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Introduction – Dr. David Adewuyi, Managing Editor

The annual 2010 AERN summit was successfully co-hosted by Kenyatta University, Nairobi and Uganda Martyrs University at the campus of Kenyatta University, Nairobi, Kenya between May 02 and 07, 2010. Important decisions taken at the summit that might be of interest to prospective authors include a compulsory subscription to the journal by individual authors, institutions, and institutional libraries for a fee and encouragement of African and American institutions of higher learning to apply to join AERN in order to enjoy the benefits of membership.

This issue contains fourteen articles covering a wide range of issues relevant to the general educational and human development issues in and about Africa, the major focus of the journal. **Emerta Asaminew** of Ethiopian Economic Association discusses pension reform in Ethiopia. The central theme of the paper is to offer background information and analysis for policy dialogue on introducing private pension funds for other segments of the society employed in the private and informal sectors of the economy. The paper concludes with what the author considers immeasurable advantages of the proposed reforms. **Odejobi, C. O**'s paper was aimed at discussing the promotion of ingenuity and imagination in early childhood through the Universal Basic Education (UBE) Scheme in Nigeria.

Deploying extension education services for private agricultural extension delivery in Nigeria was discussed by **Farinde, A.J.** and **Yusuf, O.J**. of Obafemi Awolowo University and **Oyewale, Z.F.** of Federal University of Technology, Minna. The authors investigated the willingness of nomadic Fulani to pay for extension services in Niger State and found that a nomadic Fulani was willing to pay ₦3,655.91 for extension services per year. **Afolabi, M.O., Afolabi, E.R., Ojedokun, O.E.** and **Adediwura** collaboratively sampled two hundred consumers of five anti-malarial medicines to estimate the readability and content validity of the Medicine Information Labels on the drugs. One of the findings of the study is that while the labels were considered to be readable in terms of vocabulary levels, text organization and ability to stimulate readers' interest, the labels were rated low in legibility, syntax and illustration. Implications of their finding on the health of drug consumers were discussed.

Olusegun Akinbote of University of Ibadan discussed the fit between the rate of development and the system of education in modern societies. The author's focus was on the state of the school environment in Nigeria. The paper specifically discusses the nature and components of a child-friendly school environment and highlights some of the deficiencies in the Nigerian school environment. Suggestions on how to make Nigerian schools learner friendly are also made. **Olubukola Ojo** and **Omolola Lawani** investigated the level of disposition to violence of learners from monogamous and polygamous African marriage forms. The result of the study revealed that the percentage of learners from polygamous homes who were disposed to violence were higher than those from monogamous homes.

'Yomi Akindele-Oscar of Olabisi Onabanjo University, Nigeria, examined the combined and relative efficacy of emotional labor and emotional intelligence on job stress of nurses. The results indicated that the two independent variables both jointly and relatively contributed significantly to the prediction of the criterion measure. The author therefore recommends that

nurses should be exposed to emotional intervention and training skills or programs that would enable them withstand environmental and emotional pressures that predisposed them to job stress. **O.S. Adewale, E.O. Ibam,** and **A.A. Obiniyi** discussed web-based approach to career counselling. The authors regard online career counselling system as a viable alternative to conventional counselling systems. They developed a mathematical model Career Online Counselling System using fuzzy logic based on the trait-and-factor approach to counselling.

Esther Oduolowu of University of Ibadan discussed parental involvement in the provision of necessary infrastructure in their wards' institutions as a means of securing enrolment enhancement, attendance and retention. She suggested a greatly expanded program of self-help projects should be initiated in all public primary schools in Nigeria. **Olalekan Ojedokun's** experiment found that the moral dilemma model; one of the strategies of value-clarification, might be more efficacious in assisting improved knowledge acquisition and development of desirable attitude about HIV/AIDS than the expository method. He therefore recommends it to Social Studies teachers in teaching its learning content among secondary school students in Nigeria.

Abdourahmane Barry of D'Youville College, New York, offers an overview of the Guinean education system with a special attention to its evolution and some of its performance indicators for both public and private schools in the country. He opined that the information provided in this paper can be a starting point for anyone interested in the education system of the Republic of Guinea. **J.O. Akande** examined community education and its implications for changing lives for the better in Nigeria. The content and methods of Nigerian indigenous community education are highlighted. The study advocates for political favor and adequate funding that can facilitate a mixture of formal, informal and non-formal education for better living in Nigeria.

Tichaona Mapolisa, **Barnabas Muyengwa**, and **Sharayi Chakanyuka**, all of Zimbabwe Open University, did a qualitative case study of tutors' experience in supervising research projects at M Ed and B Ed levels of Mashonaland Central and Mashonaland East Regions of the Zimbabwe Open University. Their analysis of twelve research projects revealed that even though the majority of the tutors indicated that they were comfortable supervising quantitative research, pure quantitative research was rare among the analyzed projects. Tutors recommended that ZOU should craft and draft National and Regional policies on mounting research workshops for tutors and students every semester. The study also recommended that ZOU should mobilise resources and forge partnerships for the purpose of setting up internet centres, library facilities and research centres and archives in the regions. **Ademola Adejumo** and **Olusegun Fajuyigbe** of the Department of Fine and Applied Arts of Obafemi Awolowo University discussed the role of visual art in achieving the Millennium Development Goals (MDGs) by the year 2015 especially as regards improvement in environmental health in Nigeria. The paper focused on the role of visual arts in the proper arrangement of the built environment and the menace of visual illiteracy as it affects the wellbeing of the people.

Adopting Private Pension System in Ethiopia

By

Emerta Asaminew

Abstract

In spite of the case that the paper to some extent touched pension fund reforms in some countries from public managed to fully funded one, the central theme of this paper is to offer background information and analysis for policy dialogue on introducing private pension funds for the other segments of the society employed in the private and informal sectors of the economy. In the face of small government and booming private sector participation in the education and health sector among others, the non-government employees in Ethiopia are estimated to constitute 91 percent of total employment. The establishment would also create a chance for the uncovered public employees as well as those who want to contribute more even side by side with the public pension system where they have membership. The country would benefit from the launching of the system through a more facilitated financial system and hence economic growth. It could also play a decisive role in reducing old age dependency and poverty.

Introduction

Social protection, including safety nets, health insurance and pensions, is a major element in reducing risk for the working poor. Thus, the importance of the economic and social role played by these sectors in domestic economy cannot be denied. Apart from that, they are part of the financial sector of the economy and play a significant role in economic building. A due consideration in this paper will be put on pension funds. Pension is a retirement income, paid for by investments built up during one's working life.

In recent years a growing number of countries, developing as well as more advanced, have seen rapid growth of pension funds as institutional investors, notably in the wake of pension reform shifting the finance of retirement income from pay-as-you-go to funding. Quite large number of countries has also adopted private pension funds which are fully funded side by side the government sponsored pay-as-you-go system. Private pension system is not operating in Ethiopia and the objective of this short paper is to bring into forth the issue of introducing private pension funds to policy debate. It has also an objective of reminding concerned bodies such as the National Bank of Ethiopia (NBE) and other government offices which bear the responsibility of protecting the gradually increasing private employees in the education, health, industrial, etc sectors from risks related to health and incomes.

Alternative Pension Systems

In performing the financial intermediation function of asset transformation, pension funds are generally intended to fulfill and provide the public with two primary functions: to furnish a saving mechanism and to alleviate poverty among old through provision of income payments on retirement so as to make consumption flows smooth. Efficient pension funds play a pivotal role in financial markets and the economy in general. They are, for example, the largest institutional investors in the OECD area (OECD, 2000), and therefore have a decisive impact on the

development of the economic infrastructure as well as the financial stability of these countries. Employers, unions, or private individuals can setup pension plans, which acquire funds through contributions paid in by plan's participants.

Although the purpose of all pension plans is the same, countries provide social security benefits in remarkably diverse ways, reflecting differences in levels of development and historical experience. The differences also reflect political philosophies and cultural differences concerning the role of individual responsibility, family, employers, capital markets, and government. Pension services are provided by at least 172 countries (Turner, 2001; cited in US SSA, 1999). We can, however, aggregate them into two major approaches - the social security and the private pension system. At national level, literatures and country experiences have shown that countries may adopt these approaches independently or jointly. These systems are based on two different financing principles-the former based on the distributive (pay-as-you-go) principle and the latter on cumulative (fully-funded) principle.

The Distributive (Pay-As-You-Go)-hence PAYG- Principle- A PAYGO scheme is a social contract of mandatory inter-temporal intergenerational transfers in which today's benefits to the old are paid by today's taxes from the young, relying primarily on a payroll tax. Tomorrow's benefits to today's young are to be paid by tomorrow's taxes from tomorrow's young. It is backed by an implicit government debt or promise to contributing worker cohorts that they will benefit from future workers contributions once they retire.

The pension system financed by this principle does not own adequate assets. To society, the pension contributions are considered a mandatory social tax other than the best saving facility. As such stimuli are missing, the effectiveness of the distributive system greatly depends on a country's administrative coercion.

To be successful, a PAYGO system requires a higher worker to retiree ratio. However, the ratio is shrinking in nearly every country. Thus, to one degree or another, this system is facing financial problems as the system's structure is overtaken by demographics. In China, currently, there are approximately 6 workers for every retired person. By 2030, there will be only 2.3. In Armenia, by now, there are 4.3 workers for a retiree. But this figure will fall to 3.7 by 2015 and further to 2.9 by 2020(The Central Bank of the Republic of Armenia). Similarly, in the US there were 15 workers to every retiree as recently as 1950. Today there are only 3.3. By 2025, there will be only 2. In Japan and Europe, the problem is even worse (Trustee's Report; cited in Tanner(2001)). Thus, only through the use of market mechanism can countries ensure that they will be able to provide future retirees. Despite the demographic fact and the inherent inefficiency of the public managed vis-à-vis the private one, still some countries provide old-age benefits through a defined benefit social security system as a sole mechanism based on principles of social insurance.

Cumulative (Fully-Funded) Principle- For self-employed individuals or where employees do not have occupational pension schemes, they must establish a private pension scheme. This also applies where individuals are not eligible to join their employer's pension scheme or want to make additional contributions independent of the employer. Private pension system is an earning related full-funded scheme which forces workers to save part of their wage income for old age. This requires an accumulation of funds today that match expected future liabilities. The contribution of each pensioner is pre-defined but the benefit received by each individual is uncertain. It is uncertain in the sense that it is determined by the investment return on the contributions. The average return on old-age savings (contributions) depends on domestic and international market interest rate and rates of return. Thus, the key issue with private pension

funds revolves around asset management: pension fund managers should try to hold assets with higher expected returns and lower risks through diversification.

The mechanism is that workers contribute some percent of their wages to their own account at a pension fund company, and the latest invest the funds in long-term securities such as bonds, stocks, and long-term mortgages, since benefits paid out of the pension fund each year are highly predictable. Employers may also contribute to employees accounts. Contributions from current workers are invested and used to pay pensions of those same workers upon their retirement. The fund itself carries no additional liability.

Such type of pension system provides, thus, a good saving vehicle for old age. Furthermore, the capital accumulated under the funded part of the system would generate increased productivity and higher wages for the economy, raising the overall rate of return. Private pension plans may be administered by financial organizations such as building societies, banks, life insurance companies, or a pension fund managers. A wide variety of funding arrangements exists, as does the extent to which governments regulate and tax private plans.

Economic Significance of Private Pension System

Availability and efficient management of pension plans as per the need of the labor force is increasingly perceived as central to the functioning and healthy development of national economies in the free market system. Recall the self-evident fact that financial system deepening is crucial to the achievement of sustainable economic development.

Introduction of a market-based system for retirement (private pension system) is to provide for the security and protection of individual workers (weather government, private, or self-employed) within the context of financial sustainable system. Moreover, its development in developing countries is of great relevance in that a good sum of the labor force is private or self-employed. As Turnham indicated it, in developing countries, available estimates of informal-sector employment in urban areas vary between an average of 30 percent for a sample of relatively high-income countries and 50 percent for a sample of low-income countries (Corsetti & Schmid-Hebble, 1995). More realistically, as Turner (2001) put it, in Sub-Saharan Africa, nearly 75 percent of the labor force works outside the formal economy, often in subsistence agriculture. On average, social security programs in Africa cover only 10 percent of workers (Turner, 2001). Most workers not covered relay on extended families for support when they can no longer work. Such dependence on extended family is no more working as socioeconomic as well as demographic problems are widening in poor African families. Lack of alternative social insurance mechanisms would widen the incidence of old age poverty.

The new system could raise national saving rate and encourage the development of national capital markets. It also eliminates factor market distortions, increasing long-term growth and welfare levels. In addition, the system may also affect growth through efficiency improvements in both financial and labor markets. The potential efficiency gains are derived from incentives to liberalize financial markets or to reduce the magnitude of financial repression. Pension funds, the argument goes, provide particularly valuable financial resources in the process of reforming domestic markets, both because of their magnitude and their encouragement of the development of the long-term investment instruments. Efficiency gains in the labor markets work through changes in labor supply and resource allocation decisions in response to new incentives in product and factor markets.

A system of individually owned, privately invested retirement accounts would accelerate the move to a shareholder based economy and can promote full participation by workers. Since every worker would have an individual pension account, every worker would have the opportunity to own stocks. Even the poorest worker would become a shareholder and owner of factor of production and, consequently, could grow much more attached to the free market and to a free society. This has the effect of reducing class conflicts, which in turn has a role of promoting political stability, in a way improving the workings and coverage of the financial sector.

Generally, international experience has revealed the advantages of cumulative pension system (the Central Bank of the Republic of Armenia):

- Development of financial market by creating long-term savings in the economy; increase in national savings, hence additional investments and stimulation of the economic growth;
- Create effectiveness, generate products of high quality, and better customer service due to high competition among managers and political neutrality;
- Independent of the demographic situation; and
- Freedom to choose: a pensioner will himself/herself determine how to deal with personal pension savings; the amounts of pensions are determined only by personal pension contributions and investment income.

Pension system is one of the strategically important areas in the state policy, and therefore like other financial institutions, it requires ongoing control through an authorized body to ensure their soundness and safeguard the interest of affiliate workers. Such a body shall be responsible for regulation and control over the activities of the private pension funds, including administrators' activity. According to international experience, proper control is a key factor, and shall incorporate:

- Ongoing off-site and on-site supervision;
- Capability of early recognition and prevention of problems;
- Imposition of fines and penalties;
- Ability to revoke the license; and
- Require compliance with and administration of professional integrity for staff and management.

For private pension funds to be sufficiently reliable to mandate that workers' savings be deposited with them, certain minimum conditions have to be met. A growing literature analyses these threshold conditions. Vittas (1998 and 2000) argued that the slow build up of (private) pension funds gives the adopting country time to implement the infrastructure of more efficient capital markets, and to encourage the development of an adequate supply of private securities. Vittas(1998) put three necessary conditions for the success of the new system are conditions relating exclusively to the political will and technical capacity to guard and manage the accumulated assets:1) a political commitment to macroeconomic price stability and sound fiscal policies– long term financing will be unattractive if there is too much instability, 2) a political commitment to the effectiveness of an independent regulatory and supervisory body, and 3) the existence of well capitalized banks and insurance companies to offer asset management and administrative services (although these need not be domestic institutions). E Philip Davis (2005) added a fourth condition for the success of private pension funds: pension funds must not be unduly constrained in their investment choices nor driven by political as opposed to economic imperatives.

The Case of Ethiopia

Like many other developing countries of the world, safety nets, pension systems, and public transfers are not adequately developed in Ethiopia. There is lack of well-developed formal social assistance programs for the population. The population instead has to relay on traditional practices including within and across family and community transfers. Family members are taken care of by other family members during their old age, sickness and unemployment. This system, however, is faced with increasing level of problems due to economic as well as social shocks. The pressure on the independents is even worsened with HIV/AIDS and other health problems. All this implies increased government responsibility in providing some social security services unless it furnishes adequately favorable environment for the private sector to play its own role. Lack of such programs can lead to increased incidence of poverty.

As it was indicated at the beginning, the emphasis of the paper is on security system. The prevailing type of security system in Ethiopia is the government sponsored Social Security system. The history of the formal social security system in Ethiopia dates back to the formulation of the Pension and Social Security Authority (PSSA) in 1963(Pubic Service Pension Proclamation N. 209/1963). This decree covered only the military and civil service workers. For these groups, the pension scheme was funded by a mandatory contribution. The PSSA administers four pension scheme namely: old age pension, invalidity pension, sickness benefits/pension and work injury pension. To maintain international standard and to benefit from international experience, the SSA become an affiliate member of the International Social Security Association (ISSA) in 1985. In the SSA scheme, normal retirement age is 60 years for both males and females and the scheme is applicable on any type of work. Minimum years of service to qualify for pension entitlement are 10 years. It is estimated that the population over 60 years of age in Ethiopia was 4.5 percent of the total in 1990;it is expected to fall to 3.9 in 2020 and rise afterwards to 4.2, 6.8 and 15.1 per cent in 2030, 2050 and 2075, respectively. The dependency ratio (population over 60/ population 20-59) was 11.5 per cent in 1990 and is expected to increase in the future.

Moreover, since only government employees are covered by the pension scheme, large portion of the eligible age population is excluded. The total number of beneficiaries as of 1998 was 439,363 (Melaku Don, 1998). Given this limited coverage, broad-based reduction of old age poverty is not possible. Moreover, the implied saving mobilization role of such financial institution cannot be realized. When we examine the structure of the labor force in Ethiopia, the majority of the employed population (91 percent- excluding unpaid family workers) works for either the informal sector, the private sector or is self-employed (CSA, 1999). These employees fail to have access to pension services and thus are vulnerable for income instability especially in their old age. There are also a reasonable amount of public employees with no possibilities for pension services so as to make consumption flows somehow smoother in their old ages.

Moreover, the majority of public as well as non-public employees who are denied access to government sponsored pension system lack access to provident funds. Provident funds in this country are usually employer sponsored where both employers and employees contribute some amount (some percentage of their salaries, for workers). It is different and less important than pensions in that while provident funds are to be paid as a lump sum benefits to workers upon their leave from their employment either as a retiree or even in their working ages, pension funds are to be paid to members at their retirement in the form of monthly settlements so as to make consumption flows smooth while income flows are, strictly speaking, declining. Moreover, while public and private pension schemes generally offer survivors benefits as an annuity, provident funds usually only provide a lump sum benefit. Lump sum benefits typically provided

by provident funds do not protect against the risk of a retired person outliving his or her income. These problems are largely acknowledged by countries and most countries have been replacing it with the fully funded private pension system.

Apart from the poverty-reducing role of pension funds during the old age and disability times, one should notice their role in furnishing another avenue for financial sector development and widening financial product ranges. This might in turn impact long-term investment and economic growth of the country. Studies and mere observation reviles that there should be extended efforts to expand financial intermediaries and products so as to make the country beneficial from the sector.

The financial system in Ethiopia is very fragmented and there are particularly no well-established investment opportunities for pension funds. One can identify at global level four asset classes that could help bridge the gap between the supply and demand for long term funds that could be raised by pension funds: securitized bonds, mortgage securities, infrastructure finance bonds, and collateralized loan obligations. The newly flourishing real estate industry and the ongoing infrastructure works in Ethiopia usually require huge sum of long-term finance. The fear for lack of investment opportunities for funds raised by the private pension funds can be drooped to lower level if the funds can be used to finance the real estate industry and infrastructure development activities in the country. Moreover we should believe that new instruments may bring new opportunities.

Conclusion

In Ethiopia, unlike other developed countries and countries in transition, the public pension system is not endangered with demographic factors--retiring baby boomers, shrinking working age populations and lengthening lifespan. The problem is lack of coverage. As is shown in the paper, a large proportion of the country's labor force work for the non-government sector and lacks access to public pension benefits. Thus, there should be another institution standing for the benefits of this group of the society. More importantly, too, the adoption of fully funded pension scheme is crucial for the mobilization of funds (capital) and efficient allocation of credit. Thus, they should be viewed as catalysts to develop the financial sector of the county. They would lead the sector to institutional investors in financial assets. Therefore, responsible government bodies should draw appropriate rules, policies and guidelines for the introduction of the scheme in Ethiopia. Any such move to introduce a complementary pension system will be rewarded by stabilized society, expanded financial system, and growing economy.

Nevertheless, it should be born in mind that the structure and limitations of the existing financial system (like lack of a menu of long-term saving instruments and capital markets) and other institutional inefficiencies, provide important constraints on the prospectus for successfully implementing private pension systems. Thus, a high degree of commitment is required from concerned entities in this regard. Once a point about private pension schemes is raised so as to make it subject of policy debate, all requirements, ownership structure, and administrative, regulatory and supervision issues are left for further study and empirical examination.

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Promoting Creativity in Early Childhood Education through Nigeria's Universal Basic Education (UBE) Scheme

By

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Abstract

Every society ought to be interested in the production of individuals who display originality and quality in their work. From the utilitarian point of view, it is desirable on the grounds that creative individuals like to contribute in the long term to the promotion of happiness in the community in particular and the nation in general. This paper is aimed at discussing the promotion of ingenuity and imagination in early childhood through the Universal Basic Education (UBE) Scheme in Nigeria.

Introduction

Many people use the term 'creative' according to Woods and Barrow (1975) in a neutral descriptive way. For example, a woman may say that her child is creative because he makes toys, cars, planes, trains, knives etc. out of an empty tin of milk. In the same vein, a teacher may say that a particular student is creative because he can write good essays and solve problems in mathematics. A child who is able to suggest a number of uses for empty cartons may also be said to be creative. Therefore, creative people are purposeful as well as imaginative (Torrance, 2001). The word "creative" therefore is seen from different perspectives though with a singular aim: inventiveness and originality. The following questions quickly come to mind: (1) what is creativity? (2) What does one have to do to be regarded as being creative? (3) Under what conditions will a person be regarded as creative?

There is no one definition of creativity that everyone can agree with because of the considerable debate about the definition of Creativity (Sharp,2001). In this write- up creativity is perceived as a unique dimension in Universal Basic Education (UBE) Scheme in early childhood education and it is portrayed as a conditional virtue, a logical and decisive attempt to arouse children to participate in the promotion of community development. Creativity has been an African heritage from time immemorial. This is evidenced in African sculpture, wood carving, fashion design, pottery, architectural design, blacksmithing, oratory and literary creativity writers (novelists). It is the burden of this paper that such African heritage be integrated and promoted in the UBE scheme as a way of creating and enhancing creativity in children. This no doubt will likely create job opportunities for the masses.

Creativity infuses life with unlimited possibility and potentiality to use imagination, talents and abilities in unique and original ways, so that every individual will experience the richest meaning and qualities of life. Creativity entails the 'three P's' of a *person* engaging in a creative *process*, which produces a creative *product* (Dust, 1999).

The value of creativity to the individual performing the act is the production of something new, a drive within, striving to make a lot of difference in order to be original.

Originality may be described as the ability to come up with ideas and products that are novel, if not unique. It is believed that the creative process involves imaginative activity, the ability to generate a variety of ideas (productivity), problem-solving (application of knowledge and imagination to a given situation), and the ability to produce an outcome of value and worth. (Dust 1999; Cropley, 1999). To Hartmann 2005 and Bowen (2008), creativity is gaining and sharing a new view, a new angle, a new insight. It is not about consuming, it's about giving. It does not inhibit us, it frees us.

Schachtel (1962) looks at the basic motivation behind the individual's quest for creative experience. He sees this as being concerned with the openness of the individual to the world around him. This is the ability to remain receptive to the experiences provided by the environment and to see, continually the possibilities for further development. Creativity is a matter of relationship with oneself, which enables one to come to better terms with the outer world. When one is really working on his inner world, he becomes excited, for he is making important discoveries and gains. An environment that encourages creativity therefore is one that includes opportunities for children to explore and discover, and offers a broad base of experiences followed by opportunities for imitation (Stout, 2000).

Creativity is an inborn capacity for thinking differently. As such, Kotelnikov, (2008) and Ruthledge, (2008) define creativity as the juxtaposition of ideas which were previously thought to be unrelated. This implies that creativity is the ability to combine ideas in a unique and different way to create something that meets a specific challenge.

Gotz (1982) opines that creativity is a process of turning insight into reality. This is a complex process involving 'know-how' as well as the phenomenon of the creative will, that is, the will to concretize.

Everyone of us are born to be creative, with unlimited potential for creating. But as we grow up, we give away the creative potential. According to LeBoeuf's (2002) any primary ability or talent can be developed by training and improved upon by exercising it. Therefore, this creative potential must be reawakened with practice and encouragement.

According to Pink (2005), we are entering a new age when creativity is becoming increasingly important and we need to foster and encourage *right-directed thinking* (representing creativity and emotion) over *left-directed thinking* (representing logical, analytical thought). Hence, Nickerson (1999) provides a summary of the various creativity techniques that have been proposed. These include:

1. Encouraging acquisition of domain-specific knowledge
2. Stimulating and rewarding curiosity and exploration
3. Building motivation, especially internal motivation
4. Encouraging confidence and a willingness to take risks
5. Focusing on mastery and self-competition
6. Promoting supportable beliefs about creativity
7. Providing opportunities for choice and discovery
8. Developing self-management (metacognitive skills)
9. Teaching techniques and strategies for facilitating creative performance
10. Providing balance

To become a creative person, one must be self-reliant. This will enhance the ability to think independently and become more proficient at coming up with new ideas. According to Craft (2000); Edwards & Springate (1995); Mellou (1996); Tegano, Moran & Sawyer (1991); and

Runco (1990), the role of teachers in fostering creativity should be actively emphasized. They maintain a balance between structure and freedom of expression for young children. Creativity can also be encouraged by asking open-ended questions, tolerating ambiguity, modeling creative thinking and behavior, encouraging experimentation and persistence and praising children who provide unexpected answers.

Creativity is an effective resource that resides in all people. One important factor in encouraging children to use their creative abilities is that teachers should believe that all pupils are capable of achieving a high level of creative functioning. Edwards & Springate (1995) observe that young children are developmentally capable of classroom experiences which call for (and practice) higher level thinking skills, including ANALYSIS (breaking down material into component parts to understand the structure, seeing similarities and differences); SYNTHESIS (putting parts together to form a new whole, rearranging, reorganizing); and EVALUATION (judging the value of material based on definite criteria). Teachers should therefore recognize pupils' creative talents and provide the right kind of environment and condition to help them to understand and develop their own divergence.

Wood & Barrow (1975) contend that a necessary condition of being creative is that one should produce work that is one's own; we mean that the painting, music, poem, photograph etc. is of the agent's own idea and reflects one's way of looking at things. It must not be produced according to someone else's instruction. It should also not be an imitation of another person's work. Thus, one who simply copies the work of others, no matter how good the work is, cannot be described as being creative. For example, fashion designers are not creative because they copied styles drawn on posters by other people. In addition to producing work that is one's own way of looking at things, a creative work should be original.

By being original we mean that the work should break new grounds, in order words, the work must be unique and distinctive in some way and it must express ones ideas and feelings. Scientists like Avogadro, Gay Lussac, Galileo and Darwin would not have been described as creative if their theories did not break new grounds in the scientific world. Novelists like Soyinka, Ekwensi, Achebe and Dickens are described as creative because their works were distinctive in some way. Originality here does not mean that the work must be extraordinary or be a deviation from the normal way of doing things. The work could even be a variation of someone else's work, as in the case of a composer producing a piece of music consisting of works from another composer. In this case, the originality could lie in the selection of words or a change in the rhythm of the music. For instance, the popular song 'Malaika' by Makeba which has been remixed and sung in different forms by other musicians is typical of what we refer to as originality.

Then the question is: Does a creative person has to produce a work that has some standard of excellence once the work is original? If we do not make reference to the quality of the work produced, it then implies that every painter, photographer, novelist, dancer, journalist who simply produces something of his own that is original would be said to be creative. Woods & Barrow (1975) hold that creative work should have some measures of quality in them. If we insist that a creative person should produce works of good quality, it implies that creativity has some value in relation to its objective. Therefore works of good quality must be produced in order for it to be recognized as creative.

A creative person should be consistent in his work. That is, if one produces an original work that is one's own, every other work produced should be original for one to be described as creative.

Another necessary condition of creativity is self-expression. The individual must have the freedom to express him/herself in whatever s/he is doing without any hindrance.

Creativity in Early Childhood

Sully (1896) was the originator of the concept "Child's Acts," meaning the childish kind of conceptual activity or the spontaneous art of children. Sully was the first to make a coherent attempt in classifying children's marks, that is, their drawings (also described as doddlings). As a proponent, his work promoted much research work in children in many areas of their development - mentally, physical and emotionally.

Children are more curious about anything new; they ask questions and challenge orders. The urge to search and find out is typical of them and it is a vital force in their learning. The children's creative experiences come through their heads, eyes and fingers as they dismantle and re-organize things around them. They think literally and make associations between things that are not usually connected. Menakaya (1978) holds that children's sense of sight and touch have exceptional and vivid significance for them. In this regard, they draw, paint and like making things both in groups and individually and their creative activities demand inquiring and exploration (Lancaster 1970; Lowenfeld 1987). Bredekamp, et al (1992) believe that play is vital in the development of the child's creativity and imagination:

> Play provides opportunities for exploration, experimentation, and manipulation that are essential for constructing knowledge and contributes to the development of representational thought. During play, children examine and refine their learning in light of the feedback they receive from the environment and other people. It is through play that children develop their imaginations and creativity. During the primary grades, children's play becomes more rule-oriented and promotes the development of autonomy and cooperation which contributes to social, emotional, and intellectual development.

Play in this context is not seen as an ordinary, unintentional act, but a creative kind of activity that will challenge the imagination of the child and make him perform originally. Creativity is especially crucial for the Nigerian children. Creativity instills sensitivity to good workmanship and the feeling for others, the intrinsic value of work and the satisfaction for a job well done. Creativity is an ability every child is born with, therefore the Nigerian society through our educational policies needs to promote creativity among the children because it is at this childhood stage that the seed of aesthetics can be better sown.

Universal Basic Education (UBE) in Nigeria

Yoloye (2004) observed that the concept of basic education is not a completely new term to the Nigerian society and that within the last decade, it has assumed a global
significance and its meanings has been broadened. The Universal Basic Education program was formally launched by then President Olusegun Obasanjo on 30th September, 1999. According to Federal Ministry of Education (1999), Basic Education is *"the foundation for sustainable life-long learning. It provides reading, writing and numeracy skills. It comprises a wide variety of formal and non- formal educational activities and programs designed to enable learners acquire functional literacy."* Also Obayan (2000) describes basic education as that level, type and form of learning needed to build firm roots for literacy and numeracy, to inculcate basic life skills and more importantly, to consolidate the skills of learning how to learn.

The expanded visions of UBE therefore are to universalize access to basic education, engender a conducive learning environment and eradicate illiteracy in Nigeria. The establishment of the program is in response to the provision of the constitution of the Federal Republic of Nigeria (1999) which stated in Section 18 as follows:

> *...government shall direct its policy towards ensuring that there are equal and adequate educational opportunities at all levels...government shall eradicate illiteracy; and to this end government shall as and when practicable provide (a) free, compulsory and universal primary education (b) free secondary education (c) free university education, and (d) free adult literacy programs*

The program aims at achieving the following objectives:

- Developing in the entire citizenry, a strong conscientiousness for education and a strong commitment to its vigorous promotion
- Provision of free universal basic education for every Nigerian child of school going age
- Reducing drastically the incidence of drop out from the formal school system
- Catering for young persons, their schooling as well as other out of school children or adolescent through appropriate form of complementary approaches to the provision of UBE
- Ensuring the acquisition of appropriate levels of literacy, numeracy, manipulative, communicative and life skills as well as the ethical, moral and civic values needed for laying a solid foundation for the life -long living (FME, 2000).

UBE Scheme becomes very imperative for it will provide the avenue for the child to recognize his/her unique talents and develop mastery in those areas. Children are naturally creative but we need to help them to develop this creativity. One way to do this is to transform the space they play and learn in, so that children are inspired by their surroundings to engage in creative activity.

Approaches and Strategies for Promoting Creativity in Early Childhood in UBE Scheme

Creativity has recently been given official recognition as one of the overarching aims of the curriculum in schools (Sharp, 2001**).** As result, the curriculum according to QCA, (1999b) should enable pupils think creatively and critically, solve problems and be different for the better. It should give them the opportunity to become creative, innovative, enterprising and capable of leadership to equip them for their future lives as workers and citizens. Since UBE advocates massive literacy to equip individuals with knowledge, skills and attitude that will enable them to live a meaningful and fulfilled lives; contribute to the development of the society; derive maximum social, economic and cultural benefits from the society and discharge their civic and obligations competently; it is a better avenue to develop their creative ability. UBE will help to nurture creativity in children through training and have the ability to put to practice whatever they are taught in the classroom afterwards.

Many UBE products would not continue with education, creativity therefore is a means of independence. And as such, should be seen as a life-long skill. According to Real (n. d) creativity, the ability to generate novel responses to problems and challenges is a basic human ability. Some people have extraordinary talents in fields that have been recognized as "creative." Some people are encouraged to express their creative ability more than others and may even get rewarded for doing so. The all round purpose of creativity training is to develop one's ability to generate and implement new ideas. This type of training thorough the UBE will enhance the

official learning of rules about how things are and how to listen to one's inner voice thereby recognizing the unique talents of creativity and develop mastery in them.

Education is a weapon for acquiring skills, relevant knowledge and habits. Therefore, when we consider the educational value of creative activities, for example those involving the teachers playing minimal role by providing materials and possibly the topics to be worked on, there may be empirical connection between such activities and being creative in their value sense. It has been discovered that when children are given freedom of expression that they grow up less restricted in their expressions. This may be educationally valuable when reference to critical standards is not highlighted. It provides relaxation and promotes self-confidence in children. But there must be some restrictions in whatever should be done because if all writing lessons become exercises in self-expression, they will cease to provide relaxation and self confidence. Lowenfeld & Brittain (1987) in their work state that free activity in Art lessons is an efficient way of promoting creativity in any discipline and that disallowing such free activity will suppress the child's creative forces and make him less likely to produce valuable work.

The following approaches and strategies can be adopted for promoting creativity in early childhood in UBE scheme.

Approaches	**Teacher/Students' Activities**
Create an idea from learning environment	The teacher should create a good pupil-teacher relationship. The teacher must be a good listener, receptive to ideas and be able to respond positively to them.
Setting clear an achievable instructional objectives	Teacher should plan tasks and activities that give pupils opportunities to be creative by setting a clear purpose for pupils work.
Varying instructional modes	Teachers should use a range of instructional delivery methods such as practical experimentation, problem solving role play, visual materials, such as diagrams and cartoons.
Use resource persons and organize field trips	Teachers should give pupils first-hand experience through visits and contact with creative people. Activities should be made relevant to pupils' lives.
Encourage collaborative learning	Teachers should give opportunities for collaborative activities.
Use motivational strategies	The use of external incentives should be limited rather pupils should be encouraged, recognized and rewarded with words of praise and certificate of achievement so as to derive intrinsic satisfaction for having done something really well.
Involve children in lesson planning	Pupils should be encouraged to participate in the planning of their own work and they should be given enough time to do their work.
Provide the instructional platform	There should be adequate materials and preparation so that a successful result is achieved. This will help in building up of positive self concepts which is very important in promoting creativity in early childhood.
Encourage games in form of plays	Educational games which call for imaginative, individual solutions should be encouraged.
Sequence learning	Allow time for the child to explore all possibilities, moving

	from popular to more original ideas.

Adapted from Bredekamp, et al, 1992.

Many of the activities in the primary school curriculum of the UBE in Nigeria specifically portray these mentioned general activities and as such can engender creativity in children. Examples of such activities include: -

In science there are activities like:
(a) create air currents by blowing with the mouth or using paper fan;
(b) act drama on the uses of water
(c) play on a see-saw
(d) produce different sounds from the mouth and throat
(e) mould with wet sand and clay
(f) make and flies paper kites
(g) make things to float in water
(h) make objects with clay.

In Arts and Crafts, there are activities like :
(a) draw diagrams of functional art works
(b) draw diagram of a decorative art work
(c) make drawings of specific objects used in beautification and color them
(d) draw basic shapes on folded paper to form a pattern
(e) draw a major character in a play
(f) draw an object associated with a given local ceremony and color it
(g) make drawings of a costume worn during a selected festival.

It is obvious that if these activities are practised in the classroom, children's creative ability might be significantly developed.

Conclusion

As mentioned earlier, no single definition of creativity has been accepted as the best. However, no matter how viewed, creativity represents patterns of primary abilities which vary with different spheres of creative activity. It is established in this paper that creativity involves times, insight taken from the imaginary and physically concretized in the real world, possession of know-how and exercise of the creative will. Creativity is part of every area of the curriculum and all areas of learning have the potential to be creative experiences. The creative process which includes curiosity, exploration, play and creativity, is as applicable to personal, social and emotional development (Duffy 2004). Therefore, if Universal Basic Education (UBE) scheme would be relevant and sustainable for national development, it has to promote creativity in early childhood.

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Challenges of Refocusing Extension Education Services for Private Agricultural Extension Delivery in Nigeria: Evidence from Nomadic Fulani's Willingness to Pay for Extension Services in Niger State

By

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Abstract

This study investigated the willingness of nomadic Fulani to pay for extension services in Niger State and draw challenges for refocusing extension services to include nomads for private agricultural extension delivery in Nigeria. Data collected from one hundred nomadic Fulani were analyzed using descriptive and inferential statistics, and Contingent Valuation Method (CVM) to determine the amount that nomadic Fulani are willing to pay. The CVM result showed that a nomadic Fulani was willing to pay ₦3,655.91 for extension services per year.

Key words: Challenges, refocusing, extension services, extension delivery system, willingness to pay, and nomadic Fulani

Introduction

Agricultural extension as an institution focusing on education of adult people particularly the homemakers and farmers is essentially a special form of education. According to Oakley & Garforth (1992), "agricultural extension is a means by which new knowledge and ideas in agriculture are introduced to rural areas in order to bring about change and improve the lives of the farmers and their families" (p.2). Agricultural extension had been described by many scholars, as a voluntary, non-formal, out-of-school, adult educational process, which is concerned with teaching adult farmers and home makers improve their technologies capable of improving their socio-economic conditions (Williams, 1989; Swanson & Claar, 1984; Ladoja, 2008; Farinde, 2008). "It employs educational principles and methods to conduct its programme in a thoughtful, systematic way, and in an atmosphere of peace, mutual trust and respect (Farinde, 2008 p.120). In his work, Adams (1982) looked at agricultural extension, as "an advice and assistance for farmers to help them improve their methods of production and ways of marketing (p.3). Based on this basic understanding of agricultural extension, extension research efforts are planed and organized to provide extension advisory services to farmers in every aspect of agriculture. Thus, we have livestock extension, fisheries extension, crop extension, and so forth. The ultimate objectives toward which agricultural extension focus are more fruitful and better living for all people. Therefore, in order to achieve these objectives, adequate funding of agricultural extension becomes inevitable for provision of adequate infrastructures, appropriate strategic planning and execution, appropriate and timely research activities and provision of logistis. This new global extension situation is better put: "While extension traditionally implied training and dissemination of messages about specific

technology, more recently, it has expanded to include assisting farmers to form groups, dealing with marketing of agricultural products, and partnering with a broad range of service providers, such as credit institutions (International Food Policy Research Institute (IFPRI) (IFPRI, 2006 p.1).

In Nigeria, agricultural extension services are one of the most important institutions with the widest range of responsibility for agricultural and rural development. Therefore, as one of the government's efforts aimed at improving agriculture, agricultural extension services are free social services to farmers in Nigeria. As a result, the total costs of these services are borne by the government alone (Ajayi, 2006). The Nigerina government obtained World Bank loan which amounted to US$137.64 million naira in 1989 (Baxter, Slade & Howel, 1989). Adedoyin (2004), described the loan as a counterpart fund to the government used to implement some pilot projects adopting the Training and Visit approach to extension in order to improve agriculture. However, after the withdrawal of the World Bank's assistance, problems of dwindling economy and cash strains arose. The provision of extension services became thwarted, ineffective and less efficient because the government did not provide adequate funding. This caused the low extension agent-farmer ratio, put at 1: 4,200 in Oyo state, Nigeria (Project Coordinating Unit/Agricultural Development Programme, 1999). The status quo is still maintained and even worse in many states in Nigeria, Niger State inclusive, where many extension agents have been retrenched and the few that remains are faced with many constraints.

In order to ameliorate the effects of the inadequacies in government support for agricultural extension services, some private and Non-Governmental Organizations have ventured into the provision of extension services in Nigeria. Some of these NGOs are into the provision of the services in order to improve their members' quality of life as well as those of the host communities; and most of these organizations did not charge any fee for extension services they provide to farmers (Ajayi, 2006). Many private organizations use free extension services as a safety net for their company and a way of improving the economic conditions of small-scale farmers. They have ventured to provide free private extension services to promote efficient and sustainable production of a commodity and as a way of participating in the community development of their host communities as experienced in the case of Nigeria Tobacco Company (NTC) and Shell Petroleum Nig. Plc. respectively. Still, to improve agricultural extension services and reduce the problems of inadequate funding, Jibowo (2001) conceived that privatization and/or commercialization of extension could be advantageous in that it could promote greater access of farmers to extension agents and farm inputs since more extension agents would be employed while beaureacratic bottlenecks involved in mobilizing extension resources would be reduced. However, problems such as farmers' poor economic background, bribery and corruption, political instability, high subsistence nature of farming, farmers' lack of interest and difficulty in attaching values to extension services were identified as constraints to extension privatization (Dimelu & Madukwe, 2001).

Ajayi (2006) observed that the state of agriculture extension services in Nigeria have received the attention of some researchers who imagined a future when farmers will be paying for the services at least to offset part of the bill from which the government is gradually withdrawing due to economic reasons. This situation according to Farinde & Atteh (2009) may end up with many alternatives such like government-farmer partnership extension initiatives, farmers' group extension initiatives, private organization extension initiatives and private organization-farmer partnership extension initiatives. The imports of this new trend are diverse and this is seen in the Pluralistic Agricultural Advisory Services (PAAS). According to International Food Policy Research Institute (2006), the benefits of pluralistic agricultural advisory services are "their ability to overcome constraints, such as shortages in funding, staffing, and expertise, and to provide the necessary flexibility to tailor services to the needs of

specific subsectors or regions" (p.3). To this end and with particular interest in nomadic farmers, whose migratory nature of farming denied them of direct and regular extension services from the government public extension institution would necessitate knowing their willingness to pay for extension services; and how much they are willing to pay?. This will make extension valuable and accessible to the nomads as at when needed and in conformity with global trend of privatizing extension services. If this perceived situation of private funding initiative comes into reality and the nomads are paying for extension services consumed, there is a need for refocusing extension service delivery system to include nomadic Fulani farming activities. This study aims to assess the willingness of nomadic farmers to pay for extension services and draw challenges for extension services delivery system in Nigeria.

Specific objectives of the study.

The specific objectives are to:

1. describe socio-economic characteristics of the nomadic Fulani in the study area;
2. determine if the nomadic farmers are willing and how much they are willing to pay for extension services;
3. investigate which personal and socio-economic variables of the nomadic farmers influence changes in their willingness to pay for extension services; and
4. draw challenges of mainstreaming nomadic farming into agricultural extension delivery system services in Nigeria.

Methodology

The study area

The study is carried out in Niger State. The state lies between latitude 8° and 11°3'N and longitude 30° and 6°33'E. The State is situated in the middle belt zone of the country with a population of 3,950,249 (NPC, 2006). The total land area of the state is about 85,733.17sqkm, which represents about 9.3 percent of Nigeria total area. Over 80% of the land is arable, which constitutes the largest fertile agricultural land in Nigeria. The Nupes, Gwaris, Hausas and the Fulani are the major tribes supported by the minority tribes like Yoruba, Tiv, Ebira and Ibo/Igbo people. About 85.0 percent of the population engages in farming either directly or indirectly. The State experiences distinct dry and wet seasons with annual rainfall varying from 1100mm in the northern part to 1600 mm in the southern part. It has maximum temperature usually not more than 37.5°c (recorded in March) and minimum temperature of about 30.2°c (recorded between December and January). The rainy season is for about 5 months, between April and October in a year. There is an average sunshine duration of about 9.0 hours/day in the state. About 85.0 percent of the population engage in agriculture while the remaining 15.0 percent are into other vocations such as civil service, manufacturing and commerce. Most topography is predominantly plain land with interrupted undulations. The soil ranges from sandy-loam to clay-loam. The common crops grown in the state are maize, yam, vegetables, rice, groundnut and guinea corn among others. Tomatoes, pepper, melon, and okra fruits are grown in large quantity by farmers. Other fruits include eggplants, citrus and mangoes. In addition, the availability of grassland and favourable climate make Niger State a haven for nomads. Therefore, rearing of cattle, sheep and goat remain another major occupation of the Fulbe tribe in Niger state.

Sample and sampling method

The study was carried out in Paiko and Bosso Local Government Areas (LGAs) of Niger State of Nigeria. Purposive and multi-stage random sampling procedures were employed to select the two LGAs and respondents based on the predominance of nomadic Fulani in the areas. Based on the number of nomadic camps in these local governments, four under Bosso LGA and three nomadic camps from Paiko LGA were selected for sampling. From each camp, 15 nomadic Fulani were selected, given 105 nomadic Fulani interviewed using a validated and pretested interview schedule. However, only 100 completed data instruments were analyzed.

Measurement of variables

Some selected independent variables such as age, income, years of formal education, family size, farm size, years of awareness, capital investment, number of cattle, number of sheep/goats, amount willing to pay, and number of extension contacts were measured in absolute values given by the respondents. Variables like gender, membership of social organizations, levels of awareness, and sources of capital were measured at nominal levels. Nomadic fulanis' willingness to pay (WTP) was measured by responses to five statements on Likert scale as in Ajayi (2006). The total score per respondent fell in the range between five and 25points. The absolute scores were employed to run regression of WTP with the independent variables.

Statistical method

The use of simple frequency counts, percentages and measure of central tendencies were used to analyze and describe the socio-economic characteristics of the respondents. Multiple regression analysis was used to determine the factors, which significantly affected the willingness of nomadic Fulani to accept and pay for extension services in Niger-state. In addition, the Contingent Valuation Method (CVM) analysis was used to calculate the Lower Bound Mean (LBM) of the sum of money, which the nomadic Fulani are willing to pay as described and used (Blaine, Lichtkoppler, & Stanbro,. 2003; Ajayi, 2006; Farinde & Atteh, 2009). In this method, various levels of payment as indicated ranging from N100 to N800 only in irregular whole Naira increment were presented and used in the calculation. The LBM is known as conservative lower average of money, which nomadic Fulani are willing to pay because the formula used to calculate it does not capture the interpolations of amount, i.e between those listed. For example, the percentage of nomadic Fulani willing to pay more than N100 but less than N200 was neither estimated nor used in LBM calculations. The formula used was adapted from Blaine et al (2003) and it is thus presented as:

$LBM = \pi_o (P^o) + {}^k\Sigma i=1\pi (Pi\text{-}Pi\text{-}i)$

Π_o = cumulative percentage of respondents willing to pay the initial o smallest finite amount

P^o = smallest finite amount

K_o = Number of subsequent amount

3.1 Results and discussion

Data in Table 1 show the results of the selected demographic and socio-economic characteristics of the respondents. The average age of the respondents is 43.28 with standard deviation of 12.32. About 48% of the respondents were young below 40years while only 26% were above 50 years. This age category is important such that majority of the respondents would appreciate the value of agricultural extension services in nomadic farming. Of the respondents, 91% were male while 9% are females. This indicates that the level of Fulani women involvement in pastoral farming is low, compared to their men counterpart. This explained the fact that Fulani women are only involved in the processing of cattle products while men specialize in rearing and milking of cattle/cows. The average family size of the respondents is about 8.0 and 3.5 standard

deviation. Majority of the respondents (69%) had only Quranic education. This implies that nomadic Fulani in the study area are mostly illiterates in the western sense and this is an indication that, nomadic education programme is not effective in the study area.

Of the respondents, 98% belonged to some social organizations among which 71.43% belonged to farmers association, while 20.41% belong to religious association, while 5.1% and 3.06% belonged to credit and thrift society and co-operative society respectively. This points to the fact that membership of social organization by the respondents is a function of informal sourcing for initial capital (93%). This could go a long way in creating awareness amongst the farmers on the need to pay for extension services thereby increasing their willingness to pay. On years of farming experience, 76% of the nomadic Fulani had been in pastoral farming for 30 years; only about 24% has been in the system for 60years. This is so because average Fulani children are primarily initiated into pastoral activities from childhood. Majority (97%) of the respondents had farm size below 10 hectares and only 3% had larger farm size. The average farms size owned by respondents in the study area is 5.60ha with standard deviation of 8.21. The large hectares of land own for farming is mostly used for grazing and not for cultivation. This seems one of the greatest challenges of mainstreaming nomadic farming into the agricultural extension delivery system services, that is, getting enough land for animal gracing without causing nomadic Fulani to arable crop farmers conflicts.

Majority of the respondents (77%) were aware of the extension services in cattle management while 23% responded negatively. A lot more of awareness still needs to be created as this will influence their willingness to accept and pay for extension services. On the ability to pay for extension services, majority (73%) of the respondents rated themselves as being able and willing to pay for extension services. Only a minority of 27% are not willing to pay. This is an important finding because nomadic Fulani's could be further strengthened to be able to pay for extension service through adequate contact, education and dissemination of useful, compatible, affordable and appropriate improved farm technologies. When these are done and the majority is progressing, the few laggards would join later if values are added to nomadic farming extension services. Detailed analyses of the assessment of the extension service offered to them showed that majority (79%) of the respondents were of the opinion that the extension agents were fair. This assessment was based on the extent to which they were visited and trained on relevant agricultural production related activities.

Result of contingent valuation method.

The LBM for agricultural extension services in the study areas as calculated was N3,655.91 per nomadic Fulani per year. This translates as N304.66 per nomadic Fulani per month. If this is multiplied by the number of nomadic Fulanis, the amount which would accrue to the extension service provider would be substantial and reduce the government expenses incurred on extension services thereby resulting only, in a need to provide subsidy and not to bear the total cost of providing the service. In addition, private extension service providers could begin to operate among the nomadic Fulani. However, this would be possible if only the condition mentioned by farmers as pertinent to their willingness to pay for the services were met. These conditions are relevance of extension services to their situation, trustworthiness and effectiveness of the extension agents, improvement on their production output, increased income from pastoral farming and government assistance in diversification of enterprises and micro finance.

Result of regression analysis

The F-ratio of 3.563 was statistically significant at 0.01 level. This result indicates that the composition of variables considered in this study significantly contributed to changes in farmers' willingness to pay. However the variables could only account for 35% of the variation (R^2=0.35). Of all the variables, four (4) were significant in their contribution to changes in farmers willingness to pay for extension services. These include years of education (t=2.108), years of farming experience (t=3.04), sources of capital (t=-1.62) and willingness to pay for extension services (t=1.65).

The regression co-efficient for years of farming experience (B= - 63.51) is statistically significant at 0.01 level, it implies that the more the years of farming experience, the less the willingness to accept and pay for extension services. Co-efficient for years of education (B = 29.87) and willing to pay for extension services (B=1555.42) were statistically significant at 0.05 level. This implies that the more the years of education the more the willingness to pay. The co-efficient for sources of capital (B= -161.176) is negatively significant at 0.10 level, this also implies that the more functional the sources of capital, the less the willingness of nomadic Fulani to accept and pay for extension services.

Challenges of refocusing extension services in Nigeria

The migratory nature of nomadic lives in search of green pastures for the cattle does not permit regular extension contact throughout the year. This might be responsible for low productivity and incessant clashes with other farmers. Hence, their acceptance to pay for extension services might be a mirage unless there is change in their conventional orientation and believe that animal and vegetation belong to the creator and that animal are meant to feed on them. The main challenges are mainstreaming cattle rearing into the extension delivery system services focusing on nomadic Fulani to change their orientation, perception, knowledge, skill, attitude and practices through education in modern cattle farming with both policy and legal backup. The greatest challenges of extension are cultural reorientation of the Fulani, adequate budgetary allocation; adequate infrastructural facilities at strategic nomadic farm centres; and appropriate strategy that will engender nomadic farming (cattle rearing) in modern way, devoid of communal clashes on utilization of resources. Although, the nomadic Fulani finds extension service as a necessity for its high added value for nomadic farming in Niger State, their willingness to pay for extension services should be for adequate provision of necessary infrastructures and funding based on private initiatives but guided by policy strategy of efficient and effective operation.

To summarize the challenges, there is need for restructuring of the agricultural extension delivery system service and expand its scope to include nomadic farmers like others. The others are smallholder arable crop farmers, poultry farmers, fish farmers, agro-processors and women-in-agriculture under the unified extension system in Nigeria. Establish nomadic strategic agro-ecological based training centers or settlements with large expanse of land for establishment of pasture farms and provision of adequate infrastructural facilities like regular supply of water to both animal and human being throughout the year with regular supply of power and road networks. Others are dissemination of modern techniques of cattle, sheep and goats rearing, housing, feeding and health management; processing and packaging of animal products and marketing. There is also need for development of appropriate nomadic farming extension strategy that considers peculiarities of the Fulbe cultural differences to avert conflicts at all levels of interaction. All these must be backed-up with a comprehensive extension policy and

legal blue print, stating scope of extension, sources of funding, administration and service provision for agricultural extension delivery system services in Nigeria.

Conclusions

1. The average age of the respondents was 43.28 with standard deviation of 12.32; mean family size was 7.7; mean years of farming experience was 24years; and average farm size was 5.6ha with 93% of nomadic Fulani sourcing their initial capital from an informal sources.
2. Empirical facts emerging from this study revealed that majority of the respondents (77%) are willing to pay for extension services at N3,655.91 per nomadic Fulani per year.
3. In the assessment of the extension service offered to them, respondent were of the opinion that the extension agent were fair. This assessment was based on the extent to which they were visited and trained on relevant agricultural production related activities.
4. The characteristics of the Fulani that significantly influence their willingness to pay for extension services are age, years of farming experience, family size, number of cattle, source of capital, number of goat and sheep, years of awareness, years of education and amount willing to pay.

Recommendations

Based on the findings of the study and discussion above, recommendations are given below:

1. The need for qualitative western education among the nomadic Fulani in the study area in particular and in Nigeria is urgent, as this is in short supply. This will help them understand better what extension services in cattle management is all about and of what benefit it is to them, thereby increasing their understanding of the added -value of extension and willingness to pay for the services.

2. The variables that significantly contributed to changes in the amount willing to pay by the farmers should be given prominence when any form of participatory funding is being considered for agricultural extension services. This is very important because change in the variables identified as signified will result in corresponding change in the Fulani willingness to pay for extension services.

3. The government should make available, all season roads linking various agro-ecological based nomadic strategic training camps for easy accessibility as well as transportation of extension agents to these areas.

4. There should be enlightenment of the extension services to all nomadic Fulani and extension should be expanded in scope to cover the activities and ever - increasing population of the nomadic Fulani.

5. The challenges highlighted above should be met for proper mainstreaming of nomadic farming in a modern way into agricultural extension delivery system in Nigeria and for proper development of private extension initiative

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Refocusing Extension Education for Private Extension

Table 1: Frequency distribution of respondents' selected characteristics

Selected characteristics	Frequency	Percentage	Central Tendency
Age (Years)			
< 40	48	48.0	x= 43.28
41-50	26	26.0	□= 12.32
51-60	17	17.0	
>60	9	9.0	
Sex			
Male	91	91.0	
Female	9	9.0	
Family size			
1-5	27	27.0	
6-10	57	57.0	X= 7.70
11-15	13	13.0	□= 3.51
>15	3	3.0	
Membership of Social Organization			
Belongs to social organization	98	98.0	
Does not belong to social any	2	2.0	
Years of farming experience			
<30	76	76.0	X= 23.91
31-40	11	11.0	□= 14.62
41-50	9	9.0	
51-60	4	4.0	
No of cattle			
<50	65	65.0	X= 45.97
51-100	33	33.0	□= 27.61
>100	2	2.0	
No of Goat/Sheep			
< 15	45	45.0	
16-30	29	29.0	
31-45	18	18.0	
>45	8	8.0	
Sources of capital			
Formal	7	7.0	
Informal	93	93.0	
Level of awareness of Extension services			
Aware of extension services	77	77.0	
Not aware	23	23.0	
Willingness to pay			
Willing	73	73.0	
Not Willing	27	27.0	

Source: Field Survey, 2007

Refocusing Extension Education for Private Extension

Table 2: Amount nomadic farmers are willing to pay for extension services.

Amount willing to pay	**Frequency**	**Percentage**	**Cumulative**
8000	8	10.95	10.95
7000	3	4.10	15.05
6500	6	8.21	23.26
6000	6	8.21	31.47
5500	5	6.84	38.31
5000	5	6.84	45.15
4000	2	2.73	47.88
3700	2	2.73	50.61
3500	2	2.73	53.34
3000	6	8.21	61.55
2500	1	1.36	62.91
2000	1	1.36	64.27
1700	1	1.36	65.63
1500	3	4.10	69.73
1200	2	2.73	72.46
1000	10	13.69	86.15
750	2	2.73	88.88
500	3	4.10	92.98
300	1	1.36	94.34
200	2	2.73	97.07
100	2	2.73	100.02
Total respondent	**73**	**100.0**	100%

$0.0074 = ₦ 1.00

Source: Field survey, 2007

Therefore:

LBM = 0.998 (100) + 0.9707 (200 – 100) + 0.99434(300-200) + 0.9298 (500-300) + 0.8888 (750-500) + 0.8615 (1000-750) + 0.7246 (1200-1000) +0.6973 (1500-1200) + 0.6563 (1700-1500) + 0.6427 (2000-1700) + 0.6291(2500-2000) + 0.6155(3000-2500) + 0.5334 (3500-3000) +0.5061 (3700-3500) + 0.4788 (4000-3700) + 0.4515 (5000-4000) +0.3831 (5500-5000) + 0.3147 (600-5500) +0.2326 (6500-6000) + 0.1505 (7000-6500) + 0.1095 (8000-7000) .

LBM=99.8+97.07+94.34+185.95+2+215.38+144.92+209.19+131.26+192.81+314.55+307.35+266.7+101.22+143.64+451.5+191.55+157.35+116.3+75.25109.5

= ₦ 3, 655.91k per nomadic Fulani per year.

Refocusing Extension Education for Private Extension

Table 3: Result of Regression Analysis

Variable	Unstandardised co-efficient beta.	Standard error	Standard co-efficient Beta	t-ratio
Costant	B – 589.977	1322.477		-.446
Age (years)	B – 11.211	24.813	-.072	-.452
Family size	B 16.624	67.221	.030	.247
Years of educ.	B 29.872	14.171	.202	2.108***
Members of social Organization	B 53.738	128.255	0.44	.419
Years of farming experience	B-63.514	20.887	.481	3.041***
No of cattle	B-9.733	10.941	-.139	-.890
No of Goat/ sheep	B 20.077	17.882	.163	1.123
Crop farm size	B2.196	26.085	.009	.084
Sources of capital	B-161.176	99.631	-.188	-.1.618*
Total investment on farming (N)	B8.020E-03	.006	.148	1.406
No. of times visited	B7.671	79.250	.011	0.97
Years of awareness	B-18.751	31.008	-.069	-.605
Willing to pay for extension services	B 1555.422	943.288	.-159	1.649**

Dependent variable (Y): Willingness to pay proxy by amount willing to pay.

Model summary: R^2=0.350; Adjusted R^2=0.252; Standard error estimate = 1671.37166; F-statistics = 3.563

Note: *** Significance at 0.01 levels; ** Significant at 0.05 level ; * Significance at 0.1 level

Source: Field survey, 2007

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Content Validity and Readability Estimates of Selected Anti-malarial Medicine Information Leaflets Sold Over the Counter in Nigeria

By

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Abstract

In Nigeria, a great number of people self-medicate with over the counter anti-malarial medicines, notwithstanding their limited knowledge of the medicines. Reading a Medicine Information Leaflet (MIL) enhances proper medication use for consumers. Thus, it is necessary to facilitate patient information in the use of these medicines. Consumers should be able to read, understand and comply with the leaflet information in order to make informed decisions about their health. However, some studies showed that only a limited number of consumers actually read or understand the content of MIL. Two hundred consumers of anti-malarial medicine selected by stratified random sampling completed an instrument developed to estimate the readability and content validity of the MILs of five selected anti-malaria medicines. The leaflets were further examined using Gunning Fog formula. The data obtained were analyzed using descriptive statistics. Reading age of the MILs ranged between 13 and 17 years for Chloroquine, Fansidar^{R} and Arthemeter; thus, the leaflets were considered readable for the average consumer, whereas a range of >17 to 20 for Maloxine^{r} and Camoquine suggested that average consumer could have difficulty in reading their information leaflets. The MILs were considered to be readable in terms of vocabulary levels, text organization and ability to stimulate readers' interest but they were rated low in legibility, syntax and illustration. The selected anti-malaria medicine MILs contained adequate information that could effectively guide consumers, although only an average consumer considered three of the MILs readable.

Introduction

In Nigeria, as in sub-Saharan Africa, malaria is a leading cause of death especially in children (Leighton & Foster, 1993). It is a lethal disease, responsible for --- death annually, and is the second highest burden of disease next to AIDS (Worley, 2006.) It is known to kill nearly three million Africans yearly (Obasanjo, 2000) Part of the effort by the Nigerian government to combat the malaria scourge is the latitude given to consumers to purchase anti-malaria medicines over the counters. This situation calls for the provision of Medicine Information Leaflet (MILs) to guide consumers on appropriate usage (Burapadaja, Tanlipathanadh & Sicithonyalog, 2004).

However, central to the utilitarian value of MILs is the issues of readability and validity. Readability has been described as the interactions of various elements of a printed material that may impact upon the comprehension, motivation and speed of reading the material (Dale & Chall, 1949). The concept has also been explained in terms of the style of writing (Klare, 1963), the extent of clarity (Hargis, Hernandez, Hughes, Ramaker, Rouiller & Wilde, 1998) and the significance of reader characteristics in text comprehension (Mclaughlin, 1969). Further, Dubay (2004) stressed that readability encompasses all the factors that make some text easier to read than others, while Johnson (1998) described readability to mean all the factors that can impact

the success of reading and understanding a text, including interest, motivation and legibility of print. To these factors, Ojedokun (2005) has added smooth progressiveness, organization and illustrations. Printed materials in MILs should not have complex words or sentences and should be comprehensible to various categories of consumers. Otherwise, the MILs would be left unread, read halfway or read without the expected benefit of awareness and knowledge of the proper usage of the medicines. This may result in misuse of the medicines, either terms of incomplete dose or overdose with possible adverse consequences. Furthermore, MILs should provide the right kind of information, including information on indication, contraindication, possible adverse reactions, safety precautions, manufacturer, location of the company and expiring date. These will assist drug regulatory agencies to monitor and follow up on the complaints by customers as well. It will also help to improve the knowledge and understanding of consumers on the medicine they want to take as well as their adherence to medicine instructions (Ciocilla, Sirgo, Pappa, Mcguire & Fung, 2001).

Since ant-malaria medicines are purchase over the counter in Nigeria and are largely self-medicated, it is necessary to ascertain the extent to which the relevant MILs posses the characteristics that will promote their usability and effectiveness. To this end, the following objectives were formulated:

1 To determine the extent to which MILs of anti-malaria medicines are easy to read and comprehensible by consumers, and
2 To assess the content validity of MILs of selected anti-malaria medicines

Towards this end, four research questions were raised. They are:

(i) Are the selected MILs readable for all categories of potential –medicine consumers?
(ii) Does the selected MIL have equal content validity?
(iii) Are the selected MILs equal in all parameters of readability?

Methodology

The study is descriptive. A sample of 200 respondents were selected from five faculties of the Obafemi Awolowo University, Ile-Ife, Nigeria, using stratified random sampling technique with departments within each faculty as strata. Forty respondents were selected from each faculty. An instrument, a 21-item Questionnaire Measure of Readability of Anti-Malarial Medicines Information Leaflet (QMR-AMIL) was developed to address the readability parameters of (i) Vocabulary (items 1, 14, 15, 16, 20); (ii) Legibility (2, 3); (iii) Organization (14, 17) (iv) Smooth progressiveness (5); (v) Interest (6, 7, 8, 18); (vi) Syntax (19) and (vii) Illustration (21). Item 9-13 of the instrument relates to the content validity of the MILs in terms of provision of information on drug interaction, side effect, drug action, classification, etc. Five anti-malarial medicines were selected namely, (i) Artemether (Gvither^{R} - GVS laboratories, India), (ii) Amodiaquine (Camoquine^{R} – Pfizer Afrique de l' Ouest, Dakar), (iii) Sulfadoxine- Pyrimethamine (Maloxine^{R} – Shreechem laboratories, Bombay); (iv) Fansidar^{R} - (Swiss Pharma Nigeria), and (v) Chloroquine (Evans^{R} - Nigeria). It is important to note that malaria is endemic in Nigeria and these medicines are within easy reach of consumers. Also they are the popular brands in Nigeria, they are all sold over the counter, thus making it legitimate for consumers to buy them and use, with or without doctor's prescription. The respondents were given the MILs of the anti-malarial medicines to read, and together with the QMR-AMIL, rated the readability of the MILs. The authors using the Gunning Fog approach also determined the readability of the MILs. The method involves selecting a sample of 100 consecutive words (W), counting the number of sentences (S) in the sample, and counting the number of words having three or more syllables (T) that are not combination words, capitalized words, or verbs ending in "ed" or "es". The final step involves calculating the grade level needed to read the material by using the formula :(W/S

+ T) X 0.4". (Svartad & Mount, 2001). The approach has been widely used to estimate the readability of late primary and early secondary school reading texts, (Ojedokun 2005).

The data obtained from the Gunning Fog formula was used to evaluate the selected MIL for degree of difficulty, while data obtained from respondents was used to assess the content validity and further corroborate the measure of readability obtained via the formula.

Results

Research Question 1: Are the selected MILs readable for all categories of potential –medicine consumers? Table 1 presents the relevant results.

Table 1: The readability of the selected MIL using Gunning Fog Analysis.

MIL	S	T	Reading Age (yrs)	Remark
Gvither	6	25	* 16.67	Readable
Maloxine	4	25	**20.00	Unreadable
Evans Chloroquine	8	21	* 13.40	Readable
Fansidar	7	21	* 14.11	Readable
Camoquine	7	29	**17.31	Unreadable

- Within the reading age range (8 – 16) of all potential medicine-consumers

** Above the reading age range of all potential medicine-consumers.

From Table 1, the reading age, emanating from the Gunning Fog Analysis for the MIL of Gvither is 16.67; Evans Chloroquine (13.40) and Fansidar (14.41).These indicate that they are readable for all categories of potential medicine – consumers, irrespective of level of literacy. Whereas the MIL of Maloxine (20.00) and Camoquine (17.31) appear more advanced and require higher degrees of literacy to read them. They are therefore considered unreadable for the average consumer.

Research Question 2: Do the selected MILs have equal content validity?
Answers to this question are provided in Table 2 below.

Table 2: Comparisons of the Content Validity of the Selected MIL

	GVitHer	Maloxine	evans cQ	fansidAr	Camoquine
Content	mean	mean	Mean	mean	Mean
Drug interaction information	3.9	4.1	4.3	4.3	4.0
Information on side effect	3.8	4.1	4.1	4.2	3.8
Drugs action in the body system	3.8	3.5	3.9	3.6	3.6
Need for additional information outside the content	4.1	4.2	4.3	4.7	4.1
Information on drug	3.4	3.4	3.2	3.5	3.2

classification					
	3.80	3.86	3.96	4.06	3.74

From Table 2 above, the mean value of the content validity of MIL of CQ (Evans) (x=4.3) and Fansidar (x=4.3) indicate an equal content validity, however Maloxine (x=4.1), Camoquine (x=4.02) and Artemether (Gvither) (x=3.9) are different in terms of medicine interaction information. They also differ in information on side effects; Artemether (Gvither) (x=3.8), Maloxine(x=4.1); CQ (Evans) (x=4.05); Fansidar(x=4.2) and Camoquine (x=3.8). In information on medicine's action, the MIL are also not equal in content validity: Artemether (Gvither) (x=3.8); Maloxine (x=3.5), Evans CQ (x=3.9); Fansidar (x=3.6) and Camoquine (x=3.6). On the need for additional information outside the MIL before each of the medicines could be used, there seems to be equality in the obtained mean of scores of respondents: Artemether (Gvither) and Camoquine groups (x=4.1), Maloxine however had (x=4.2); CQ (Evans) (x=4.3) and Fansidar (x=4.7) the highest, and by implication, apparently the least in content validity. With regard to information on medicine classification, the MIL of Artemether (Gvither) (x=3.4) and Maloxine (x=3.4) are equal; ditto for CQ (Evans) (x=3.2) and Camoquine. Camoquine is also the least in content validity, with the highest score (x=3.5).

Research Question 3: Are the selected Medicine Information Leaflets equal in all parameters of readability?. Table 3 provides answers to this question.

Table 3: Comparison of the equality of selected MIL in all parameters of Readability.

MIL	Vocabulary		Legibility		Organization		Smooth Program		Interest		Syntax		Illustration		Total	
	Σ x	%	Σx	%	Σ x	%	Σ x	%	Σx	%	Σx	%	Σx	%	Σ Σx	%
Gvither	660	32.37	217	10.64	225	12.5	141	6.92	510	25.01	104	5.10	152	7.5	2039	100
Maloxine	669	30	304	13.63	272	12.2	155	6.95	560	25.11	114	5.11	156	6.9	22.30	100
Evans CQ	744	32.47	260	11.35	275	12.00	156	6.8	574	25.05	102	4.45	180	7.9	22.91	100
Fansidar	730	30.41	324	13.5	283	11.79	170	7.08	615	25.63	114	4.75	174	7.3	2400	100
Camoquine	659	30.7	250	11.65	258	12.02	141	6.57	532	24.79	98	4.57	157	7.3	2.46	100

From Table 3 above it is evident that the selected MILs are relatively equal in virtually all parameters of readability; except that there are little variations. Specifically Maloxine, Fansidar and Camoquine are relatively equal with vocabulary levels constituting 30%, 30.41% and 30.7% in the readability parameters of the selected MIL respectively. Artemether (Gvither)(32.37%,) and CQ (Evans)(32.47%) are also relatively equal respectively, in Vocabulary.

However, on legibility, CQ (Evans) (11.35%) and Camoquine (11.65%) have comparable indices; while Fansidar (13.5%) and Maloxine (13.63%) also have similar legibility indices. In terms of organisation, only Fansidar (11.79%) appears somewhat low out of all the MILs; Artemether (Gvither) (12.5%) Maloxine (12.2%), CQ (Evans) (12.00%) and Camoquine (12.02%) could be considered relatively equal in organisation. On smooth progressiveness, Fansidar (7.08%) appears to have a higher rating than others while Artemether (Gvither) (6.92%), Maloxine (6.95%), CQ (Evans) (6.8%) and Camoquine (6.57%), tend to have comparative readability indices.

In terms of the ability of each of MIL to stimulate readers interest, only Camoquine(24.79%) appears less interesting, compared with Artemether (Gvither) (25.01%), Maloxine (25.11%), CQ (Evans) (25.05%), and Fansidar (25.63%) which are relatively equal in interest as a measure of readability. In the measure of syntax as a parameter of readability, Artemether (Gvither) (5.10%) and Maloxine (5.11%) are equal; while CQ (Evans) (4.45%), Fansidar (4.75%) and Camoquine (4.57%) could be regarded as relatively equal in readability. A similar picture also obtains with regard to illustration as a parameter of readability of each of the selected MIL; while Maloxine (6.99%) appears less than others: Artemether (Gvither) (7.45%), CQ (Evans) (7.86%), Fansidar (7.86%) and Camoquine (7.32%), are relatively equal

Discussion

Easier readability of a text has more benefits for those of less knowledge and interest than those of more knowledge. Advanced knowledge of a subject can 'drown out' the effects of an otherwise difficult text (Entin & Klare, 1985). Chiesi, Spilich, and Voss (1979) found that high – knowledge subjects had better recognition, recall and anticipation of goal outcomes than did low – knowledge subjects. Comprehension was improved when text materials are written at the reading levels of all readers rather than above their levels. (Entin & Klane)

Literacy level has significant effects on health care. A complex health – care system requires better reading skills to negotiate the system and take more responsibility for self –care (National Academy, 2002). The lessons of the literacy studies for technical communication include the need to provide technical documents at the reading levels of most consumers in a bid to advance both their technical and reading comprehension. Also significant is the fact that the more critical the information is for safety and health, the greater is the need for increased readability.

The findings of the survey showed that the great majority of adult readers are mid – range intermediate readers. The challenges of the study are that technical documents should be written at their level for ease of comprehension. The difficulty of technical materials has made many readers of intermediate skill not to look for technical help in written texts. Helpful texts should not only provide readers accurate information but also information written at the reading levels they need. Very often educational programmes attempt to increase their effectiveness by using a combination of patient education interventions, Muellen, Green and Persinger (1985) identified 5 distinct types used singly or in combination. These interventions are one - to - one counseling, classroom education, written or other audiovisual materials, patient package inserts, and labels or memory aids.

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Creating A Learner-Friendly School Environment In Nigeria: A Veritable Means To Sustainable Growth And Development

By

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Abstract

The school is society's formal institution that provides the intellectual and social experience through which children develop the skills, knowledge, attitudes and interests that shape their abilities to function effectively in the society. This therefore explains why the rate of development in modern societies is intrinsically tied to the system of education. However, the school will only be able to play its role effectively if the environment welcomes the learners and gives them joy, freedom, security and general well being for effective learning to take place. Since the child is the product of his/her environment, this paper focuses on the state of the school environment in Nigeria. Specifically, it discusses the nature and components of a child-friendly school environment and highlights some of the deficiencies in the Nigerian school environment. Suggestions on how to make Nigerian schools learner friendly are also made.

Introduction

Education has been identified as a very powerful instrument for reducing inequality as well as an important avenue for improving health and the general well-being of the individual (UNESCO 2001). In other words, education has become an important instrument for the attainment of a rapid and sustainable growth and development in modern societies. Thus, the rate of development in any society is intrinsically tied to a well organised, managed and supervised education system (Samuel 1996).

The quality of education is however not only reflected in the subjects taught and achievement levels but also in the learning environment. This is because the learning environment can both reflect in and influence the behaviour of the learners. Plato, that great Greek Philosopher must have realized the importance of a stimulating environment in the life of children when he said centuries ago that the child must be surrounded with the right kind of environment. That is, we should place the child in the midst of those things which are like what we want him/her to become (Akinbote, Oduolowu & Lawal, 2001). We can therefore infer from Plato's assertion that the major forces associated with the educational attainment of learners are to be found within the home, comm*u*nity and school environments. We are products of our environments and if we try to educate the child without adequate consideration given to all aspects of his/her environment, it is just a waste of time and resources since he ay not lean or acquire the skills to secure his social and economic well being (UNESCO, 2001).

It is rather unfortunate that the Nigerian child is made to learn in what Ijila (2001) has described as the environment of crisis. That is to say, the Nigerian child is often expected to learn in a confused, disorganized and grossly inadequate environment. When in the end the child fails to learn or acquire the skills necessary for his social and economic well being as a result of the limitations placed on him/her by the environment, we all turn around to blame or punish him/her. Some times, we even trade accusations between and among ourselves – that is

the home, the society, the school and the government, as to who is responsible for the child's failures.

The last two decades have witnessed a tremendous interest in the development of an enabling environment for the child to realize his/her full potentials. Since children generally learn best in a carefully structured environment that integrates a variety of methods and material, this paper will attempt to provide answers to the following questions:

1. What is a child friendly school environment?
2. What are the components of a child friendly school environment?
3. Is the Nigerian primary school environment child-friendly?

The Child Friendly School Environment

Environment simply refers to either the tangible and intangible things or conditions, natural or man made that directly or indirectly affect the life of an individual or a group of people. We can classify the environment into two broad groups – social and physical. While the social refers to the human interactions around us, the physical refers to all the natural and man made objects/things we see or feel around us. When these social and physical surroundings are favourable and promote joy, peace, harmonious and sustainable well-being and development, it is referred to as a friendly environment.

A child friendly school environment can therefore be described as one which is favourable to the child and makes him/her free, happy, healthy and ensures his/her harmonious and sustainable well being, growth and development. Such a school environment is also conducive, the staff are friendly to the children, the health and safety needs of the children are adequately met (UNICEF, 1996). Thus, the environment in which the child operates, plays a crucial role in the development of his or her personality. It also determines to a large extent whether or not the child will ever realize his/her full potentials.

Components of a child-friendly school Environment

The school in modern societies provides the intellectual and social experiences from which children develop the skills, knowledge, interest and attitudes that characterize them as individuals and shape their abilities to perform adult roles (Berns, 2004 p. 212). Therefore, for the school to effectively and positively exert some influence on the child, the environment, both social and physical must be stimulating enough to welcome the child. The components of a child-friendly school according to UNICEF as cited by Akinbote (2003) included the following:

(a) The school resources which include:
- safe water and sanitation facilities;
- first aid supplies;
- age appropriate furniture and resources within reach;
- educational materials and other learning materials that are gender sensitive;
- well ventilated and spacious classrooms
- school library;
- play ground with appropriate equipments for the age of the children.

(b) The school curriculum which should include:
- knowledge of language, mathematics science and social studies;
- skills in literacy, numeracy and life skills;
- values of human rights as well as oral and spiritual values.
- Developmentally Appropriate Practices (DAP)

(c) Teachers who should:

- possess appropriate training in learner centred education;
- provide opportunities to foster professional skills so that children can achieve the desired learning outcomes
- understand and monitor children's rights
- encourage active learning in a language which children can understand
- offer adequate instructional time for learning in key curriculum areas
- focus supervision on learners improvement rather than covering the curriculum/syllabus.

(d) The general school environment which should be:

- a place where children's opinions and needs are included
- a place where peace and gender equity are upheld and differences of class and religion are accepted
- a place where opportunities for children's participation are extended to both inside and outside the classroom activities
- accessible to all children including those with learning disabilities;
- safe and secure, free from violence and abuse;
- a place where children take responsibility for their learning;
- a place where healthy life styles and life skills are promoted;
- a place where children learn.

Any school that can provide most if not all of the identified components of a child-friendly school environment will most certainly welcome children. An environment where children are welcome, free to explore and participate actively in all school activities will not only make them alert and motivated to learn, but also make them self confident and creative. Such a school will appeal to children's innate sense of order and high sense of responsibility which will foster life long habits of organization and statesmanship (UNICEF 1996).

The Contemporary Nigerian Primary School Environment

Although everyone appreciates and supports the child friendly school initiative, yet, the provision of such an environment particularly in the public schools in Nigeria has often constituted a great challenge. Researchers such as Okpala (2006), Ndukwe (2002) and Okebukola (2000) among others have at different occasions highlighted the gloomy state of the Nigeria school environment. According to Okpala (2006), many school children in Nigeria learn under the shade of trees while many sit on the floor to learn in their classrooms. Ndukwe (2002) on the other hand found that many schools have no adequate games and recreational facilities. Akinbote (2001) once asserted that many of the primary school teachers are not sufficiently equipped in both the pedagogical and content knowledge of what they are to teach in the schools. Okebukola (2000) while quoting the SAPA report has provided a statistical analysis of the deficiencies in the Nigeria school as follows:

- 12% of pupils sit on the floor
- 87% have overcrowded classrooms
- 3% of the schools have no chalkboards
- 38% of the classrooms have no ceiling
- 77% of the pupils lack textbooks
- 36% of the pupils have no writing materials.

Okebukola (2000) went further to say that the unfriendliness of school environment is induced among other things by:

- Inadequacies in classroom space, furniture, equipment and teaching/learning materials;
- Poorly motivated teachers;

- Gender of teachers;
- Use of poor teaching methodologies;
- Inadequacy of water, heal and sanitation facilities in schools;
- Limited community participation in education.

From the foregoing, it is evidently clear that the Nigerian (public) primary schools cannot be regarded as child-friendly. In other words, most of the Nigerian schools' environments are not conducive enough for the development of appropriate skills, knowledge, interests and attitude in the individuals to become responsible citizens. It means therefore that we still have a long way to go in the provision of a child-friendly school environment for our children. Although, government and UNICEF have been trying in the last decade to make the school environment child friendly, a visit to most public schools will reveal that the situation still requires drastic solution.

The Way Forward

Children learn best in an active and nurturing environment. However, the way and means of fostering such an environment in our schools is a great challenge. Schools must not be merely established for helping children to realize their rights to basic education. They must also help children learn what they will need to face the challenges of modern in societies. In this regard, every school is unique in meeting the needs of the children. It does not matter how big the school is or whether it is located in urban or rural area. Once, the children are able to reach their potentials, academically, socially, physically and emotionally, then the school has done its job.

As once observed by Wise (1999), the burden of mental health problems, delinquency, violence school drop out among others have become serious challenges for the government and all other stake holders in education. Since the child is a product of the home, school and the community therefore, the major forces associated with the educational attainment of the child are to be found within the home, school and community. This implies that there must be a great deal of understanding, collaboration and cooperation among all the stake holders in education. In this regard, the home, the community, the government and the school have great roles to play in making our schools child-friendly.

The home provides the first opportunity for the education of the child. Therefore the ability of the parents to provide the necessary support to the school is a crucial factor in making the school child – friendly. Parents who live below the poverty line can hardly support their children in school. There is therefore the need to empower the poor parents for them to play their roles in the education of their children in a child-friendly school environment. The current poverty alleviation programmes of government at all level should be more vigorously pursued. Efforts should be made to really identify the poor parents who need to be assisted to start, resuscitate or sustain their own businesses. The programme should be insolated from all forms of political, religious and ethnic influences in order for it to make the necessary impact on the people.

The community/society participation in education which was once a common phenomenon in Nigeria is almost completely gone. The recent limited community participation in education could probably be the result of the government take over of schools and the general slogan of 'free education' which left people with the wrong impression that everything belongs to the government. The community according to Wise (1999), has a great potential to contribute to the creation of supportive environment for children both in the community and the school.

The huge financial and material resources that are often wasted on political or social events could be used for capacity building of the poor families and the provision of basic facilities in the schools. This is where proper reorientation on the value system in our communities becomes very necessary. With adequate enlightenment programmes and practical examples by the community leaders and those in position of authority, we could re-channel our resources for the overall good of the school system. Government alone cannot do everything.

The government has its own roles to play in the provision of child-friendly school environment. It is not enough to just award contracts for the building of classrooms. As much as the classrooms are needed, other facilities such as good water supply, toilets, desks, chairs and tables for both teachers and learners as well as learning materials are crucial to the effective teaching and learning in the schools. The problem of inadequate supervision of school projects and other school activities has contributed greatly to the bad state of the public schools in many parts of the country. Efforts should be geared toward the capacity building of the teachers to catch up with the modern trends in teaching and learning. Above all, adequate funding and the appointment of the right caliber of people into the administration and supervision of education at the Local, State and Federal levels will go a long way in making the school environments more child-friendly.

The teachers and the other school administrator must be professionally qualified and competent enough to help the children realize their full potentials. Teachers must be able to motivate and provide the educationally appropriate practices which can make the school climate very friendly and inviting to the young learners. They must always improve themselves academically through further studies, attending workshops, seminars and conferences. However, the teachers must be well motivated through improved conditions of service and conducive work environment. When the teachers are happy and enjoy what they are doing, there is every chance that they would be making the social climate of the schools interesting and enjoyable to the learners.

Conclusion

The enormous power of education has been employed in modern societies for the attainment of a sustainable growth and development. This explains why various countries have embarked on massive investment in education particularly at the primary level which is the gate way to all the higher institutions that produce the manpower needed for the various sectors of the economy. However, no matter the huge financial resources invested in education, if adequate care is not taken to ensure the provision of a child friendly school environment, it will just be a waste. This is because the limitations placed on the learners through the unfriendly school environment may not allow them to acquire the necessary skills, knowledge, attitudes and values for their general well being. Since the school exerts great influence on children through their programmes, formal organizations and social relationships that evolve in the, classrooms, (Berns 2004), everything possible must be done to make the schools child friendly. This therefore calls for a collaborative effort among all the stake holders in education and make the necessary contributions to the provision of appropriate facilities and personnel that will make our schools learner friendly. Any investment made towards creating a child-friendly school environment is a great step towards a sustainable growth and development of the country.

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Learners' Disposition to Violence in an African Society and Its Implication for Counseling

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Abstract

This study investigated the level of disposition to violence of learners from monogamous and polygamous African marriage forms. It also found out the influences of parental occupation and level of education, on learners' disposition to violence. Six hundred learners were randomly selected from six local government areas of Osun state, Nigeria. The Students' Disposition to Violence Scale was used to collect information. The results revealed that the percentage of learners from polygamous homes who were disposed to violence were higher than those from monogamous homes. It was also discovered that fathers' occupation and mothers' educational level were significant influences on learners disposition to violence.

Introduction

Violence has been defined in many ways. The Concise Oxford Dictionary defines violence as unlawful exercise of physical force. The World Health Organization (WHO 2002) defines violence as the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community that either results in or has a high likelihood of resulting in injury, death, psychological harm, mal-development or deprivation. Violence has become life threatening especially in different parts of the world. Studies reveal that violence exists in every country of the world and it cuts across culture, class, education, income and ethnic origin (Felliti et. al 1998; Krug et. al 2002; Reza, Mercy and Krug 2002; Curie et al 2004; WHO 2006)

School violence appears to be on increase and it includes physical ridicule or bullying, assaults, threats, sexual offences as well as the less apparent but equally important components of graffiti and vandalism, trespassing and gangs (NCCEV, 2003).

Many factors have been identified as influences on violence. Consistently emerging from research as significant risk factors to violence, specific to schools are, poor academic performance, high absenteeism, leaving school early, and unstructured free time (Maugin and Loeber 1996). In addition, many of the factors identified in research about other aspects of life are also likely to be relevant to schools – for example, pro-violence attitudes, risk-taking, weak social ties, affiliation with anti-social peers, poor parent–child relationships, drug abuse, harsh,

lax or inconsistent discipline, or poor parental monitoring. It is however interesting to note that certain other factors within the family setting may encourage certain behaviour. It is regarded that the home remains the first place for character building and emulation of character. The expression "like father like son" evident in the Nigerian culture is a clear indication of how the behaviour of the child showcases the home training given by parents. The kind of training received is subject to many family variables.

Family type within the context of this study is seen in the context of a monogamous or polygamous family. The monogamous marriage type in Africa consists of the husband, the wife and the children. Monogamous marriage type usually does not have large number of family members as polygamous marriage type. The polygamous marriage type includes the husband, two or more wives and the children. In a typical African polygamous marriage type, the family members consist of the husband, 4 wives and about 16 or more children. Usually they live together and the wives bring up their children together under the same roof. The number of persons in such families is usually large considering the number of children to each wife which would eventually give an implication of the type of parental care and nurture that is likely to arise from this type of family. Competitions usually exist in resource allocation from the husband. There are usually struggles for the husband's attention. Many times there are quarrels that arise from various issues in the home. Such quarrels include, whose turn it is to 'sleep' with the husband, to such issues as whose child should go to the best school. Most quarrels arise from unequal distribution of funds and materials. The large number of members in polygamous family has implications for resource availability, resource management, the children's educational accessibility and attainment and might predispose members to quarrels. Due to frequent quarrels there is the likelihood of instability of emotions. This might have effect on the children such that as they are exposed to conflicts, they become vulnerable to violence. This view is consistent with that of Fadeiye (2005), that members of a polygamous family know themselves less intimately and the tendency to quarrel and fight, particularly among the wives and even the children is very high. Children who witness their parents' violence are at a significant risk of being violent too (Wilson, 2000).

In the traditional African families, fathers are supposed to be the 'bread winner'. He is expected to take care of all financial needs in the home. Meanwhile mothers are expected to stay at home and take care of children. However due to increased education of the girl child, civilization and economic reasons, mothers are now engaging more in paid employment or trading or other businesses that take them out of the house. While they are out children are left at homes on their own or with house helps. There is that assumption that children left to themselves will have less parental control and might engage more in violence. On the other hand while parents are not at home children might experience violence from other sibling and care givers.

By being victims, perpetrators and witnesses of violence, children learn that violence is an acceptable way for the strong and aggressive to get what they want from the comparatively weak, passive or peaceful.

The need for this study cannot be underestimated according to US Department of Health and Human Services (2001)'s report, research on risk factors for violence against children specific to schools is lacking for the full range of international contexts, and tends to focus on peer violence. For example, the influence of family is stronger for young children, while the influence of peers is stronger for adolescents (Surgeon General's Report, 2001). Violence has severe implications for children's development. It can affect children's health, their ability to learn or even their willingness to go to school. It can lead to children running away from home thus exposing them to further danger. According to Unicef (2005), violence against children is a

major threat to global development as well as the attainment of the Millennium Development Goals (MDGs). Bearing this in mind, it is imperative to find out the influence of variables such as family type, parental education and occupation on the learners' disposition to violence.

Objectives

The specific objectives of this study are to:

1. find out the influence of family type on learners' disposition to violence
2. determine the influence of parental occupation on learners' disposition to violence
3. examine the influence of parental education on learners' disposition to violence

Research hypotheses

The following hypotheses are generated for this study

1. There is no significant influence of family type on learners' disposition to violence
2. There is no significant influence of father's occupation on learners' disposition to violence
3. There is no significant influence of mother's occupation on learners' disposition to violence
4. There is no significant influence of fathers' education on learners' disposition to violence
5. There is no significant influence of mothers' education on learners' disposition to violence

Methodology

The research design employed in this study is survey. The population for the study consists of learners in secondary schools in Osun state, Nigeria. In the selection of the sample, six local government areas were selected randomly from the 31 local government areas in the state. Two schools were randomly selected from each selected local government area. In each of the schools, fifty students were selected using the simple random technique. Equal selection of the sexes was ensured.

The "Students Disposition to Violence Scale" (SDVS) questionnaire was used to collect data. The questionnaire was self constructed and was validated using expert judgments. The reliability of the instrument was determined using test retest method with 2 weeks interval. The reliability coefficient of 0.72 was obtained. Data was collected personally by the researchers. Data was analysed using simple percentages and chi-square analysis.

Results

Hypothesis 1: This hypothesis states that there is no significant influence of family type on learners' disposition to violence.

Table 1: Showing influence of family type on learners' disposition to violence

	Disposition to Violence				
Family : Monogamy	Not disposed	Disposed	Total	X^2	P
	183 60.0%	122 40.0%	305 100.0%	9.85	<0.05
Polygamy	133 47.0%	150 53.0%	283 100.0%		
Total	316	272	588		

From table 1 above, 60% of learners from Monogamous family type were not predisposed to violence while 40% were. Meanwhile 47% of learners from polygamous homes were not predisposed to violence while 53% were. This finding showed that a larger percentage of learners from polygamous homes (53%) were predisposed to violence than those from monogamous homes. Further analysis was conducted to find out if family type as a variable has significant influence on learners disposition to violence. Chi-square analysis was employed to analyse data. The result obtained was significant at 0.05 level of significance (x^2 = 9.85, P > 0.05). Therefore the null hypothesis was rejected.

Hypothesis 2: This hypothesis states that there is no significant influence of fathers' occupation on learners' disposition to violence

Table 2: Showing influence of fathers' occupation on learners' disposition to violence

Variable (Categories) Fathers' occupation	Disposition to violence		Total	χ^2	P
	Not Disposed	Disposed			
Farming	107 65.6%	56 34.4%	163 100%	12.39	<0.05
Trading	52 61.9%	32 38.1%	84 100%		
Artisan	18 100%	0	18 100%		
Civil Servant	64 58.2%	46 41.8%	110 100%		
Teaching	89 61.4%	56 38.6%	145 100%		
Others	23 63.9%	13 36.1%	36 100%		

Total	353 63.5%	203 36.5%	556 100%		

From the table above, fathers occupation as listed by respondents included farming (163), trading (84), Artisan (18), Civil servant (110), Teaching (145) and others not specified (36). Percentile analysis on disposition to violence according to fathers' occupation revealed that the highest percentage of learners who are predisposed to violence have fathers who are civil servants (Government workers) (41.8%). This is followed by those who have teaching (38.6%) and Trading (38.1%) as their fathers' occupation.
Chi-square analysis revealed that fathers' occupation has significant influence on learners' disposition to violence. x^2 = 12.39, P < 0.05. Therefore the null hypothesis was rejected.

Hypothesis 3: This hypothesis states that there is no significant influence of mothers' occupation on learners' disposition to violence.

Table 3: Showing influence of mothers' occupation on learners' disposition to violence

Variable (Categories) Mothers' occupation	Disposition to violence		Total	χ^2	P
	Not Disposed	Disposed			
Farming	46 (54.8%)	38 (45.2%)	84 (100%)	6.89	<0.05
Trading	62 (66.7%)	31 (33.3%)	93 (100%)		
Artisan	33 (67.3%)	16 (32.7%)	49 (100%)		
Civil Servant	78 (65%)	42 (35%)	120 (100%)		
Teaching	106 (65.4%)	56 (34.6%)	162 (100%)		
Others	20 (50%)	20 (50%)	40 (100%)		
Total	345(63%)	203 (37%)	548(100%)		

From table 3 above, for mothers' occupation, respondents whose mothers were farmers had the highest percent disposition to violence score (45.2%) apart from those who did not indicate their mothers' occupation (50%) followed by those whose mothers were civil servants (35%). Chi-square analysis on the influence of mothers' occupation on disposition to violence revealed that (x^2 = 6.89, P< 0.05) the result is significant. Therefore the null hypothesis was rejected.

Hypothesis 4: This hypothesis states that there is no significant influence of fathers' education on learners' disposition to violence

Table 4: Showing influence of fathers' education on learners' disposition to violence

Variable (Categories) Fathers' education	Disposition to violence		Total	X^2	P
	Not Disposed	Disposed			
None	16 (59.3%)	11 (40.7%)	27 (100%)	3.40	<0.05
Primary	50 (73.5%)	18(26.5%)	68 (100%)		

Secondary	143 (61.9%)	88 (38.1%)	231 (100%)		
Tertiary	149 (63.4%)	86 (36.6%)	235 (100%)		
Total	358(63.8%)	203(36.2%)	561 (100%)		

The results revealed that learners who did not indicate their fathers' education had the highest disposition to violence scores followed by those whose fathers had secondary education (36%) and tertiary education. Chi-square analysis showed that x^2 = 3.40 P < 0.05. Therefore the null hypothesis was rejected.

Hypothesis 5: This hypothesis states that there is no significant influence of mothers' education on learners' disposition to violence

Table 5: Showing influence of mothers' education on learners' disposition to violence

Variable (Categories) Mothers' education	Disposition to violence		Total	χ^2	P
	Not Disposed	Disposed			
None	27 (75%)	9 (25%)	36 (100%)	14.25	<0.05
Primary	60 (58.8%)	42 (41.2%)	102 (100%)		
Secondary	150 (58.6%)	106 (41.4%)	256 (100%)		
Tertiary	125 (74.4%)	43 (25.6%)	168 (100%)		
Total	362 (64.4%)	200 (35.6%)	562 (100%)		

From the table above, learners whose mothers have primary and secondary education are more disposed to violence. Chi-square analysis showed that x^2 =14.25, P < 0.05. Therefore the null hypothesis was rejected. Therefore there is significant influence of mothers' education on learners' disposition to violence.

Discussion

The results of this study showed that learners' from polygamous family type are more disposed to violence than learners from monogamous family type. This can be explained in that children from polygamous homes may witness more fights and quarrel between wives and other siblings due to the large family size and others factors. Research shows that parents who are violent with one another are at a higher risk for physically abusing their children (Straus, 1992) and such children might in turn do likewise to their fellow students. In 1995, the FBI reported that 27% of all violence occurs in a family setting. Sanson et al (1993) support this, in their study they established that a stressful environment can play a role in the development of aggression. Furthermore large family size, numerous siblings, living in a shared flat with a high crowding index create a stressful environment that many force children to engage in violent behaviours as outlet of aggression. This result is an indication that good parenting in stable family units is critical. The power of early parent–child bonds established within warm and supportive family relationships, along with high levels of parental care during early childhood, are important in building non violent behavior Stelward (2006).

Percentile analysis on disposition to violence according to fathers' occupation revealed that the highest percentage of learners who are predisposed to violence have fathers who are civil servants (Government workers) and teachers. This can be explained in that government workers and teachers depend on salaries which usually come at the end of the month if not delayed, this leads to lack of income to meet family needs. This confirms Hadi (2000) report, that a lack of income to meet family needs increase the potential of violence

From table 3, respondents whose mothers were farmers had the highest percent disposition to violence score (45.2%) apart from those who did not indicate their mothers' occupation (50%) followed by those whose mothers were civil servants (35%). Chi-square analysis on the influence of mothers' occupation on disposition to violence revealed that (x^2 = 6.89, P < 0.05) the result is significant. This finding can be explained in that in many African family settings today, not only the husband but and their wife/wives are engaging in paid employment or involved in businesses that take them out of the home. Usually this is to make ends meet and to provide for the needs of the nuclear or extended family. The adverse effect of this case is having either or both parents out of the house for long hours which would eventually result in inadequate interaction with and supervision of the children. The result supports Dishion (1995) finding that coercive parenting and poor monitoring of children relate to involvement in violent behaviour. Research also showed that the presence of a positive adult role model, to supervise and guide a child's behaviour is a key protective factor against violence (National Resource Center 1999). A few risk factors for youth violence occur before birth. Others come into play as the child develops in response to his or her family and surroundings. Thus, most of the risk factors that exert an effect before puberty are found in the individual and family domains rather than in the larger world.

The results from hypothesis 4 revealed that learners who did not indicate their fathers' education had the highest disposition to violence scores followed by those whose fathers had secondary education (36%) and tertiary education. Chi-square analysis showed that there is the significant influence of fathers' education on learners' disposition to violence which agrees with the position of Christoffel (1994) & DuRant (1994) that highest risk of violent behaviour was encountered among students whose parents were illiterate or just able to read and write than those who had completed their basic education.

Furthermore learners whose mothers have primary and secondary education are more disposed to violence and chi-square analysis showed that there is the significant influence of mothers' education on learners' disposition to violence. This result can be explained in that parents who are educated might have access to television, internet and other facilities where children can watch or browse violent related acts.

In conclusion, community based interventions may be the best hope for families in our society struggling with violence in their homes. Early education on the subject can help prevent the cycle of violence from continuing in schools.

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Emotional Labour and Emotional Intelligence as Predictors of Job Stress Among Nurses In A Nigerian Teaching Hospital

By

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Abstract

The purpose of this study was to examine the combined and relative efficacy of emotional labour and emotional intelligence on job stress of nurses. The study employed the ex-post-facto research design. The study's participants were two hundred and fifty nurses randomly drawn from a teaching hospital in Ogun State, Nigeria. Three validated instruments were used in collecting data. Multiple regression (stepwise) and t-test statistical procedures were used to analyze data. The results indicated that the two independent variables both jointly and relatively contributed significantly to the prediction of the criterion measure. On the basis of the findings of this study, it is recommended that nurses should be exposed to emotional intervention and training skills or programs that would enable them withstand environmental and emotional pressures that predisposed them to job stress.

Keyword: Emotional Labour, Emotional Intelligence, Job Stress, Nurses.

Introduction

The nature of work is changing at whirlwind speed. Perhaps more than ever before, job stress poses a threat to the health of workers and, in turn to the health organizations particularly the hospitals (NIOSH, 1999). The major goal of the hospitals anywhere in the world whether Teaching, General, Specialist, Military or Private is to provide excellent healthcare and services to patients. Infact the reason the nursing profession exist is the delivery of compassionate nursing with integrity, feeling and caring (Amendolair, 2003). The extent to which this goal can be accomplished depends principally on the workforce – most especially the nurses. However, Kinman (1998) have identified, among other things job stress as one of the major militating factors against health employee's well-being and effective performance. Mood and sleep disturbances, disturbed relationship with family and friends; depression and burnout; risk of cardiovascular diseases and musculo-skeletal disorders; increased absenteeism from work; tardiness; and intentions by workers to quit their jobs are all associated with stressful working conditions (Sauters, Hurrell, Murphy & Levi, 1997; and Goetzel,etal., 1998).

Stress is an unavoidable characteristic of life and work (Adeyemo and Ogunyemi, 2005). Job stress describes physical, mental and emotional wear and tear brought about by incongruence between the requirement of the job and the capabilities, resources and needs of the employees to cope with job demands (Akinboye, Akinboye & Adeyemo, 2002). Globally, stress among workers in organizations has assumed increased importance in recent times. Employee stress is an increasing problem in organizations. For example, about half of all American workers irrespective of gender, cadre and job type feel the pressure of job related stress (Walonick, 2003).

Previous research findings revealed that excessive job stress can adversely affect emotional and physical health of workers (Walonick, 2003). According to Lawless (1992), nearly three-fourth

of all workers feels that job stress lowers their productivity and they experience health problems as a consequence. A Japanese poll conducted by the Health and Welfare Ministry in 1988 also indicated that 45 percent of workers felt stress from their jobs (Asahi News Service, 1990). In Nigeria, although a high level of stress has been observed in health workers generally (Ndom & Makanjuola, 2004), the nursing profession is a relatively new focus of concern. Most of what is known about stress among nurses is derived from several studies conducted in United Kingdom and USA. Nurses face extreme in emotion on a daily basis due to the nature of their job. Corroborating this view, Adeyemo and Ogunyemi (2005) posit that workers who are involved in high level of personal interaction such as nurses are more vulnerable to occupational stress and 'burnout' than those in product-oriented organizations. The burnout syndrome is a distinctive type of stress resulting from working conditions that features high levels of interpersonal contact (Cordes and Dougherty, 1993). Burnout is a state of emotional exhaustion caused by excessive psychological and emotional demands made on people helping people. It appear to occur predominantly in professions involving close contact with other people such as the healthcare (nursing) (Leither and Maslach, 1988). Given the challenging nature of the patients they are taking care of (children, adult, old, the dying, the very sick, et cetra) the demands on the nurses are quite high and clearly constitute an antecedent to stress (Gerits, Derksen & Verbruggen, 2003). Various emotional reaction can occur, accompanied by increased levels of perceived stress which manifest themselves as exhaustion, irritability, anxiety, depression, burnout, and poor work performance, inability to sense patients emotions, increase risk for medical errors, and overall poor patient care (Amendolair, 2003).

Most common sources of nurses stress are: enduring character of the patients' behaviour, the unpredictability of the behaviour, and difficulties understanding the patient's behaviour (Gerits, Derken & Verbrugen, 2003). Nursing by its nature demands that nurses display emotion they may not actually feel. For example, the occupational culture of nurses dictates control of their affective reactions to tragic or violent circumstance (Bar-On, Brown, Kirkcaldy & Thome, 2000). They are also expected to be emotionally neutral. All these are in themselves stressful and amount to what Hochschild (1983) called emotional labour which he defined as "the induction or suppression of feeling in order to sustain an outward appearance that provides in others a sense of being cared for in a convivial safe place".

Numerous studies have identified emotional labour and emotional intelligence as important psychological factors in the behaviour of individual workers in organizations. Although the concept of emotional labour is relatively new, it has enjoyed much attention from scholars. The original definition of emotional labour was first described by Hochschild (1983). James (1989) improved on its when he defined it "as the labour involved in dealing with other people's feeling, a core component of which is the regulation of emotion - … Emotional labour facilitates and regulates the expression of emotion in the public domain". Brotheridge and Lee (2003) concluded that employees perform 'emotional labour' when they regulate their emotional display in an attempt to meet organizationally based expectations specific to their roles. Such expectations determine not only the content and range of emotions to the displayed, but also the frequency, intensity and the duration that such emotions would be exhibited (Morris and Feldman, 1996; 1997).

In the domain of nursing, emotional labour involves nurse-patient interaction or relationship but carries risk of 'burnout', if prolonged or intense (McQueen, 2004). Most prominently, the emotional labour of nursing involves feeling of care and support that nurses are constantly called upon to instill in their patients. Emotional labour of nursing is informative to interpersonal relations in the healthcare setting (Smith and Gray, 2000).

Emotional labour is particularly typified by three characteristics: face-to-face or voice contact with the public; it requires the worker to produce an emotional state in another; it allows the employer through training and supervision to regulate a degree of control over the emotional activities of workers (Hochschild, 1983; and Smith, 1992). Emotional labour has been found to affect the well-being particularly job stress and performance of workers in a cross-section of occupations such as nurses, midwives, hospital workers (Wharton, 1992) and waiters and waitresses (Adelmann, 1993). Emotion regulation involves efforts to change one or more components of emotion. Efforts exerted to regulate emotion in nurses may increase strain because this effort uses up resources that cannot be regained (Brotheridge and Lee, 2003; Kruml and Geddes, 2000; Pugh, 2001). When nurses have to project one emotion while simultaneously feeling another, this create emotional dissonance, which can take a heavy toll on them (nurses). Left untreated, bottled up feelings of frustration, anger and resentment can eventually lead to emotional dissonance (Grandey, 2000, Zebre, 2000). The disavowal of the emotional labour of nurses would leave personal stories untold and the possibilities of discussion sealed. One of the objectives of the present study was to find out if emotional labour will be predictive of job stress among nurses.

Emotional Intelligence (EI) is another independent variable whose contribution to job stress was investigated in the present work. The concept of EI was first introduced by Salovey and Mayer (1990). They defined it as "the ability to monitor one's own and other's feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and actions". However, it was Goleman (1995) who popularized the construct. Much of the recent popular work suggests that EI is highly predictive of an individual's general functioning; and functioning within specific domains, such as career performance. Bar-On (1997; 2005) defined EI as "an array of non cognitive capabilities, competencies, and skills that influence one's ability to succeed in coping with environmental demands and pressures". EI influences the selection and control of coping strategies under challenging and or stressful circumstances (Matthews and Zeidner, 2000).

EI has been found to impact on psychological health – particularly occupational stress (Adeyemo and Ogunyemi, 2005; Ciarochi, Chan & Bajgar, 2001). For example, Ciarochi, Chan & Caputi (2000) posit that EI may protect people from stress and lead to better adaptation. Goleman (1995) also explained that people with strong emotional intelligence skills easily handle emotions of anxiety, frustration and fear that cause stress in today's work world. Research findings (Gerits, Derken & Verbruggen, 2003) also indicated that nurses with high EI show less psychopathology and that nurse leaders who are emotionally intelligent tend to find passion in their work. According to Amendolair (2003), they may also display compassion to their patients, and quiet the fires that are causing burnout and pushing nurses out of the profession. Nurses who demonstrate the ability to know and manage their emotions and social relationships are better prepared to collaborate with other health care providers, find solutions to important patients care issues, such as medication errors, "right patient/right procedure" issues, and master the challenges of the ever-changing-health care environment (Amendolair, 2003; Dawda and Hart, 2000).

From the preponderant of research evidences above, it is evident that there is positive relationship between EI and job stress; but what exactly is the predictive power of EI on job stress? In summary, the present study attempt to find out if job stress of Nigerian nurses in public health institutions could be predicted by emotional labour and emotional intelligence. The study also aims at determining which of the predictor variables is the most potent in the prediction of the criterion variable.

Research Questions

The following two research questions were posed and investigated in the study:

1. What are the combined effects of emotional labour and emotional intelligence on job stress of nurses?
1. What is the relative contribution of emotional labour and emotional intelligence to job stress of nurses?

Research Design

The study adopted the ex-post-facto design. It is an after fact study which does not involve the manipulation of any variable. The research was interested in ascertaining the influence of the independent variables (emotional labour and emotional intelligence) on the dependent variable (job stress) without manipulating either of them.

Subjects

The participants in the study were two hundred and fifty nurses randomly drawn from the population which comprised all the nurses in Olabisi Onabanjo University Teaching Hospital, Sagamu, Ogun State, Nigeria. The subjects were made of 243 females and 7 males. Their age ranged from 23 years to 57 years. The mean and standard deviation of the ages were 32.6 years and 3.23 respectively.

Instrumentation

Three instruments were utilized in the study. The instruments are described below:

Emotional Labour Scale (ELS)

This instrument was developed by Prati (2004). It is a nineteen item scale with response format ranging from never (1) to Always (5). The scale measured four emotional labour efforts (1) The Surface Acting subscale. This has a cronbach alpha (α) of 0.87. A typical item on the subscale read as follows 'I just pretend to have the emotions I need to display for my job". (2) Active Deep Acting subscale. It has a cronbach alpha of .93. A typical item on this subscale reads "I made an effort to actually feel the emotions that I need to display to others". (3) Passive Deep Acting subscale. This has a cronbach alpha of .63. A typical item on the subscale read as follows "I experience the emotions I am require to express on the job". And non-acting subscale which has a cronbach alpha (α) of .70. A typical item on the subscale read as follows "I do not find it necessary to display any emotion when I am at work whether I feel it or not". The reliability of the instrument was determined through a test-retest method over an interval of three weeks. The surface acting subscale has a reliability coefficient of 0.81; the passive deep acting subscale has a reliability coefficient of 0.78; and the non acting subscale has a reliability index of 0.82.

Emotional Intelligence Scale (ELS)

The Emotional Intelligence Scale developed by Schuttle, Marlouff, Hall, Haggerty, Cooper, Golden & Donheim (1998) assesses emotional intelligence based on self-report responses to 33 items measuring the appraisal and express of emotions in self and others, regulations of emotions in self and others, and utilization of emotions in solving problems. It has a response format ranging from 1 (strongly disagree) to 5 (strongly agree). It has a cronbach alpha ranging from 0.87 to 0.90 and a three week test-retest reliability coefficient of 0.78 (Schuttle, et al 1998). Some items of the scale are: "I have control over my emotions" and "I know why my emotions change".

Occupational Stress Scale (OSS)

The Occupational Stress Scale (OSS) was developed by Hassan and, Hassan (1998) and it measures a variety of stressful job situations. It is a 60-item statements on a five point likert scale ranging from 1 (Never like me) to 5 (Average like me). The OSS has also demonstrated a high internal consistency with cronbach alpha (α) from 0.79 to 0.87. The scale also has a test-retest reliability coefficient of 0.76.

Procedure

The scales were administered to the participants by the researcher with the support of a matron and a Consultant Gynaecologist (both of them work in the teaching hospital). While some of the scales were collected immediately after completion, the rest were retrieved about a week later. They busy nature of the respondents' job and the number of scales involved in the study, as well as the number of items contained in each of the scales accounted for the delay in the completion and collection of the scales.Data Analysis

Multiple regression (stepwise) was used to determine the combine and relative effects of the independent variables on the dependent variable.

Results

Table 1: Summary of Regression Analysis Between the Predictor Variables (Emotional Labour and Emotional Intelligence) and the Criterion Measure (Job Stress)

Multiple R = .413
Multiple R^2 = .199
Adjusted R Square = .196
Standard Error = 6.89

Source of Variation	df	Sum of Square	Mean Square	F-ratio	P
Regression	2	2652.075	730.561	14.214	<0.05
Residual	246	1587.37	43.469		
Total	248	4239.445			

The result presented in Table 1 provided answer to the first research question which is interested in knowing the combine effect of the independent variables on the dependent. The result shows that the two independent variables when put together account for 19.6 percent of the variance in job stress among nurses. The table also shows that the analysis of variance of the multiple regression data produce an F-ratio value significant at 0.05 level ($F_{(2,248)} = 14.214$; $p<0.05$

Research Question 2

Table 2:Relative Contribution of the Independent Variables t the Prediction of Job Stress

Predictor	Unstandardized co-efficient		Standardized co-efficient	t	P
	B	SEB	Beta		
Emotional Labour	.232901	.097140	.267340	3.76	<0.05
Emotional Intelligence	.198266	.089071	.13592	2.41	<0.05

Results on Table 2 show the regression coefficient (unstandardized and standardized), standard error of estimate, t-ratio and probability level at which t-ratios are significant.

Discussion

The result of the first research question indicates that the two independent variables (emotional labour and emotional intelligence) when combined together appeared to be effective in predicting job stress among nurses. The calculated F-value of 14.21 which is significant at 0.05 alpha level further indicate that the capacity of the independent variables to predict job stress among nurses could not have happened by chance.

As for the relative contribution of each of the variables, the results show that each of the independent variables made significant contribution to the prediction of job stress among the participants. The contribution of each of the variables in order of merit is: Emotional Labour (β = .26740; t = 3.76; p<.05) and Emotional Intelligence (β = .13592; t = 2.41; p<.05).

The present finding concurred with Ciarochi, et al (2001); Gerits, Derken & Verbruggen, (2003); Amendolair, (2003); Adeyemo and Ogunyemi (2005). These researchers have provided evidences that emotional demands on workers are quite high and clearly constitute antecedent to stress. The explanation for the present finding could be attributed to the fact that the independent variables in the study are psychological predictors of job stress among the participants.

The finding that emotional labour is the most potent predictor of job stress among the participants could be understood from the fact that nursing by its nature demands that nurses display emotion they may not actually feel (Grandey, 2000; Hochschild, 1983). This opinion was confirmed by Smith (1992) who found that emotional labour affect the psychological well-being and performance of nurses.

Another variable that made significant contribution to the prediction of job stress was EI. This finding has the support of Ciarochi, Chan & Bajgar (2001) who noted that EI impact on psychological health particularly occupational stress. Again, the participants in this study may have been influenced in their job stress as a result of poor perception and managing of their emotions and those of the patients and co-health workers.

Implication of Findings

Nurses needed to be helped if they are to overcome their job stress problem. The hospital management might explicitly instruct or train nurses (on a continuous basis) or organize seminar about their job emotional requirements, control the quality of nurses' emotional service performance and reward or punish them accordingly. Overcoming job stress by nurses will improve their psychological well being, effective management of patients and in addition, creates an environment which supports and facilitates care in the hospital.

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Web-Based Approach to Career Counseling

By

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Abstract

Due to high rate of societal malaise – drug addiction, examination malpractices, prostitution, drop-outs, in our tertiary institutions today which have hampered effective learning, one is forced to look for an alternative way of reducing such societal problems through effective career counseling systems. Online career counseling system has emerged as a viable alternative to conventional counseling systems. There are limitations to the existing career counseling approaches in Nigeria. To address these shortcomings, we have developed an online career counseling system suitable for deployment in any system connected to a network (intranet, Internet). Some existing web-based counseling systems were examined considering their applicability and limitations to our peculiar environment. Based on our findings, a mathematical model Career Online Counseling System (COCS) using fuzzy logic and based on the trait-and-factor approach of counseling was developed to provide career counseling to candidates on the suitability or otherwise of their chosen careers. The model was finally implemented as a web-based system using Apache as web server, PHP as the server-side scripting language, HTML as client-side scripting language and MySQL as the relational database.

Introduction

Guidance and counseling of individual, had been in African heritage with specialist and methods varying from one society to another.(Saye, 2003). The various African counseling methods as outlined by Saye (2003) include the use of incantation, telepathy, spirits and some form of divinity in one form or the other. He however, observed that the failure of such counseling methods results from poor remuneration of the counselor, continuity of the relations and expansion in the popularity of the counselor.

The emergence of what is known as 'modern' counseling in Nigeria was motivated by contribution of various philanthropic, religious, social, historical, educational and environmental sources. (Saye, 2003).

Career counseling, a field of counseling psychology in Nigeria had its root from the formation of Nigeria Career Council being an offshoot of the practical effort of a group of Rev. Sisters in 1957 at St. Theresa's College, Oke-Ado, Ibadan. (Akinboye, 1987). The establishment of Counseling Association of Nigerian (CAN) in 1977 whose abbreviation was later changed to CASSON in 1992 and the making of policy also in 1977 which was later revised in 1992 lead to the establishment of guidance and counseling units/departments in government establishments and tertiary institutions. (Saye, 2003).

Ignorance in career prospects (career guidance and counseling) is one vital issue that guidance and counseling ought to tackle according to the National Policy on Education (1992).

Career guidance according to Carolyn (2000) is a portion of guidance programme designed to assist students in their career development and ***career counseling*** is the portion of the guidance programme involving counseling students concerning their career development. Provision of career development information and counseling services especially to large population of secondary school students should not and probably cannot be the total responsibility of the counselor. In reality, most school counselors have limited time to be the sole providers of career assistance, given the number of students they have to serve. In developed countries for example USA, the American School Counselor Association recommends a counselor-student ratio of 1: 561 (Meyer 2000). The situation is worst in developing countries. For example, in Nigeria there is no fixed ratio of counselor to students in most cases a single counselor attends to an entire school of more than a thousand students. In most cases, schools exist without a single counselor.

Despite having guidance and counseling units in some schools and various ministries of education, yet an examination of current societal malaise (for example cultism, examination malpractices, prostitution) in our tertiary or post secondary institutions result from students who make wrong career choice with consequent effect being that they can no longer cope with their chosen course of study.

Our society today must prepare the youths adequately for post secondary education/career, work with students with special needs, abate violence, and prepare students for an ambiguous future work force and much more. Evidence is mounting that an effective means of addressing all these issues may be a comprehensive guidance programme that includes reliable and up to date career development information/component (Carolyn, 2000). The advent of web-based or internet-based or online career counseling system can be attributed to scarcity of professionally trained career counselors in most our schools which has hampered in totality, the overall career development of our young people who leave secondary schools with little or no knowledge on how to make a choice of available careers, the requirements of any chosen career and the implications.

Our system adopted the trait-and-factor counseling approach. The trait-and-factor approach to counseling is based on trait theory which essentially states that people can be understood in terms of the traits they possess. Traits are stable characteristics believed to be finite in number that enable people to respond consistently to similar situations. Some of the commonly understood traits are intelligence, ambition, aptitude, and self esteem. These traits even though internal and observable, they can be measured by observing behaviours that reveal them. Standardized assessment, especially self-report devices, has been the means by which we learn about traits. Factors are statistical representations of assumed traits. According to Crite (1974), the trait-and-factor counseling approach is the only counseling approach with its origins in education, designed to assist high school and college students in planning for the future. Trait-and-factor counseling is direct and straightforward in its procedure, often called directive counseling. The process usually involves testing.

Our system (COCS) is a generally usable online career counseling system that is to provide career counseling services to the teeming population of our secondary school graduates irrespective of their location, age, culture, religion, ethnicity social-political and economic status. The system is intended to further handle the aspect of individual differences (complexes) in human person as regards to relationships with a counselor which hitherto determines to some extent the zeal to seek for counseling on the part of the candidate, nature and implication of such counseling.

Related Works

The main ideas behind career counseling are not new and several successful computer enhanced counseling programme which offer exciting possibilities in this age of the information revolution have already been developed (Sprik, 1990). These systems are being used with the main focus being on information delivery rather than fostering communication. For example, the use of career guidance software currently delivered via PC, the use of chat groups and counselor support via e-mail is available to a limited extent to help individuals in using information to make career choices. James (2001) however, observed that the current career guidance and counseling software available on PCs and the internet is providing unprecedented access to career information but that the integrity and validity of such information and quality of some of the software are questionable. Areas where current existing system are failing according to him include delivering assessment, information and instruction that lack any evidence of validity, overwhelming users with data, and failing to indicate the circumstances where additional professional assistance may be needed by the user.

James et al (1999) defines internet-based career information delivery system (CIDS) as including three components – assessment, search capability and information delivery (educational and occupational data), and these components must be integrated to assist the individual in using the information from one element of the web site to complete another element of the site. He further gave examples of integration to include using assessment results to search for occupations, or looking up educational programmes of an occupation being researched.

In this paper, the main objective is to develop and implement an **Online Career Counseling System** which seeks to address the following educational and vocational problems:

- Assist candidate to choose course of study and identify the inadequacies in a candidate who does not possess the minimum academic qualification for his/her chosen career and advice him accordingly.
- Help the candidate develop his potential in the areas he/she has aptitude and interest for.
- Assists candidate to acquire knowledge of characteristics and functions and duties of the group of occupations within which his choice falls.
- Help provide general information and specific abilities and skills required with regard to the academic qualification, and pre-requisite skills.
- Stimulate candidate into the implication of job's choice since such a choice implies spending a good percentage of his/her life in such a job.
- Intimate candidate to the appropriate work attitudes (Mustapha, 2003).

However, the following on-line career counseling systems were reviewed:
Georgia Career Information System (GCIS), Washington Occupation Information System (WOIS), Education and Career Opportunities System (ECOS) and Idaho Electronic Career Information System (eCIS).

All the systems reviewed have similar design structures of integrating pieces of software (modules) that handle aspects of 'career', 'educational programmes' and 'schools'. The module handling 'career' issues contains information related to hundreds of occupations usually defined within the United States. The module handling 'educational programmes' contains information about programmes/courses of study, admission requirements, tuitions, scholarships and financial aids, and the module handling 'schools' provides links to institutions or schools within the defined states offering such programmes.

The systems reviewed serve the purpose for which they were developed. The following are their shortcomings with respect to their applications in our country – Nigeria:

- The occupations so defined in the systems are mainly limited to the United States of America.
- Assessment tools as used by the systems to evaluate users and identify their career related interests are quite different from the assessment tools used in Nigeria.
- Admission requirements into academic programmes for the various occupations as defined by the systems are different from what is obtainable in our country (e.g 5 credits in WAEC, NECO, NABTE, etc.).
- All the systems reviewed charge fees in dollars before one can use them and the fees charged depends on the discretion of the organization or developers. So they are not open.
- The systems are completely alien to our youths or the target population of this country to whom this system is intended.
-

The System Model

The system model is derived using fuzzy sets and fuzzy logics. Fuzzy sets and fuzzy logics are preferred because of the imprecise nature of required input data. The fuzzy logics provide convenient way to map an input space into an output space. Fuzzy set does not have crisp, clearly defined boundary. The elements of a fuzzy set are partitioned and the membership values (degree of membership) between 0 and 1 are determined. In fuzzy logic, the truth of any statement becomes a matter of degree (Paplinski, 2004).

Model Derivation

Variable description table

Label	Criterion	Purpose	Measurable parameters	Values
P_i	Profession or career	Represents a cand.'s chosen career	Not applicable	i =1,2..44
S_{ij}	O'level subjects required for a cand's chosen prof. P_i	List all subjects required by any chosen profession P_i	Subjects that every candidate must credit to qualify for the profession P_i	j = 1,2, ..5
a_{ik}	Attributes required for a chosen prof. P_i	attributes required for a given profession P_i.	a_{ik}, k = 1, 2, ... 5 for instance P_1 = law a_{11} = firm, a_{12} = dynamic, ..a_{15}	0.04
m_{ir}	Attributes a candidate possesses	all the attributes the candidate possess for the profession P_i	m_{ir} , r = 1,2, ... 5	0.04
t_{in}	Cand's personal interest in the chosen profession P_i	Measures the level of interest a cand. has in the chosen profession P_i	Strong interest, Moderate interest Low interest, No interest	0.005 to 0.02
O_{ij} /b_{ij}	O'level results in two sittings	Contains all the subjects the candidate credited like in WAEC or NECO	Credit in atleast five subjects	j = 1, 2, ...5

C( ) is a function that returns O'level subjects candidate credited in one or two sittings.

It takes in O_{ij} or b_{ij} or both depending on if candidate has O'level results from one or two sittings.

U( ) is a function that returns the subjects a candidate credited that are required for a given profession P_i

It takes in (as argument) S_{ij} and matches it with what is returned by the function C( ) to determine the suitability of the subjects candidates credited for the profession P_i

That is, $U(S_{ij}) \equiv C(a_{ij}) \vee C(b_{ij})$

O'level requirement (for a given profession) $= \begin{cases} 1, U(S_{ij}) \equiv C(a_{ij}) \vee C(b_{ij}) \text{ where } 1 \leq C(a_{ij}) \vee C(b_{ij}) \leq 6 \\ 0, \text{otherwise} \end{cases}$

W( ) is the fuzzy function that returns the weight of the subjects required for the profession P_i that the candidate credited.

g( ) is the fuzzy function that returns the weight of the attributes required for the profession P_i that the candidate possesses.

The fuzzy functions W( ) and g( ) are obtained by applying fuzzy rules using ***fuzzy inference method***s. The fuzzy inference method applies approximate reasoning method.

According to Nikola(1998) fuzzy inference takes inputs, applies fuzzy rules and produce outputs. Fuzzy rules deal with fuzzy values e.g high, cold, very low etc., these fuzzy concepts are usually represented by their membership functions. A membership function shows the extent to which a value from a domain is included in a fuzzy concept.

f( ) is a function that returns the weight of a candidate's personal interest in a given profession P_i Personal interest for any given profession P_i have values as 'strong interest', 'medium interest', 'low interest' and 'no' interest.

For a profession P_i

$f(t_{in}) = t_{in}$ $\quad n = 1,2, \ldots\ldots 4$

The value of $f(t_{in})$ is between 0.005 and 0.02

For the Career Online Counseling System (COCS), by applying fuzzy inference method based on fuzzy logic, we determine a candidate's (counselee) and his chance of qualifying for a given profession P_i . A fuzzy rule defines the degree of the candidate's suitability for a given profession P_i depending on the nature of the O'level result he has.

Therefore, counseling result for a profession P_i is given as:

$$\mathbf{C_iP_i} = \sum_{j=1}^{5} W \ S_{ij} \ + \sum_{k=1}^{5} g \ a_{ik} \ + \sum_{n=1}^{4} f \ t_{in} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots(1)$$

The COCS is a three (3) input, one (1) output, four (4) rule (three-part process) system as shown below. The inputs are crisp (non-fuzzy) value limited to a specific range. All rules are evaluated in parallel using fuzzy reasoning. The results of the rules are combined and distilled (defuzzified). Finally, the result is a crisp value.

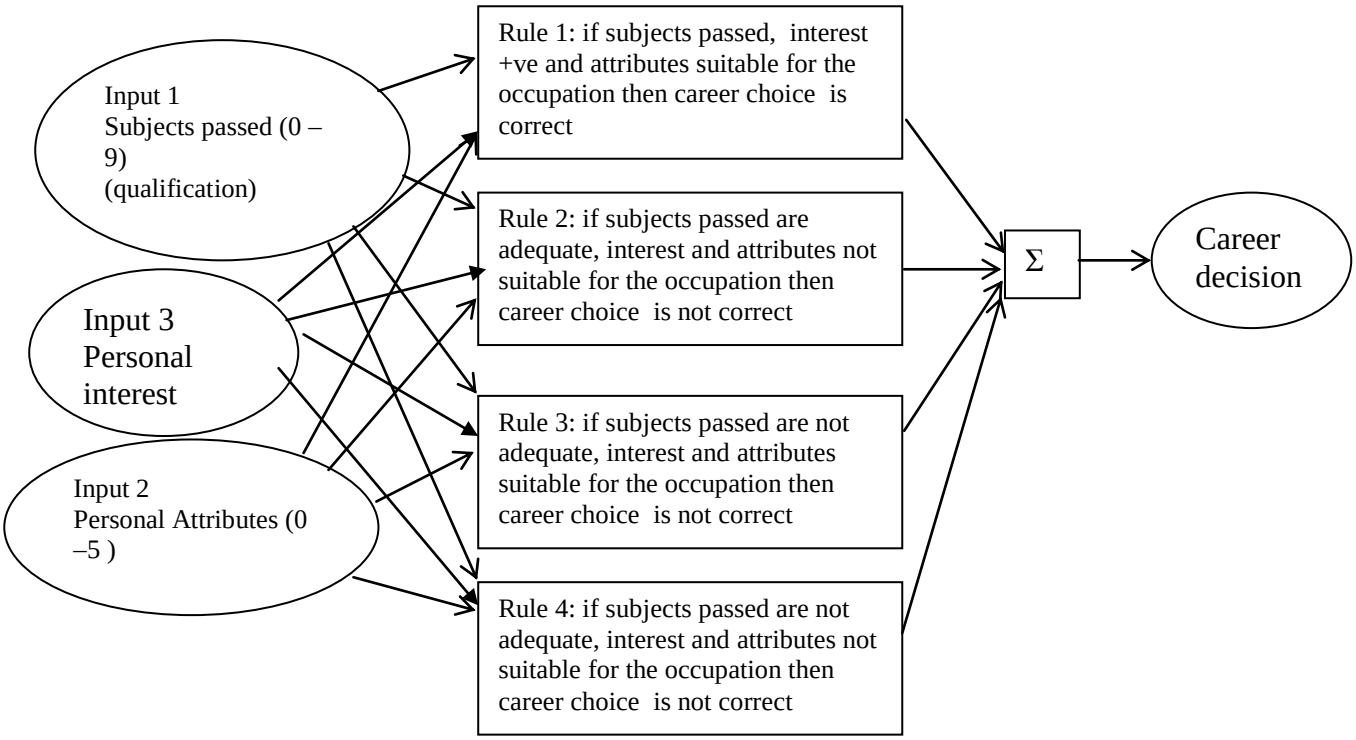


Fig. 1 COCS System Model diagram

The COCS Overall System Design

The system receives as inputs from the user (candidate) his occupation/profession of interest, O'level subjects passed, personal attributes, personal interest and evaluates the data gathered by matching it with the requirements of the chosen profession and finally generates counseling result or take decision as would be expected of a counselor.

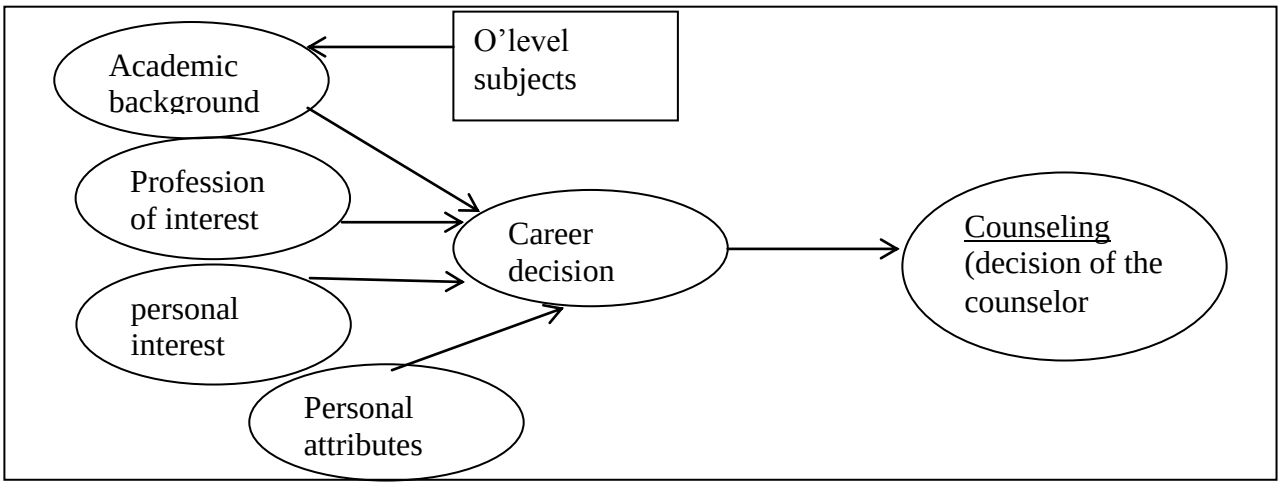


Fig. 4. COCS overall system structure

Career On-line Counseling System (COCS) Activities

The sequence of activities within the COCS is clearly illustrated in the UML activity diagram shown below. The activity diagram shows the workflow from the start to the finished point detailing the many decision paths that exist in the progression of events contained in the system.

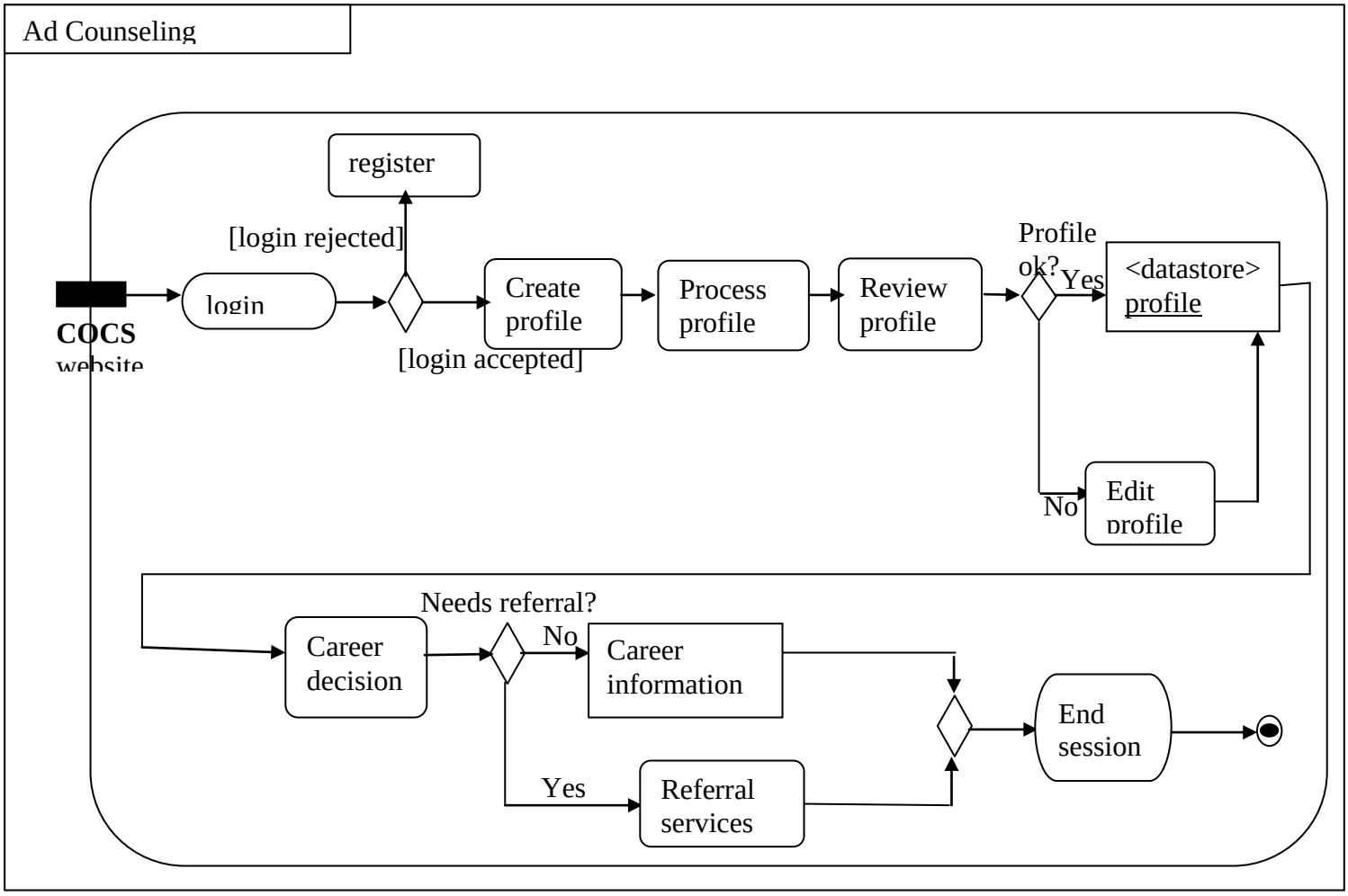


Fig. 5. Career On-line Counseling System Activities diagram

System Implementation

The implementation involves the integration of different technologies to actualize the desired system. The idea behind the development of the system is to make career counseling available to all categories of people in the target population (prospective university candidates) irrespective of their geographical location. A lot of flexibility is built into the system with some role-based access mechanism to some areas of the system. The implementation involves a demonstration of model developed. Sample data from youths who have just gotten their senior school certificate results and waiting to apply for the Universities Matriculation Examination (UME) were used to make the demonstration.

COCS Implementation Technology

The technological approach adopted for the development of the COCS is an integration of web technology, database technology and programming technology, using open source solution (Apache, MySQL and PHP) running on Windows XP operating system.
The version of Apache used for the system is 2.0.50, with features for password-protected pages for a multiple of users, customized error pages, virtual hosting for different IP addresses mapped to the same server, directory index directive to multiple files and many more. According to Netcraft web site (www.netcraft.com), it is a popular choice because of its flexibility, power and price. PHP 5.0 is the version used for development of the system. It is a server-side scripting language that makes our web site to be truly dynamic. It contains numerous built-in functions with flexibility and relatively small learning curve, making it one of the most popular scripting languages around. It is now preferred as an alternative to Microsoft ASP language and Perl. Elizabeth et al(2005). MySQL 4.0.20 is the version used for the development of the system. It is the database construct that enables PHP and Apache to work together to access and display data in a readable format to a browser. MySQL according Elizabeth is the perfect choice for providing data via the internet because of its ability to handle heavy loads and its advanced security measures. The COCS consists of five modules – system Admin, User Admin, Client setup, career description and career decision.

Conclusion

This research has successfully produced a customized on-line career counseling system which has features peculiar to our system (Nigeria). A successful implementation of this research will ensure that youths of this country make appropriate career choices that will help curb the menace of societal problems like examination malpractices, unfilled ambitions, cultism, prostitution, drug addiction and so on that result from wrong career choices.

However, the following measures have to be put in place for optimum realization of the objectives of this research:

- Internet facilities and computers should be made available even in remote communities of our country.
- Collaborative efforts are required among various agencies of government saddled with the responsibility of managing the youths to produce a commercialized version of the COCS.
- Career Counseling Centres with Internet capabilities should be established in our towns and cities with the COCS accessible to interested users through such centers.

Further research on COCS should focus on incorporating more multimedia facilities for data capturing with regards to job description and job areas of the various careers. Also building in link facilities to ascertain the genuineness of qualification supplied by the user is another area to be looked into.

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The Impact of Self-help Project by Parents Teachers' Association (PTA) on the Education of Nigerian Children

By

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Abstract

Parental involvements in children's education in Nigeria centered on different approaches. One of them is the self-help project of the Parents-Teachers' Association (PTA). This study examined the impact of the school renovation one of the self-help projects carried out by the PTA with an intention of assessing the benefits in respect of capacity to enhance enrolment, attendance and retention. Field information were collected from twelve local government areas from the Southwest geo-political zone of Nigeria by 24 research assistants supervised by this investigator through the use of various instruments and procedures; documentary, questionnaire and checklist/observation. The information collected were subjected to descriptive statistics (frequency count and percentages).The results revealed, among other things, that the renovation led to significant increase in pupils' enrolment, pupils' attendance and high rate of retention. The study therefore recommends that a greatly expanded program of self-help projects should be initiated in all public primary schools in Nigeria.

Key words: Parents Teachers' Association (PTA), Primary school, Self-help, Project, Nigeria.

Introduction

Parental influence is used broadly in this paper to mean several different forms of parents' participation and involvement in the education and with the school of their children. There are two main strands to parental influence in Nigeria.

- Parents influence as a result of their involvement in the individual child's education at home and in the school and
- Parents' influence as a result of their involvement in the life of the school of their children.
-

The focus of this paper is on the second strand that is parents' influence as a result of their involvement in the life of the school through a body or organization known as the Parents Teachers' Association (PTA).

PTA is a voluntary and welfare organization comprising parents, guidance and teachers in a school with the aim of ensuring the well being of the pupils and the progress of the school. The association acts as the link between the home and the school in partnership for a more fruitful educational upbringing of the children and youth Igwe, (1990). According to Christenson and Sheridan (2001), school learning is a joint production process involving the home and the school. Krage (1978) believed that interests of the home and the school overlap and intermingle. To him, the school is an extension of the home and parents and teachers meetings eliminate all

home and school conflicts. Taiwo (1981) emphasized the role of parents as close collaborators in school performance and all round educational development of the child especially in his formative years at school. He argued further that parents should visit schools regularly to inquire about the progress of their children. He encouraged regular attendance of parents and teachers joint meetings to discuss matters affecting their children. Parents and teachers have to work hand in hand to help children achieve success in school work, Epstein, (2005) and contribute to the development of the country. The molding of children is a collective responsibility of parents, guidance and the teachers (Mansaray, 1995, Sogbesan, 1989 and Bolaji,1998). Steedman (1980) reviewed a lot of past studies on school performance and concludes that parental involvement in children's learning is indispensable to academic performance. Similarly, Wiseman (1964) postulated that parental involvement is very important because attainment at school is so powerfully determined by what children bring to school and the assistance given to children by parents at home.

The main objective of the PTA is to bring parents, guidance and teachers together for the interest of the child in particular and the progress of the school in general.
Other objectives of PTA include the following:

- To ensure that there is no misunderstanding and distrust between the parents and the teachers and between the home and the school.
- To ensure that parents and teachers are conscious of their joint responsibility to the provision of qualitative education for the children and contribute to the progress of the community.
- Provide an effective link between the home and the school.
- Assist the Board of Governors to provide educational services, materials as well as equipment for the school to enhance teaching and learning.

Parents play a very important role in the education of their children. According to Maduewesi (1991), Nigerian parents can be categorized into three types, these are the "wide awake, the still sleep and the in –between parents". The "wide awake" parents are those who knew the value of education and would go to any extent to see that children get it. Such parents patronize both the private and public schools depending on their economic standing. They support the children in and out of the formal school system and participate actively in all school activities to encourage their children. Such parents are found to be very active and usually play prominent roles in PTA meetings. The "still asleep" parents are those who despite government enlightenment programs of the value of education still have their minds closed. They see nothing good in educating their children and formal education has no meaning to them. They are not aware that the children need basic education to acquire living, learning and social skills that will equip them to live a successful adult life. Many of such parents are religious fanatics that see formal education as a way of corrupting their children. There are many of those children in non-formal settings who would never step the four walls of formal school setting in their lives. The "in-between" are the parents who knew the value of education but could not support the education of their children as a result of their own low level of education, economic constraints or other astringencies. This category of parents is found in the rural areas. Most of such parents are either traders or farmers. Female children suffer most in the hands of such parents (Nkana, 1999 and Sanya, 1996).

The "wide awake" are aware of the fact that Nigeria Government cannot shoulder the whole responsibility of providing basic education for her children. Nigerian children in the primary school level form the largest number of learners and there are the other levels like the secondary and tertiary which the country is providing free education. The wide awake parents are also aware that the earlier the intervention in the school life of their children the better the progress

of the children's education and that their support for the school will enhance learning outcomes in the long run.

Therefore, PTA in Nigeria remains a great pool of resources in most of our primary schools. This body has become a pillar and backbone of most schools. The association serves as an avenue through which parents render assistance to the schools. The role of parents in ensuring that their children have qualitative education is not limited to prompt payment of school fees and purchasing school materials. Studies (e.g. Akintoye,1980) have revealed great impact of parents in the provision of instructional materials to the school, providing health facilities, maintenance of discipline, financial contributions and buying school bus. Yoloye (1995) revealed in his study that PTA has been a tremendous help in solving disciplinary problems in schools. He pointed out that some children due to their background and environmental influences; they are tough, insultive and aggressive. Such behaviors usually result into fighting, bullying and unruly dispositions among pupils. However better understanding and mutual relationships between the parents and teachers have reduced these acts of undesirable behaviors in schools (Weiss, Kreider, Lopez, and Chatman, 2005).

In some other instances the PTA with the permission of the Local Government Education Authority had organized staff improvement programs for some unqualified staff to step their qualification and be fit to teach in such schools. This support is very relevant as many schools in rural areas are under-staffed, it is usually in the cities and commercial centres that you have qualified teacher. Qualified teacher usually reject rural posting and those available usually seek posting away from the rural areas. This is the reason why we have a large number of unqualified teachers that is 'teachers' without teaching qualifications in the rural areas.

Rationale for the study

The twenty first century has witnessed a dramatic quantitative growth in primary education in Nigeria. Beyond expanding educational accessibility, the federal government embarked on a mass education program to wipe out illiteracy throughout the federation. A viable Universal Basic Education Program (UBE) was launched in 1999 by the civilian administration. The program is an ambitious educational program designed to stimulate and accelerate national development, political consciousness and national integration (UBE, 2002). Some of the objectives include the provision of free, universal and compulsory basic education for every Nigeria school agenda children, reducing drastically the incidence of drop-out from the formal school system through improved quality, efficiency and ensuring the acquisition of appropriate levels of literacy, numeracy, manipulative, communication and life skills:

However, there are some problems that are starring the program in the face. Some of such problems are:

- Inadequate Funding:- Inadequate funding has been a fundamental problem of Primary Education. The federal government decided to share the responsibility among the federal, state and local governments. The federal and state governments usually meet their own obligation but the local government sometimes could not. The implication of this is the fact that, since the finance is inadequate, other school services suffer, for example; the number of teachers to be employed is usually cut down, equipment could not be provided, inadequate proportion and instructional materials are scarce since funding is essential in providing these supportive services.
- Inadequacy of Infrastructure Facilities in Primary Schools:- Quite a number of primary school buildings are very old and not in good shape. In fact, many of them are dilapidated. Some have no roofs, windows and doors. This problem is related to funding

because infrastructural facilities can only be purchased by money. Although the federal government is currently trying to put up a model building in some selected schools through State Primary Education Board (SPEB). The board can only build one model school per local government. Infrastructure is a serious problem facing primary education. There is inadequate furniture. Some schools have no good chairs and tables. Many school materials have been destroyed by wind as a result of heavy downpour because of lack of storage facilities. Therefore, the learning environment of the primary schools is unfriendly because of poor and inadequate infrastructures. The situation was worsen by the attitude of the "still asleep and in-between" categories of parents who believe that since government proclaim that primary education is free, it should be absolutely free. Therefore, not ready to support the school in any form. Many children of such parents stay away from school even when primary education is universally free.

Primary education is a formal system of education designed for six years old children. It is a six-year course for all children and great importance is attached to it. The primary school is seen as a place in which the child gains the fundamental knowledge, skills, thoughts, feelings and actions, which are considered necessary for all citizens. This level of education has the highest number of learners. Majority of primary school children terminate their education at the primary school level so it is the only form of formal education they can receive. Moreover, this level serves those who would advance, to get them equipped for further studies. It is at this level of education that all children acquire basic learning and basic living skills that will make them to be functional member of the society.

It was evident that the federal government cannot shoulder the responsibility of funding primary education alone thus she embarked on campaign to get the communities through the families involved in partnership in the management structure of primary education program. This is in line with the opinion of Sander (2005) who stresses the need to build strong school-community partnerships for students' success. In response to this call for involvement at the grassroot, the PTA came alive to support in various forms. One of such support is the Self-help project-renovation. There had been efforts by various communities to contribute to funding of education; this has been at secondary school level. This move became prominent at the beginning of this decade as one of the attempts to save the primary level of education from deterioration.

The main objective of this study therefore was to investigate the impact of the Self-Help project of the PTA in some Nigeria schools and establish empirically the effects of the efforts on the education of Nigerian children at the primary school level. Unlike other countries where loads of books, journal articles and stand-alone reports on the activities of parents involvement in children's education but there is a dearth of data on the self-help projects of the PTA at the primary level of education in Nigeria.

Research Questions

The following questions were formulated to guide the study:

1. Does the Self-help Project- renovation influence enrolment in the schools?
2. Has there been improvement in students' school attendance as a result of PTA self-help project in the sample schools?
3. Does the self-help project- renovation affect the retention rate in the schools?

Methodology

The study is a simple descriptive survey in which there is no manipulation of variables.

Population and Sample: All Primary schools in Southwest zone of Nigeria constitute the population. The Southwest geo-political zone is made of Oyo, Ondo, Ogun, Osun, Ekiti and Lagos states. A total of 36 focus schools distributed across 12 Local Government Areas from the six states that made up of the geopolitical zone participated in the study.
A multi-stage sampling procedure was used in the selection of the subjects:

i) Two Local Government Areas were randomly selected from each of the six states constituting the southwest geo political zone.
ii). In each selected Local Government Area, three public primary schools were randomly picked to participate in the study.
iii) For each of the participating school, the following stakeholders in primary education provides relevant information: head teacher, two teachers that are members of the PTA, two parents who are active members of the PTA, one official of the Local Government Education Area (LGEA) and one official of Non-Governmental Organization (NGO). These individuals were purposively selected. In all, the study involved 12 Local Government Areas, 36 public primary schools, 36 head teachers, 72 parents and 72 teachers, 12 officials of the Local Government Education Area and 12 officials of Non- Governmental Organizations.

Instruments

Four valid and reliable instruments were developed and used to gather information for the study.

i) **Documentary:** This includes the class attendance register for selected classes which showed students' school attendance, school nominal enrolment, retention rate, project's financial income/ expenditure records.
ii) **Questionnaire:** This was designed by the investigator to collect information from stakeholders- head teachers, teachers, parents and all officials of the Local Government Education Areas and Non-Governmental Organisations involved in the study. The instrument was divided into four sections A to D.

Section A (items 1 to 7) focused on the demographic information such as age, status, educational qualifications, professions and infrastructure such as toilets, wash hand basins, storage facilities, play ground in the schools.
Section B (items 8 to 14) centered on the design of the project, mainly the characteristics of the project committee members, their roles, the objectives of the project, time lay for the project, sources of funding and the modus operandi of the project.
Section C (items 15 to 21) focused on the impact of the project on enrolment, attendance and retention, constraints and reasons for full and partial achievements of objectives.
Section D (items 22 to 26) provided opportunities to give suggestions for improvements in the running of PTA affairs in general and execution of self-help projects in particular.

iii) **Checklist/ Observation Schedule:** This instrument was also designed by the investigator to collect information on quality of the school environments before and after the project.
iv) **Structured Interview:** The questionnaire was modified to fit into a structured interview format. This was administered on the officials of the Local Government Education Areas and the Non-Governmental Organizations.

Validity and Reliability of the Instruments

The instruments were thoroughly scrutinized by experts in the various fields connected with the study. The instruments were also trial-tested in the areas and schools not involved in the study sample. The instruments were administered on similar sample but not on those who were involved in the study. Using inter-rater method and correlation statistics on the responses of the sample taken, the investigator arrived at the reliability coefficient of 0.82.

Procedures

The procedure involved a one shot data collection during the field activities. The following procedures were followed:

Pre-field Activities (i) The investigator recruited 24 research assistants to participate in the field activities. The research assistants were speakers of the local language of the areas where they worked. The investigator trained the assistants in the use of the instruments and coding of the responses of the respondents. The assistants were assessed using the assessment guide designed by the investigator. Those who qualified were selected to participate in the process of data collection. The investigator got approval from the State Universal Basic Education Board (SUBEB) of the states involved and a letter to the Local Government Education Areas and from there; letters were sent to the Head teachers of the selected schools. In the selected schools, the Head teachers contacted the parents and other stakeholders to be interviewed or to respond to the questionnaire for approval and willingness to participate. The purpose of the study was explained and their willingness to participate was solicited. The approval was ensured before the commencement of data collection.

Field Activities

The investigator with the research assistants moved to the field for data collection and this took about five weeks to gather the data. It was difficult to get appointment with the parents, the LGEA and NGO officials. There were no problems with the head teachers and teachers. After the collection of the data the information gathered were collated, coded and analyzed with the assistance of data analyst and this took another two weeks. The information collected was subjected to descriptive statistics that is frequency count and percentage.

Results and Discussion

The results of the study are presented in tables according to the research questions posed for the study. The first question was to find out if the self-help project that is renovation carried out by the PTA of the sampled schools led to increase in enrolment. Table 1 below shows the result.

Table 1: Impact of Renovation on Pupils' Enrolment.

Local Govt. Edu. Area	Before Renovation (2002)	After Renovation (2006)	Difference	% Difference
Ikere Ekiti	507	689	182	35.9
Ise-Emure	611	670	59	9.7
Epe	523	680	157	30.0
Ikorodu	435	745	310	71.3
Odeda	619	810	191	30.9
Orile- Iganmu	504	566	62	12.3

Akoko North	482	572	90	18.7
Owo	450	593	143	31.8
Ayedaade	520	588	68	13.1
Oorelope	482	610	128	26.6
Akinyele	613	696	83	13.5
Ibadan North	604	656	52	8.6

The figure on enrolment before renovation (2002) and after renovation (2006), the difference between them and the percentage difference are shown in Table 1. The table shows that the highest percentage increase in enrolment was recorded in Ikorodu Local Government Area in Lagos state (71.3%), followed by Ikere –Ekiti in Ekiti state (35.9%) and Odeda in Ogun state (30.9%). The lowest percentage was recorded in Ibadan North in Oyo state (8.6%). The increase in enrolment could be attributed to the renovation.

The renovation had significant influence on enrolment because of parents' commitment to the education of their children. This is in line with what their beliefs are about what is important, necessary and permissible for them to do with and on behalf of their children. This corroborates with one of the six frames of partnerships which Epstein (2001) identifies as ways of influencing children's education positively. The collaborative efforts of the Universal Basic Education Commission (UBE, 2002) with stakeholders such as the PTA boosted the morale of the parents. The success of Basic Education is indirectly connected to child friendly environment where children could be comfortable to learn. The renovation brought forth beautiful learning environment that are attractive and conducive for learning.

Question two sought to find out if there has been improvement in pupil' school attendance as a result of PTA self-help project. Table 2 below revealed the results.

Table 2: Influence of Renovation on pupils' average school attendance.

Local Govt. Edu. Area	**Before Renovation (2002)**	**After Renovation (2006)**	**Difference**	**% Difference**
Ikere Ekiti	65	77	12	18.5
Ise-Emure	62	73	11	17.7
Epe	67	76	9	13.4
Ikorodu	64	73	9	14.1
Odeda	56	78	12	21.4
Orile- Iganmu	60	72	12	20.0
Akoko North	59	68	9	15.3
Owo	61	70	9	14.8
Ayedaade	64	69	5	7.8
Oorelope	60	68	8	13.3
Akinyele	58	69	11	19.0
Ibadan North	56	67	11	19.4

Table 2 shows the average of students' attendance before renovation in 2002 and after renovation in 2006 as well as the differences and the percentage of the differences. The percentage difference was got by multiplying the difference with 100 and divided by the average attendance before rennovation (e.g. 12/65x100=18.5). The results show that Odeda Local Government Area had the highest average percent increase in students' attendance (21.4%) followed by Orile-Iganmu with (20.0%). The two local government areas are both from Ogun

state. The lowest increase in students' average attendance was recorded in Ayedaade Local Government in Osun state.

The effects of public campaigns for support and involvement of parents and communities at the grass roots yielded dividends as shown by the results. Parents revealed that they became actively involved by the enlightenment they received through the campaigns. Parents and community were better informed and the leaders mobilized themselves to contribute both in cash and kinds. Many artisans from the communities rendered their services ranging from carpentry to bricklaying and even cheap labor supply. As a result of this commitment and involvement, many thereafter ensure that there wards attend school regularly.

The third question for the study focused on whether the self-help project-rennovation efforts of the PTA affect the retention rate in the schools. Table 3 shows the results.

Table 3: Effects of Renovation on Retention Rate in the schools.

Local Govt. Edu. Area	Before Renovation (2002)	After Renovation (2006) %	Difference
Ikere Ekiti	88.3	94.7	6.4
Ise-Emure	92.2	94.6	2.4
Epe	92.6	98.3	5.7
Ikorodu	89.3	94.8	5.5
Odeda	91.6	94.5	2.9
Orile- Iganmu	90.3	91.6	1.3
Akoko North	92.7	100.7	8.0
Owo	91.1	96.3	5.2
Ayedaade	93.7	97.6	3.9
Oorelope	94.3	95.7	1.4
Akinyele	88.2	93.6	5.4
Ibadan North	88.1	94.1	6.0

Table 3 shows percentage rate of retention before renovation and after renovation as well as the difference between the numbers. The table shows that all the local government areas in the zone experienced increase in retention within the project duration. The improvement of the retention of the students can be attributed to the approaches of the school renovation designed to make both the classroom and the school environment child-friendly and conducive for teaching and learning. The implementation committee members interviewed disclosed that they spent parts of the money collected to refurbish the dilapidated school structure including school toilets, bought school materials and other instructional aids. It is expected that students are more likely to be attracted to a child-friendly environment than to schools in deplorable conditions.

In support of the above and based on the data collected during the interview, a broad spectrum of benefits are associated with the project by the stakeholders across the Local government areas covered by the study. The greatest benefit was the provision of conducive atmosphere for learning. Other benefits include increased school enrolment, attendant and higher retention rate and enhanced community goodwill. The stakeholders' perception of the benefits has justified the investment made on the school project by the community in general and the parents in particular.

Conclusion

The success story of the PTA in the Self-help project of school renovation was achieved partly as a result of the approaches of the implementation committee members. They sensitized and empowered other parents, community members and other stakeholders and shareholders in the primary school system. However, one of the immediate concerns of the stakeholders is the issue of effective and sustainable management and the monitoring of the project. The association therefore appealed to the states and local governments to disburse funds to schools for maintenance of the school structures.

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Relative Efficacy of Moral Dilemma Model of Value-Clarification on Nigerian Secondary School Students' Knowledge and Attitude to Hiv/Aids – A Clue for the Social Studies' Teacher

By

Ojedokun Olalekan Elijah

Abstract

The value-clarification strategy has been employed in teaching population education and other concepts in the Nigerian school curriculum and has been found efficacious. There was a doubt whether secondary school students will learn better and develop desirable attitude, if a Social Studies teacher employs the strategy in teaching the learning content of HIV/AIDS. This experiment found out that the moral dilemma model; one of the strategies of Value-clarification, may be efficacious in assisting improved knowledge acquisition and development of desirable attitude about HIV/AIDS than the expository method, if a Social Studies teacher employs it in teaching its learning content among secondary school students.

Introduction

The teaching of value and belief is an important aspect of any Social Studies programme (Ogundare & Ogunsanya, 2004). Values, in the word of Cecilia (2000), are the elements that guide a person's life choices in a definite direction; and are standards of judgment in human behaviour which are intricately related to what the individual has come to accept as guiding principles of living. Values are also considered to develop mainly from experiences that individuals have from the influence of people and from conditions around them. They constitute a bridge between the "knowledge world" and the "action world" in social education and influence values held by individuals and groups (Ehman, Mehlinger & Patrick, 1974).

To Akinpelu (1991), "all human actions (and inactions) are determined by values". Hence it can be inferred that human's interaction with the environment (the major focus of Social Studies Education) is value-laden. This may be because the question of "values" comes to play whenever people take decisions, make choices or express preferences. Iheoma (2000) explains that values represent a people's views about a desirable society; and that the aims of education are the values selected for emphasis by its educators and educational policy makers. Home remarks that values, which are beliefs and ideas, are essential for the maintenance, strengthening and improvement of society.

Lawton & Duffor (1976), explain that what is selected from the culture of the society for class instruction should be based on what is particularly valued by the society, and that its transmission should not be left to chances but entrusted to special instructions and specially trained teachers. The desire of the Nigerian Society to achieve its national goals using education as a tool, invariably calls for the service of a Social Studies teacher who will assist the youth to clarify their values. One major value upon which all other sectors of the society depend is the

"value for life". It is a known fact that only the living citizen can work, participate and contribute to the development of the nation. This will however be affected in the face of unbridled spread of HIV/AIDS. There is therefore the challenge on the part of the Social Studies teacher to employ the value-clarification method in his teaching.

The value-clarification method as defined by Kirshenbaum (1977) is a form of questioning, as of activities or "strategies and approach toward subject content, all of which are designed to help individuals learn a particular valuing process and to apply the process to value laden areas and moral dilemmas in their lives". The method provides the prerequisite skill for making informed and rational decisions on value-laden issues. It addresses certain behavioural tendencies in the apathetic, listless, very inconsistent and very uncertain children who are usually unable to make up their minds. It also addresses the problems of over conforming learners, who do what they think adults do and role-play, by trying to find their own identities and pretend to be other people. It thus helps in the re-examination of values and promotes the cultivation of rational ones (Ogunyemi, 2000).

Methods used in value-clarification teaching approach therefore include large and small group discussion; individual and group work; sensitivity and listening techniques; moral dilemmas; rank order and forced choices; songs and cart work; games and simulation; personal journals and interviews; and self analysis worksheet (Simon,1999). Simon (1999) has formulated a sevenfold process describing the guidelines of the value-clarification approach. They are (1) choosing from alternatives (2) choosing freely (3) prizing one's choice (4) affirming one's choice (5) acting upon one's choice (6) acting repeatedly overtime; and (7) willing to affirm the choice in public.

The inference that could be drawn from here, in reference to HIV/AIDS education in Social Studies, is that the youth(1) has an alternative of choice of living a life without AIDS or otherwise (2) may choose freely from alternative behaviours that avoid the risk of HIV/AIDS –The A, B, C and D of HIV/AIDS (3) weigh the importance of the choice (4) take a stand on choices of mode of prevention (5) insist on choice of prevention in the face of pressure (6) refuse to be persuaded when pressure is severe (7) sustain and be consistent in the avoidance of AIDS-risk related behaviour and situations. However the researcher has opted for the moral dilemma model of value-clarification. This may be because the task of HIV/AIDS education among sexually active youth is enormous; and the only way to address it is to create a dilemma for the youth against the value that they hold of risky and sexual behaviours that they engage in, as a result of emotional and peer pressures.

Thus, the question of relevance of moral dilemma model of value-clarification may be better answered in reference to Kohlberg (1963) theory of moral development. According to Kohlberg, everyone ought to act in terms of the universal value of human life; and that it is logical and desirable for all persons to respect human life. To Kohlberg, mature morality arrives when young people learn to make "right decision" using ethical principles based on logical comprehensiveness, consistency and universality. Kohlberg used an anecdote of a sick woman and a chemist who refused to give out a prescribed drug because the husband of the woman could not pay the cost of the drug that was ten times the original price, to illustrate a moral dilemma situation. The dilemmas were that the man broke into the chemist shop and stole the drug to save the life of his ailing wife. Then the question of whether to allow the woman to die, when the social norm of "not stealing" is respected or that the man violates the social norm in order to save the life of the woman arises (Oladele,1998).

Kohlberg opines further that the youth's moral judgment falls into post-conventional level of moral thinking where the individual focuses on justice as the major source of value. According to him, youths at the post-conventional level, examine values critically so as to conform with the norms agreed upon by whole society; and that it is when rights and rules are critically examined, that the youths know what is in order, and thus, avoid taking steps that may lead to self-condemnation (Oladele, 1998).

In a discussion of moral education, Grinder (1978) explains that moral education is a matter of role clarification, which are meant to forestall moral anxiety and strengthen resistance to temptation by emphasizing inductive disciplinary encounter. According to Grinder, young people direct their attention to the consequences of their behaviour; they are encouraged to assess how their moral choices affect the rights and intention of others, and that they are provided with sufficient autonomy to process information into an objective, comprehensive system of values. This may therefore explain why value-clarification is a useful short-term approximation to the discussion of moral dilemmas: apparently because it helps young people to become more purposive, creative, productive, analytical and respected. Thus, it is specifically useful in assisting young people to explore own judgment about matters of conflicting value interests, by which they are lead to clarify interpersonal role relationships.

In its practical sense, the standard of judgment or value should not be compromised at any level of human endeavour; and that is why the Social Studies teacher has a very significant role to play, using the moral dilemma model of value-clarification, especially with the emergence of new concerns such as population issues and HIV/AIDS epidemic (Ogunyemi, 2000). It is hoped that the strategy will assist by way of disabusing the mind of the youth against false precepts they hold such as seeing HIV/AIDS as an American Invention to Discourage Sexual intercourse or as the white-man's disease.

Ogunyemi (2000) provides a guideline for the application of the Moral Dilemma Model in teaching matters of population and sexuality education. He identifies five steps involved in moral dilemma approach to value-clarification. They are, confrontation of the dilemma, definition of terminology, explanation of terminology, testing reasoning for a position; and reflecting on reasoning for a position. Thus, in order to teach secondary school students to clarify their value on HIV/AIDS, the teacher has to introduce the dilemma to the students. All basic terminologies are to be defined; followed by the explanation of the nature of the dilemma(HIV/AIDS), vis-à-vis its mode of transmission, prevention, lack of cure, and how to relate to people living with HIV/AIDS. The learners are to be asked to take a position,(positive or negative) and then to explain why they have chosen such positions. It is expected that if this model is well applied in a Social Studies classroom where HIV/AIDS is slated for instruction, the secondary school students will learn better about HIV/AIDS, by demonstrating knowledge of the subject matter and eliciting desirable attitude towards the pandemic.

However, this last assertion may be regarded as a speculation, more importantly that there is little or no empirical fact to back up the proof of efficacy of the strategy in the Nigerian context. Although Ogunyemi(1994) experimented the moral dilemma model of value-clarification on pre-service teachers knowledge and attitude to population education, and arrived at a result indicating that it is efficacious, it is not certain that it may be useful in teaching secondary school students to acquire sufficient knowledge and develop desirable attitude to HIV/AIDS. Olagunju, Busari & Ogunbiyi (2004), who arrived at a positive result about the efficacy of peer-tutoring and role-play in teaching about HIV/AIDS in secondary schools using the science curriculum, suggest that there is the need to investigate the impacts of value-clarification on students' knowledge and practices that are HIV/AIDS-risky. Their emphasis on knowledge and practices

leave gap for an examination of attitude, which is a prerequisite for risk-related practices. These challenges have therefore motivated this study; which is out to experiment the efficacy or otherwise of the moral dilemma model, an aspect of value-clarification strategy, with a view to providing answers to the following research questions:

a. Will moral dilemma model of value-clarification be efficacious in assisting secondary school students to acquire relevant knowledge about HIV/AIDS?
b. Will moral dilemma model of value-clarification be efficacious in assisting secondary school students to develop desirable attitude towards HIV/AIDS?

Methodology

Two intact classes of Junior Secondary School Class One (JSS I) students participated in the study i.e. 147 and 130,who were selected as experimental and control group respectively. The rationale for the selection of JSS I students was that they are at the onset of puberty; and are vulnerable to peer and emotional pressures that may subject them to making mistakes of embarking on health-risk-related behaviours. They therefore deserve to be properly guided before they start to experience such pressures. It is hoped that they would be able to evaluate their actions and inaction after being exposed to values associated with living a healthy and sickness-free lives. The 147 students were exposed to a 7-day continuous instruction using the moral dilemma model of value-clarification. While the 130 students were involved in the regular school work which also involved teaching about HIV/AIDS under the topic "Health Institution" using the expository method. The set of students were from two different schools. A teaching plan of Moral Dilemma Model of Value-clarification on HIV/AIDS developed according to the proforma suggested by Ogunyemi (2000) is summarized viz:

a. **Confrontation of the dilemma**

Here, current statistics of people living with HIV/AIDS and the number of youth involved were provided. The teacher explained that if care is not taken, everybody may have AIDS, including the teacher and the students; and that everyone on earth could die one after the other and there will be no one to live on earth again. Students were guided to figure out the benefit between living as a healthy being or living with a sickness that will despise treatment and yet end up killing one. Here the problem of dying young and the value of living longer, healthy life is emphasized.

b. **Definition and explanation of terminologies in the dilemma**

Each of the following was defined and explained: HIV(human immunodeficiency virus); CD4 – cell or T – helper cell; Infectious disease; Opportunistic infections; Opportunistic disease(s);AIDS(acquired immune-deficiency syndrome); Unprotected sexual intercourse; Mother-to-child transmission; Sharing of sharp objects; Blood transfusion; Unhygienic circumcision; Signs and symptoms of HIV/AIDS(prolonged diarrhea),swollen glands, white spot in the mouth, severe weight loss, recurrent fever, nausea and vomiting, skin rashes etc.; How to prevent contact with HIV/AIDS - abstaining from sexual intercourse, being faithful to one's sex partner, condom used appropriately. Do not's of HIV/AIDS e.g. Do not (1) practise commercial sex (2) have unprotected sex (3) accept blood without evidence of laboratory screening (4) use sharp objects with other people - whether known or unknown to be infected or not etc; How to know exactly that one has HIV/AIDS - sero-status, voluntary HIV counseling and testing, ELISA, (Enzymes Linked Immunosorbent assay), HIV anti-bodies in the blood, western blot, antiretroviral medicines, immunity boosting, and so forth.

c. **The nature of the dilemma**

The teacher explains that "HIV/AIDS kills. Once its virus enters into the body, the person starts to manage his/her body. He/she will be living on drugs, most of whom have their negative consequences". Teacher guides the students to discuss the following consequences of HIV/AIDS - Physical: The person may have two or more of each of Nausea (feeling like vomiting.), diarrhea, migraine, headaches, dementia and insomnia; may be hospitalized for a long time, and be living on drugs, that require strict compliance. Emotional: Depression, anger, violence, despair, hopelessness, suicidal tenderness, dependency and helplessness. Social: Discrimination, stigma, rejection, abuse, ridicule, hate, fear, criminal behaviour and self-incarceration and sometimes prostitution; and Economical: poverty, unemployment, homelessness, hunger etc. "The teacher stresses that AIDS does not discriminate - The black, the white or red, the young and old, and a new baby can contract it. It cannot be cured, unlike other sickness or disease. The best way not to contract it is to avoid behaviour that will make one to contract it". The students were guided to have insight into, and to discuss how HIV/AIDS, sexually-transmitted diseases, unwanted pregnancy and drug use, relate to, and how they can affect longevity, health and wellbeing and career; and how fidelity and abstinence and proper condom use are best approaches to avoid contracting HIV/AIDS. The advantages derivable from prompt, voluntary and regular testing and counseling, proper use of drug, avoidance of rape tendencies and vulnerability, eating of health promoting good foods, exercise and rest were also discussed. The needs to assist people living with HIV/AIDS and not stigmatize them were also analyzed with a view to clarifying the values the youth already held about each issue.

Testing reasoning for a position

Here students were made to reason along, by taking common positions on value of having a career in a healthy sickness-free body; avoidance of unwanted pregnancy, or becoming a teenage father; value of voluntary HIV counseling and testing; helping people living with HIV/AIDS, and avoidance of illicit drugs use and rape.

Reflecting on reasoning for a position

Here reasons were adduced for positions that were taken above in the context of value for life(living and not dying),living healthy life, achieving one's life career goals, reducing pressure on the government, family and community and avoiding the risk of discrimination following contracting HIV/AIDS and having appropriate approaches to people living with HIV/AIDS by eliciting desirable attitude to them.

The teaching sessions were done by Social Studies teachers in each of the schools. The teachers involved in the moral dilemma exercise were trained on how to use the model; while teachers of the control group were encouraged to ensure that the scheme of work on Health Institution, a topic in the Nigerian JSS I curriculum is followed to the letter : so as to have a basis for comparison with the experimental group. Two research instruments were developed and validated by the researcher, namely Test of Knowledge of HIV/AIDS(r=0.74) and Test of Attitude to HIV/AIDS(r=0.78). The Test of Knowledge was a 30-item multiple choice objective test measuring knowledge of basic terminologies on HIV/AIDS, mode of transmission, prevention, stigmatisation and assistance of people living with HIV/AIDS. Other issues measured were HIV testing and counselling, management of HIV/AIDS and effects of HIV/AIDS on its patient, his/her family member, the government and the community. The Test

of Attitude, a 25-item instrument however measured prevention of HIV/AIDS, assistance for people living with HIV/AIDS, HIV/AIDS counselling and testing and HIV/AIDS management. The efficacy of the model was assessed following a post-test administration of the research instruments. The Test of knowledge was marked on a total of 30 marks for each research participant. Each participant's score was converted to a percent-correct score . The Test of Attitude, a 4-point scale, was graded over a total of 100 marks. The average(mean) scores of all the participants were found on each level(knowledge and attitude) and were then compared with the control group to examine which strategy is likely to be more efficacious in teaching for better understanding of issues surrounding HIV/AIDS and development of desirable attitude to the pandemic.

Results

Premised on the methodology above, results derived are presented according to each question below.

Research Question 1: Will moral dilemma model of value-clarification be efficacious in assisting secondary school students to acquire relevant knowledge about HIV/AIDS?

Findings – The total percent-correct score obtained by students that participated in the moral dilemma instruction was 9,337.44.With a total number of 147 participants ,the mean score obtained was 63.52.The control group had a percent-correct score of 3909.1.With 130 participants, their mean score was 30.09.The post-test performance of participants in the moral dilemma model of value-clarification group therefore averaged higher than those in the control group. By implication, the moral dilemma model of value-clarification may be more efficacious in assisting a better knowledge of HIV/AIDS issues than the expository method of teaching.

Research Question 2 : Will moral dilemma model of value-clarification be efficacious in assisting secondary school students to develop desirable attitude towards HIV/AIDS?

Findings – The total percent-correct score obtained by students that participated in the moral dilemma instruction was 10,672.2. With a total number of 147 participants ,the mean score obtained was 72.60.The control group had a percent-correct score of 6,182.8.With 130 participants, their mean score was 47.56.The post-test performance of participants in the moral dilemma model of value-clarification group therefore averaged higher than those in the control group. By implication, the moral dilemma model of value-clarification may therefore be more efficacious in assisting secondary school students to develop desirable attitude towards HIV/AIDS than when the expository method of teaching is employed in Social Studies.

Discussion

The Social Studies teacher is expected to be versatile in selecting appropriate teaching strategy in order to achieve the purpose for which a topic has been slated for instruction in the classroom. However, because the subject derives content from so many sources to form its own curriculum (Akinlaye, Mansaray & Ajiboye, 1996), the teacher is faced with the dilemma of determining which strategy will be most appropriate to execute a teaching plan. From the results obtained in this study, it is likely that the moral dilemma model of value-clarification will be a better teaching strategy, in order to make Social Studies' student learning about HIV/AIDS in the secondary schools to have a better knowledge and understanding of HIV/AIDS issues than when taught with the conventional method of teaching.

It therefore suffices to generalise that issues associated with risks and challenges and those which require decision making such as reproductive and family health and HIV/AIDS are better taught using value-clarification strategy if we want the students to learn better and to also develop desirable attitudes. This opinion buttresses what Ogunyemi (1994) said about the efficacy of the value-clarification strategies and also provides a response to Olagunju, Busari & Ogunbiyi's (2004) call for a research to test the efficacy of value-clarification strategy via the teaching of the learning content of HIV/AIDS in the classroom; with a view to suggesting whether value-clarification will be good to enhance better understanding of HIV/AIDS issues and the development of desirable attitude towards the pandemic.

Conclusion And Recommendation

Based on the findings of this study, it may sound good to conclude that the moral dilemma model of value-clarification strategy, if properly adapted, could be a good teaching method that may not only facilitate a better knowledge and understanding, but also reinforce the development of desirable attitude towards HIV/AIDS. Thus, it could be recommended that teachers of Social Studies should learn how to design appropriate moral dilemma model in teaching some of the Social Studies topics that are designed to train in decision making such as HIV/AIDS or Population and Family Life; bearing in mind that by this the learners will learn better and demonstrate better understanding of concepts and appropriate attitude and behaviour which are the hallmarks of any Social Studies instruction.

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Understanding The Guinean Education System: Evolution And Some Performance Indicators

By

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Abstract

This paper offers an overview of the Guinean education system with a special attention to its evolution and some of its performance indicators for both public and private schools in the country. It is hoped that the information provided in this paper can be a starting point for anyone interested in the education system of the Republic of Guinea.

Key words: Guinea, Education in Guinea, Evolution of the Guinean Education system.

The Rationale for This Paper

While working on my doctoral degree at the University at Buffalo, New York, I was asked to prepare a class project presentation on the Guinean education system. At the beginning, it seemed pretty easy for me due to my personal knowledge and experiences as a former high school teacher. In less than 24 hours, I came up with an outline for my project presentation. After reviewing the plan, my professor, expressed his enthusiasm about my project in these terms: “This topic will be a special interest to the class" and he added “When developing this outline, I want to you to include all the sources you will use to prepare this project and possibly bring some samples in class during your presentation. If someone is interested in exploring further the education system in Guinea, you can direct him or her to these samples as a starting point”.

I spent the following ten days searching the university libraries and other libraries in the area for sources that I could use to support my arguments and what seemed to be an easy task at the beginning revealed to be difficult. Even with the assistance of the most experienced librarian help desks at that time, I could not come up with a single coherent study addressing the Guinean education system. The few studies I found were studies conducted by governmental agencies such as the United States Agency for International Development (USAID) and other Non Governmental Organizations such as the World Bank, UNESCO, and so on. However, these studies targeted only specific areas of the education sector such as girls’ education, teacher training and the like. It became apparent to me that studies on the Guinean education system were conspicuous in their absence not only in English but also even in French, the official language of the country. This experience brought me home the necessity to come up with a coherent study that presents most, if not all, aspects of the Guinean education system.

Beginning with very succinct background information of the country, this paper; therefore, offers an overview of the Guinean education system. Special attention is given to its evolution

and some of its performance indicators for both public and private schools in Country. It is to hope that the information provided in this paper can serve as a starting point to anyone interested in the education system in the Republic of Guinea.

Republic Of Guinea

Country background

Republic of Guinea, a small country (245,855 sq. Km) in West Africa, gained its independence on October 2nd, 1958 after 60 years of French colonization. The capital is Conakry. It is often referred to as "Republic of Guinea, Guinea, or Guinea-Conakry" to distinguish it from Guinea-Bissau and Equatorial Guinea in Africa, and Papua New Guinea in Asia. Neighboring Countries are Guinea-Bissau to the northwest, Senegal and Mali to the north, the Ivory Coast (Cote D'Ivoire) to the east, Sierra Leone and Liberia to the south, and Atlantic Ocean to the southwest. The country is divided into four distinct geographical regions: Lower Guinea, the Middle Guinea (Fouta Djallon), Upper Guinea, and the Forest Guinea. The population of Guinea, according to the July, 2009 estimate, is about 10,057,975 with an annual population growth of 2.57%. The age structure of the population is as follow: 42.8% is below 15 years old, 53.7% between 15 and 64 years old, and 3.5% is over 64 years old (CIA, 2009).

Guinea is known to be one of the wealthiest countries in Sub-Saharan Africa in terms of natural resources. For example, it has 25% of the World's known reserves of bauxite, along with diamonds, gold, and other metals (World Bank, 1999). Yet, Guinea's per capita income is only $1,100 and its social indicators such as life expectancy (57.09 years) and literacy (29.5%) is among the lowest in Sub-Saharan Africa (CIA, 2009). The paradox here is how a very rich country that is not big in size and population can have such low social indicators even by Sub-Saharan standards. This question is difficult to answer, but the explanation in part resides in the country's governance structure and power system, to which we turn now.

Since independence in 1958, Guinea has experienced three types of government systems. The first regime which brought the country to its independence and took a socialist line, assumed power in 1958 and adopted the first constitution the same year and amended it later in 1982. The 1958 constitution laid the groundwork for the country to transition from colonial administration to self-governance. According to the Constitution, the President was elected by universal suffrage to a seven-year term; he was chief of state, the government, and the armed forces. There was only one political party, the Democratic Party of Guinea (PDG), from which the National Assembly, comprising 210 members, was chosen by unicameral votes.

After a military coup in April 1984, the PDG was outlawed, the constitution suspended, and the parliament dissolved. Guinea was then ruled by a president as head of the 17-member Military Committee for National Rectification (CMRN). In 1990, a new constitution was approved in a national referendum. It authorized a transitional government to oversee the change to a two-party civilian system with a unicameral legislature of 114 seats and universal adult suffrage. In 1992, amendments authorized an unlimited number of political parties. Under these amendments, the President of the Republic shall be elected for a term of five years by universal suffrage and may be reelected for a second term. Presidential elections were held late in 1993; legislative elections, after being postponed several times, took place in 1995.

In November 2001, however, the President, under the umbrella of his party decided to amend the constitution in spite of the opposition of the President of the National Assembly, the political leaders and majority of Guineans. This amended constitution allows the President to serve more

than two terms, increases the term from five to seven years and removes the previous age limit of 70 years for presidential candidates.

Up to December 23, 2008, Guinea was a republic, governed, in theory, by an elected president assisted by his appointed council (Ministers including the Prime Minister). Government administration is carried out at five levels. In descending order, they are: Eight regions, 33 prefectures, over 100 sub-prefectures, and many districts (known also as communes in Conakry-capital city and other large cities and villages or "quartiers" in the interior). District-level leaders are elected; the President appoints officials to all other levels of the highly centralized administration (CIA, World Factbook, 2009). Theoretically, all three branches of government (executive, legislative, and judiciary) exist; however, the legislative and judiciary are powerless in the sense that they operate according to the will of the executive.

After the death of Lansana Conte (president of the country from April 3, 1984 to December 22, 2008), a young military officer --Captain Moussa Dadis Camara--took power, suspended the constitution, and proclaimed himself as the president of the Country. Since then, Guinea is ruled by a junta who promised to organize democratic election in 2010; however, the outlook for the Country with this new leader does not look bright for the Guineans people and the international community. With this background information, we shall next see how the government system under the first two regimes influenced the education system in Guinea.

The Guinean Education Sector

Education is a process by which an individual acquires knowledge and skills necessary for appreciating and adapting to the environment and the ever-changing social, political and economic conditions of society and as a means by which one can realize one's full potential. (Kirumba, Chediel, and Sekwao, 2000, p.61). Without education, development will not occur. Only an educated people can command the skills necessary for sustainable economic growth and for a better quality of life. (World Bank, 1988, p.v.).

Recognizing this importance, African governments have accorded significant importance on increasing educational opportunities in their nations. In spite of this commitment, education in Africa is still lagging far behind the rest of the world. For example, out of 40 million African children of primary school age, half are not attending school. Further, the same source estimates that by the year 2015, 75% of all the school age children in the world not attending school will be Africans, even when the continent has only 12% of the world's children (Sunday Observer, 1999). Guinea is not an exception in this crisis. The evolution of its education sector provides abundance evidences regarding what has or has not been achieved so far.

Evolution

The development of the education sector in Guinea has gone through three historical periods: Before the independence, from the independence in 1958 to 1984, and from 1984 to date (Wann, 1999).

Before the independence in 1958

The first schools to be established in Guinea were run by Catholics and there were only three schools for the whole territory which became French Guinea in 1901 and later the actual Republic of Guinea in 1958. These schools were extended to other major cities in the country and continued to function until 1967 when the missionaries were expelled. At the end of the19th

Century, 360 children were attending schools, and as recently as 1937-38, less than 1,000 children were attending schools (about 800 at the elementary level and about 200 at the secondary level). At the time of the creation of the Party Democratic of Guinea (PDG) in 1947, the figure increased to about 11,000 pupils at the elementary level and about 5,000 at the secondary level. However, only 839 Guineans had the chance to complete secondary school courses while 657 attended vocational schools. After 60 years of domination, only about 162 privileged students got scholarships and went to attend higher education in France.

From the independence in 1958 to 1984

After the country gained its independence on October 2nd, 1958, the newly independent state opted for the spreading of general education schools, vocational training schools and universities. In 1957/1958, there were 450 classes at the elementary schools and 65 classes at the secondary level, but by 1966/1967, the numbers increased to 3751 classes at the elementary level and 882 classes at the secondary level. In August 1961, education in Guinea became free and compulsory (in theory) until the baccalaureate level (end of 12 or 13 grade). Realizing that the nation's educational policy was leading to the training of a large majority of pupils, the state educators, in 1975, started the creation of faculties in all major cities or regions to supplement the two existing universities (Conakry and Kankan) in order to provide more access to higher education after secondary schools. The secondary school teachers training of Maneah created in 1978-1979 became the higher education institute of sciences in the 1990s.

From 1984 to date

With the collapse of the first regime in 1984, the new government decided to adopt new educational policy, which aimed not only to make education available to all Guineans, improve internal and external efficiency, and remove social inequities in the system, but also to relate education to employment opportunities. With these new changes, Guinea's pre-university educational system succeeded in accommodating 1,268,734 students (997,645 in the primary and 271,089 in the secondary) in the academic year 2001/2002 (Ministry of Education-Guinea, 2002) and 1,843,570 students (1,317,791 in the primary and 525,779 in the secondary) in the academic year 2006/2007.

The Guinean educational policy adopted in the last two periods (1958 to 2008), which we discuss next, has had a mixed effect on the educational system of the country.

The educational policy

From the date of independence in 1958 to the end of the first regime in 1984, the Guinean government pursued a unique educational policy. Major parts of this policy aimed not only to eliminate the French education system that existed before independence and replace it with national languages in all primary school levels (Urch, 1992) but also to link the education system to the political party at the local, regional, and national levels. In theory, primary school was compulsory and lower achievement requirement for access to secondary school was set for females and a quota was reserved for them to the higher education institutions. However, the nature of the reform, combined with poorly trained teachers and rapid enrollment growth resulted in a low quality of education, inadequate external efficiency, and inefficiency in the allocation of scare resources. Moreover, the transition from primary school where the medium of instruction was in national languages, to secondary school, where the medium of instruction was in French, reduced student comprehension in secondary schools and therefore, undermined the quality of higher education.

These policies remained in use in the Guinean education system until the collapse of the first regime in 1984. After the fall of this first regime, a new program of reform and rehabilitation was initiated to improve access to education and the quality of education. French was re-introduced as the medium of instruction at all levels, but the ability to perform well in the new system was compromised by the fact that two generations of teachers were not trained to teach in French. In spite of this ambitious program, the reform remained incomplete due to lack of resource intended to support the policy. A more coherent orientation was introduced by the new educational strategy of 1989/1990 policy which was a structural adjustment in education. The goals of this new education strategy were to increase the resources allocated to education, increase access to school, improve the quality of the education system, promote equity, strengthen the Ministry's capacity for management and stimulate decentralized planning and management. If this new policy has been a success in terms of planning and objectives and has attracted many donors, it has not been successful in meeting its target because of the conditions governing the policy implementation. Consequently, this and other previous policies have had a very limited success (World Bank, 1995, 1999, & 2002; Diallo, Back, & Hickson, 2003).

Administration and decisions

Three ministries are responsible for all decisions and administration regarding educational matters in Guinea: the Ministry of Lower Education known as Pre-University and Civic Education (MEPU-EC), which is responsible for all primary and secondary education (academic) and Civic Education and Literacy; the Ministry of Technical Education and Vocational Training (METFP); and the Ministry of Higher Education and Scientific Research (MESRS). For this paper; however, the focus is on the Ministry of Pre-University education. This Ministry pilots all pre-university structures through 8 regional academic inspectorates (IRE) which in turn, pilot 38 prefectoral-level Directorates of Education (DCE) and 210 sub-prefectoral pedagogic delegates.

Structure of the education system

The education system in Guinea is organized into a 6-4-3-3(5) plan (6 years in primary, 4 years in middle, 3 years in high schools, and 3-5 years in the tertiary). In addition to this plan, a number of post-secondary vocational programs exist of varying length (Word Bank, 1995; Diallo, 1999). During the academic year, students in primary school typically attend classes 5 days a week from 8:00am to1: 00pm. In the secondary level (middle and high school), students attend 6 days a week from 8:00am to 2 pm with slight variations on Fridays and Saturdays and slight variations for private schools. The academic year in Guinea generally starts on October 5th and ends on July 2nd each year. During this period two holidays are given, from December 23rd to January 2nd and from April 4th to April 11th, in addition to the general vacation that starts on July 2nd and ends on October 4th each year.

The professional status of elementary and secondary teachers in Guinea

Teachers' professional status in primary and secondary education in Guinea is difficult to define since teachers operating at these levels come from different educational backgrounds, especially in the middle and high schools. That is why it is not surprising to find different categories of teachers teaching in the secondary levels. Most are qualified teachers; however, there is a small portion of under qualified teachers or non-qualified teachers that are being utilized.

At the primary level (grade1 to 6) there are two categories of teachers. The first is the category of teachers who had nine years of basic education (end of middle school at that time) and three years of full time courses of elementary education degree from an elementary teacher training institution known as Teacher Training Institute (ENI). About three decades ago, teaching in the elementary levels required this status. Through the years, the requirements changed from 9 to 12 plus the three years educational training mentioned above for the second category of teachers. Teacher education programs of this level consist of courses in general education and pedagogy, with a short period of time of teacher observation and teaching practice in the classroom. Graduates from this program may teach any subject in any grade in the elementary because they do not need to be specialized in a specific subject in order to teach at this level.

At the secondary level, there are four categories of teachers, listed here by order of status from the lowest to the highest in terms of teaching profession.

As in the primary level, the first category of teachers receives three years of full time courses in a teacher-training institute specialized in training teachers. However, unlike the primary level, this category of teachers must hold a high school diploma that can be gained after 13 years of basic education accompanied with the national examination. A candidate who succeeds in this examination can be allowed to continue in the secondary teachers training, if he or she desires to become a teacher. He or she can be specialized in one or two school subjects and be certified to teach at the middle school level.

The second category includes teachers who have not initially intended to go into teaching. These teachers also graduated from agricultural schools and hold a bachelor degree in one domain related to agricultural areas. Because of unemployment in the field they were aiming for, and because of the need for teachers in the education system, the government decided to give them a short period of training to allow them to become teachers in some subjects that are closely related to their specialization. Most are teaching in the middle schools, but a small portion (those who showed good skills and mastery of their subjects) are teaching at the high school level too.

The third category comprised of teachers who have a bachelor degree in science or mathematics or social science. Those teachers are University graduates from either inside or outside of the country. They have concentrations other than the teaching profession, such as doing research or working in the laboratory fields. Here also, because of a lack of employment opportunities in their fields, they are allowed to teach in their subject areas either in middle or high school or both, depending on their performance.

The last category is the category of teachers who hold a bachelor in science or mathematics or social science from a higher education institute aimed uniquely for the teaching profession. Most of them are teaching in the high school levels, but a few of them can be found in teaching situations either at the middle school level or at the university level. Those teachers are specialized in one or two subjects.

Curriculum:

The Ministry of Pre-University Education and Civic Education (MEPU-CE) through the National Institute for Pedagogical Research and Action (INRAP), with the assistance of other institutions, develop the core curriculum for primary and secondary education (divided into primary, middle, and high schools). The weekly lesson timetable in these three levels is as follow:
General elementary education: Weekly lesson timetable

Subject	***Number of weekly hours in each form***					
	1st	***2nd***	***3rd***	***4th***	***5th***	***6th***
French Language*	15:30	15:30	14	14	13:15	13:15
Calculus	5	5	5	5	5:00	5:00
Sciences observation	1	1	1	1	1:30	1:30
History	---	---	1	1	1:30	1:30
Geography	---	---	1	1	1:30	1:30
Civic instruction	1:15	1:15	1	1	1:30	1:30
Arabic	---	---	---	---	---	---
Physical education	1:30	1:30	1	1	1:30	1:30
Total Weekly hours	**---**	**---**	**---**	**---**	**---**	**---**

** For French language, school heads reported different weekly hours (ranging from 7 hours to 25 hours) both between and within schools in the two sectors (public and private) and one private school did report additional activities such as writing, drawing, and practices*
Data source: from participating schools-Guinea (Barry, 2009)

First cycle of general secondary education (Middle school): Weekly lesson timetable

Subject	***Number of weekly hours in each form***			
	7th	***8th***	***9th***	***10th***
French Language	8	8	8	8
History	2	2	2	2
Geography	2	2	2	2
Mathematics	6	6	6	6
Physics	3	3	3	3
Chemistry	2	2	2	2
Biology	2	2	2	2
Civic Education	1	1	1	1
English/Arabic	2	2	2	2
Physical education	2	2	2	2
Total Weekly hours	**30**	**30**	**30**	**30**

Data source: International Bureau of Education (2002)-UNESCO

Second cycle of general secondary education (High School): Weekly lesson timetable

Subject	***Number of weekly hours in each form (11th, 12th, and 13th)***		
	Social Sciences	***Sciences Mathematics***	***Experimental Sciences***
French Language	6-8	4-6	4-5
History	2	1	1
Geography	2	1	1
Mathematics	4	8	4
Physics	2	5	4
Chemistry	2	4	4
Biology	2	1	4

Economics	2	1	1
Philosophy	2-4	1-2	1-2
Geology	-	-	2
English/Arabic	3	2-3	3
Physical education	1	1	1
Total Weekly hours in each form (maximum)	**30**	**30**	**30**

Data source: International Bureau of Education (2002)-UNESCO

Students' Examination

Student examination is divided into two categories: standardized national examination and local evaluation. Each year the Ministry of lower education organize a standardized national examination at the end of the following grade levels: 6th (end of the primary school), 10th (end of the middle school), and 12th and 13th (end of the high school). Local administrators and teachers are given authority to evaluate the remaining intermediate grade levels (1 to 5 for primary school, 7 to 9 for middle school, and 11 for high school).

Even though progress has been made in the education sector in the last decades, the performance indicators produced by the ministry of education suggest that the sector still faces enormous challenges and some of these challenges are highlighted in its annual performance indicators.

Major sources of education finance

Like other countries in Sub-Saharan Africa, education financing in Guinea comes from different sources, which can be classified into three major categories: government, foreign partners, and households (Students/parents).

Government

Almost all recurrent spending for public education is financed by the government with tuition being covered for all levels including public higher education. In the last years, as the table below shows, government financing of the education sector has been up and down which suggests scarce financial resources for education.

Evolution of the education budget versus the national budget from 1991 to 2002 (in 1,000 GNF)

Year	National budget	Education Budget	% of government exp.	% of GNP
91	178,224,000	45,831,274	25.7	2.1
92	236,237,500	59,442,000	25.2	2.1
93	251,355,000	65,434,000	26.0	2.2
94	265,039,000	61,676,500	23.3	1.9
95	250,376,000	69,442,750	27.7	2.0
96	280,669,000	71,850,285	25.6	1.9
97	286,268,000	76,701,927	26.8	1.9
98	301,338,000	77,810,459	25.8	1.7
99	323,206,550	96,679,660	29.9	1.7
00	392,400,000	100,543,330	25.6	1.8

01	531,610,886	150,707,400	28.3	1.8
02	849,322,031	204,034,730	24.0	2.3

Distribution of the 2000 education budget among its sub sectors:

Sub sector	Number Students (%)	Exp. (%)	Salaries (%)	Goods & Services (%)	Transfers (%)
Primary	77.0	43.9	87(69,18)	13	0
Secondary General	21.0	23.2	85(50,35)	15	0
Secondary Tech	0.7	9.6	50(29,21)	48	2
Higher Education	1.3	23.3	43(21,22)	8	49

As the table shows, the share of primary education in total education expenditure in 2000 is estimated to be 44% and salaries consume the major share 87% (69% for teaching and 18% for non-teaching personnel) while the remaining (13%) is used for goods and services because there are no transfers (scholarship, stipends, etc…). For the other educational levels, the scenarios are similar to the one described at the primary level.

Foreign partners/Donor agencies

Like other Sub-Saharan countries, the education sector in Guinea is supported by many foreign partners/donor agencies. However, this support generally targets specific components of the integrated sector development plan identified by the Ministry of Education as priority areas. The major participants, among others, contributing to the development of education in Guinea, as indicated in one project financed by the International Development Association (World Bank, 1995), are: International Development Association (IDA), African Development Bank (AfDB), United States Agency for International Development (USAID), United Nations Educational, Scientific, and Cultural Organization (UNESCO), United Nations International Children's Emergency Fund (UNICEF), European Union Development Fund (FED), France, Canada, and Japan.

Parents/students

Similar to many countries in Sub Saharan Africa, parents in Guinea make valuable contribution to the education of their children through the payment of fees of various kinds. Parents are expected to cover the cost of textbooks, uniforms, meals, and transportation for their children to get to schools. Moreover, parents participate in fund raising organized by schools or parent unions. In addition to the cost described above, parents/students in private schools pay monthly tuition fees and these fees vary from one school to another.

Performance Indicators: Strengths And Weaknesses

In the past years, the growth in primary education has been very significant in terms of increasing student enrollment. For instance the total enrollment rate of elementary students in the nation has increased from 31.9% in 1991/1992 to 72.0% in 2001/2002 and to 79% in 2006/2007. As a result of this increase at the primary level, secondary education enrollments have experienced a 23.48% increase in 2001/2002 to 37% in 2006/2007. Efforts have also been made to increase the number of schools, teachers, and administration in order the match the

growth in the student population. The following table provides the success and limitations of this reform.

Education Indicators		**1991/1992**		**2001/2002**		**2006/2007**	
		Primary	***Secondary***	***Primary***	***Secondary***	***Primary***	***Secondary***
Eligible for enrollment		1126289	---	1393820	1,192,862	1,676,284	1,411,742
Total Enrolled		359,406	87,975	997,646	271,089	1,317,791	525,779
Net enrolled		***31.9%***	***-***	***72.0%***	***23%***	***79%***	***37%***
Number of Teachers		7374	4572	21,125	7,246	29,049	13,337
Number of schools		2,586	235	5,278	512	7,124	866
Number of classes		8415	1897	23,655	4,142	30,486	6,460
Ratio	***Students/class***	***43***	***46***	***42***	***65***	***43.2***	***81***
	Students/teacher	***49***	***19***	***47***	***37***	***45.4***	***39***

Extracted data from the Annual statistics, Ministry of Education (2002 & 2007)

In spite of this increase in number of teachers, schools, and administrators, schools and classes are still overpopulated. For example, an estimate of class sizes in urban areas vary from 45 to 95 children in each class without forgetting that multi-grade teaching is widely practiced in rural areas. For instance, teachers in multi-grade teaching account for 12% of total teachers, about 10% of all classes are used for multi-grade teaching and 13% are used for two shifts. To reduce class sizes, a large number of contractual teachers, about 44% of all teaching personnel were recruited in 2000, but their low salaries resulted in a high turnover rate and low morale. Because it was not able to retain these contractual teachers, the Ministry of Education was obliged to hire 1500 teachers as permanent employees in 2001, but the problem here was that not enough resources were devoted to in-service teacher training, leading to a lack of pedagogic skills particularly for contractual teachers who did not receive adequate teacher training to improve their skills (World Bank, 2002).

Other areas that cause serious concerns not only to parents and students but also to many educators are the high rate of repeaters and drop outs. If students fail to graduate or move to the next level, the first option they choose, in most cases, is to repeat the grade level; however, failing to succeed in the second attempt leads to a removal of the student from the education system. The 2002 statics is informative in this respect as illustrated in the table below.

Efficiency Indicators	**Primary**		**Secondary**			
			Lower		**Upper**	
	Boys	***Girls***	***Boys***	***Girls***	***Boys***	***Girls***
Repetition rate (%)	28.1	31.5	29.4	25.8	35.4	41.1
Dropout Rate (%)	4.1	7.4	7.9	11.7	6.4	16.1
Years to complete the cycle	8.5	9.1	5.7	6.2	5.2	4.8
% completing the cycle	66	37	50	40	60	23
Survival rates	73	48	76	71	67	45

% joining secondary	48	38	-	-	-	-

Data obtained by the World Bank (2002) from the annual statistics of the Ministry of Education

In response to these concerns and changes in government policy toward the private sector, private education is being accepted as an alternative to public education in Guinea. As a result of this acceptance, the share of the private sector in the education system is growing year after as the table below demonstrates.

Share of private education in the nation in 2002-2003 & 2006-2007

Acad. Year	*Level*	*School type*	*No. school*	*No. Students*	*No. teachers*	*No. Admin.*	*No. Classes*	*Students Per Class*
2002-2003	Elementary	Public	4261	836330	17038	---	16821	49.7
		Private	1195	218601	6430		7243	30.2
		Community	309	18527	391	---	427	43.4
		Total	5765	1073458	23859	---	24491	43.8
	Secondary	Public	359	265116	5740	---	3353	---
		Private	198	36375	2669	---	1397	---
		Total	557	301491	8409	---	4750	63
2006-2007	Elementary	Public	5135	967629	20102	---	20363	47.5
		Private	4540	325575	8414	---	9518	34.2
		Community	119	24587	533	---	605	40.6
		Total	7124	1317791	29049	----	30486	43.2
	Secondary	Public	445	427481	7445	1253	3928	108.8
		Private	421	98298	5892	1076	2532	38.8
		Total	866	525779	13337	2329	6460	81.4

Extracted data from the Annual statistics of the Ministry of Education 2002-2003 and 2006-2007

After showing, in the above table, the evidence that the private sector is being a reality in the Guinean education system, now let us look at the academic performance indicators of each sector (public and private) on the national examination.

Performance indicators between students in public and private schools on the national exam for the academic year 2002-2003-Guinea

2002/2003		**Private**			**Public**		
Level	Grade	Students	Repeaters	**% passing**	Students	Repeaters	**% passing**
Upper Secondary	13th	1,223	99	**91.9%**	14242	6423	**54.9%**
	12th	3,216	279	**91.3%**	28714	15845	**44.8%**
Lower	10th	5,066	483	**90.5%**	38226	11067	**71.0%**

secondary							
Elementary	6th	21,762	2,949	**86.4%**	102,288	36,553	**64.3%**

Extracted data from the Annual statistics of the Ministry of Education 2002-2003

The above statistics on student performance show that private school students are outperforming their public counterparts in these examinations. For example in the academic year 2002/2003, students success on the national exam in private school in the 12 and 13 grades were respectively 91% and 92% against 45% and 55% in the public schools.

Summary

The background information of the country has revealed that Guinea has gone through three phases: before independence in 1958, during independence 1958 to 1984, and from 1984 to date. In each of these periods, different policies have been adopted to guide the education system of the country based on its economic, political, and cultural context. Some of these policies had abolished the private schools that existed before independence and replaced them with government schools. Furthermore, the medium of instruction (French) was replaced with national languages in all primary schools and also linked the education system to the political party at the local, regional and national levels. However, with the changes in government system, the policies toward private education and limitations of public resources to face the new challenges (access and quality) forced the new government to reverse these policies. Since then, private education has been reintroduced again and as the share of private education in the nation shows, the private sector is growing year after year and students from these emerging private schools are outperforming students in the public sector in terms of academic performance in all levels. Investigating the factors contributing to these differences in academic performance between students in public and private schools is worth exploring in the future.

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Tradition is Worth Mining: Integrating Indigenous Community Education to the Overall Educational System in Nigeria

By

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Abstract

The concept of community education has different meanings for different countries, depending on the country's overall socio-cultural, political and economic status. The objective of this paper is to examine community education and its implications for changing lives for the better in Nigeria. To achieve this objective, this study takes a rear view of the indigenous community education in Nigeria. This is to create an awareness that indigenous community education has values that if exploited, can make a difference for better living in Nigeria. The paper therefore underscores the need to integrate indigenous community education into the overall educational system as a panacea for growth and development. The content and methods of Nigerian indigenous community education are highlighted. Thus, if integrated into the overall educational system, the indigenous community education can serve the marginalized in the Nigerian society. In establishing the priorities for integrating indigenous community education into overall educational system in Nigeria, the study advocates for political favor and adequate funding that can facilitate a mixture of such formal, informal and non-formal education for better living in Nigeria.

Introduction

From time immemorial, cultural expression has been used to pressure for change (Kleymeyer, 1996). This implies that tradition is worth mining with village elders as living books. Levine (1996) asserts that reclaiming the histories of indigenous peoples is a first step towards securing better future. Therefore, according to Akinrinade (2005), a nation that ignores its history and which is not concerned with how much of its history and culture is passed on its youth and future generations is in grave danger.

However, to date, emphasis has been placed on formal western education in Nigeria to the utter neglect of indigenous community education. The current popularly held view is that Information and Communication Technologies (ICTs) are to be applied and adopted as instruments per-excellent to widen access to education, blaze paths to development and spur economic growth (Velzeboer, 1996; United Nations Development Program (UNDP), 2002; Keegan, 2004; Olofsson and Lindberg, 2005 and Oduaran, 2006). Notwithstanding, poverty constrains access to, and effective use of ICTs in developing nations and women in all parts of the world suffer double jeopardy (Mejiuni and Obilade 2006). Also, up till now, the application of ICTs to the present educational system has not reduced the socio-cultural and economic problems permeating the Nigerian society. In this case, there is a growing interest among researchers, sociologists, anthropologists, historians, adult and community educators to explore indigenous community education in Nigeria with a view to integrating it to the formal Western education. The argument has always been that indigenous education negates elitism, monopoly, social barriers, and privileges in favour of any one person or group.

This article explores the value of indigenous community education to be uncovered, preserved, revitalized and transferred by integrating it to the formal western education. Such an integrated educational system backing up with government policy remains a gate way to foster the future development of Nigeria.

Operational Definition of Indigenous Community Education

The term "community education" enjoys a variety of definitions. In developed countries, for example, community education may be observed in terms of expanding existing services around resources such as those of a school, available for wider use by the local community (Anyanwu, 2003). Whereas, in developing countries, it could be concerned with the growth in a community of a political awareness that will encourage the people to press for educational or social change. Community education from this vantage point is not unprecedented in Nigeria. For example, the incidence of mass education to promote environmental sanitation, or to accept immunization against preventable diseases, or to mobilize for social and economic reconstruction is a strong case to illustrate the peculiarity of community education. This fact lends credence to the belief expressed in the Dublin Declaration (1983) cited in Anyanwu (2002), that, all people must practice community education according to their own history and experience and to the end that education for all will relate to the issues of everyday life and to the betterment of individual and social life.

The term indigenous community education in Nigeria is operationally defined in this paper as ubiquitous and non-formal learning activities peculiar to the indigenes of a particular community at pre-literate and pre-colonial era that groups or individuals undertake for their personal, community, socio-cultural and economic development. Its primary focus is learning by doing for the training of intellect, imparting technical skills as well as moral values.

Indigenous community education in this regard has considerable flexibility in the conditions in which learning is offered and the community as context. In the past, every member of the society had access to indigenous community education, and the entire community was the teacher. Also, it was a type of education promoting ubiquitous learning as it took place anywhere. Today, literature is replete on this type of education (Majasan, 1967; Smelson, 1974; Tiberondwa, 1978; Adeyinka, 2000; Coetzee and Roux, 2000; Sarumi, 2001 and Adeyinka 2006). Also, there is a growing awareness to have a rethink of indigenous community education for possible integration to formal school system for future development (Ocitti, 1973; Fafunwa, 1974 and Adeyinka, 2006). This explains why the Federal Republic of Nigeria sees the need to promote functional education by exploring the legacy of indigenous community education. What makes indigenous community education to be thus coveted for and its integration to the contemporary education essential is that it is comprehensive, effective, work- oriented, less expensive, flexible, all-embracing, continuous, community based, people oriented, attractive, useful, relevant, problem solving, honest, firm, fair and makes people accountable to God (Sarumi, 2000).

Principles of Nigerian Indigenous Community Education

The Nigerian indigenous community education was premised on solid philosophical foundations. Ocitti (1973) cited in Adeyinka (2006) rightly identified these foundations or principles, as preparationism, functionalism, communalism, perennialism, and holisticism.

The principle of preparationism implies that the role of learning and teaching in pre-literate Nigeria was to equip community members with the skills appropriate to their gender in preparation for their distinctive roles in society. (Adeyinka, 2006). In this case, indigenous

community education in Nigeria has done much to meet the needs of our people. It was much the same as contemporary human capital development. Male education thus produced farmers, warriors, blacksmiths, rulers, and other workers in male dominated occupations from which women were excluded. On the other hand, female education was predominantly designed to produce future wives and mothers. The principle of preparationism in this wise meant to develop a sense of obligation in community members towards the community. Thus, they grew to appreciate the history, language, customs, and values of the community in readiness to build a dynamic society.

Functionalism was another principle upon which indigenous community education in Nigeria was rooted. Learners acquired skills through imitation, initiation ceremonies, work, play, oral literature. In this regard, there was no gab between study and the world of work. According to Sarumi (2001), emphasis on functionalism was perhaps one of the greatest attributes of indigenous community education which made unemployment difficult in pre-literate and pre-colonial Nigerian society.

The third principle of indigenous community education was communalism or corporate life. Individuals were educated in and for the society ways of life and within the ideological parameters of communalism (Wagner, 1993; 1999; Ocitti, 1994; Sarumi 2001). The implication was that all members of the community owned things in common and applied the communal spirit to life and work (Adeyinka, 2006). For example, children belonged to the community, and every member of the community had a stake in their upbringing. Also, there was in place traditional thrift and credit system whereby individual members of community contributed fixed amounts in cowries at regular intervals. Collection was done rotationally among members of the thrift and credit group at a specified time. Money collected in bulk could be used for a worthwhile venture. This was a poverty reduction strategy in pre-colonial era in Nigeria.

Perennialism formed another philosophical foundation of indigenous community education in pre-literate Nigeria. In this sense, education was regarded as a vehicle for maintaining or preserving the cultural heritage and status quo. According to Adeyinka (2006), education in indigenous African Communities was conservative in nature. This explains the reason why it had only a little progressive influence on the minds of young people (Suelson, 1974; Adeyemi and Adeyinka, 2006).

Holisticism, or multiple learning constituted the fifth philosophical foundation of indigenous community education in Nigeria. This enabled community members to acquire a variety of related skills which made them productive in many ways. In this case, a man could work as a builder, farmer, or fisherman while a woman was a gardener, housewife, and cook, besides being a nurse to her children (Adeyinka, 2006).

In view of the above analysis, it is ostensibly clear that indigenous education in pre-literate and pre-colonial Nigerian society had its in-built mechanism for growth and development. It was comparable to the four pillars of learning formulated by Faure, et al (1972) and Delors, et al (1996). The four pillars of learning ("learning to know", "learning to be", "learning to do", and "learning to live together") had been the core of the indigenous community education in Nigeria even before the advent of the Europeans into the country.

The content and methods of Nigerian indigenous community education

The society was a key factor in determining the content of instruction in pre-colonial Africa. This was with the view of making education germane to the socio-cultural milieu of the community.

According to Adeyinka (2006) the physical, social and spiritual environment influenced the content of the curriculum in that what was taught was meant to assist community members in adjusting and adopting to the environment in order to exploit and derive benefit from it. For example, community members learned about the landscape, the weather, and plant and animal life. Such knowledge afforded community members to take good advantage of both plant and animal life in their locality.

The physical situation-mountain, plain, river or tropical forest also influenced what practical skills community members acquired. Therefore, those living in riverine areas learned such skills as were required to catch, preserve, and market fish. In addition, they learnt how to manufacture and mend fish-traps, nets, and canoes. In this way, the physical situation and social environment determined the subject matter in indigenous community education. This did not leave room for unemployment or underemployment since teaching and learning went hand in hand with profitable occupational activities.
A wide variety of teaching methods were used to transmit knowledge and skills, in indigenous community education system. The informal method was commonly used with emphasis on imitation and learning by doing. Specialists in professions such as traditional medicine, hunting, weaving, copper and iron manufacturing, divinations and drumming were engaged to teach. According to Wagner (1999); Sarumi (2001) and Adeyinka (2006), both theoretical and practical approaches were employed in teaching. Pupils were encouraged to recite poems, riddles, songs, proverbs and folklores.

Despite the absence of literacy, the Nigerian indigenous community education offers unique legacy that if exploited through integration to formal system of education can induce sustainable change and development.

Strategies for integration

Effort has been made to examine what indigenous community education means, its principles, contents and methods. This is with the view to determining the strategies for integration with the contemporary formal educational system. Aderinto and Akande (2007), opine that the aim of education undoubtedly is to develop the individuals or groups to acquire the necessary skills that will enable them live productive lives. Both formal and non-formal types of education are geared to accomplish this aim. To this end, the need to integrate both systems for common goals and purposes is long overdue. To achieve this goal, strategies for integrating indigenous community education (a type of non-formal education) and formal type of education are highlighted in this work.

First, the rich legacy of indigenous community education which is gradually passing into oblivion should be revitalized. This could be done by integrating indigenous community education and cultural practices into the formal school curricula at all levels from primary to tertiary institutions. The curriculum development organizations such as the Nigerian Educational Research and Development Council (NERDC) and the National Universities Commission can play a key role in this respect.

Second, students are to be encouraged to actively participate in key socio-cultural functions such as festival days, community days, community youths festivals. Such occasions can provide among the students, vast knowledge in history, geography, economy and socio-cultural set-up of a community as pivotal components of indigenous community education. Communities with diversified traditional cultures can be coalesced, share their views and value systems to enrich the knowledge of students in indigenous community education in Nigeria.

Third, programmes of non-formal education such as indigenous community education should be standardized and given recognition by the formal sector.

Fourth, accreditation of indigenous community education programmes, and making them equivalent to that of formal education would give students incentive to be more patriotic and contribute to the development of the community.

Fifth, adult and community educators, historians, sociologists and anthropologists, researchers and experts in the Nigerian languages, traditions and cultures should be encouraged to showcase the value-laden cultural and historical heritage of Nigerian indigenous community education to the outside world through international conferences, seminars and workshops. Such fora should enjoy the full support of governmental and non-governmental organizations in terms of financial assistance and political backing.

Policy Issues for future development

According to Aggarwal (2004) there is an absolute need for the evolution of a sound national policy on education by making large – scale changes in the present system in order to meet the growing requirements of the country. This corroborates the opinion of Chunman (2002), cited in Adeyinka (2006), that future education policies should focus on eliminating evil and promoting benevolence, promoting original human nature and discarding the negative aspects of the human mind. From every indication, this is more than the formal school can give. Therefore, the learner of the future should not depend on the formal school for all his or her education (Adeyinka, 2006). This brings the essence of the integration of indigenous community education as a non-formal type of education and the western type of formal education into fore. Adeyinka (2006) asserts that if the present formal, western-oriented education in Africa is complemented by the traditional education system, the African educational system would be given a new lease on life and become an education that would adequately equip the young to discover their beliefs and become critically aware of what they truly need for a rich existence.

Indigenous community education, a form of non-formal education is not tied to a rigid curriculum, to structured and manipulative examination processes, or to grades and certificates; it does not rely on compulsory attendance, it is not licenced by the state to wield a monopoly of "certifiable knowledge". In this wise, indigenous community education as a form of non-formal education if blended with formal education can transform the present educational system in Nigeria. In the first place, it will widen access to education as social justice. In addition, it will provide an enabling environment where children, adolescents, and adults can acquire the knowledge and skills they need to engage in profitable occupations of their choice (Adeyinka 2006). This will reduce the unemployment and under-employment cases in Nigeria. This implies that Nigeria should now start to operate as totally comprehensive educational system – comprehensive both in policy and in structure for community and national development. The integration of indigenous community education to formal education remains the gate-way to enhance the acquisition of both theoretical /technological and speculative /intellectual knowledge.

Conclusion

Effort has been made in this paper to underscore the need for integrating indigenous community education as a form of non-formal type of education to western formal education. The thrust of the paper is that much could be learnt from the past. Indigenous community

education is laced with rich and educative culture of Nigerians, if dredged up, modified, it will satisfy the needs, aspirations and occupational expectations of the local beneficiaries. In this regard, whatever is good in indigenous community education that could lead to more functional education could be accepted and incorporated into the existing pattern, content and methods of formal western education in Nigeria. This, believingly will enhance better and more effective social, economic, and political organization, and a better life for all in Nigeria.

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Tutors Experiences In Supervising Research Projects For Students On The Masters And Bachelor Of Education (M Ed And B Ed) In Educational Management: A Case Study Of Mashonaland Central And Mashonaland East Regional Centres Of The Zimbabwe Open University (ZOU)

By

Tichaona Mapolisa, Barnabas Muyengwa and Sharayi Chakanyuka

Abstract

This study was a qualitative case study of tutors' experience in supervising research projects at M Ed and B Ed levels of Mashonaland Central and Mashonaland East Regions of the Zimbabwe Open University (ZOU). Eleven tutors were interviewed, eleven tutors wrote personal accounts while ten tutors filled in the questionnaires. Six B Ed and six M Ed projects were analysed by the co-researchers. The study showed that smaller regions had fewer female tutors. Tutors enjoyed supervising research for the co-operative, hard working and committed students. Tutors faced the challenge of working with students who failed to meet deadlines. Tutors also felt that supervising qualitative research was harder than supervising quantitative research. However, an analysis of the twelve research projects revealed that even though the majority of the tutors indicated that they were comfortable supervising quantitative research, pure quantitative research was rare among the projects analysed. Tutors suggested that the Department of Education should encourage the students to visit other libraries and internet cafes in order to broaden their research knowledge base. Tutors recommended that ZOU should craft and draft National and Regional policies on mounting research workshops for tutors and students every semester. The study also recommended that ZOU should mobilise resources and forge partnerships for the purpose of setting up internet centres, library facilities and research centres and archives in the regions.

Introduction

The present study is a case study of tutors' experiences in supervising M Ed and B Ed (Educational Management) students' research projects at the Zimbabwe Open University (ZOU) with particular reference to Mashonaland Central and Mashonaland East regions. Open and distance education programmes generate novel opportunities for university tutors, academics and students to collaborate in research work. Although this seems to be new, it is one that needs to be taken seriously as the fame of open and distance programmes continue to grow. The role of tutors in supervising students' research projects is too often a marginalised process not regarded as an inclusive part of the planning process. Several scholars argue, however, that the advantages of knowing tutors' experiences in supervising students' research projects in advance culminate in the determination of good quality research projects.

Background of the study

In a conventional teaching and learning situation, the supervision of M Ed and B Ed (Educational Management) research students is usually done by co-researchers who are presumed to be of similar research experiences and backgrounds. However, at the Zimbabwe Open University (ZOU), an open and distance learning institution, students' research projects are supervised by one tutor. These supervisors generally have varied research backgrounds and experiences since most of them are people who would have graduated from other universities,

largely of a conventional nature. To that end, supervising students' research projects as a process is far from being a simple task (Pearce, 2005). Consequently, knowledge of tutors' experiences in supervising students' research projects is critical.

From an academic point of view, the quality of students' research projects is usually dependent upon the tutors' research experiences and knowledge. To underscore this point, some tutors cease to continue learning by not carrying out research related activities after graduating from university (Cresswell, 2003; Patton, 2002). Furthermore, individual tutors seem to vary in terms of their inclination towards a research paradigm, with some in favour of a purely qualitative research design while others would opt for an extreme quantitative research paradigm (Gay, 1996; Silverman, 2006). Also university service by tutors in the form of baseline survey studies, conference papers and research workshops and training programmes are essential ingredients for improving the quality of students' research projects, yet in moist institutions these are rare experiences for most tutors (Baker, 1994; Bell, 2000). Thus, ignoring tutors' experiences in supervising research projects would lead to questionable quality of students' research projects. For this reason, the co-researchers found it necessary to explore tutors' experiences in supervising MEd and B Ed (Educational Management) students' research projects in Mashonaland Central and Mashonaland East regions of the ZOU

Statement of the Problem

Tutor's experiences in supervising students' research projects are largely diverse, complex and challenging (Shumba, 2004). While every university has some presumed standardised research guidelines for supervising students' research projects, it is impossible to find two or more tutors with identical research supervisory experiences. With that in mind, it may be argued that some students tend to benefit more than others if their tutors have had an exposure to sound research experiences and knowledge. Conversely, when the tutors' research experiences are not academically grounded enough, it follows that their students' research projects will not be effectively supervised. Thus, the co-researchers were prompted to investigate the following question:
What are the tutors' experiences in supervising MEd and BEd (Educational Management) students' research projects in Mashonaland Central and Mashonaland East regions of the ZOU?

Objectives of the study

The current study examined tutors' experiences in supervising students' research projects at MEd and BEd (Educational Management) levels at the ZOU Tutors' experiences in supervising research projects were studied through personal accounts, in-depth interviews, in-depth questionnaires and analysis of twelve B Ed and M Ed (Educational Management) students' research projects in a bid to realise these two objectives.

To assist the Department of Education at the ZOU to identify its tutors' experiences in supervising students' research projects with the intent to improve the quality of students' research projects. A literature review shows that a knowledge of tutors' experiences in supervising research projects is critical in helping students to compile research projects that would largely gain academic acceptance (Dysthe, Samara and Westheim: 2006).
Identify the strategies ZOU's Department of Education might need to adopt in order to improve the quality of research supervision among tutors. Use of competent and knowledgeable tutors to supervise students might maximise benefits to research students in the two studied regions of the ZOU

Research Questions

In order to accomplish the preceding objectives the current study sought to provide answers to the following questions.

1. Which students did you not enjoy supervising? Enjoyment in supervising research projects entails tutors' joys and reasons that might be helpful in crafting strategies to improve tutors' supervisory performance.
2. What challenges did you face in supervising research students?
3. Which research paradigm are you comfortable with in supervising research students?
4. Which research paradigm presented you with problems in supervising research students?
5. What are the recommended strategies for improving the quality of research supervision at the ZOU's Department of Education?

Importance of the study

The present study was indispensable in that it would be an eye opener to the ZOU's Department of Education and its tutors to collectively work in research supervision in pursuit of providing quality learner support services. The study deliberately aimed to gather data on the department, tutors' and research needs. It was hoped that would be useful in bringing about effectiveness and efficiency in the manner the ZOU's Department of Education and its tutors manage research supervision.

The study attempted to identify gaps in tutors' experiences in terms of content and practice in research supervision and provide suggestions for improvement. It also consciously sets out to assist research supervisors explore, by means of self reflection and reflection on feedback from others, how they practise supervision (Pearson and Kayrooz, 2004). Furthermore, the Department of Education would improve the quality of its service delivery through constant programme evaluation centred on quality research supervision. Also constant planning and revision of research supervisory practice is necessary (Torrance, Thomas and Robinson: 1994). The researchers hoped that, eventually, the Department would design a well structured research supervisory programme that would culminate in the production of quality student research projects.

Definition of Key Words

Tutors Experiences. The word 'experiences' may be used to denote the act of going through joys, pains and challenges pertaining to some activity or process. The present study regarded tutors' experiences as joys, pains and challenges that tutors felt as they supervised Master and Bachelor of Educational Management [MEd/and B Ed (Educational Management)] students' research projects.

'Joys' refers to the exciting moments that tutors had while they supervised students' research projects.

'Pains' means unexciting and worrying moments encountered by tutors in their supervision of students' research projects.

'Challenges' implies hindrances or problems that negatively impact on tutors' abilities to supervise students' research projects. The word also means factors that let down students' performance during the process of supervision of their research projects.

'Research projects'. The word 'research' may be defined as search for knowledge or any systematic inquiry to establish facts. The current study adopted Trochkins (2006) definition in which a research project is viewed as an inquiry directed towards the increase of knowledge or understanding of the subject under study.

'Case Study'. A case study is perceived as an in-depth study of a particular phenomenon. In this study, it was a research strategy that was meant to enable the co-researchers to understand in great depth and detail tutors' experiences in supervising students' research projects in their natural setting.

Literature Review

Tutors' Experiences in Research Supervision

At the ZOU, supervision of students' research projects is carried out by a single tutor. He/she is assumed to be an expert guide for the research student in terms of formulation of a research topic, writing the research proposal, collecting data and writing the research report. In the process, some tutors' experience challenges that hinder students from completing their research projects on time.

Research authorities such as Bell (2000), Pearce (2005), Sharma (1993), and Sidhu (2001) document the following as some of the challenges to students' completion of research projects and some of the likely experiences that tutors face during supervising research projects.

- Lack of commitment and motivation to do the research,
- Lack of adequate theory in the area of being researched,
- Family problems/commitments,
- Lack of funds,
- Lack of time,
- Lack of library resources,
- Students' failure to meet regularly with the supervisor.

As co-researchers, we feel that any of the above challenges usually negatively impacts on the quality of students' research projects they would compile. In the final analysis, we felt that the quality of the research project is a true reflection of the quality of work produced by both the tutor and the student.

Research Paradigm

One other area that is indicative of tutors experiences in supervising research projects is the research paradigms that tend to dominate in social research and these are quantitative and qualitative research (Ghosh, 2000; Nyawaranda, 2005; Wilkinson and Bhandakar, 2001).

In carrying out both quantitative and qualitative research both Nyawaranda (2005) and Shumba (2004) suggest the following stages of the research process as another source of tutors' experiences in supervising research projects.

- Helping the student shape his/her topic so that it becomes focused and researchable,
- Writing the introductory chapter on the research problem,
- Reviewing related literature on the study,
- Writing the research methodology,
- Presenting, analysing and discussing or interpreting research findings,
- Summarising the findings, concluding and making recommendations, writing the abstract.

Thus it can be deduced from the above authors' view that knowledge of two research paradigms usually makes a tutor a more polished researcher. A tutor who is comfortable with both paradigms is usually flexible enough to supervise students' research projects that hinge on either research paradigm. However, not all tutors may have a strong background on the two paradigms. Hence, the quality of their research supervision may not be as effective as expected.

Ways to Improve Research Supervision as Advance in the Literature

Scholars like Bogdan and Biklen (1992), Nyawaranda (2005) and Shumba (2004) and have advanced ways by which tutors could improve their research supervisory experiences. They suggested the following:

- Tutors need to continue learning through active engagement in actual research practice if ever they entertain any hopes of enhancing their research experiences, skills and prowess.
- Tutors' research supervisory experiences can be boosted through further studies (pursuing higher degrees). Tutors need to write scholarly papers that can be published in refereed journals for publishing.
- Tutors need to read current research text books and research journal articles.

While the above suggestions are credible enough, it is unfortunate in that not all tutors access such research- nourishing experiences. Such a deprivation tends to militate against the quality of the research supervision and that of the research projects.

Previous Research Studies

In one of the recent articles in the U.K on Masters level dissertation, Anderson, Day and McLaughlin (2006), highlighted the quality of shaping and supporting students' efforts that framed supervisors' communications and actions. The study also focused on how supervisors saw themselves as having a gate keeping role, a commitment to align students with academic standards and at the same time a personal commitment which involved a responsibility to assist students to pursue a topic that excited their interest and to support their sense of agency.

An Australian study by Aspland, Edwards, O'Leary and Ryan (1999) focused on tracking new directions in the evaluation of post graduate supervisors. Three key issues which emerged from the University faculty-based student and supervisor focus groups were:

1) The importance of systematic feedback, monitoring and evaluation to the supervisory process.
2) The importance of relational aspects of supervision as the student communicates over the long time with one or more supervisors
3) Lack of strategies to facilitate this evaluative feedback process. On the basis of these findings, the authors designed evaluative strategies to facilitate ongoing feedback between students and supervisors.

A Norwegian study by Dythe, Samara and Westheim (2006) described and analysed an alternative supervision model at the Master of Education Programme at the University of Bergen aimed at improving research supervision. Individual supervision provided more specific advice. Critical factors for supervision groups were regular attendance, mutual obligations, structure and clear rules.

Research has shown that successful research supervisors and students need to be abreast of current trends and practices in the conduct of educational research. From the foregoing discussion, it is evident that most authorities agreed that tutors' experiences in supervising students' projects are an effective mode of teaching and learning. They further agree that tutors experiences in supervising research projects vary along the lines of challenges that students face in completing research projects, research paradigm and strategies to improve quality of tutors' research supervision. They further concur that the tutors need to be actively engaged in research for the purposes of improving themselves as researchers-cum-supervisors. Tutors need to have research skills needed by students (Nyawaranda: 2005; Yin: 1989).

However, as noted by Nyawaranda (2005) and Shumba (2004) some studies indicate that scholars and students at conventional universities generally view distance teaching methods as inferior to the practice of co-research supervision at conventional universities. Other research studies were carried out in the U.K, U.S.A and Norway using conventional universities. They lacked the context of Open and Distance learning mode from a developing countries context. This study attempts to partially fill the gap.

Research Methodology

This case study was rooted in qualitative research for three reasons. First, qualitative research is human-centred (Willig, 2001) because it allowed us to gather data and seek participants' opinions on findings about their experiences in supervising research projects at the ZOU's studied regions. Second, both Patton (2002) and Silverman (2006) have indicated that in qualitative research, researchers could study tutors' experiences in supervising research projects in length, breadth, depth and detail with greater openness since researchers are not constrained by predetermined categories of analysis. Third, qualitative research is a discovery-orientated approach in the natural environment (Thomas and Nelson: 2001). In the context of this study, qualitative research suffices because it enabled us to study tutors' experiences in supervising research projects at two of the ZOU's regions in their proper setting.

A case study is a form of descriptive research in which a single case is studied in depth to reach a greater understanding about similar cases (Thomas and Nelson 2001). We strived for an understanding of a single situation or phenomenon, that is, tutors' experiences in supervising

research projects at two of ZOU's regions in depth and its natural setting, recognising its complexity and its context.

The study did not rely on one data source. It employed triangulation of data sources (Gill and Johnson 2002). Similarly, Punch (2004:153) asserts that in a case study, "multiple sources of data and multiple data collection methods are likely to be used." For this reason, we collected data through personal accounts, in-depth interviews, questionnaires and document analysis.
A purposive sample of two of the ZOU regions was selected. Both regions provided five research participants apiece who responded to the in-depth interviews and questionnaires and six M Ed and six B Ed (Educational Management) students' research projects for document analysis. A purposive sample was viewed as a form of non-probability sampling in which the research participants seemed to meet the study's needs (Baker 1994). It also enabled us to handpick cases to be included in the study on the basis of our judgement (Cohen and Manion 1997). Thus, it enjoyed the benefit that we managed to build a sample that satisfactorily met our study's specific purposes. Two of the co-researchers worked in the two regions - Mashonaland Central and Mashonaland East during the rime of the study.

In each region data was collected from eight full time and two part time tutors in the Department of Education. These were broken down into six male and four female/tutors.
Data was collected through eleven personal accounts, ten in-depth interviews, ten in-depth questionnaire and document analysis. Use of the personal accounts enabled us to gather very detailed and useful data about research participants' experiences in supervising students' research projects. Issues for study were tutors' joys, lack of joy, challenges and suggested strategy to improve research supervision. However, personal accounts presented a challenge as a research instrument by asking the research participants to write too much detail about issues under study (Best and Khan 1994). Fortunately enough, we received enough support from the two regions' tutors after our clear explanation of the purpose of the study.

Ten in-depth interviews were also employed to complement data from personal accounts. They contained questions on similar issues to those contained in the personal accounts. The interviews enabled us to obtain data on tutors' experiences of supervising research projects in greater detail, depth, length and breadth (Cresswell, 2005; Kitchin & Tate, 2000 and MacMillan and Schumacher, 1998). Interviews gave us the opportunity to probe and rephrase questions (Bell, 2000). While the major challenge of interviews is capturing data, we overcame this by using shorthand during the interviews and transcribing fully later.

We also used an open-ended questionnaire to collect data as a means of triangulating data to ensure we collected as much detail as possible on the supervision of research projects. Through the questionnaire, participants explained issues fully and freely (Sekeran,1994). The questionnaires were easier to administer and thus saved the researchers' time.
Our last data collection strategy was document analysis. For this we selected six B Ed and six M Ed projects from each of the two regions under study. Sidhu (2001) calls this approach content analysis. We subjected the content of the research projects to rigorous scrutiny to determine the quality of supervision with regard to research paradigm, research design, data collection, data analysis, presentation and discussion. We analysed the projects individually and then compared the findings.

The present study collected data through personal accounts, interviews and questionnaires from tutors who had supervised students' research projects. Findings from the study were captured from the themes put across by the personal accounts. The other three instruments' findings were used to backup the findings from the personal accounts. Six tables were used to present data and

convey a sense of quantity, as this study was largely a qualitative. Therefore, thick descriptions of phenomena were made use of to interpret findings. We used research participants' view points to come up with our interpretations of the tutors' experiences in supervising research students in the ZOU's two regions. The findings of the study are presented and discussed below.

Discussion of research findings

Ten tutors took part in the study as interviewers. Only one (10%) tutor was employed as a programme co-ordinator (a full time tutor). The other 9 (90%) were part time tutors. The tutors responded to the questionnaire. Two (20%) tutors were programme coordinators while eight (80%) tutors were part timers. Also, eleven tutors responded to personal accounts. One (9.09%) tutor was a programme coordinator. The rest (90.92%) were part timers. This distribution is credible because ZOU employs not more than three programme coordinators for the Department of Education in each of its ten regions.

In regard to distribution of the research participants by gender, nine (81.8%) of the interviewers were male whilst two (18.2%) were female. This distribution is also confirmed by the personal accounts which gave nine males and two females. However, the questionnaire's distribution indicated that ten tutors participated in the study. Seventy percent (7%) of the tutors were male and the rest were female tutors. This distribution is plausible female teachers do not favour to be attached with ZOU regional campuses outside major cities. They appear not to be comfortable with travelling to and from major cities to the two studied regions, which are almost entirely rural.

Research participants who responded to the interview guide and the questionnaire were distributed by their age. For the interview research participants, four (36.36%) were aged between 46 and 50 years, three (27.27%) were aged between 51 and 55 years, two (18.18%) were aged between 50 and 60 years. One (9.09%) was aged between 41 and 45 years and one (9.09%) was aged between 35 and 40 years. The questionnaire respondents showed that 50% (5) tutors were aged between 50 and 59 years, 20 % (2) tutors were aged between 40 and 49 years, with another 20% (2) tutors being aged between 30 and 39 years and ten% (1) tutor being aged between 60 and 69 years. These findings show that the tutors were mature enough and not too old to be able to supervise research students.

The interviewed research participants gave their length of service in years at the ZOU four (36.37%) tutors had been attached to ZOU for a period between seven and eight years. Three (27.27%) tutors had worked for ZOU for a period between three and four years. Two (18.18%) tutors had a tutoring experience of five to six years at the ZOU; with the other two (18.18%) tutors having worked for ZOU for nine to ten years. None of the tutors had worked for ZOU for a period less than three years. These results indicate that the tutors in the studied ZOU's regions had reasonable experience to enable them to supervise research students.

Twelve research projects, that is, six at M Ed level and six at B Ed level were analysed as part of the document analysis. Each region provided 50% of the research projects for each level.

Programmes that research participants tutored were given by level and those interviewed research participants 11 indicated that they tutored M Ed, nine tutored B Ed, one tutored B Ed Secondary and three tutored diploma in Primary Education. Tutors who responded to the personal accounts showed that six tutored M Ed, eight tutored B Ed, two tutored B Ed Secondary and five tutored Diploma in Primary Education. Those who responded to the questionnaire indicated that six tutored M Ed, eight tutored B Ed, four tutored B Ed secondary

and six tutored Diploma in Primary Education. (Dip Ed.). This distribution is reasonable as the B Ed is the longest existing programme followed by the M Ed.

Participants were asked to pint out the number of students they had supervised for B Ed and M Ed between 2005 and 2008. Those who were interviewed indicated that they had supervised ten1 B Ed and 56 M Ed students. The questionnaire respondents revealed that they had supervised 65 B Ed and 38 M Ed students respectively. On the average eight tutors on the personal accounts had supervised the following; B Ed 11.5, M Ed 6.75 and Dip Ed 2. These results also show that B Ed is the oldest degree followed by M Ed. The Diploma in Education was introduced in 2006 and the students proceeded to their research recently.

The research participants were also requested to indicate the number of students who managed to complete their research projects/dissertations. The interviewed participants pointed out that 89 out of ten1 B Ed research students successfully completed work, while 55 out of 56 M Ed research students did the same. Participants who responded to the questionnaire indicated that 65 out of 65 B Ed students and 38 out of 38 M Ed students managed to complete their research projects. Possible reasons given for this seemingly high completion rate were:

- Students were keen to complete their degree programmes
- Completion of degree programmes enhanced student's promotional chances
- Students looked forward to earning better market value outside the country in comparison with their non-degreed colleagues.

Regarding the number of training workshops in supervision of research projects, participants who responded to the questionnaire in both regions revealed that on the average they attended to a single workshop once in two years. The interviewed participants echoed similar sentiments with the questionnaire respondents as four of them had never attended a research workshop at all, two attended one workshop and five attended two workshops. This tends to go against Gaffarella and Barnett's (2000) advice on the value of workshops. They indicated that preparing and receiving critiques from professors and peers was perceived to be the most influential element in helping participants to understand the process of scholarly writing and producing a better written product. Therefore research workshops prepare supervisors for better supervisory practices.

Participants were also asked to indicate their joys in supervising students' research projects. Seven interviewed participants advanced the following points as reasons for their joys of supervising projects.

- Broadening knowledge base
- Hard working students who read ahead and come regularly for supervision/consultation
- Students who are clear on what they want to research on and can justify their data collection methods
- Sharing new knowledge with students
- Assisting students to grow academically
- Students who seem to have adequate research theory from their research methodology courses
- Supervising mature and devoted students who are well focused

The other four participants' joys in supervising students were:

- Acting as a guide for students to come up with a research topic
- Organized students who complete their projects on time
- The two-way learning process by both the supervisor and the student
- Exploration of grey areas that supervisors thought of e.g. the influence of sexual abuse on pupil performance in the primary school

The sources for joys in supervising students' research projects as given by the interviewed participants were confirmed by the participants who wrote personal accounts. Seven of the participants indicated that they enjoyed supervising M Ed students. A sample of the reasons given to explain this is:

- M Ed students have a better theoretical background than B Ed students
- MEd students were more challenging and encouraging tutors to research.
- One participant indicated that s/he had students dedicated and committed to their work. In general, participants enjoyed supervising students who took research seriously, were resourceful and met agreed deadlines.

On the other hand, participants' who responded to the personal accounts gave a clearer picture of some of the reasons why some tutors did not enjoy supervising research projects in the two regions. They did not enjoy supervising students "who were not committed", "lacked sound theory", "did not meet deadlines", "did not attend supervision (meetings) regularly". Three supervisors identified students in the B Ed programme, whereas, the rest did not identify the programmes.

Taken together with the item above, it would appear that M Ed students were easier to supervise as they had a better grasp of research theory and practice after completing a project at B Ed level. At B Ed level most students were doing serious research for the first time and had a lot more to learn. These would be more demanding to supervisors. This is worrying as supervisors should be able to guide and motivate students doing research at any level.

Participants identified a number of challenges faced in supervising students' research. The major challenge cited by five participants in the personal accounts referred to the students' attitude as shown in the excerpts below:

- Students would take long to attend consultation meetings. Four questionnaire respondents and four interviewed participants confirmed the same position as well.
- Uncooperative students. Five interviewed participants were agreeable with this challenge as well.
- Heads and deputy heads who were uncooperative in meeting deadlines.
- Students who left the project to the end.

Two personal account participants raised concern with students' lack of "understanding of the research process" and failure to come up with topics. Six questionnaire participants confirmed

this by pointing out that students lacked theory on the area being researched on. Three B Ed research projects that were analysed underscore the above challenge in the following ways:

- Students wrote lengthy topics exceeding fifteen words
- They mixed up limitations and delimitations
- Their research methodology had no clear paradigm and research design
- Their sampling procedures were unclear
- Data presentation and analysis procedures were not explicit
- They did not know the difference between the tenses of a research proposal and a research report.

Participants who responded to personal accounts and questionnaires indicated the research paradigm they preferred. Five of the personal account responses indicated that they were comfortable supervising quantitative research and only one was comfortable with qualitative research and only one with both paradigms. Possible reasons to explain such differences could be:

- Different research backgrounds of participants,
- Different research experience of participants

The next item requested participants to indicate the research paradigm they had problems with. In the personal accounts, five indicated that they had problems in supervising qualitative research; five indicated they had no problems with any paradigm and one did not answer. There appears to be some contradiction between responses for the two views. Only two supervisors were comfortable with qualitative research. While it appears that most supervisors were comfortable with quantitative research, a close look at the twelve analysed research projects reveals that pure quantitative research is rarely put into practice as students' projects seem to adopt a mixed form of research. This observation signifies that all supervisors have problems in dealing with both research paradigms mentioned above. The research paradigm to be adopted for a particular study is identified right from the topic to the last chapter.

Last but not least, participants were requested to suggest strategies that work in supervising students. Six personal accounts and five interviews participants agreed that, as research supervisors, tutors needed to be more resourceful. One interviewee and one personal account participant pointed out that students needed counselling sessions and career guidance seminars organised by ZOU so as to encourage their ultimate goals. Other suggested strategies given in the three research instruments were:

- Encourage students to visit libraries
- Urge students to visit internet cafes
- Organise research seminars for both students and supervisors at regional level Boost library resources.

The participants were asked to recommend strategies that ZOU could adopt to improve supervision of research projects. A multiple of recommended strategies were put across in the three instruments. Chief among them included:
Tutors need to be involved in serious research
Regions need to have libraries with various reading materials for research

ZOU regions need to find partners to work with the provision of Internet facilities

Conclusion and Directions for Future Research

This study set out to explore tutors' experiences in supervising students' research projects at the ZOU with particular reference to Mashonaland Central and Mashonaland East Regions. The study interviewed one programme coordinator and ten part time tutors in the two regions. Two programme coordinators and eight part time tutors responded to the questionnaire. One programme coordinator and ten part time tutors responded to the personal accounts. Twelve research projects were analysed for the two regions. The results provide a fertile ground for further research in the same studied field, especially in developing countries. ZOU programmes are largely run by part time tutors. Female tutors seem not to be comfortable with working in regions outside Harare. Most tutors were mature enough to be able to supervise students. Tutors were also experienced enough to supervise students. There were high completion rates of research projects in the two regions. However, provision of the more competent supervisory practices and library services could be helpful in achieving ten0% success completion rates in both B Ed and M Ed levels. The results of this study also underscore the value of mounting compulsory workshops for both supervisors and students. Golde (2005) suggests that through workshops departments and disciplines can change practices that do not serve the educational interests of students. This implies that tutors would adopt student-friendly supervisory practices that would advance their academic knowledge, interests and growth. The study also revealed that tutors were thrilled with supervising mature, cooperative committed and hard working students. Such students motivated tutors to work very hard. It also revealed that tutors did not enjoy supervising research students who "lacked theory", "were uncooperative", "did not meet deadlines." Such students were a disincentive to tutors' hard work. However, despite the existence of such supervisory setbacks, tutors should be mature enough to guide and motivate students to carry out research at any level. Knowledgeable supervisors should be willing to supervise any students regardless of their research background.

The study further revealed challenges that tutors face in supervising research. Students were reported to be taking too long to attend consultation meetings. This means that they delayed the completion of the projects. Therefore, it would be rather hard for them to meet deadlines. Some students were also uncooperative. Students' failure to work with supervisors on good mutual terms is usually a detriment and hindrance to the students' academic growth. The student is always the loser, although the tutor may be blamed as ineffective external observers. Students and some supervisors also lacked research theory and practice. This was one of the greatest let downs of supervision of research in the studied regions of the ZOU

The results of this study suggest valuable strategies needed for further research. First, while tutors are assumed to be more knowledgeable in terms of theory and research experience, they needed to be resourceful in order to adequately support students' research. Second, the impression advanced in this study that tutors are more comfortable with supervising quantitative research should not be left unexplored. Further research should be done to indicate dimensions in which quantitative research is easier to supervise than qualitative research. Also further research is necessary to find out the degree to which the findings of the present study can be generalisable to other ZOU's regional centres. This case study acknowledges the implications of supervising qualitative research, but extended study might bring about ZOU's research policy on workshops for supervision, instruction and outreach programmes.

Recommendations

In a bid to improve the quality of supervision of research and research projects submitted by B Ed and M Ed students at the ZOU, the following recommendations were made from the tutors' experiences. The Department of Education needs to:

- Ensure that students are taught adequate research theory in the Research Methods and Statistics courses.
- Provide research students with the opportunities to develop specific information skills (Kangai & Mapolisa, 2008).
- Urge tutors to be more resourceful than students to make sure that they are always ahead of students in terms of research theory and knowledge sought in given areas of inquiry.
- Encourage students to visit other libraries and Internet cafes in order to improve the quality of their research work.
- Provide the students with the research guides so that they can read and be guided on the ZOU's in-house style of compiling a research project.
- Encourage collaborative research and consultancy work between tutors and students so that they actively see the value of their active engagement in research work.
- Mount regular workshops regarding the research process, quantitative and qualitative research paradigms and mixed form research so that tutors will be at home with supervising any project presented in any paradigm.
- Provide students with research supervision contracts and guidelines so that they will be able to work well with their supervisors.
- Make sure that tutors are encouraged to supervise rather than inspect students' work. Inspecting students' research projects will become abusive supervision which discourages and disheartens otherwise potentially good students' research work.
- The Zimbabwe Open University should:
- Adopt the practice of recruiting tutors from all districts of the ZOU regional centres to ensure gender equity and equality in terms of tutor composition at the regions. This would also go a long way in cutting down students' travel costs.
- Ensure that the research students are given counselling sessions and career guidance seminars so as to encourage them to study with the full knowledge of the consequences and implications of their actions during the supervision process.
- Craft National and Regional policies on mounting research workshops for both students and tutors every semester.
- Source at national level current research textbooks, journals and articles for onward transmission to Regional Libraries. Such material need not exceed the age of five years as innovations in education quickly come and go.
- Mobilise resources with partners to ensure that Internet facilities and research centres and archives are set up at Regional Centres.
- Encourage all lecturers across faculties to regularly meet and workshop on matters relating to research supervision, academic paper writing and consultancy work.

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Tables

Table 1: Interview, Questionnaire and Personal Accounts. Research Participants' Professional Status/Title.

Research Instrument	Professional Title/Status	Actual Numbers	Percentage (%)
Interview	Programme Coordinator	1	9.09
	Part Time Tutor	ten	90.91
	Total	11	teno
Questionnaire	Programme Coordinator	2	20
	Part Time Tutor	8	80
	Total	ten	teno
Personal Accounts	Programme Coordinator	1	9.09
	Part Time Tutor	ten	90.91
	Total	11	teno

Table 2: Interview, Questionnaire and Personal Account Research Participants by Gender

Research Instrument	Gender	Number	Percentage (%)
Interview	Male	9	81.8
	Female	2	18.2
	Total	11	teno
Questionnaire	Male	7	70
	Female	3	30
	Total	ten	teno
Personal Accounts	Male	9	81.8
	Female	2	18.2
	Total	11	teno

Table 3: Interview and Questionnaire Research Participants by Age

Research Instrument	Gender	Number	Percentage (%)
Interview	35-40	1	9.09
	41-45	1	9.09
	46-50	4	36.36
	51-55	3	27.27
	56-60	2	18.18
	Total	11	teno
Personal Accounts	30-39	2	20
	40-49	2	20
	50-59	5	50
	60-69	1	ten
	Total	ten	teno

Table 4: Interview Research Participants' Length of Service at the ZOU (N=11)

Length of Service	Number	Percentage (%)
0-2	0	0
3-4	3	27.27
5-6	2	18.18
7-8	4	36.37
9-ten	2	18.18
Total	11	teno

Table 5: Document Analysis: Number of Research Projects Analysed by Level Programme (N=12)

Programme	Number	Percentage (%)
MEd	6	50
BEd	6	50
Total	12	teno

Table 6: Number of Students Tutored Programmes by Level.

Research instrument	Level	Number
Interview	MEd	11
	BEd	9
	BEd Sec.	1

	Diploma	3
Personal Accounts	MEd	6
	BEd	8
	BEd Sec.	2
	Diploma	5
Questionnaire	MEd	6
	BEd	8
	BEd Sec.	4
	Diploma	6

Art, Visual Literacy and Environmental Health in Nigeria

By

Ademola Adejumo and Olusegun Fajuyigbe

Abstract

This paper discusses the role of visual art in achieving the Millennium Development Goals (MDGs) by the year 2015 especially as regards improvement in environmental health in Nigeria. Many urban dwellers in Nigeria still live in unhealthy environmental conditions occasioned by slums, congested housing and traffic, poor waste-disposal habits and decaying infrastructures. This paper focuses on the role of visual arts in the proper arrangement of the built environment and the menace of visual illiteracy as it affects the wellbeing of the people in Nigeria. It also observes that people are the major polluters of the environment and that many of them appear indifferent and insensitive to the issue of environmental health and positive maintenance culture. This buttresses the idea that visual illiteracy is a serious issue which must be addressed if Nigeria will achieve any meaningful progress regarding the Millennium Development Goals. As a result of the need to sensitize people to be conscious of the physical quality of their environment in order to ensure environmental cleanliness and positive maintenance culture, the paper recommends the teaching of Visual Arts and aesthetics at all levels of the country's educational system as a long-term solution; and mounting intensive mass-awareness programmes in the meantime.

Key Words: Visual Literacy, Visual Arts, Development, Maintenance Culture, Environmental Health

Introduction

The motivation for writing this paper is three-fold, namely, the conviction that good health is the bedrock of human well-being and key to earning a livelihood; the observation that the Millennium Development Goals (MDGs) of improvement in the material health by 2015 is being frustrated by some environmental problems; and identification of a particular problem that needs to be solved in order to facilitate the achievement of the goals.

The term Environmental Health, as used in this paper, refers to the World Health Organisation's (WHO) definition of the term, that is, "Those aspects of human health and disease that are determined by factors in the environment." It also refers to the theory and practice of assessing and controlling factors in the environment that can potentially affect health. The word **Art** denotes "creative skill". It is both a product and a process, the process being the creative manipulation of some material to produce an end-result which becomes the product (Adejumo, 1990: 8). Visual Literacy implies ability to use the eyes beyond a mechanical recording and identification of elements that the eye is exposed to (Arnheim, 1972: ix).

The drift to towns and large urban areas by many people can be explained by various opportunities, like jobs, that are more available in such places than in the rural areas. However, when people live together in large numbers it becomes difficult to provide them with adequate

housing, transport and recreation in a healthy environment. Disease is easily spread, and often arises from insanitary condition of such urban areas (Jennings, 1958: 191-205). These are part of the challenges confronting our growing towns and cities. Men and machines pour out their wastes into the atmosphere constantly, and as populations and industries grow so does the level of atmospheric pollution, constituting environmental health hazards.

As a result of population upsurge, solid household and industrial wastes present problems as enormous quantities of them have to be carried away somehow. Much of such garbage is collected and tipped on the waste-land or simply dumped along the sides of outlet roads to towns and cities. The waste water from houses and factories also has to be carried away as sewage. Besides, there are the papers and cellophane bags, plastic bottles, broken glasses, empty "pure water" sachets and other litter often left by some people on any waste ground and public open space. Above all, many of the streets and market places in urban areas are often punctuated with accumulation of uncollected garbage. Such scenes are not only a health hazard and an eye sore but visual pollution indeed.

Air pollution occurs in towns and cities from house and factory chimneys and from car and other motor vehicle exhausts. Not only are these atmospheric pollutants a hazard to human health, they can damage plant life, directly or indirectly affect animals, and corrode or wear away materials like metal structures.

There are traffic problems also in our urban areas that are related to environmental health. Most of our roadways are designed for motor vehicles of all categories to compete with pedestrians. The result is frustration and wasted time in the choked-up streets, a high accident rate, and noise and air pollution. Even worse, in most towns, as soon as vehicles stop, they cause an even greater problem since there is usually a shortage of off-street parking spaces resulting from faulty design or/and construction of the roads.

Noise is another form of pollution in our cities. Indeed it is one of the most common and widespread. As cities grow, and there are more motor vehicles, air traffic, factories and people, the level of noise grows accordingly. Noise has come to be accepted as part of modern living, yet no one seems to care to know exactly what effects it has on human health. According to Cities Alliance (2007), most city dwellers already have damaged hearing and a few have nervous break-down because of noise. Some who work in noisy factories or streets or near airports become partly or completely deaf.

At this juncture, it is worthy of note that the need to find solutions to the foregoing problems of growing cities and towns justifies the declaration of human health as an essential component of sustainable development. Several studies have been carried out in this respect. For instance, Okpala (1986) relates the provision of adequate utilities and infrastructural facilities such as water supply, power supply and sanitation, to the health status of people in any built environment. He then infers that Nigerian population fort the most part cannot be said to be a healthy one because they do not have adequate provision of these facilities and services. Also, Fadare (1998) in the study of Itire and Mushin areas of Lagos State attributes the prevalence of the diseases like malaria, typhoid and bronchitis to unhealthy environmental conditions such as inadequate space between houses, accumulation of uncollected solid wastes and pollution of air and water.

Most of the other similar studies (for example Batsmen, et al, 1993; WHO, 2000; POST, 2002; Porto, 2004; WHO and UNICEF 2006; Water Aid, 2006; Olawumi, 2007) examine the correlation between water supply and sanitation services and health. All these studies conclude

that poor condition of both especially water, is associated with poor health; and that improved or adequate water and sanitation is linked with improved health. The WHO and UNICEF studies even associates unplanned settlements in the urban areas of Africa with inadequate provision of portable water and sanitation.

This paper agrees with the foregoing conclusion that provision of adequate water and sanitation is very crucial to the general wellbeing of humans especially their health, but contends that the adequacy of water and sanitation has minimal health benefits unless hygienic practices are upheld. Hygiene is related to cleanliness and aesthetic sensitivity. It is the science or act of preserving health. It can only be acquired through visual literacy and exposure to visual art experiences.

Visual literacy and aesthetic sensitivity are aspects of human development that have not been adequately provided for in our educational system in this country because they are simply taken for granted. This paper aims at highlighting our need to be aesthetically sensitive and visually literate so we can improve the design of our environment and reduce to the barest minimum all the visual and other forms of pollution occasioned by insensitivity and dirty habits. It requires knowledge of the issues at stake and a change of attitude, but it is absolutely necessary for achieving sustainable built environment and the Millennium Development Goals of improvement in material health.

The Meaning and Importance of Visual Literacy

Visual literacy can be described as the ability to see (read) and understand the language of visual expression or visual information. In this regard, **to see** is as different from **to look** as **to speak** is from **to babble. To look** means merely using the eyes to identify; operating them to the extent that they enable us to find our ways, read or counts. On the other hand, **to see** (as a visual artist sees) goes beyond opening the eyes no matter how wide. It takes place with efforts and involves thinking about what meets the eyes. This is only possible, of course, when there is contemplation - a marriage between the eye and the mind, both working in cooperation. The ability to do this is what is called visual literacy. This ability is not wholly inherent, and suggests that the eyes must be trained to see, to make visual literacy the source of visual development.

Visual literacy is the springboard in visual art training. Unfortunately, this aspect of human development is taken for granted in this country and, as much, no adequate provision is made for it in our education. The consequent of this neglect has resulted in mass visual illiteracy and we tend to look rather than see. We do not possess at birth the ability to see any more than we possess the ability to speak. But we possess the ability to learn how to see and to speak. It is obvious that if we had not been trained or taught to speak we would have been able to do more than babble, unable to make intelligent sounds as a means of oral communication. The failure to train to see has resulted in our ability to see –to understand the visual language. We are visually inefficient, because we are visually illiterate, for according to Annheim (1974: 1).

We have neglected the gift of comprehending things through our senses... Our eyes have been reduced to instruments with which to identify and to measure; hence we suffer a paucity of ideas that can be expressed in images and incapacity to discover meaning in what we see. Naturally we feel lost in the presence of objects that make sense only to undiluted (educated) vision, and we seek refuge in the more familiar medium of words.

There we are. Visual literacy is to visual intelligence what verbal literacy is to literary intelligence. Visual literacy makes for visual intelligence, visual thinking –a precursor to creative

imagination which may be defined as the ability to envisage uncommon combination or recombination of known elements into unique or original forms. Creative imagination is of course the fount of creativity –the the ability to understand and apply experiences to cause to come into being something unique. This unique thing may open up avenues for further unique experiences or provide better solutions to old problems or needed remedy for new experiences.

It would be no overstatement to state that if man is to survive, creativity is probably is last hope, apart from providence for devising ways of relating to the complex and ever changing issues of multiplying problems of life and the environment in which he exists. The tragic consequence to society of a dearth of creative imagination could be tremendous in its intensity. The gravity of such a situation underscores the importance of visual literacy. One other importance of visual literacy consists in its contribution to the development of the "feeling" dimensions of the human being. No man can be said to be human if he is undeveloped or underdeveloped in the feeling dimension of his being. **Feeling** here refers to large number of experiences ranging from brief sensations to lasting sentiments such as emotions, moods, attitudes, inclinations, longings, impulses, aspirations and dispositions. The ability to see and understand visual information engenders, among other things, feelings of sympathetic responses and compunctions, moral and otherwise that are most salutary on humanity and society.

Visual Literacy and Aesthetic Judgment

Visual literacy leads to the development in a human being of the capacity for quality aesthetic judgements. According to Silverman (1976: 48-49),
Aesthetic judgements are decisions about the extent to which qualities and meanings associated with experienced objects or events evoke significant affective responses.
Quality aesthetic judgements enhance human concern for decent visual environment among other things. Decent visual environment is a mark or state of development and highlights the difference in one aspect, between individuals and between developed and underdeveloped communities. The ability to make quality or disciplined aesthetic judgements and to respond accordingly is a mark of development in a human being. In this regard, Ducasse (1967:321) states that

The ability to discriminate is thus the indispensable foundation for tactful dealing with others, and for appreciation of the endless variety of human relationships and human situations. Hence, however greatly we may admire a man's moral character and his intellectual attainment, we perceive an unmistakable lack in him if we cannot also say that he is a man of taste and gifted with delicacy of sentiment.

To educate for quality aesthetic judgement is worthwhile. Of course, aesthetic judgement can be made without special training. While this is true, however, quality or disciplined aesthetic judgements are in probability the result of educated vision. There is a significant difference between a naive common-place aesthetic responses resulting from undisciplined aesthetic judgement and quality aesthetic responses which result from disciplined aesthetic judgements. This difference is manifested in the standard and quality of taste exhibited by the two kinds of aesthetic judgements and responses.

Visual Literacy and Environmental Sanitation

Visual literacy accounts for our attitude towards the sanitation of our environment. That our cities have slums, that we dump refuse everywhere about our cities, that our surroundings are littered with debris and that we dwell in filth and squalor could be attributed to visual illiteracy;

our inability to understand the visual information and message that meet our eyes as we look at these conditions. How else could the apathy with which we attend to the unhygienic conditions that characterise our environment, our cities, and our surroundings be explained?

We accept the situation as a **status quo** and do nothing to improve it because what meets our eyes makes no meaning, conjures no idea, conveys no message, gives no information and as such elicits no response or at best elicits the wrong responses. With the wrong response we react not to improve the situation but worsen it. Instead of cleaning up; dirty environments invites us to litter it the more with refuse and dumps. If we were visually literate, we would be able to see – understand – the information and message contained in our insanitary conditions of our environment, our cities and our surroundings. If we were visually literate, the feelings dimensions of our being would have been developed and our capacity to feel the repugnance of filth and squalor would move us to deplore the situation and to react appropriately. We would always endeavour t keep and maintain clean surroundings.

The many hazards of insanitary, filthy surroundings and environment retard our developmental efforts. Diseases emanating from such conditions are a mark of underdevelopment. Developed countries rarely have incidents of such diseases as malaria, scabies, and yaws which are caused by dirt of all sorts. This state of affairs is a major consideration in assessing our level of development.

Lofty structures, giant factories, sophisticated medical facilities, network of roads, and so on, do not by themselves make for development without the sense of their maintenance. What is the use of a filthy and unhygienic medical facility? What contribution does an ill-maintained pot-hole ridden network of roads for development?

Our lack of visual art training and the consequent visual illiteracy is also reflected on the planning of our towns and cities. As a result of our lack of capacity for aesthetic appreciation and the ability to make quality aesthetic judgements; our towns and cities, where they are planned display gross lack of refinement and development, because we are visually insensible to the qualities of cities that have lustre and beauty. The visual insensitivity is attributable to visual illiteracy. It seems nothing but economic considerations govern our planning policies and exercise. No consideration to the aesthetic quality of the environment. The haphazard campaign of **keep the city clean** or monthly environmental sanitation exercises are no solution to our environmental problems and can never be an effective substitute to internalised habits of cleanliness, which result from training in aesthetics and make for aesthetic experience and judgement.

Visual literacy helps to develop visual sensitivities which could be brought into play in solving environmental problems. It is the neglect in training our vision that has caused such ugliness to accumulate in our towns, cities and home surroundings, constituting health hazards. It is responsible also for our misuse of the natural environment, public facilities such as parks, squares and fountains. Many of us are incapable of seeing, feeling or appreciating the beauty of decent environment, or the hazards we create by the misuses of them.

We live in cities of slums with parks of rubbish heaps, garden of filth and fountains of infested ponds because we are visually uneducated. We are aesthetically underdeveloped and as such we do not exercise the sensibility and selection which make for good taste. We have not developed the capacity for aesthetic experiencing and enjoyment because we are incapable of understanding the visual information or message that meet our eyes in the things we look at.

This is so because we have neglected to educate our vision, to learn to see in order to understand the language of visual expression and discover meaning in what we see.

Visual Art and Maintenance Culture

In order to achieve sustainable environmental health, the essence of art and aesthetics should be made known to dwellers of the built environment. Art is an expression cultural values and feelings via the intellect, and it has the capacity to help people to be more conscious of the physical quality of their environment irrespective of training, learning and status. Man's survival is dependent on his ability to employ art to create pleasing forms, indeed, it is his last hope. In this regard, Adejumo (2006:8) notes that man must "devise ways of relating to the complex and ever-changing issues and multiplying problems of life and the environment in which he exists". But, man cannot do this without proper grooming in creative art education as well as the value and essence of art and aesthetics.

Artists are creative minds who can help to structure or restructure the built environment in order to make it more pleasant to the people. In construction generally and particularly in landscape architecture or environmental art; harmony, balance and orderliness are paramount because these essentials add value to the business of living. The role of art is not limited to design but construction for comfort. Such creative arrangement of the environment in respect to buildings and infrastructures leads to pleasurable sensation while the opposite is indifference or positive discomfort. In other words, the scenery in our built environment whether impressive or pleasant, unusual or disturbing, tends to affect environmental health. But only creative art education can teach us the essence of observation as the cornerstone of creativity / aesthetics; as well as sensitize us to orderliness and cleanliness and inspire us regard to environmental health and maintenance culture.

Visual Literacy and Maintenance Culture

Culture is shared attitudes, a particular set of attitudes that characterises a group of people. It is shared values, that is, practices and social behaviour of a particular nation or people. The culture of cleanliness, excellence and orderliness however, is almost eroded in our built environment due to certain challenges that accompany living in a constantly changing society like ours. It is in this regard that the paper considers Nigerians attitudes to maintenance culture and management of the built environment.

Maintenance is an act of maintaining or a state wherein something or somebody is being maintained. It is maintaining things of value especially what is needed to support life. In every organisation, institution or locale, a maintenance unit is usually set up to cater for the health and wellbeing of tools, materials and the environment so as to ensure good performance, continuity and soundness of the support system. Maintenance is not limited to materials and tools/equipment; the built environment could as well be sustained and enhanced for better performance. When maintenance is neglected or undermined, then decay and degradation are inevitable.

Visual sensitivity to the state of our physical environment has the tendency to engage us in the art of maintenance culture or cleanliness. In other words, if people are visually illiterate, it should not be surprising if their surroundings are untidy, because such persons lack an attitude of preserving or upholding the physical quality of their environment. Maintenance culture as used in this paper, means an attitude of loving care towards the built environment – our roads, public and private buildings, infrastructures, urban transportation and public art such as

sculpture, murals, advert bill boards, etc. Having or imbibing a culture of maintenance is not an end in itself, but a means towards achieving a goal; that is ensuring a beautiful, healthy, sustainable and dependable environment.

In addition, maintenance culture is an attitude of cleanliness, prudence in the management of materials, technology and finance used in constructing the buildings and infrastructures. It must be noted at this juncture that poor attitude to maintenance of public and private buildings is inevitably responsible for the decay of the built environment, as well as one of the causes of epidemics. Even, if the idea of "health for all" is achieved by 2015, can it be sustained in a situation where most Nigerians give little or no thought to maintenance culture? To be visually literate means that one must have *oju-inu* (inner eye or foresight) and *oju-ona* (design consciousness) to be able to understand accurately the essence of maintenance attitude.

Maintenance culture therefore is a positive attitude at sustaining and preserving what already exists to a high standard of quality such that it is able to sustain human activities and life generally. The need to imbibe this attitude becomes imperative because the natural environment ultimately determines the quality and sustainability of human activities and life. March (1998: 23) asserts that "the quality of a people's life depends on how much beauty they can create and maintain". But Adejumo (2006: 12) is of the opinion that people lack maintenance culture because they are visually illiterate and aesthetically insensitive to their surroundings. In his words, "if we were aesthetically sensitive, our capacity to feel the repugnance of filth and squalor would move us to deplore the situation and react appropriately". Therefore, to cultivate an attitude of maintenance or imbibe feelings of cleanliness is a sure way to achieving sustainable environment and development goals by 2015 AD.

The Source of Visual Literacy

At this juncture, the question may be put: Can visual literacy be taught? What particular mode of studying develops visual literacy and the feeling dimension in human beings? The answer to the first question is yes, and to the second question the subject of Visual Art is specially adapted to the education of vision and of feelings. In a broad sense, **Art** is a skill, experience or power of forming creative by study, observation and thought (Mills, 1965:16). The creative action invariably takes the form of the combination of lines, shapes, volume, colour, or a succession of movements, sounds or words, which gives pleasure to the mind and satisfies our sense of beauty. Art can be can be categorized as visual (drawing, design, painting, sculpture, architecture and craft), literary (fiction and poetry), and performing (drama, music and dance); or literal (languages and philosophy, history, literature). Visual art is a category of art that is concerned with seeing or mental vision (Arnheim, 1972: v-xi). From another perspective, both literary and literal arts are concerned with skill of expression in language, speech and reasoning; while visual arts are about creativity, aesthetics and generation of emotion on one hand, and also use and function as a means to an end.

Visual art uses conventional science and symbols made up of lines, shapes, texture, volumes and colours to convey our ideas and feelings about the world around us. Such visual languages preceded written languages as a means of communication. It is obvious that visual images communicate easily and clearly more than words or captions because most of the symbols used in visual art have a relatively universal applications and interpretations. The expressive language of visual art goes beyond the boundaries of any race or culture.

Visual arts can be classified as Fine arts and Applied Arts. The **Fine Arts** are those forms which have a value purely from the aesthetic, emotional and pleasing approach –that is, forms of art

which primary functions is the appeal they make to man's sense of beauty and high emotions. They include architecture, painting and drawing, and sculpture, and are contrasted with **Applied Arts** (which include ceramics, graphics, photography, printing, advertising design and textile design and clothing), in which function is as important as aesthetic considerations.

The primary aim and role of visual art is to communicate, comfort and design for aesthetic words and values. Overt encounter with the visual art either in making or in consuming, demand formal interest and critical appreciation both of which are perquisites of visual literacy. Creativity in the visual art is enhanced by keen appetite and hunger for visual forms, visual experience, because the artistic creative mind is nurtured more, it seems, by visual than by verbal information. Because artistic creativity demands a visually well-fed mind to stimulate the imagination during artistic creation, the creative visual minds seeks out new sights and this characteristics impels it to avidly consume varied visual materials in other to build a well-stocked visual memory for reference, explanation and understanding during novel and visual encounters (Edmonston,1975). Visual literacy is as such, a pre-requisite for visual memory. Quality works of art result from "finely tuned selective vision" which determines the superior configuration of the element of art –line, shape, colour and form –in combination or re-combinations that make the masterpiece.

It is important to point out that the need to build a well-stocked imagery and memory for reference makes the visual artist to be in constant contact with nature because the physical beauty in nature is the reference source for all man-made aesthetics (Gotshalk, 1962:34). The infinite variety of forms, the limitless range of colours and pattern arrangement in nature are permanent source of inspiration to the artist, it is the other rhythm, proportion and beauty that the creative process impels the visual artist to constantly observe in nature, through visual literacy that which enriches and sharpens his aesthetic sensibility to abhor things like decaying infrastructures and visual pollution occasioned by poor maintenance culture and disorderliness in refuse disposal (plate 1); faulty design, construction and use of our roadways (plate 2); and other dirty habits that endanger our psyche and health.

It thus follows that meaningful involvement in the making and consuming of visual art is a rich source of visual literacy. This deduction is corroborated by Lowenfeld (1960: 25), Linderman (1964:6) and Cornford (1968: 205), who hold that visual art experiences, especially drawing, designing, painting and modelling are developmental necessities for children, just as speaking, reading, dancing, etc. are. A child needs art experiences, not necessarily to become a professional artist, but to exercise essential human qualities – keen observation, visual literacy, coordination, visions, craft, imaginations, thought and expression.

Plate 1: Disorderliness in refuse disposal
Plate 2: Faulty road networks & traffic congestion as road users compete for space

Proper introduction to visual art practice affects a child personality, outlook, achievements and future, regardless of his individual bent or eventual career. Being observant is a life-long education. Someone who is observant will be visually literate and able to control or have a sound mastery of his environment. The technical skill of handling the art materials affords a valuable training for hand and eye, useful to the future scientists, architect, engineer, and the craftsman and practitioner of any kind, while the planning and the execution make the individual more sensitive to people ideas and the materials world. He or she will be able to choose, care for, value and use the tools of his other calling and those required for daily existence with discretion and imagination.

Art and the Built Environment

Aesthetics has been defined variously by scholars as a philosophical thought concerned with the essence and perception of beauty and ugliness; and it is closely related to the philosophy of art. In respect of this study, it will be appropriate to define aesthetics as the study of "sensory or sensori-emotional values, sometimes called judgments of sentiment and taste" (Zangwill 2007). The word "Aesthetics" is derived from the Greek word "aisthētikos" meaning an idea of what is beautiful or artistic, especially as it applies to the study of the rules and principles of art. The term "aesthetics" was introduced in 1753 by the German philosopher Alexander Gottlieb Baumgarten. In generic terms, aesthetics is connected with art and orderliness, since it is the outward appearance of a thing, especially when it results in pleasurable sensation.

Artists are creative minds who can help to structure or restructure the built environment in order to make it more pleasant to the people. In construction generally and particularly in art and architecture harmony, balance and orderliness are paramount because these essentials add value to the business of living. The role of art is not limited to design but also includes designing comfort and communication of the ideals. Such creative arrangement of the environment in respect to buildings and infrastructures leads to pleasurable sensation while the opposite is indifference or positive discomfort. In other words the spectacle in our built environment whether impressive or pleasant, unusual or disturbing tends to affect environmental health.

There is element of art in the built and natural environment. Actually, the early man sharpened his artistic sensibility by copying from nature and his surroundings generally. It can be seen in the planning of our surroundings and in nature itself. The arrangement of flowers, the natural beauty of the foliages, the setting of the houses and design of the building reflect art and creativity. In this regard, Ojo (2006: 4) notes that "nature has always been a source of inspiration for creative activities"; and artists have explored nature to making life worth living in the built environment.

The designing of the built environment is an artistic exercise in itself, meaning that urban planners are visually literate people. Through professions like community planning and urban design, art contributes to the harmonious shaping of all the parts of man-made environment in relation to each other (Adejumo 2006: 9). In addition, works of art have been used to create pleasing environments for centuries. Paintings, murals, mosaic, are used to decorate our interiors, while sculptures: fountains and ceramics: flower planters, urns and vases are used to enhance the beauty of our gardens, foyers and exteriors of buildings (Fichner-Rathus, 2001: 6). Lawal (1982: 8) opines that art has continued to enrich the quality of living not only through the creation of basic necessities of life such as shelter, utensils and clothing but also in making them more pleasant in appearance and use. But what becomes of the environment if its inhabitants show apathy towards the aesthetic quality of their surroundings? The only way out is to educate them as regard the concept of art and aesthetics with respect to human development (especially regarding environmental health and sanitation), and thereby make them appreciate the truth that creative art teaching is one of the highways to individual and national development in the new millennium

Conclusion

This paper asserts that the efforts being made to achieve the Millennium Development Goals (MDG) of improvement in environmental health by 2015 are frustrated by people's lack of visual

literacy and aesthetic feeling. It attributes our general environmental health problems in Nigeria to faulty design and construction of our built environment, inadequate water supply, poor sanitation services and poor hygiene. The thrust of the paper however, is on hygiene because human beings are identified as the major polluters of the environment and there is need to develop attitudinal changes. People need to be visually literate and aesthetically sensitive to enable them inculcate hygienic habits and effect positive maintenance culture.

The paper indicates that visual literacy is an aspect of human development, but it has not been given adequate recognition in our educational curriculum. It tries to examine how the study of and involvement in the visual arts can cultivate visual literacy. While the paper does not claim in any way that education and involvement in the visual arts is the only source of nurturing visual literacy, it however does modestly assert that education and involvement in the visual arts is best suited to teach, nurture and develop visual literacy, and maintenance culture and management of the built environment.

Recommendations

Since exposure to visual art experiences has been identified as a sure way of nurturing visual literacy and aesthetic sensitivity, it is necessary that Visual arts should form a significant part of the school curriculum in Nigeria's educational system meant for national development, and the teaching of it should be accorded the attention it deserves.

Most, if not all, the Town planning departments at various levels of our government usually include planners, architects, environmental scientists, geographers (in their teams) but no artists is included. This omission needs to be corrected henceforth in order to incorporate the professional aesthetic input of artists in our physical development efforts. This will ensure that not only is the town suitably ordered but that it is as beautiful as possible and well-maintained.

Constant and regular awareness programmes should be mounted by Information and Visual Arts establishments to sensitise the citizenry about the need to cultivate hygienic habits and positive maintenance culture.

Hitherto, traffic on most of our roads is chaotic. Motorists, motor-cyclists and pedestrians have to struggle, on daily basis, for the use of the roads space resulting in avoidable accidents. It is hereby recommended that pedestrian route should be separated from the road for mechanised vehicles, and provision should be made for off-street parking spaces.

Environmental sanitation activities aimed at improving or maintaining the standard of basic environmental conditions affecting the well-being of people should be established and be executed regularly. The environmental conditions in question include clean and safe water supply; efficient and safe animal, human, and industrial waste disposal; protection of food from biological and chemical contaminants; clean and safe ambient air (and reducing air pollutants to the minimum); and adequate housing in clean and safe surrounding, that is, environmental hygiene.

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