.

We can therefore see that the efforts of the Kwara State Ministry of Education on the teachers have been strictly in line with the provisions of the Blueprint.

Apart from the teachers, the Blueprint also recommends the appointment of supervisors who should be NCE holders, appointed from the Local Government Areas where the Nomadic classes are located. It is the duty of such Supervisors to ensure constant check on the teachers and to make sure that all necessary records are well kept. This 'provision of the', Blueprint has not been implemented in Kwara State. Up till date, it is the officers in the State Ministry of Education that take up the sole responsibilities for going round to inspect the schools, a job which they seldom carry out because of lack of funds and vehicles. The Blueprint also makes provision for the appointment of State and National Co-ordinators of the programme. While the National Co-ordinator is expected to monitor the project nationwide. The State Co-ordinator is limited to the State. There is no such appointment yet in Kwara State.

The responsibility for monitoring the implementation of the programme in the State is therefore that of the Chief Education Officer (primary) and his assistant (ACEO - primary) in the State Ministry of Education. It is these same officers that run around to monitor the traditional pre-primary and primary education programmes under the supervision of the State Ministry.

#### The Take-off of the Nomadic Education Programmes in Kwara State,

All the states with any number of concentration of ,Nomadic Fulanis were directed by the Federal Government to launch the programmes and to enlist the Fulani children. It. Deptment of Nomadic Education was created at the National level to carry out an overall supervision of the programme.

The Kwara State Government quickly commenced efforts at encouraging the nomadic Fulanis to come out for the programme. The State Ministry of Education entered into dialogues with two recognised Fulani associations; namely, Maiyatti Allah Cattle Breeders Association and MacDuranake Allah Jamu's Fullo Association. On the 15th of February, 1988, a Nomadic Centre was commissioned in New Busa by the then State Commissioner for Education, Dr. (Mrs) Ramat Abdullahi. On the 30th of June of the same year, a recruitment ceremony and launching of the Nomadic Education programme formally came up in the Indoor Sports Hall of Kwara State

Stadium, Ilorin. The State Government approved a budgetary allocation of fifty thousand Naira (50,000) for the prosecution of the programme during the 1988 fiscal year. The Federal Government immediately, supported the state with about N300;000. The primary education section of the State Ministry of Education became directly responsible for the implementation of the Nomadic Education Programme. Efforts were intensified by the officials of the Ministry in co-operation with various nomadic communities and associations in the State. As at February 1990, only five Local Government Areas in Kwara State were covered.

The student enrolment is shown in Table 1 below:

Table 1  
Enrolment of Pupils in Kwara State Nomadic Schools

	Place	Local Govt. Area	No. of Students
1.	Aiyekale	Ilorin	45
2.	New Bussa	Borgu	25
3	Lafiagi	Edu	30
4.	Kata	Ifelodun	15
5.	Agbonna	Asa	60
6.	Etile	Asa	30
7.	Aleyo	Asa -	20
			Total 225

Source: Kwara State Ministry of Education, Primary Education Section, 9 March, 1990: Nomadic Education Student Enrolment in Kwara State, February 1990. In other words, as at February, 1990, a total of 225 Nomadic students were enrolled in seven classes spread around five local government areas of the State, with Asa Local Government Area having three centres and the other one each.

### **The Learning Materials in Kwara State Nomadic Schools**

The school systems recommended in the Blue print on *Nomadic Education* can be categorised into five. They are the Regular Schools, the On-site schools, the Mobile schools, the Adult Education Schools and the Distance Education Programmes (through radio and television). The Regular Schools are for the settled Fulanis. The On-Site schools are for the semi- Sedentary nomadic groups. These are schools sited along movement routes, mostly at area regarded as a resting points for the Nomads. The third category is the Mobile Schools. As the name

implies, these schools are provided for those nomads that are constantly on the move. The class rooms established in this type of schools are - portable. The Adult Education School is for the adult nomads. Like its parental traditional Adult Education Programme, classes would be organised for the parents 'and they would be taught how to read and write. The final one is the Distance Education Programme. This is education through electronic media such as Radio and Television. Radio Stations are expected to present *some* programmes such as drama, discussions, sports, etc that would reflect the culture of the culture of the nomads.

Nomadic education in Kwara State operates the Mobile School system Tents are used for classrooms. This is to ensure that they are not easily damaged by storms. Each classroom can contain up to 45 pupils. These classrooms can easily be folded.

Some other learning materials, were also distributed to the schools throughout the State. As many as 5, 10,20 and even 25 items of each of the materials were given to each school. These materials include hand bags, vests, charts (Tsetse fly, Mosquito, Heart, Skeleton system, etc), National Islamic Religious Knowledge Text-Books, Packets of chalk Map of 21 States, Ilesanmi Agricultural Science for primary School (Book 1 to 6). A new Course in Primary School Studies, My First Step (Books 1to 3), Nelson Primary Social Studies (Books 1 - 6), Cardboard papers, slates, Exercise books and pencils (Kwara State Ministry of Education, Primary Education Section, June 1989). The major distribution was done on February 1989. It was done through the Zonal Inspectorate of Education Offices in the Local Government Areas concerned (Primary Education Section, June 1989).

The Blueprint expects the Centre for Nomadic Education to be a resource centre for the Nomadic School. It is clear from Section 2.6 (iv) of the Blueprint that the Centre is charged with the responsibility for “developing and selecting adequate teaching and learning materials”. Perhaps because the' centre is new, it has not been able to produce any essential teaching aids which it could loan to nomadic schools in Kwara State.

## **Suggestions and Recommendations**

There are no problems without solutions. The problems encountered in implementing the Nomadic Education Programme in Kwara State are caused by administrative bureaucracy at Federal and State levels.

It looks as, if the Federal Ministry of Education could not make adequate preparation for the take-off of the nomadic education programme nationwide. For example, the Ministry does not seem to have known exactly how many Fulani nomads it was planning for and the, spread of these nomads across the country. Also, it does not appear that the Federal Ministry of Education gave a serious thought to the preparation for the take off of the programme. In addition, qualified scholars should have been commissioned to write books on different subjects to be taught in the nomadic schools. All these fundamental requirements were lacking at the commencement of the programme on which the federal government has spent a substantial sum of money. This lack of adequate preparation at the national level tends to create implementation problems at the state level.

The Centre for Nomadic Education. in the University of Jos must therefore speed up its efforts at a National Nomadic Education Curriculum which will provide not only the content or syllabi of nomadic education in the country but also the methods and techniques of teaching the nomads and the procedure for evaluating the extent to which learning is taking place among the Fulani nomads. As a matter of urgency, the Centre should encourage interested individuals and groups of people to write and publish textbooks on different subjects" in the Nomadic Education Curriculum.

The Adult Education School of the Nomadic Education Programme should be allowed to go hand-in-hand with the one already being implemented.

The government must not "abandon the adults while their children are being educated. "The government must: however bear in mind that these Fulani adults are already educated in elementary Arabic and in Religious Theology. Most of them can even write down Fulfulde in Arabic scripts i.e. the Ajami. So, the government must seize this opportunity to educate the Fulani parents. The Centre for Nomadic Education should commission experts to write textbooks in Fulfulde, using Ajami

scripts. In fact, Ajami Education should be part of the Curriculum of the Nomadic Teacher Education. These will ensure that the programme succeeds.

Kwara State Government, on its own part, should direct its Ministry of Education to release more funds and vehicles for the operation of the programme. The State Government ,should also appoint as a State co-ordinator of Nomadic Education without wasting time. All these are necessary to ensure required success for the programme in the State.

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