

THE PACESETTER

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THE PACESETTER:
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EMMANUEL ALAYANDE COLLEGE OF
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CALL FOR PAPERS

It is a pleasure to introduce to you another volume of our newly packaged College Journal, entitled “**THE PACESETTER**”. The Pacesetter is a bi-annual and multi-disciplinary educational journal. Articles are hereby invited for publication in subsequent issues.

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1. All articles should be original, analytical, scholarly and empirical.
2. The cover page should bear the title of the paper, typed in upper case and lower case letters, centred between the left and right margins, and positioned in the upper half of the page, author’s full name (surname first in uppercase letters) and contact address.
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4. An abstract of about 200 words must precede every article.
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2. Adedigba, T. A. and Raji, R. A. (2006). Effects of enhanced collaborative group strategies on Colleges Students’ achievement in population education. *International Journal of Research in Education*. 3(1): 235-239.

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1. Adele-Bolaji, W. A. (1999). *Eta-Oko*. Oyo, Nigeria: Immaculate City Publisher Nig. Ltd.

N.B. *The first letter of the first word of the main title, subtitle and all proper nouns have capital letters.*

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EDITORIAL COMMENTS

It is a great pleasure to introduce to you another issue of the College Journal – **THE PACESETTER**. This edition Volume 19 No. 3 includes thought provoking articles which both on economic and curriculum issues, teacher education and national transformation among others.

Members of the editorial team are appreciated for their commitments and scholarly assessments of the manuscripts. No doubt, their thoughtful and precise recommendations have helped us to make worthwhile editorial decisions. Our appreciation goes to our highly esteemed contributors from far and near. Needless to say that their contributions have continued to sustain our commitments.

We hope you will find the reading of this number as stimulating, refreshing and educative as always. We welcome reviews, position papers and research reports that may further broaden our perspectives of the various issues raised in this number of the journal. The College Management is commended and appreciated for always giving us an enabling environment to undertake research programmes of this nature from time-to-time.

Special thanks to the *Tertiary Education Trust Fund (TETF)* for assisting in the production of this edition. We appreciate this wonderful contribution and look forward to similar assistance on subsequent editions in order to reach more hands. We also want to appreciate the esteemed contributors, assessors and our editorial consultants for their wonderful supports.

Thank you.

Farayola, I. P
Editor-in-Chief

CONTENTS

Editorial Comments	v
Women Involvement in Nigerian Politics: Pre-Colonial and Post Independence Experience Ajayi A. O & Olawoore S. A.	1
Promoting Security Education in Nigeria through Social Studies Adeyemi O.O.	8
Pre-Service Nigeria Colleges of Education Teachers' Knowledge of, Attitude to and Access to Contraceptives in Oyo State Bamidele A. D.	19
Linguistic Heterogeneity, Ethnicity and Religious Intolerance; Implications for Nigerian Nationhood Okedigba S. O.	30
Relevance of Social Studies to the Teaching and Learning of Environmental Education in Nigerian Secondary Schools Olayiwola O. A. & Adebisi O. M	42
Effects of Co-operative Learning Method on Students' Academic Performance in Basic Electricity Subject Skills Development in Technical Colleges in Oyo State Adedeji 'S. A.	51
Roles of Educational Supervisors in Enhancing Secondary School Teachers' Instructional Delivery in Atiba Local Government Area of Oyo State Alabi C.O.	61
Roles of Adult Education Towards National Transformation Akinteye S. A. , Bello B. F. & Olagbende. O V	70
Language of Question: Intersecting Semantics In Solving Word Problems in Mathematics Oladeji F. F. & Idowu, A. F.	78
Infrastructural Development As A Tool For Economic Transformation In Nigeria Mosobalaje R. O.; Ogunjimi O. O; Rasaki M..G & Abiola B. A	89
The Use of Abusive Words in the Style of New Generation Yorùbá Playwrights +s[bz, B-lqnI3 K7k1I[m[99	
Bibliotherapy as a Tool for Nurturing the Gifted Children Aikomo D.O	108
Design of 1KVA Pure Sine Wave Power Inverter as Backup Source of Power for Physics Laboratory Sheu A. L.	115
The State of Public Goods and Services in Ibarapa Region Oladapo, O. S	124

Renewable Energy and Industrialisation in Nigeria: Problems and Prospects	Amusat T. A & Adegboyega O.	137
Indigenous Moral and Civic Education as Panacea for Good Governance and National Security	Ogungbola, M. A. Aliyu, J. A. & Gbadamosi, R. O.	147
Improving Junior Secondary School Mathematics Teachers Competency through Re-Training Programmes in Oyo State	Ayandokun, O.O	154
Information and Communication Technology: Tool for Effective Teaching and Learning in Public Secondary Schools in Oyo State	Afolabi R. A. & Oshin O O.	161
Science and Technology Education: A Tool for Addresssing National Security Challenges	Busari, G.A. , Ogungbesan, Y.F. & Sodipo, E.O.	172
Roles of Higher Education in Enhancing Good Governance and Effective State Capacity In Nigeria	Adeleke G. O.	181
Reading Habit as A Determinant Of Students' Academic Performance in Emmanuel Alayande College of Education, Oyo	Adesina, F. B & Idowu, G. S	192
Library Activities And Services In Support Of Qualitative Educational Development In Nigeria	Agbeniga K A & Imran A A	200
Re-Integrating History into School Curriculum in Nigeria for Nation Building and National Transformation	Ogunbunmi O. A.	207

WOMEN INVOLVEMENT IN NIGERIAN POLITICS: PRE-COLONIAL AND POST INDEPENDENCE EXPERIENCE

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Abstract

The Nigerian women have for long been playing crucial role in political life of the country, and this has contributed in no small measure in shaping the political system of the nation. For development of any kind to be successful, a vantage position should be accorded to women. As they constitute larger proportion of the population. In this regard, they should not be left out in the issues of decision making that bothers on their lives. Their experiences, agonies, gains and losses for their involvement in the politics of Nigeria were also considered. This paper thus intends to examine the participation of Nigerian women in Nigerian politics from the pre-colonial, colonial and post independence periods. It also seeks to identify the contributions of women in those periods. The burden of re-awakening of gender sensitivity and emergence of women in the Nigeria political scene were also discussed. Secondary sources were consulted for the writing of the paper, and it was concluded that the Nigeria government should work towards achieving gender equity in democratic governance, increase women participation and access to politics.

Introduction

Women contributions in Nigerian politics cannot be over-emphasized. As we know that politics is global activities, that has continued to attract the attention of every segment of our society. In indigenous African societies, before the advent of colonial powers, women political position varied extensively across Africa's multi-ethnic/tribal groups. In the pre-colonial traditional Nigerian societies, female participation in political life was limited. In some societies, women exercised extensive authority. During the colonial period however women became a political surrogate of their male counterparts.

Over the years, women have been relegated to the background in issue of the overall development especially in the developing nations like Nigeria. This is borne out of the sentimental attachment on feminine gender. Historical evidences are available to prove that the Nigeria women have for long been playing crucial role in political life of the country, and this has contributed in no small measure in shaping the political system of the nation. Today, women are participating more actively in political issues than ever before as a result of political re-awakening and awareness. More often than not, they are besieged with challenge of discrimination in politics. In

Nigeria, women population is more than half of the nation's population, most of them are illiterates thereby limiting their political roles to mere voting or party stalwarts who have no influence on the decision –making organ and organization of the party. This idea of seeing the women playing the number two role at homes has come to play itself out in the political life of the people. And this ought not to be so with regards to the ever dynamic nature of things globally as women are now seen in other communities as avant grade in developed nations. It is surprising that the same mindset of yester years is still what is obtained in Nigeria (Akande, 1999).

In pre-colonial times, women were actively involved in the political affairs of their time women like Efunsetan Aniwura, in Ibadan land, Moremi of Ife, Queen Aminat of Zaria, Funmilayo Ransome Kuti, Margaret Ekpo and Hajia Gambo Sawaba. Other women who have made impact in the country's political scene in post independence period Include Ngozi Okonjo Iweala, Obi Ezekwesili, Dora Akuyili and so on and so forth.

Today, many countries of the world are making efforts to bridge the gap between men and women in politics. Gloria (2002) observed that the most powerful agency of change for the modern women has been Nigeria's formal education system, from which a large number of elite women emerged politically and play active role in Nigeria politics.

Women Involvement in Pre-Colonial and Colonial Politics

In the pre-colonial traditional Nigerian societies, women involvement in politics was limited. The few who participated included the legendary Queen Amina of Zazzau (Zaria) who was

reputed to have ruled over an empire, Moremi of Ile-Ife and Queen Idia of Benin. Traditional Yoruba societies were noted for their kingdoms being ruled by kings. But some women too have performed the role of kings in certain kingdoms. For instance in Ile-Ife, there had been two female monarchs, namely Olowu and Teboye. In Akure there had been three female monarchs, Eyearo, Eyemol and Amaro. In Ondo Yeye Lisa-Lobun had a role to play in the appointment of new Osamawe "The King". In many Yoruba kingdom women were an integral part of a complex, centralized and hierarchical palace organizations. They were often involved in political maneuvering and intrigues with chiefs, kings and kingmakers (e.g. the Iyalode chieftaincy position).

In some Nigerian pre-colonial traditional societies women were often given position of responsibility, more because of their birth and lineage than the capacity of leadership. In Borno, for example, the kings mother, his first wife and his sister were given high position which entailed power. Unfortunately, the colonial intruders did not take cognizance of traditional structure of Nigeria societies. In their characteristic manner, they introduced new structure that destroyed many good aspect of our culture. The kind of educational system, which was introduced by the colonial officials was planned with a bias towards placing men at an advantage (Sani, 2007).

If women did not participate fully in the political affairs of their societies, they were active in another area concerning their economic and social well-being. Many Yoruba cities for instance had Iyalode (Mother of the cities) or head of the women who took care of the problems of the women. The market women especially looked up to them as leaders. Iyalode Efunsetan Aniwura dominated the

16th century Ibadan politics as she built a protective wall around her little kingdom within Ibadan. She outwitted her male (fellow chiefs) counterpart in decision making in Ibadan land. At a stage, she became more powerful and thus constitute terror and a threat to the leadership. She went away with whatever actions she took in the chieftdom with nobody to call her to questioning. Her period coincides with that of Queen Kambasa in Northern Nigeria. She was brought up in a strictly religious home where woman does not have a say over issues. Yet she distinguished herself as she said it as a form of enslavement to womanhood. She became very vocal in the community and as such attracts followers to herself. Madam Tinubu, an ebullient women held such an exalted position in Lagos and in Abeokuta. She was born in Owu in the old Egba kingdom. Madam Tinubu was a very successful business woman that traded in Tobacco and salt and also acted as a middleman for Brazilian slave traders in 1846. She played an active role in pre-colonial politics in Lagos. Akintoye was brought back to Lagos with Tinubu effort and emerged as the great power behind Akintoye throne. She was accused of monopoly in her commercial activities and Campbell forced Tinubu out of Lagos. (Awe, 2001).

Awe (2001) further states that when Tinubu got to Abeokuta she settled at the Owu quarter. Here, resolute and undaunted, with her unflinching business acumen and enterprise and set up a flourishing trade in gunpowder, bullets and other weapons of war. During the inter-war years in Yorubaland, the arms and ammunitions required for the war were in great demand Tinubu was very useful to Egba people in another area in 1863, Dahomean invasion of Egba was imminent. Tinubu was one of those who organized defence strategy for Egba land,

she threw in all she had to support the Egba war effort. The Dahomeans soldiers were defeated with heavy losses on their side. As a result of the victory in the war, Egbas fully appreciated the immense contributions and honoured her in 1864 with the honourable title Iyalode of the Egbas or Head of the women. This title accorded her a unique constitutional right of having a say in the affairs of the Egba people. By this title she has acquired a land of status, which she did not possess in Lagos and one, which gave her every scope to perform her usual role of being the pillar of strength behind the throne.

Nigerian Women in the Era of the Anti-Colonial Movement

The event, that brought Nigerian women into the limelight in the early stages of the anti-colonial movement in Nigeria, was the Aba women's Revolt of 1929. The revolt occurred in four divisions in Calabar Province. In Afikpo Division of Ogoja Province. During the riots, the women lost fifty-five of their companions who were killed and fifty were wounded. Roused by the native administrations tax efforts, the angry women sought for the removal of European presence from their land. The women went out to attack the agencies of local government, warrant chiefs, Native courts and their staff. The men and institution who and which brought British colonial rule home to people (Sesay, A & Adeniran, A. 1998). With the new constitution put in place by the Governor Clifford, this made provision for elective post in Lagos and Calabar. The major party among the political parties was the Nigerian National Democratic Party (NNDP) formed in June 4, 1923, by Herbert Macaulay, a grandchild of Bishop Ajayi Crowther. And the party supplied all elected candidate from Lagos to legislative house including the councilors. One of the reason for political success of Nigerian National

Democratic Party (NNDP) was the support given to it by the market women led by Madam Alimotu Pelewura, the chairperson of market women associations. Women involvement in politics then added to the success of (NNDP). Madam Pelewura was not seen as women leader alone but a national leader for women because of her political activities in decolonization period and her contribution made the women folk to be aware of political and economic frustrations of the colonial period.

Women Nationalist Struggle in Nigeria

The period between 1945 and 1960 was the era of decolonization and nationalist struggle among the women in Nigeria. Many Nigerian women could no longer stay aloof and watch the men, some of them took the bull by the horns. Among the front-liners in this crusade were Mrs. Margret Ekpo, Mrs. Olufunmilayo Ransome Kuti, Miss Aduni Oluwole, Mrs. Wuraola Esan, Mrs. Janet Mokehi, Lady Abayomi Oyinkan and Alhaja Gambo Sawaba, and Madam Ekpo Young. Most of these women politicians were either active members of defunct political parties or leaders of the women's wing of the parties.

The first Nigerian female politician to be elected into a legislative assembly in Nigeria was Mrs. Margaret Ekpo. Margaret Ekpo organized the Aba women's Association, she was a fierce opponent of colonialism and a strong advocate in demanding equal right for Nigerian women. In 1945, Janet Okala formed the Enugu women's association, she and Ekpo worked hand in hand with Kuti to organize strikes and demonstration against objectionable government policies. She succeeded in making the women aware of their rights. She also taught them how to protect and defend their right and to imbibe the spirit of nationalism (Arifalo, 1999).

Mrs. Funmilayo Ransome Kuti, was heart and soul in Nigeria politics, she fought for women right in Egba and Nigeria as a whole, she was a liberator of women in Nigeria, she was against the increase of taxes on women and she is interested in provision of increase facilities for the enlightenment of women, her involvement in Nigerian politics was not a smooth sailing. She was the founder of Abeokuta ladies club, the club organized lesson for non-literate Egba market women. Funmilayo Kuti was alleged of having contacts with the Communist World. Balewa informed members of the house of representative that since 1945, she had been reported to have had contacts with several communist organizations. On one particular occasion, when Mrs. Ransome-Kuti requested for a passport, it was denied. In 1959, Mrs. Ransome Kuti contested the election into the House of Representative as an independent candidate in Abeokuta, when the NCNC refused to adopt her as the official party candidate. On this she did not succeed. Also attempt to form a political party of her own did not materialize. She made an impressive and indelible contribution on the development of political consciousness among Nigerian women. According to Akinniyi (1999), Mrs. Kuti was the mother of nationalist struggle against the British Colonial administration in Nigeria.

Another nationalist women was Alhaja (Malama) Gambo Sawaba. Her experience in certain respect was different from that of other women politicians in Nigeria. She championed the cause of women in Northern Nigeria between 1951 and 1952, where she agitated for female franchise, she condemned the marriage of girls who were under age and use of forced labour. She was also a great advocate of western education in the North. In 1953, she

organized the inaugural meeting of the women wing of NEPU in Kano. In July 1958, during its second congress the women's wing of the NEPU decided to affiliate with All-Nigerian Workers Union under the leadership of Mrs. Ransome Kuti. Sawaba was a woman of great courage, that fought for women emancipation in Northern Nigeria and the reason why Nigeria should embrace self rule.

Nigeria Women in the Politics of Post Independence Period

During the last stage of Babangida Transition programme, Nigerian women began to show an increase in political awareness. One clear indication of this development was the fact that over twenty-four million women registered to vote as stated by Essian in Ahmad (1999). Shortly, after the ban on political activities was lifted some prominent Nigerian joined the newly formed political parties Sanni (2001). Among these women were Mrs. Regina Agbakoba, Oyinbo Odinamadu, Lella Donnyaro, Bimbo Akintola, Egun Oyagbinla, Hajija Ashama etc. Some of them attempted to form their own political parties and they were ready to fill the vacuum left by women like Funmilayo Ransome Kuti and Adunni Oluwole.

Similarly, during the second republic (1979-83) only one female was elected into a 57-member senate while 11 were elected into the 445-member House of Representatives, talking on "the effective participation of women in transition programme". None of the political parties of the second republic was gender sensitive. None of the political parties encouraged active women participation in decision making of their parties.

Explaining the participation of women in the aborted Third Republic, Adetutu (2001) submitted that only a few

Nigerian women contested for elective positions. For example at the local government level, only three (3) women were elected as chairpersons out of about 591 positions contested for during the election. The same picture was presented by the number of female legislators in the state house of assembly. Women legislators in the state and local government levels numbered only twenty-seven (27) in all states of the federation. Out of a total number of 1,172 legislators 14 states did not have female representative in their legislatures. At the national level, there was only one senator in a 91-member senate and 14 women representatives in a 593-member House of Representative.

In the Fourth Republic, Obasanjo reveals an infinitesimal representation of women in elective posts. For example Mrs. Kofoworole Buknor-Ekerele is the only female deputy governor in a country comprising 36 states governors and 35 deputy-governors were men (2.8%). Out of 109 senators, 3 were women (2.73%) and only twelve (12) were women out of 360 members of the House of Representatives (3.33%). Obasanjo nominated seven (7) women out of a possible 49 for ministerial appointments out of which three lost to senatorial screening (14.28%). It is therefore clear that women have got numerical power but this is not being translated into the needed advantage that women exhibit over our men during elections (Yetunde, 2008).

In Goodluck Jonathan Administration, 13 female ministers were appointed. Only seven female senators (7.63%) and 19 representatives. (5.28%) were elected in 2011 as opposed to nine senators and 25 representatives that sailed through in 2007. Out of those elected in 2007, only three female senators and 11 Representatives were re-

elected in 2011. In spite of women's topsy-turvy march in the National Assembly, most of those elected are women of substance, who are expected to play critical roles in the affairs of the seventh National Assembly. Also we have three female deputy governors in Nigeria all from the southwest and even, recently at the local government level women participation in politics has been increasing tremendously (Arowolo and Aluko, 2010).

Challenges facing Women in Politics

There are many barriers to women political participation in Nigeria. According to Essian (1999), religious misconception and rigid mind sets about women's role, lack of resources to run campaigns, and political violence work against women's full participation in electoral processes.

Sanni (2007) hinged his reason for women political apathy on the fact that politics, in this part of the world is extremely expensive whereas, most women especially at the grassroots are poor. Sesay and Adeniran (1998), also identified violent nature of Nigeria political terrain as a reason why women may find it difficult to run shoulder with their male counterparts. Politically-motivated assassination also tends to frighten women from seeking political office.

Another factor attributed to the decline of women's participation in public and economic affairs is contemporary socio-economic factors. Women regarded politics simply as a game of money, and most progressive and intelligent women who are interested in it are not economically sound enough to compete with their male counterparts who are economically buoyant. This affects women participation in public affairs. Similarly, women consider politics as an aggressive, violent and dirty game which tend to deter them from actively participating in it (Ahmad 1999). However,

some women are still actively involved in politics.

A Politically-motivated assassination was another scenario that tends to frightens women from seeking political offices. The killing of Chief Bola Ige (former Minister of Justice) and Mrs. Suliat Adedeji (a frontline politician in Ibadan) among others examples. (Akande, 1999).

The violent nature of our nation's political activities make it difficult for women to run shoulder to shoulder with their male counterparts. An example was that of the former Deputy Governor of Lagos States Mrs. Bucknor Akerele who has a frosty relationship with Former Governor Bola Tinubu. Also, in the last dispensation, a former Chief whip of the senate, Mrs. Stella Omu had to resign her position when members accused her, of issuing statements without the authorization of the house. Was she guilty? While a man in suit offence would be given a better treatment.

Conclusion

Nigerian women, adventure in the Nigerian political terrain has been long, rough, tough, tedious and tortuous. They have responded admirably to the arrogance of male chauvinistic motion hostility in various ways and places. The pre-colonial women and women in decolonization period play a very important role in women emancipation in those periods. Modern Nigerian women can no longer plead lack of precedents and role models. There is no doubt that women have some potentials and rights to contribute meaningfully to the development of their country. Therefore, the Nigerian government should work towards achieving gender equality in democratic governance, increase women participation and access to politics.

Recommendations

The study therefore recommends that:

- Women should be encouraged to participate in Nigeria politics, the idea of keeping them at home for child upbringing and domestic activities should be discouraged since women are now playing active role in global politics.
- Government should bridge the gap between women and men's participation in Nigeria politics and encourage active participation.
- Women are agent of change in any given society, if given the opportunity to demonstrate it. Their role in decolonization process during colonial regime cannot be undermined.
- Government should allay fear of some factor inhibiting women involvement in Nigeria politics like discrimination, oppression, violence, assassination and provide adequate security for them.
- There should be a constitutional provision for the percentage of women seeking for political post and offices across the country for gender balance.
- Government should provide a conducive atmosphere for women's participation in Nigeria politics as mother of the nation.

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PROMOTING SECURITY EDUCATION IN NIGERIA THROUGH SOCIAL STUDIES

By

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Abstract

Insecurity is a global phenomenon for which nations have turned to the education sector for solution. The Nigerian government, in response to the socio-political challenge, has developed the security education curriculum for the three levels of its basic education programme and depended on Social Studies teachers and experts to implement the curriculum. This paper examines the three key challenges that this new mandate will pose to these teachers and experts as they respond to this task and how Social Studies could assist in promoting security education in Nigeria by taking into cognizance national unity. This includes a conceptualization of security education, the preparation of pre-service and in-service teachers, and the need for teacher education institutions to update their programmes to tackle the challenge of insecurity. The paper, amongst others, recommended that Government through Social Studies experts should provide a leadership role in the revision of the curricula for Social Studies teacher education programmes in the country and in the development of retraining packages, mandatory continuous professional development (MCPD) programmes for teachers, and the development of undergraduate and postgraduate programmes in security education.

Introduction

One of the daunting socio-political challenges of Nigeria as a nation at centenary is insecurity. The country, like many nations, is faced by a plethora of security challenges. The global nature of insecurity has been underscored by the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2002), when it noted that the past century has witnessed the most devastating war in history and an exponential growth in violence between individuals, including youths at school. Unfortunately, despite conflict resolution efforts of international organizations like the United Nations (UN). African Union (AU). Economic

Community of West African States (ECOWAS) and military interventions, several nations are still experiencing different forms of insecurity.

In Nigeria, there are several internal conflicts leading to insecurity in some parts of the country. The Niger-Delta struggle for resource control, Jos crisis, numerous inter and intra communal crises, youth restiveness, various political crises, the farmers-Fulani herdsmen crises, and recently, the *Boko Haram* insurgency are the greatest security challenges since the country returned to democratic governance. The security situation is made worse by armed

banditry, different dimensions of violence, terrorism, hostage taking, cultism and the likes.

The effect of insecurity on national economy has been grave as lives have been lost, public utilities are destroyed, serious economic losses by individuals, corporate organizations and government, decline in the spate of foreign investments, destruction of property, shutting down or relocation of businesses, human capital flight, and diversion of huge public funds to restore peace in some areas, amongst others. Perhaps the most devastating effect is the general feeling of insecurity or psychological trauma experienced by citizens in some parts of the country.

In several countries, youths play prominent role or are used to perpetrate and perpetuate these crises. Often, with little or no information, they are misled into triggering, escalating and sustaining these crises. Citizens of many countries are also ill-prepared to manage security situations. It is in this light that the United Nations dedicated 2001 to 2010 as the decade for the Promotion of peace and non-violence for children and young adults of the world. The General Assembly of the United Nations, thereafter went on to invite Member of States to take necessary steps to ensure that the practice of peace and non-violence, is taught at all levels in their societies, including educational institutions (Muller. 2002). Countries are now turning to education for solution to the problem of insecurity. As Benavot (2002) noted:

Education has become a universal cure-all, an elixir that, if taken in regular doses according to standardized prescriptions, is hoped to solve a multitude of national woes and societal challenges ... For international educational organizations. National ministries of education, policy analysts and educational experts, schooling has come to be seen as the

preferred solution for a host of social problems. (p.52)

The revision of school curriculum has become a veritable strategy to prepare individuals to manage themselves and their immediate environment in times of insecurity and to identify threats to security. Social Studies is the subject discipline that often accommodates such curricula enrichments because it is one school subject that conveniently deals with emerging issues in society. Tyler (1949), cited in Oluwaseun (2012), had earlier referred to these emergent issues as issues of contemporary life. In Nigeria, such emergent issues as voting and electoral issues, road traffic accidents, traffic regulations, human trafficking, drug abuse, responsible parenthood, family life issues, negative behaviour, popular participation and other contemporary life issues are now included in Social Studies. The opportunity to include security education came during the Presidential Summit on Education in 2011. One of the outcomes was the 6th Edition of the National Policy on Education 2013, in which the basic and post basic education curricula were restructured.(NPE, 2013).

There was a reduction in the number of subjects offered at the basic education level in the National Policy on Education 2013. Lower basic level now has six (6) compulsory subjects and one (1) optional subject; middle basic level has eight (8) compulsory subjects and one (1) optional subject while the upper basic education level has nine (9) compulsory subjects and one (1) optional subject. To achieve this, some subjects were collapsed as themes and given a new nomenclature. The new subjects are Basic Science and Technology, with Basic Science, Basic Technology, Physical and Health Education, and Information

Technology as themes; Religion and National Values. with Christian Religious Studies, Islamic Studies, Social Studies, Civic Education, and Security Education as themes; and Pre-Vocational Studies, with Home Economics and Agriculture as themes.

National Values would be taught by Social Studies graduate teachers. In other words, these teachers would teach Social Studies, Civic Education and Security Education. Security Education is therefore, an innovation in the new 2013 National Policy on Education. A look at the Social Studies teacher education curricula for Colleges of Education and Universities in Nigeria shows that teacher trainees do not have exposure to Security Education courses. The central problem of curriculum study is the gap between our ideas and aspirations and our attempts to operationalize them (Stenhouse, 1975). There are three major issues before Social Studies experts and the Social Studies Association of Nigeria (SOSAN) as the country confronts several security issues facing it. One is how to conceptualize security education. The second is how pre-service and in-service social studies teachers would be prepared for the effective implementation of the new security education curriculum in Nigeria. The third challenge is how tertiary institutions in the country will update their programmes to produce a crop of graduates who will be active participants in the quest to solving the myriad security issues in the country? This paper seeks to address these challenges.

Concept of Security Education

Security education may be seen as that cooperative, dynamic and lifelong process through which a society generates knowledge, values and skills for its survival, sustenance, enlightenment and empowerment against all forms of danger

and threats to its well-being and coexistence Oluwaseun (2012). There are two important terms in the conceptualization of security education and these are security and education. A clarification of these terms is germane to the understanding of the concept of security education.

Security is an important concept that has received far less scholarly attention than it deserves (Baldwin, 1997). Perhaps, this is why Digeser (1994) described it as a neglected concept. According to Oluwaseun (2012) there are four perspectives of security: The military or national security perspective, the cooperative or international security perspective, the global security perspective and the comprehensive or human security perspective.

During the Cold War years (1945-1948), the term "security" was defined from the military perspective where it was seen as the process and act of effective protection of lives and property in a country. In other words, security was seen from the perspective of national security and was defined as a protective condition which statesmen either try to acquire, or preserve, in order to guard the various components of their polities from either external or internal threats (Baldwin,1997). United Nations Development Programme (UNDP, 1994) defined national security as security of territory from external aggression, or as protection of national interests in foreign policy, or as global security from the threat of nuclear holocaust. This has been referred to as the classical formulation which sees security as how states use force to manage threats to their territorial integrity, their autonomy, and their domestic political order, primarily from other states. Hence, Baldwin's (1997) notion that security studies during this

time was composed mostly of scholars interested in military statecraft.

With the end of the Cold War, the concept of security came under increasing scrutiny from scholars and practitioners alike. There has, therefore, been an extension of this military notion of security to include other notions of security. Nolan (1994) introduced the notion of cooperative security which emphasizes the interdependence of a cluster of nations to protect themselves from threat from either a nation or group of nations. Echeverri (2010) referred to this notion of cooperative security as the international relations theory of security.

Similarly, Alagappa (1998) introduced the notion of comprehensive security which sees threats to territorial integrity and political order as not just coming from other states but from non-state actors and even natural catastrophes. Bajpai (2000) faulted these notions as being restricted to the protection and welfare of the state. In his opinion, what is central - or should be central - is the protection and welfare of the individual citizen or human being. To him, therefore, a conception of security that is centered above all on the sanctity of the individual may be called human security. Francis (2012) aptly summed up the meaning of security as generally about the condition of feeling safe from harm or danger, the defense, protection and preservation of core values, and the absence of threats to acquire values. Security is about survival and conditions of human existence.

Unlike security, the conceptualization of education has received considerable attention in the scholarly literature. Therefore, to build the concept of security education, a number of definitions of education would be given. According to Good (1973) cited in Sowemimo (2013) education is the

aggregate of all the processes by means of which a person develops abilities, skills and other forms of behavior which are of value in the society he lives. Yet another definition is that given by Dave and Rajput (1999) who defined education as a process of human enlightenment and empowerment for the achievement of a better and higher quality of life. To Aighomian and Iyamu (2001), it is the process by means of which an individual is taught what is desirable in the society. Obanya (2004) defined education as the inter-generational transmission of cultural heritage. A number of deductions may be made from these and other definitions. The first is that education is a lifelong process that spans through life. It has to do with the transmission of knowledge, values, skills and other forms of behavior from one generation to another. Finally, it predisposes the survival and sustenance of society.

What then is security education? This term is hardly defined in literature. Where materials are available, they are used in the sense of Information Technology (IT). For example, the CISCO Security Center (2013) defined security education programme as essentially an internal marketing campaign to raise awareness about security risks and promote corresponding good practices across the organization. Following different episodes of shooting in schools in the US and parts of Europe, security awareness training has been emphasized in schools rather than a clear curriculum. In the United States of America, Homeland Security has been mounted as a programme in some universities at the undergraduate and postgraduate levels. Reese (2012) and Kahan (2013) have also reported the lack of definition of homeland security. A concise definition of security education as an area of study is therefore lacking.

Edozie (2014) sees security education as that cooperative, dynamic and lifelong process through which a society generates knowledge, values and skills for its survival, sustenance, enlightenment and empowerment against all forms of danger and threats to its well being and coexistence. That this process is cooperative shows the complementary role of security education. Aside the formal school system, its content may be learnt personally, or given by different institutions of society and the neighborhood. That it is dynamic shows its responsive nature. This implies that its content and methods can change over time as security challenges change. Again, that it is a lifelong process shows that it builds security consciousness and strategies in the individual all through his/her lifetime.

Social Studies Teachers and Promotion of Security Education in Nigeria

Though teachers are not the only factor in the implementation of curricula innovations, the literature is replete with the fact that they are a force that cannot be ignored if an innovation must succeed. Bishop (2005) and McGeown (2010) have also underscored the fact that the disposition and attitude of teachers to any innovation ultimately determines its success or failure. Innovation implementation must take cognizance of teachers because they operationalize the innovation at the classroom level (Waugh & Punch, 1985). Invariably, teachers may or may not support an innovation as conflicting findings exist in some literature (Blakemore & Cooksey, 1981 Urevbu, 1997).

In Nigeria, teachers' negative attitude and resistance to curricula innovation have also been documented. Studies on the introduction of sex education and family planning in different

parts of Nigeria by Esen (1984) and Olayinka (1981) have pointed to nervous and negative reactions to the idea of teaching sex education and family planning to adolescents in schools. The major reason usually adduced for this is that, these will create curiosity, which may lead to experimentation, sexual promiscuity and general moral decay among youths. Contrary to the above, in Nigeria Olaogun (1991) found that teachers were favorably disposed to the new national Junior Secondary School Social Studies curriculum.

The democratization of South Africa in 1994 changed virtually everything that needed change as far as education was concerned, especially, the school curriculum. The new *Curriculum 2005* developed in the later of the 1990s responded to this change. This was almost crippled by teachers, especially the inadequately prepared black teachers (Robinson, 2002).

Based on these conflicting reports about teacher's response to curricula innovation in developing countries, new curricular innovations policies now thread gently, ensuring that provision is made for teachers (Ukaegbu, 1986). This was the case in Mauritania, Uganda, Benin, Burundi and Mali where teachers were not only carried along in the innovation planning but also trained to implement the curricula innovation Weva (2003). Training remains an integral part of curricula reforms and if it is ignored, resistance and negative disposition of teachers would be inevitable.

As Chapman (1997) pointed out, there may be very good reasons why teachers do not implement particular reforms in practice: they may not agree that the problem that the reform is designed to address is in fact a problem or the problem may run counter to their beliefs. Beyond teachers' overall

dispositions to innovation is the question Maduewesi (2001) posed: are teachers coping with emergent curriculum issues? According to her, the issue of curriculum overload, overcrowded school timetables, ever-growing variety of subject matter contents, skills techniques, machinery and equipment, ICT and so on for which teachers are ill-prepared, integration and infusion of global issues and concerns are some of the emergent curriculum issues with which teachers are contending.

If the introduction of security education at different levels of education in Nigeria must succeed, there are lessons to learn from the reported studies and past experiences shared so far. Since teacher preparation at pre-service and in-service levels and capacity building are vital prerequisites for innovation implementation, it becomes imperative to take a look at how tertiary institutions can help in preparing teachers and in generalizing security education through its numerous programmes.

For pre-service Social Studies teachers, a review of curriculum at the tertiary level is inevitable. What form will this take? Should aspects of security education be infused into the content of existing courses or should new courses be mounted altogether? If the infusion option is taken, will the faculty guarantee the coverage of the new content? If the new course option is preferred, how will these new courses be derived? Does the faculty have the capacity for implementation of the new security education courses? Who will lead this curricular revision project?

Starting from the last question, it is the position of this paper that Social Studies Association of Nigeria (SOSAN) as a curriculum development agent will arise to its responsibility in taking the needed leadership position in this project. SOSAN is an academic forum for Social

Studies experts, specialists, graduates, and Practitioners all levels of education in Nigeria and should be able to advance solutions to the challenges facing the field. A first step is that the content, pedagogical and technological areas of security education in the basic education curriculum be critically examined. This should be followed by a full assessment of the security situation in and outside Nigeria, thus providing a global picture of the issue of insecurity. The issue curricular linkages with existing and emergent fields must also be addressed. For example, emergency management arid disaster risk education and refugee education are now being emphasized by some nations and the United Nations. The idea here is to provide a connect between the basic education curriculum and the curriculum of Social Studies teacher education programmes of Universities and Colleges of Education on one hand, and with global trends and future security challenges on the other hand.

After these have been done, the issue of infusion and separate course approaches would be addressed. Infusion is used here to mean the addition of relevant aspects of security content to existing Social Studies courses. The separate course approach entails mounting completely new courses on aspects of security education content for pre-service social studies teachers. Both approaches have implications for credit load and personnel. Inter-agency linkages may also be required with the Nigerian Educational Research and Development Council (NERDC), National Universities Commission ENUC), National Commission for Colleges of Education NCCE), National Emergency Management Agency (NEMA), Tertiary Education Trust Fund (TETFUND) and relevant security agencies.

For in-service Social Studies teachers, capacity building workshops would be a veritable option hatched by well funded Mandatory Continuous Professional Development (MCPD) programmes in security education. The obvious reason for this is that workshop duration is too short to cover the diverse contents of security education. Also, the dynamic nature of security education could be managed by a responsive MCPD programme in security education. The issue is do we have a data of Social Studies teachers in the country? How will the training needs analysis (INA) be supported by appropriate agencies? Will SOSAN position itself to take leadership in this project?

Repositioning Teacher Education Institutions for Security Education

One of the major challenges of Social Studies in Nigeria is the perception that everyone can teach the subject. Consequently, an overwhelming number of teachers who teach the subject are *prima facie* unqualified. An unqualified Social Studies teacher is one who does not hold a certificate or a degree in Social Studies Education but finds him/herself teaching the subject at any level. Such teachers may show manifest defects in constructs, incompetence in pedagogy and deficiencies in some content areas. The question is what should be done to build their capacities? Aside training qualified Social Studies teachers in relevant workshops and MCPD programmes, recertification programmes may be organized for them. Another option is to generalize security education for all teacher trainees.

The generalization of security education may take three approaches across different programmes of teacher education programmes in Nigeria. The first approach is to mount it as a General Studies Course. This is intended to create

security awareness and sensitization in students across all disciplines. The challenge with this approach is that course allocation may be contested by academic departments and personnel. Also students' engagement and content delivery may not be concentrated enough to achieve the minimum critical mass.

The second approach is to mount a distinct Security Education programme at undergraduate and postgraduate levels. As stated earlier, this approach is already being adopted in the United States. The challenge being faced in the USA is how to develop and standardize the Homeland Security Education Curriculum at these levels (Cutrer, 2012; Kiltz, 2012; Ramsay, 2013; Ramsay & Cutrer 2008). The approach is like putting the horse before the cart-a model that helps to produce a pool of qualified personnel to drive the programme. Unfortunately, the Nigerian approach is like putting the cart before the horse-the programme was mounted before a consideration was given to the training of personnel.

The third approach is the interdisciplinary approach which requires a comprehensive view of security from several disciplinary perspectives. Here, different disciplines which lay claim to specified aspects of security education content may interface with each other for the purpose of gaining deeper insights, concepts, theories and methods of studying the phenomenon of security. This approach would work well if a Centre is established in the institutions of higher level. Such Centres should be manned by a board drawn from affected disciplines. From the perspective of curriculum development, this approach manifestly shows that security education is an integrated field.

Conclusion

There is no doubt that in the last 100 years. Nigeria as a nation has been faced by several socio-political challenges. One of such challenges is that of insecurity. With the turning to the education sector for sustainable solution, Social Studies Education has been entrusted with the responsibility of responding to the challenge. By its integrated and responsive nature, Social Studies Education has become a preferred programme to adequately implement the security education curriculum at the basic education level in Nigeria.

To guarantee effective implementation, the need for SOSAN to take up the needed leadership role has been underscored. In particular, a review of Social Studies teacher education curricula in Universities and Colleges of Education has been suggested to prepare pre-service teachers to implement the new curriculum.

Recommendations

Based on the submission of this study, the followings are recommended:

- Government, as a matter of urgency through the Ministry of Education, should review the current Social Studies curricula in our tertiary

institutions of learning to accommodate security education.

- Pre-service teachers should be adequately prepared to implement the new curriculum, so as to make the teaching of security education a reality.

Regular capacity building workshops, seminars, conferences and MCPD Programmes should be organized for in service teacher to attend from time to time to make them to be efficient and effective in the delivery of their lesson.

There is the need for Nigeria government to modernize our security agencies with the help of advanced countries such as United State of America, European Union Members and China through constant and regular training of our security personnel. This effort we enhance the operational capability of the Nigerian security agencies by identifying avenues that will enable them respond appropriately to internal security challenges and other threats.

Finally, Nigeria government must address socio economic deprivation and the severe wealth inequalities among her citizenry through creation of job/employment opportunities and reduction in the salaries of our political office holders.

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PRE-SERVICE NIGERIA COLLEGES OF EDUCATION TEACHERS' KNOWLEDGE OF, ATTITUDE TO AND ACCESS TO CONTRACEPTIVES IN OYO STATE

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Abstract

This paper discusses the findings of a study which examined the knowledge of attitude to and access to contraceptiveves among pre-service NCE teachers in Colleges of Education in Oyo State. A sample of 250 pre-service teachers (male=115 and female =135) were selected through stratified random sampling using sex, level of study and course combination strata. A questionnaire titled Knowledge of, Attitude to and Access to Ccontraceptives (KAAC) was used to collect data for the study. The data collected were analysed using descriptive statistics of frequency count and simple percentages for the research questions while the hypohese were tested using t-test statistics. The findings of the study show that pre-service NCE teachers have good knowledge of contraceptives and also have positive attitude toward the use of contraceptives. However, many have difficulties in havingg access to contraceptives. It was also found that there is no significant difference in the knowledge of male and female pre-service NCE teachers about contraceptives. Based on the findings, it was recommended that misconceptions arising from lack of knowledge about contraceptives use need to be clarified while efforts should be made so that pre-service NCE teachers in Nigerian Colleges of Education will have more access to contraceptives.

Introduction

High fertility rate and hence high population growth rate are among the major economic and social problems facing the developing world. High fertility rate has been associated with poor child and maternal health as well as increased risk of maternal mortality (Lwelamira, Mnyamagola & Msaki, 2012). This is as a result of government's inability to adequately provide social services for rapidly growing population and shrinkage of resource base. In order to control population, there is therefore the need for campaigns for the use of contraceptives

among men and women of reproductive age of which pre-service teachers in Nigerian Colleges of Education are a part.

There are various challenges for adolescent parents especially those that are still in school. Some of these challenges as identified by Raimi and Babajide (2010) are economic dependence on family or others; life plans and career goals are distrupeted, so future aspirations may be hindered; isolation from peers; inability to provide proper care for the child; low self –esteem that may be transmitted to the child; peer rejection; and the child has fewer

opportunities due to low self-income of the parent.

Contraception is a method or practice of preventing a woman from becoming pregnant, while contraceptive is a drug, device or practice used to prevent a woman from becoming pregnant. Contraceptive use is seen as pivotal to protecting women's health and rights, impacting upon fertility and population growth, and promoting economic development particularly in much of Sub-Saharan Africa (Gordon, Sabates, Bond & Wubshet, 2011). In their study, Darroch, Singh and Nadeau (2008) report that globally, contraceptives help prevent an estimated 2.7million infant deaths and loss of 60million years of healthy life.

There are various reasons for using contraceptive. Bolaji (2010) identified some of the reasons to include; if the family has enough children; if the people concerned are not ready for children; because of medical reasons; job demand; and if one or both are still in school.

This paper focuses on pre-service NCE teachers in Nigerian Colleges of Education. From the field study conducted by the researcher, it was found out that some pre-service NCE teachers get pregnant a year or two years after they gain admission into the College of Education. Some of these pregnant girls are too young and unmarried. From all indications they are not ready for child rearing financially and materially judging from the way they care for these children within the school premises. Also, some of them are impregnated by their colleagues in school thereby compounding their academic problem. The end result of their act is one or some of the various challenges facing adolescent pregnant women stated above.

The question that presents itself then is: What are the effects of Family Life and Emerging Health Issues (FLEHI,

GSE 124) course introduced into the Nigerian Colleges of Education Curriculum? FLEHI is a second semester 100 level course which is compulsory for all students in Nigerian Colleges of Education (State and Federal). A sexual health/HIV infection is one of the topics in the course. The course contains information on contraception and abortion.

There are various factors that affect the use of contraceptives. One of such factors is Knowledge. Knowledge is power. Hemmings, Wubshet, Lemman, Antoni and Cherinet (2008) report that women's education impact upon their level of knowledge and their contraceptive use. Beekle and McCabe (2006) also report that educated and literate women of Ethiopia were more likely to discuss family size and contraceptive use thereby increasing their knowledge and impact on their use of contraceptives.

Attitude is a hypothetical construct which is not directly observable; its existence can only be inferred from observable responses (Derek, 2007). Attitude is the totality of an individual's inclination, feelings, prejudice or bias, preconceived notions, ideas, fear, threats and conviction about a subject or topic (Gbore&Daramola, 2013; Bamidele, 2014). Gordon et al (2011) observed that a more direct measure of women's attitude towards contraceptive use is their stated approval or disapproval of family planning. Thus, attitude to the use of contraceptive is another variable that determines the use of contraceptives.

Lack of family planning source and method is often cited as a key variable in determining contraceptive use (Korra, 2002). Heeks (2008) reports that being advised on family planning through visits to health clinics has been considered an important variable for contraceptive use and desire to limit child

bearing. Educated women are considered more likely to demand, seek and question service providers and adopt a contraceptive method that is ideally suited to them and therefore less likely to discontinue it (Gordon et al, 2011). Thus, access to information on contraceptives also determines use of contraceptives.

Summing it up, Lwelamira *et al* (2012) stated that some other factors that limit the use of modern contraceptive to include myths, rumours and misinformation about modern contraceptives, low availability and poor access to service. This paper therefore examines the knowledge of, attitude to and access to modern contraceptives among pre-service NCE teachers.

Statement of the Problem

High population growth rate is among the major economic and social problems facing Nigeria. Contraceptive use is seen as pivotal to protecting women's health and rights, impacting upon fertility and population growth and promoting economic development. However several factors had been identified that limit modern contraceptives use among pre-service NCE teachers leading to unwanted pregnancy. Some of the problems associated with unwanted pregnancy among pre-service NCE teachers include; inability to attend lectures regularly as some will go for anti-natal, lack of concentration during lectures and poor academic performance among others. This study therefore examined the pre-service NCE teachers' knowledge of, attitude to and access towards contraceptive use in Oyo state.

Purpose of the Study

The purpose of this study is to investigate the knowledge of, attitude to, and access to contraceptives by pre-service teachers in Nigeria Colleges of Education (NCE) institutions in Oyo state.

Research Questions

In addressing the problem of the study and to achieve the purpose of the study the following research questions were raised:

- ❖ What is the level of knowledge of contraceptives among Oyo state pre-service NCE teachers?
- ❖ What is the attitude of Oyo state pre-service NCE teachers to the use of contraceptives?
- ❖ Does Oyo state pre-service NCE teacher have access to contraceptives?

Hypotheses

Three hypotheses were stated and tested at 0.05 level of significance. The hypotheses are:

HO₁: There is no significant difference in the knowledge of contraceptives among male and female pre-service NCE teachers in Oyo state.

HO₂: There is no significant difference in the attitude of male and female pre-service NCE teachers in Oyo state to the use of contraceptives

HO₃: There is no significant difference in the access to contraceptives among male and female pre-service NCE teachers in Oyo state.

Theoretical Framework

There are several theoretical models on health behavior such as; Health Belief Model and Health Promotion Model developed by Becker (1974). These models have been applied and tested with regards to the use of contraception (Eko, Osonwa, Osuchuckwu & Offiong, 2013). This study is based on Health Belief Model. In the Health Belief Model, individual perception such as perceived seriousness of pregnancy, perceived benefits and perceived barriers are likely to affect the

preventive measure. Perceived seriousness includes using contraception to prevent unwanted pregnancy. Perceived barrier such as difficult access to Sexual and Reproductive Health (SRH) and service provider negative attitude can prevent the use of contraceptives. On the other hand, perceived benefit of communicating with parents may result in more effective use of contraception. Health Belief Model promotes an ability to weigh benefits and make changes when confronting health risk.

This study is connected to this model in the sense that pre-service NCE teacher (if unmarried and does not intend having children when in school) must first perceived that engaging in unprotected sexual intercourse involves consequence such as: unwanted pregnancy (Perceived susceptibility), then the consequence could be negative such as, having a child and dropping out of school so as to support the child because of economic reasons (Perceived severity); however, adherence to prescribed intention such as use contraception will help prevent unwanted pregnancies (Perceived benefit). It is within this framework that the study examines knowledge of, attitude to, and access to contraceptives among the pre-service NCE teachers.

Methodology

Research design

The study adopted a descriptive research design of the survey type. It focuses on the knowledge of, attitude to, and access to contraceptives among the pre-service NCE teachers in Nigeria Colleges of Education in Oyo state.

Population and Sample

The population for the study comprised all 200 level pre-service teachers in the two government owned Colleges of Education in Oyo State (Emmanuel Alayande College of Education, Oyo and Fedral

College of Education (SPECIAL), Oyo. A purposive sampling was used to select 250 pre-service NCE teachers in 200 level based on the fact that these set of students had taken the course in Family Life and Emerging Health Issues (FLEHI, GSE 124). Stratified and simple random sampling techniques were used to select 250 sample based on sex, department and course combination.

Research Instrument

The only research instrument used in this study was a questionnaire on Knowledge, Attitude and Access to Contraceptives (KAAC). The questionnaire was divided into two sections. Section one was on demography. It sought personal information about sex, course combination, current level of study and age. Section two contains questions which required information on knowledge of, attitude to and access to contraceptives. Twelve items were on knowledge, six items on attitude and six items on access to contraceptives. The scoring of KAAC was done by attaching a 2-point scale to each of the statements. The scale points are:

Yes	2points
No	1point

The point for each student on KAAC were converted to percentage

Validity and reliability of the instrument

The questionnaire was given to two experts in Reproductive Health Education and two lecturers in the department of Test and Measurement to ascertain the content and face validity of the questionnaire. Test-retest method was used to determine the reliability of the instrument. The reliability index of 0.72 was obtained.

Administration of the instrument

The administration of the instrument was done by the researcher with the assistance of two other research assistants.

Data Analysis

The data collected was analysed using descriptive statistics of frequency count and percentages for the research questions while the hypotheses were

tested at 0.05 level of significance using t-test.

Results and Discussion

The result of the findings is presented as follows:

Research Question 1:What is the level of knowledge of contraceptives among Oyo state pre-service NCE teachers?

Table 1: Pre-service Teachers' Knowledge of Contraceptives

S/N	Item	Yes	%	No	%
1	Have you ever heard of contraceptives?	224	89.6	26	10.4
2	Using contraceptives can prevent one from getting pregnant	235	94.0	15	6.0
3	A girl cannot get pregnant if she thoroughly washes herself after having sexual intercourse	86	34.4	164	65.6
4	Abstinence is also a method of contraception	230	92.00	20	8.0
5	Contraception is only meant for female	41	16.4	209	83.6
6	Contraceptives are drugs/practices to prevent pregnancy	238	95.2	12	4.8
7	Condom is the only contraceptive I know.	120	48.0	130	52.0
8	It is only good to use contraceptives if one is young/unmarried /in school.	145	58.0	105	42.0
9	Using contraceptives can make one to be barren	107	42.8	143	57.2
10	Barrier (i.e. condom) method of contraception is easier and cheaper to use	241	96.4	09	3.6
11	Withdrawal method of contraception is very dangerous	204	81.6	46	18.4
12	Contraception is only meant for wayward people	76	30.4	174	69.6

Source: Field work

From Table 1 above, 224 respondents (89.6%) agreed that they have heard about contraceptives. 235 of the respondents (94%) agreed that using contraceptives can prevent pregnancy. 86 of the respondents (34.4%) have wrong impression that a girl cannot get pregnant if she washes herself thoroughly after having sexual intercourse. A thorough wash after having sexual intercourse might not be able to prevent adequately

the seminal fluid from entering the fallopian tube where conception usually takes place. 92% of the respondents agreed that abstinence is a method of contraception, while 41% of the respondents have wrong notion that contraception is only meant for female only. 238 (95.2%) of the respondents expressed correct knowledge about what contraceptives actually meant, while 120 (48%) of the respondents claimed

ignorance of other forms of contraceptives apart from condom. 145 (58%) of the respondents were of the opinion that contraceptives should be used only by young, unmarried and those that are in school. This opinion is contrary to the fact that married people who have enough children and are still in their reproductive year can still use contraceptives. 107 (42.8%) of the respondent have wrong opinion that using contraceptives can make one to be barren. This is a misconception as only permanent method of contraception such as Tubal ligation for female and Vasectomy for male are irreversible methods which are not recommended for those that are yet to have children. All other methods of contraception are reversible. 241 (96.4%) of the respondents agreed that barrier method

such as condom is easier and cheaper method of contraception. 204 (81.6%) of the respondents were of the opinion that withdrawal method of contraception is very dangerous. This is true as the success of the method depend on the sensitivity of the male to withdraw during sexual intercourse before ejaculation. Only 76 (30.4%) of the respondents reported "Yes" that contraceptives are meant for only wayward people.

From the above, it is evident that pre-service NCE teachers have good knowledge of contraceptives. Majority of them are used to condom as major means of contraception. However, there is misconception that contraception can lead to barrenness, it is only for wayward people and it is only good for unmarried, young and those that are still in school.

Research Question 2:What is the attitude of Oyo state pre-service NCE teachers to the use of contraceptives?

Table 2: Attitude of Pre-service Teachers to Contraceptive use

S/N	Item	Yes	%	No	%
1	I cannot go for contraceptives because people will think I am a prostitute or promiscuous	65	26.0	185	74
2	The fear of getting pregnant will not discourage me from having unprotected sexual intercourse.	67	26.8	183	73.2
3	I prefer abortion to the use of contraceptives	10	4.0	240	96.0
4	I cannot risk unprotected sexual intercourse, therefore I use contraceptives always	223	89.2	27	10.8
5	Using condom does not make one enjoy sexual intercourse, so I prefer oral pills	96	38.4	154	61.6
6	I do not mind what people say, I always go for contraceptives	185	74.0	65	26.0

Source: Field work

From Table 2, it could be observed that 65(26%) reported "Yes" that going for contraceptives make people think that

one is a prostitute or promiscuous, while 185 (74.0%) do not care about what people say about them when they go for

contraceptives. Very few of them 67 (26.6%) do not care of getting pregnant, they always engaged in unprotected sexual intercourse. 10 (4.0%) of the respondent preferred abortion to the use of contraception, 223 (89.0%) reported that they cannot risk unprotected sexual intercourse, therefore, they always use contraceptives. 98 (38.4%) preferred oral

pills to condom in order to have satisfaction during sexual intercourse.

From the above, it shows that majority of pre-service NCE teachers have positive attitude toward the use of contraceptives. Only few of them claimed that contraceptives are meant for wayward people.

Research Question 3: Does Oyo state pre-service NCE teacher have access to contraceptives?

Table 3: Access of Pre-service Teachers to Contraceptives

S/N	Item	Yes	%	No	%
1	Parents and elders always prevent young people from getting access to contraceptives	237	94.8	13	5.2
2	Buying contraceptives is like buying other drugs so I can easily get contraceptives	165	66.0	85	34
3	I find it difficult getting information about types and uses of contraceptives, so I don't use contraceptives	96	38.4	154	61.6
4	I do not feel comfortable buying contraceptives in public.	189	75.6	61	24.4
5	Contraceptives are expensive I cannot afford to get and use contraceptives regularly.	96	38.4	154	61.6
6	I only get information about contraceptives from people that comes from Oyo State Agency for Control of Aids (OYSACA) that usually come to our school occasionally	215	86.0	35	14

Source: Field work

From Table 3, it shows that a high number of respondents 237 (94.8%) reported that parents and elders always prevent young people from getting access to contraceptives. 165 (66.0%) reported "Yes" that buying contraceptives is like buying other drugs, so it is easier for them to get contraceptives. 96 (38.4%) reported that it is difficult getting information about contraceptives and that lack of information prevents them from using contraceptives, while 215 (86.0%) of the respondents reported "Yes" that

they only get information about contraceptives from OYSACA that occasionally come to their school. 189 (75.6%) of the respondents reported that they do not feel comfortable buying contraceptives in the public, while 96 (38.4%) reported that contraceptives are too expensive and they cannot afford to use contraceptives regularly.

From the above, it shows that the pre-service NCE teachers find it difficult in getting information about

contraceptives. This may be as a result of the erroneous belief that sexual intercourse and contraceptives should not be discussed openly and that discussing contraceptives openly make people look immoral.

Testing of Hypotheses

HO₁: There is no significant difference in the knowledge of contraceptives among male and female pre-service NCE teachers in Oyo state.

Table 4: t-test Analysis Showing Knowledge of Contraceptives between Male and Female Pre-service Teachers in Oyo state.

	N	\bar{x}	SD	Df	t _{cal}	t _{table}	Remark
Male	115	38.19	7.932	248	0.42	1.96	NS
Female	135	38.12	8.669				

- Significant at $p < 0.05$

t-test analysis was used to determine the difference in the knowledge of male and female pre-service NCE teachers. As indicated in table 4, the t-test analysis shows that t-cal. of 0.42 is less than the table value of 1.96 at 0.05 level of significance. Therefore, the null hypothesis is not rejected, because there

is no significant difference in the knowledge of contraceptives among male and female pre-service NCE teachers.

HO₂: There is no significant difference in the attitude to the use of contraceptives by male and female pre-service NCE teachers in Oyo state.

Table 5: t-test Analysis Showing Attitude to Contraceptives between Male and Female Pre-service Teachers in Oyo state.

	N	\bar{x}	SD	Df	t _{cal}	t _{table}	Remark
Male	115	38.14	8.344	248	0.617	1.96	NS
Female	135	39.13	7.104				

- Significant at $p < 0.05$

t-test analysis in table 5 shows that the t cal. 0.617 is less than the t-table of 1.96 at 0.05 level of significance. Therefore, the hypothesis is not rejected.

HO₃: There is no significant difference in the access to contraceptives among the male and female pre-service NCE teachers in Oyo state.

Table 6: t-test Analysis Showing Access to Contraceptives between Male and Female Pre-service Teachers in Oyo state.

	N	\bar{x}	SD	Df	t _{cal}	t _{table}	Remark
Male	115	37.08	10.733	248	0.715	1.96	NS

Female	135	39.13	7.104				
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- Significant at $p < 0.05$

The result obtained in the t-test analysis table 6 shows that the table 0.715 is less than table value of 1.96 at 0.05 level of significance. The hypothesis is not rejected.

Discussion

The findings of this study show that pre-service NCE teachers have adequate knowledge of the use of contraceptives especially the use of condom for preventing unwanted pregnancy. Though, few of them have misconception that the use of contraceptives can lead to barrenness. Their high knowledge of contraceptives may be as a result of the fact that they are educated and can read materials on contraceptives. The finding corroborates the study of Beekle and McCabe (2006), Korra (2002), Gordon et al (2011) that schooling and contraceptives use are strongly related. The finding is also in agreement with the findings of Hemmingsetal 2008 that women's education impacts upon their level of knowledge, and through it their contraceptive use.

The findings of this study also show that both male and female pre-service NCE teachers have positive attitude to the use of contraceptives and that there is no significant difference in the attitude of male and female pre-service NCE teachers in Oyo state. Their positive attitude may be as a result of their knowledge about the reason why people use contraceptives and the consequence of having unwanted pregnancy. The positive attitude of the students might also be as a result of their discussion among their peers. This is in agreement with the findings of Korra (2002),

Sharan and Valente (2002) and Beekle and McCabe (2006) that reported that

educated and literate women in Sub-Saharan Africa were more likely to discuss family planning with their spouses and were more likely to use contraception.

Furthermore the findings of this study also revealed that parents and elders prevent younger ones from getting access to contraceptives. The attitude of parent and elders in this regard may be on moral ground that discussing the use of contraceptives with the youth may make them to be wayward. The only source of accessing information on contraceptives is through OYSACA that visits their schools occasionally. Lack of access to information may hinder the pre-service NCE teachers knowledge and attitudes towards the use of contraceptives. Financial incapability also hinder the pre-service teachers from having access to contraceptives.

The implication of this study is that majority of the pre-service NCE teachers have high knowledge of contraceptives, which may be a reflection of the knowledge gain in FLEHI. However, one expects pre-service NCE teachers be free from misconception and develop favourable attitude to contraceptive use so as to justify their level of knowledge and education. This situation calls for urgent attention of Government and Non-Government Organisations who are involved in population education and womens' right to intensify enlightenment campaign for the use of contraceptives.

Conclusion

From the findings of this study, it could be concluded that knowledge, attitude and

access to health services play a significant role in contraceptive use. Also, the study shows that there is no significant difference in knowledge of, attitude to, and access to contraceptives among male and female pre-service NCE teachers in Oyo state. Further more, the findings also provide evidence education for both male and female is very important as this would help to enlighten and correct some misconception that they may have about contraception, contraceptives and the use of contraceptives.

Recommendations

Based on the findings of this study, the following recommendations are

suggested. There is a need to further intensify campaign on the use of contraceptives in order to correct ignorance and misconceptions among the pre-service NCE teachers in Oyo state.

Effort should be made to encourage youth to show favourable attitude towards the use of contraceptives. It is also recommended that health care providers should be trained to be able to offer counselling services to youth in order to improve acceptance and utilisation of contraceptives.

Finally, effort should be made so that pre-service NCE teachers in Oyo state will have more access to contraceptives.

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LINGUISTIC HETEROGENEITY, ETHNICITY AND RELIGIOUS INTOLERANCE; IMPLICATIONS FOR NIGERIAN NATIONHOOD

By

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Abstract

Nigeria's peace has continued to be threatened ever since her independence in 1960 by crises. Although some of the crises were caused by other factors, most of them have arisen from her linguistic diversity, ethnicity and religious intolerance between adherents of the two foreign religions of Christianity and Islam. The fabrics of the nation's existence have been assaulted severally by these crises so much that when a crisis happens, one will feel that the nation will crumble immediately. Nigeria is one of the countries that are linguistically diverse with over 500 languages spoken within her borders. Ethnicity has continued to thrive because of the diversity in language. Most citizens of Nigeria first see themselves as members of certain ethnic groups before they claim to be Nigerians. Adherents of Christianity and Islam are always at one another's throats over petty religious issues. Though both religions preach peace, the actions and in-actions of their adherents contradict the tenets of the religions. The crises have insidious effects on the well-being of Nigeria and Nigerians as the nation's unity and development are hampered. The objective of this paper, therefore, is to examine the effects of linguistic diversity and ethno-religious crises on the unity of the Nigerian nation. The paper found out that peace, unity and development may continue to elude Nigeria if the hydra-headed monsters of linguistic diversity, ethnicity and religious intolerance are not checkmated. It recommends, inter-alia, that Nigerian leaders should provide good leadership; qualitative education should be provided for all Nigerian children in order to wipe away ignorance among Nigerians; and government should be more decisive in resolving the national language issue by making English the nation's national language since none of the local languages can receive the unanimous blessings of all the linguistic groups the way English language will be received; Nigerians should stop being religious bigots and learn how to tolerate people of other faiths since faith is a personal thing.

Introduction

Oteh & Eze (2012) say that religion and ethnicity are very crucial in understanding the development of Nigeria as they both affect democracy, nation building and national integration. The incessant crises that have been plaguing Nigeria since 1960 to the current Boko Haram killings in the North Eastern part of

the country are products of ethnic and religious complexity, diversity and intolerance. They are of the opinion that the ethno-religious crises are symptoms of the character and politics of Nigeria.

One may be safe to say that the foundation of the ethno-religious crises plaguing Nigeria was laid by the British during the colonial era. The colonialists

forcefully merged many communities to form what is today called Nigeria without seeking the consent of the people about the merger. The colonialists did not consider the ethnic and cultural differences of the communities before merging them. The people of these communities were, therefore, wedded together in a forced union. The differences among the communities after independence continue to manifest in how the different ethnic groups relate with one another despite different efforts made by government to unify them.

According to Salawu (2010), the nature of ethno-religious conflict reflects a religious intolerance that smacks of ethnic sentiments. His assertion that ethno-religious conflicts reflect a situation in which the relationship between members of one ethnic or religious group and another of such group in a multi-ethnic and multi-religious society is characterized by lack of cordiality, mutual suspicion and fear, and a tendency towards violent confrontation. This is more apt when the Nigerian situation is considered. Nigeria has always been faced with the problems of ethnic sentiments and religious intolerance.

Nigeria is a country that is linguistically diverse. This linguistic diversity has continued to promote ethnicity in the country. Ethnicity on its own part impacts negatively on the unity and well-being of the nation as different ethnic groups primarily strive to promote the interests of their people at the expense of national unity. Although the message preached by Nigerian leaders is "Unity in Diversity", the unity of the nation is not, frankly speaking, being helped by her linguistic diversity. Issues of national importance that are supposed to be sincerely and objectively addressed collectively are often given ethnic colourations by ethnic groups, especially

if the issues are deemed to affect the interests of their (ethnic) groups.

In terms of religion, Nigeria is also diverse. There are foreign religions, chief among which are Christianity and Islam. There are also different traditional religions from place to place. As a result of this religious diversity, Nigeria has continued to witness violent religious crises. Probably as a way of forestalling religious crises, the nation's constitution approves a secular system in which none of the religions is recognized as the state religion. Thus, there is recognition of freedom of worship. In spite of the secularity of the Nigerian state, religious crises, arising from religious intolerance, have continued to be the order of the day. The crises have, however, been mostly between adherents of the two most popular but 'foreign' religions of Christianity and Islam both of which, ironically, preach peace.

As at 2009, it was estimated that the number of Nigerians that had lost their lives in ethno-religious crises that had engulfed the country since the return of democracy in 1979 was well over one hundred thousand. The number of those injured tripled the dead, while those displaced were put at millions (**Yusuf 2009**). By now, the figures of those who lost their lives and those who got injured must have quadrupled given the unprecedented violence which the present Boko Haram insurgents unleash on the nation at will. The first major religious crisis in the country was the Maitatsine Crises of 1980 in Kano. The crisis masterminded by late Mohammodu Marwa claimed the lives of thousands of Nigerians, both Christians and Muslims, who had come from different parts of the country and even beyond her shores to live in the ancient city. Since then, there have been very many other more violent

ethno-religious crises which we shall look at cursorily in the course of this paper.

Linguistic Heterogeneity, Ethnicity and Religious Intolerance

Linguistic Heterogeneity: Bamgbose (1991) opines that multilingual societies face the problem of linguistic heterogeneity and development. Linguistic diversity engenders language conflict which ultimately leads to economic, social and political under-development or outright non-development. This is because it promotes political sectionalism, hinders inter-group co-operation, national unity and political stability. Nelde (1987) is, however, of the opinion that linguistic conflict is what leads to other forms of conflict which threaten the peace and unity of a society that is linguistically diverse. Nigeria is said to have over 250 ethnic groups. An ethnic group is a group of people who shares the same or very similar cultural, social, and political ties. Because of the forceful manner with which the British colonialists had brought the diverse ethnic groups together, the relationships among these diverse ethnic groups have always been with suspicion and even hatred.

In Nigeria, Igbo, Yoruba and Hausa-Fulani are the most populous and politically influential ethnic groups. In the South-East, Igbo is the dominant ethnic group. The region is also predominantly Christian. Yoruba is the dominant ethnic group in the South-West. The population of adherents of Islam and Christianity in the area is believed to be nearly evenly split. Hausa-Fulani is the dominant ethnic group in the North, and the region is mainly Muslim. Other ethnic groups like Efik, Ibibio, Tiv and Ijaw also constitute a relatively large segment of the nation's population.

Ethnicity: Olu-Adeyemi (2006) sees ethnicity as a kind of social identity that rests upon culturally specific practices and a unique set of symbols and cosmology. He adds that the belief of an ethnic group in common origin and history confers social identities of both insiders and outsiders on members and non-members of an ethnic group respectively. In his opinion, one of the important ways people conceive of themselves is through ethnic culture, and that culture and identity are closely intertwined. In Nigeria today, issue of ethnicity has formed part of the most recurring issues in nation's body polity. The issue of ethnicity has been with the nation since the colonial period and it appears there is no end in sight to the conflicts generated by ethnic rivalries among the very many ethnic groups.

Suspicion reigns supreme among the ethnic groups. The nation's unity is thus being threatened. Alabelewe (2013) quoted President Good-luck Jonathan to have said that: "The greatest danger to our collective security as a people and a nation lies in the peril of ethnic and religious intolerance". The President added that the twin evils are capable of threatening the nation's corporate existence as one sovereign indivisible nation if not checked.

Religious Intolerance: Ekwunife (1993), cited in Muhammed; Ayinla; and Adeoye (2006), is of the opinion that religious intolerance is a blind and fixated mental and psychological negative attitude towards religious beliefs and practices that are contrary to one's cherished beliefs and practices. Muhammed, et al (2006) on their own part are of the view that such negative attitudes are found in situations where leaders or groups in a particular society blindly refuse to understand and respect

other religious views and practices except the ones they consider to be true.

The colonial administration laid the foundation of religious intolerance in Nigeria because of the way it helped prop up Islam as a state religion in the Northern Region though the administration was claiming secularity. Agbaje (1990) is of the opinion that the colonial administration "underwrote Islam in the Northern part of Nigeria and used it as the basis of political authority in local administration". He adds that the colonialists not only kept out Christian missionaries from the North so as to preserve the assumed Islamic homogeneity of the region, it also adopted the emirate system of political administration with its strong religious content.

From the above therefore, one can safely say that Christianity did not get to the North early enough, and that the people of the North had been used to having Islam as the de facto state religion. People of the area, especially Moslems, have, over time, come to feel that Islam should be adopted as state religion in Nigeria even after independence. This assertion is being proven right by the activities of the Boko Haran insurgents who are presently waging war on Nigeria with the aim of Islamizing the whole nation. Ekanem and Ekefre(2013) are of the opinion that the issue of religious intolerance in Nigeria is deeply rooted in the north because of the fact that the region has the highest level of illiteracy in the country. They argue further that the people of the north, particularly Moslems, view everything with the spectacle of religion, and that the north does not have a culture that is different from religion. In their own words, "... everything to an average northerner who is a Moslem is viewed from Islamic religion. So, to them(sic),there are no

differences between culture, politics, and religion".

Though there had been cases of religious conflicts in Nigeria, it was, however, the unilateral decision of the military government of General Ibrahim Babangida to change the position of Nigeria in the Organization of Islamic Countries (OIC) from that of an observer to that of a full member in 1986 that laid the foundation for the present serious religious polarization of Nigeria. This action of government generated series of intra and inter-religious conflicts and violence. Christians were the most angered as they viewed the action as a deliberate attempt to Islamize the country contrary to the provisions of the nation's constitution. Since then, much as the government tries to assure Nigerians of the secularity of the nation, Nigerians, especially Christians, have continued to view every action of government in the sphere of religion with suspicion and distrust.

Highlights of Ethno-religious Crises in Nigeria

In Nigeria, ethno-religious violence has become a recurring decimal since the early 1980 ssuch that three months hardly passes by without the occurrence of at least an ethno-religious crisis. This is why Muhammed, *et al* (2006) say several flash points of religious violence have emerged across the country in addition to a number of potential situations of violence outbursts.

We are undertaking a brief examination of ethno-religious crises in Nigeria to refresh our minds about the various orgies of ethno-religious violence that have befallen Nigeria since the 1980s. We are drawing largely from the accounts of these crises as given by Ayinla (2004). The first major religious crisis was that ignited by Maitatsine followers in the ancient city of Kano in

December 1980. Thousands of people were killed, and property worth several millions of naira was completely destroyed. Members of the sect struck again on October 16, 1982, this time, in Bullumkutu, Borno State. It was estimated that over 5000 people were killed, and property running into millions of naira was also lost to the crisis. The sect members struck four days later on October 20, 1982 at Rigassa Village in Kaduna State where 52 persons were killed.

In 1984, the Maitatsine Islamic sect unleashed mayhem on the people of Jimeta, via Yola in old Gongola State, now Adamawa. Over 1000 people were said to have been killed by members of the fanatical Islamic sect while several thousands of people were displaced. Property worth millions of naira was also destroyed. Gombe was the next in line to taste the bitter pill of the sect's heinous activities in 1985. The loss in terms of lives and property was mammoth. The clash between adherents of Christianity and Islam in Ilorin in 1986 left several people dead and property valued at several millions of naira destroyed. In 1990, Christians and Muslims clashed again in the city of Kano with the result being huge loss of lives and destruction of property valued at millions of naira.

Tafawa Balewa and Dass in Bauchi State were the theatres of war between Christians and Muslims in 1991. Hundreds of lives were lost. Churches, mosques and buildings, both residential and commercial, were also destroyed. The Zango-Kataf crisis followed in 1992. Zango-Kataf, a town in Kaduna State, and its environs were held hostage by Christians and Muslims who engaged one another in a battle that left many people dead and property destroyed.

The peace of Sagamu, a town in Ogun State, was shattered for a number of days in July, 1999 when some Yoruba

traditional worshippers clashed with some group of Hausas. Lives were lost while property valued at several millions of naira was destroyed. An estimated 3,000 people lost their lives in another clash between Christians and Muslims in Kaduna metropolis between 21st and 22nd of February, 2001. There was a retaliatory attack later in the same month in Aba, Abia State when Igbo Christians rose against the Hausa community in the town in retaliation for the death of thousands of their sons and daughters in Kaduna in the preceding week.

On September 7, 2001, Christians clashed with Hausa/Fulani Muslims in Jos. The violence claimed more than 1000 lives while around 1000 people were also injured. Property valued at several millions of naira was also consumed by the crisis. Again, Christians and Muslims clashed with one another in Kano on October 12, 2001. Hundreds of lives were lost. Between May 22 and 23, 2002, the Kaduna metropolis boiled when Christians and Muslims engaged one another in very violent clashes that resulted in the death of over 3000 people. As usual of such clashes, property worth millions of naira was destroyed.

In September 2002, a wave of deadly ethno-religious crises swept across the northern part of Nigeria like a wild fire. The crises were as a result of an alleged blasphemous publication against Prophet Mohammed on the 2002 Miss World Beauty contest in the *This Day* newspaper of September 21, 2002. One Isioma Daniel, a Christian, was the alleged author of the article in which it was written that Prophet Mohammed (S.A.W) would have marvelled at the beauty of the ladies participating in the competition if he were to be alive and had seen them. Muslims considered this very offensive. Thousands of non-Muslims and Southerners were killed by Muslim

fundamentalists. On November 22, 2002, violence broke out once again in the Kaduna metropolis between Christians and Muslims. At least, 250 people were believed to have lost their lives in the violence. Houses and other business premises were also burnt and destroyed.

From May 2-4, 2004, Christian youths in Yelwa Shendam area of Plateau State went berserk killing more than 600 people, mostly Muslims in retaliatory attacks. Prior then, scores of Christians had been killed by suspected Muslim fundamentalists. The retaliatory attacks also saw to the burning/destruction of several vehicles and buildings. In May 2004, Christians and Muslims clashed in the city of Kano. Over 100 people lost their lives and thousands of others were displaced. Property believed to worth billions of naira was lost to the crisis (Ayinla, 2004).

All the crises highlighted above tend to pale into insignificance when they are put beside those that have so far been fomented by the Boko Haram Islamic sect. For instance, *The Nation* Newspapers of 16 June, 2014 in a news item entitled; "Boko Haram attacks create refugee and food crises", quoted the Displacement Monitoring Centre, an affiliate of Norwegian Refugee Council, to have said that the sect had killed over 3000 people between May 2013 and March 2014 alone. The Boko Haram insurgency erupted in Borno State in 2009 when a group of Islamic fundamentalists declared *fatwa* (a kind of death sentence) on Western education, and held the state hostage for about five days before they were dislodged by the military. Ever since re-grouping, the sect has grown more daring and violent as it has been able to carry out successful attacks on high-brow targets such as the police headquarters and the United Nations building, both in Abuja.

The sect has consistently wreaked unquantifiable havoc on the nation and her people. It was the sect that introduced the idea of suicide bombing into Nigeria, and several of such bombings have taken place usually with grave fatalities. The most recent were those that happened at Nyanya, a suburb of Abuja. The first happened at Nasir El-Rufai Motor Park in Nyanya, on April 14, 2014 while the second took place on May 1, 2014 at a spot that was just a couple of metres away from the scene of that of April 14, 2014. For instance, a report authored by Abubakar, Tsokar and Falaju in the *Saturday Guardian* of 3rd May, 2014 said at least nineteen people lost their lives and sixty people injured in the second Nyanya attack alone. Cumulatively, thousands of lives have been lost to the sect's incessant attacks while several thousands have also been displaced.

Up till now, the sect has continued to hold sway in the three states of Borno, Adamawa and Yobe in spite of the declaration of a state of emergency in the states by the Federal Government. Well over 200 young ladies were abducted by the sect from their school in Chibok, Borno State on April 20, 2014. Up till the time of this write up, only about 40 of them have been rescued. Agonisingly, security agents appear to be bereft of ideas on how to rescue the remaining girls in the custody of the sect. News items entitled: "Abducted girls: Hope of early rescue dim", and "Abducted schoolgirls: No rescue in sight yet" authored by Odebode and Adepegba; and Amaefule, Umukoro; and Opara on page 41 and pages 22 and 23 of *Saturday Punch*, and *Sunday Punch* of May 3 and May 4, 2014 respectively confirm this. Hope, however, seems to be rising for the rescue of the young ladies with the offers of assistance from the United States of America, Britain, China, Israel and others.

Causes of Ethno-Religious Crises in Nigeria

Factors responsible for the recurring incidences of religious violence in Nigeria include; *ethnic chauvinism, poverty, ignorance, injustice, politics, rising unemployment, over-zealousness on the part of religious leaders, and fanaticism*. A quick explanation of these factors is done here.

Ethnic Chauvinism: There are some ethnic groups in the country that believe that they are superior to other ethnic groups. Members of such ethnic groups often feel and act arrogantly anytime there is an issue affecting the nation. This feeling of superiority is common among members of the three major ethnic groups; Hausa, Igbo and Yoruba. An attestation to this superiority ego is the appellation; "Born to Rule" which a state belonging to one of the major ethnic groups once bore. The interests of the minority groups are often not given equal attention by government. The minority groups thus feel being dominated, and their desire to assert their identities and protect their interests often causes friction and conflicts. Where the conflicts cannot be properly managed, crisis ultimately results.

Poverty: The high level of poverty in the nation, especially in the north, has left many youths highly pauperised and hopeless. Sponsors of the heinous acts of suicide bombings and mindless killings in parts of the north find willing hands in youths who are poor and ready to do anything for any amount whatsoever. Since they do not enjoy any decent life in life, they do not feel life is worth living. Surely, it is the rich and the wealthy that are comfortable that fear death most.

Ignorance: Ignorance is also a factor that is responsible for religious violence in the country. This ignorance is a product of low or no education, and

indoctrination. Religious violence is rampant in the north because the area has the highest rate of illiteracy. Most youths in the area, especially boys, are stark illiterates. They constitute the *Almajiris* who go about soliciting for alms. These *Almajiris* are prone to being indoctrinated by people who are more knowledgeable than them. The youths can be easily manipulated and incited against the people. Other parts of the country are not experiencing frequent and violent religious violence as the north does because virtually all the youths from those parts of the country have some level of education, no matter how little, which makes them more enlightened and difficult to be indoctrinated.

Injustice: Injustice breeds violence in the country. In Nigeria, the poor do not usually get justice from the court as the rich and the powerful are treated as being above the law. If an aggrieved person is denied succour at the court, he may resort to self-help in order to get justice in his own way. For instance, the Boko Haram menace in the North is partly a product of pent-up anger arising from long period of injustice. The alleged extra judicial murder of its founding leader, one Mohammed Yusuf, by the police was one of the reasons initially adduced for the ruthlessness of the sect in its attacks.

Politics: As for politics, Nigerian leaders often ride on the backs of religion and ethnicity to achieve their selfish ambitions. In a bid to achieve their ambitions, Nigerian leaders do play on the religious and ethnic sensibilities of the electorate. Voting is often done along the lines of religion and ethnicity, more so after such leaders must have whipped up religious and ethnic sentiments, and so when candidates of other faiths and or ethnic stocks win, violence breaks out. The unity of the nation is thus being weakened. Apart from this, the leadership

of the country is bad. Virtually all leaders who have ruled Nigeria have not been able to properly integrate Nigerians as one people. Rather than provide good leadership, they have feathered their own nests, those of their immediate families, their cronies and ultimately, their ethnic groups. The result is that every ethnic group schemes always to have its own man at the helms of affairs of the nation so that its people will have easy access to the nation's wealth. The result is the avoidable friction, tension, and ultimate violence that usually characterize elections in Nigeria.

Over-zealous Religious Leaders: Some religious leaders are un-scrupulous and over-zealous in how they practice and preach their religions. Such leaders do preach what their Holy Books do not teach. This affects leaders of both Christianity and Islam. While there are Christian clergies who may preach that every non-Christian will be consumed in hell fire after death, there are also Imams and other Muslim clerics that are wont to preach that killing a non-Moslem is Jihad, and a visa for such a murderer to enter heaven. Such teachings will no doubt promote intolerance between adherents of the two religions. Both religions preach peace, and these types of teachings are definitely not from the Holy Bible and the Holy Quran. Ajuluchukwu, cited in Omotoso (2003), captures this rightly when he says: "Ordinary Nigerians know nothing about inter-religious cleavages except when incited by their respective doctrinal leaders."

Fanaticism: Religious fanaticism is another cause of religious intolerance. There are adherents of both Christianity and Islam that are so fanatical about their religions to a level that they do many extreme things that their holy books do not preach. A religious fanatic is the one who holds extreme or irrational enthusiasms or beliefs about a religion.

The wanton killings that are witnessed during religious crises are carried out by fanatics who can be described as being demented. In actual fact, however, these fanatics are hypocrites; they do not truly worship God since God abhors killing of people, especially innocent ones.

Unemployment: Nigeria has for a very long time now been experiencing serious unemployment. Many youths who have graduated from institutions of higher learning do not have jobs years after graduation. Some of these youths do nothing while some engage in odd jobs not related to the skills they have acquired in school. These youths are frustrated and are ready to give vent to their anger at the slightest provocation. The youths are also ready tools in the hands of mischievous politicians and ethnic/religious bigots since an idle hand is a potential workshop for the devil.

Implications

There is no-gainsaying that linguistic diversity, ethnicity and religious intolerance have great consequences on the Nigerian nation-hood. These consequences are felt in virtually all the facets of the nation's life. The implications are discussed along the following lines: *Lack of unity, poor leadership, insecurity, and underdevelopment.*

Lack of Unity: Linguistic diversity and ethnicity have caused suspicion and distrust among Nigerians. Each ethnic group views all actions of the other groups as attempts to dominate or marginalize it even when such are not intended. This has been responsible for the non-existence of unity among Nigerians. Nigerians rarely think and act as one united people on issues of national importance. Probably disappointed by the increasing level of disunity among Nigerians, the late sage, Chief Obafemi Awolowo, had described Nigeria as "a mere geographic location"

(Oteh & Eze, 2012). Arguably, the only time that Nigerians are truly united is when any of the national football teams is playing. There and then, all ethnic or tribal differences are forgotten. This was clearly demonstrated during the 1994 African Nations' Cup when Nigerians suspended all demonstrations and protests against the annulment of the June 12, 1993 presidential elections and concentrated on the matches of the Super Eagles at the competition. Demonstrations and protests, however, resumed shortly after the competition ended.

Each ethnic group or nationality is out to promote and protect its own interests first and foremost at the expense of the nation. In fact, virtually every ethnic group has an agenda it religiously pursues. This has led to the emergence of different ethnic militias championing the causes of their respective ethnic groups. The Oodua People's Congress (O.P.C.) is out to defend the interests of the Yoruba; the Movement for the Actualization of Sovereign State of Biafra (MASSOB) is defending the interests of the Igbos while the Arewa People's Congress is defending the interests of the Hausa-Fulanis in the north. The Movement for the Emancipation of Niger-Delta (MEND) in the South-South is defending the interests of the ethnic minorities in the South-South. There are many others.

Although it is said that there is strength in diversity, Nigeria's own case seems to be an exception. Moving forward as a nation is becoming increasingly difficult because there is lack of cohesion and unity of purpose. The drum of disunity is sounding even louder now that the nation is preparing for another round of elections in 2015. Different ethnic groups and militias are issuing threats to destabilize the country if the results of the presidential elections do not favour their kinsmen. Where can our

present state of disunity lead us as a nation bearing in mind the popular aphorism: 'Unity is strength'? Nigeria is a metaphor for a house that is divided against itself.

Poor Leadership: Ethnicity and religious intolerance are rubbing off on the quality of the nation's leadership. The election of leaders, especially at the federal level, is usually a product of ethnic and religious affiliations. Oftentimes, the qualities of aspiring candidates are not considered in the nomination of candidates for elective offices by political parties. What matter are the ethnic and religious backgrounds of such candidates. By implication, therefore, no two people from the same ethnic group or religion can be nominated as candidates, let alone be elected, at the local, state and federal levels no matter how good they may be. The only probable time Nigerians did not think along this line was in the 1993 presidential election where Late Chief M. K. O. Abiola and Alhaji Babagana Kingibe (both Moslems) were fielded as presidential and vice-presidential candidates respectively of the defunct Social Democratic Party (S.D.P). Their joint ticket was alleged to have won the election which result the government of Gen. Ibrahim Babangida annulled.

Insecurity: The nation's security is being threatened regularly by cases of inter-ethnic clashes and religious crises. The regular ethnic and religious crises which result in loss of lives and destruction of property have assumed a proportion where nobody can sleep with both eyes closed. The Boko Haram sect has declared war on the Nigerian nation since the year 2005 when it first started as a religious group that was opposed to Western ideas, including education. The group has since then grown into a terror group that has killed thousands of innocent people. The north-eastern part of the country is under siege as the group

carries out devilish and deadly attacks on different locations almost at will. The nation's is inundated daily with horrifying accounts of the sect's deadly attacks.

The group has launched a number of high profile attacks on strategic targets. The sophistication with which the group carries out its attacks has made the military and other security agencies look helpless and a no-match for the insurgents. As if to further confirm the helplessness of security agents, Boko Haram, around 11 pm on April 20, 2014, abducted over 200 female students of a government secondary school in Chibok, Borno State who were writing their Senior Secondary Certificate Examinations. Three weeks in captivity, the girls have not been freed neither has their whereabouts been established.

Lack of Development: The north-eastern part of the country has become a theatre of war where lives are lost on a daily basis. The declaration of a state of emergency in three states of Borno, Yobe and Adamawa has not achieved the much desired result. No meaningful development can take place in a place devoid of peace and security as no investors, both foreign and local, will want to invest in a chaotic environment. Besides, resources which would have been spent on the provision of social amenities and other facilities are expended on arms and ammunition. Buildings and other structures destroyed in the attacks have to be rebuilt while the displaced have to be resettled and rehabilitated. All these come at a huge cost. Most importantly, the peace and tranquillity required by government to function effectively and plan for the development of the nation are elusive.

Conclusion

Although Nigeria is not the only country in Africa that is multi-lingual and religiously pluralistic, the negative effect of these

phenomena on the Nigerian nation appears to be most grievous going by the alarming rate of violent crises engendered by ethnic and religious differences that have become regular occurrences. The nation's unity is being undermined by these differences so much that the so-called strength in diversity has become an illusion. The intolerance of people of other faiths by an average Nigerian has wreaked, and is, in fact, still wreaking unquantifiable havoc on the nation. Innocent Nigerians are being killed by people who profess to be serving God simply because such people do not worship the same God through their own means or religion. People who engage in this heinous act are actually unbelievers and are definitely not serving God. They are bigots!

Going by the current spate of senseless killing of innocent Nigerians in some parts of the country, the well-being of the country is in jeopardy except government takes prompt and decisive steps to end the madness. Nigeria could attain greatness and assume her rightful place in the comity of nations if concerted efforts are made by both the leaders and the led to banish the twin evils of ethnic chauvinism and religious intolerance from the land.

Recommendations

Nigeria's situation is not hopeless. The country can overcome her present challenges and bounce back into global reckoning as the power house of Africa if we as a people and government would act on the recommendations below: First, government should expedite actions in resolving the nation's national language problem by making sure that English language is made Nigeria's national language. Having served as a language of wider communication for Nigerians of different ethnic backgrounds, English language is the right choice as the nation's national language. Alternatively,

however, a koine can be developed that will incorporate some words of English language and those of the three major languages. Choosing one the local languages may not have the blessings of most of the ethnic groups.

In addition, Nigerian political leaders should endeavour to provide good and purposeful leadership for the citizenry. If there is good government in place and Nigerians, irrespective of their tribes or religions, can have access to the basic necessities of life, they would bother less about the tribe or religion of whoever governs them. It is the failure of successive governments to provide for the basic needs of the followers that has led to the struggle by various ethnic groups to have their kinsmen at the helm of affairs with the hope that their lots will be bettered when their own people are in power.

Again, religious leaders should be mindful of how they use language in their teachings and sermons. Many religious leaders do not teach or preach what their Holy Books say. Rather, they feed their followers with wrong ideas and opinions to get them indoctrinated. These gullible followers, having been successfully brainwashed, go about attacking anybody who does not hold the same false opinion(s) with them. Closely related to this is the incitement of their followers against people of other faiths. The labelling of adherents of other faiths as unbelievers who must be forcefully made to recant their faiths and accept one's own faith is inciting and an invitation to anarchy. Winning new converts into one's religion needs not be by force. On the whole, there is the need for all Nigerians to stop being religious bigots and learn to live in peace with people of other faiths.

Government at all levels must ensure that qualitative education is

provided for all children. The governments of all the states in the north must wake up to their responsibility of ensuring that all children in their domains attend school. The Almajiri system in the North breeds potential danger because the Almajiris do not have any training, formal or informal, which can prepare them for a meaningful and productive life later in adulthood. Education is definitely an invaluable instrument for transforming the society as it makes people easier to be led but difficult to be enslaved.

Furthermore, government should, as a matter of urgency, put in place measures that will ensure the creation of jobs to absorb the millions of young graduates who roam the streets daily looking for jobs that are non-existent. Most of the youths who engage in crimes generally were lured into the business because of their idleness. The Nigerian business environment does not encourage most of the petty businesses which these youths would have engaged in no thanks to poor power supply and high interest rates and strict conditions for borrowing at banks.

The government at the centre should do more in its war against corruption than it presently does. If corruption could at least be reduced to a very minimal level, the enormous resources that public officials steal and divert to their private pockets could be used to solve some of the social and economic problems presently confronting the nation.

Culprits of ethno-religious crises should be heavily sanctioned so as to serve as a deterrent to other people who might want to foment similar troubles. The non-punishment of perpetrators of ethno-religious crises in the past has been largely responsible for the escalation of such crises in the country.

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RELEVANCE OF SOCIAL STUDIES TO THE TEACHING AND LEARNING OF ENVIRONMENTAL EDUCATION IN NIGERIAN SECONDARY SCHOOLS

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Abstract

Despite the abundant resources which nature has offered man, the environment remains plagued with dangers arising from man's ignorance of techniques of effective management of the environment. The need therefore arises for more emphasis on Environmental Education as an infusion of the existing school subjects. It is on this basis that this paper examines the relevance of Social Studies to teaching and learning of Environmental Education in Nigerian secondary schools. The paper has concepts clarification based on the review of literature on the concept of Environmental Education and aims and objectives of Social Studies as relevant to Environmental Education teaching in schools. In conclusion, Social Studies is considered as a key carrier subject relevant for the realization of the goals of Environmental Education in Nigeria.

Introduction

Social studies as a dynamic subject has continuously been changing its contents to cover issues and problems of man in different societies. As some problems are being solved, new ones are being created as a result of human actions and activities in the environment. Environmental Education is of course a major emerging area of study in Social Studies. The need for Environmental Education as currently being advocated has therefore become an essential demand of the present day Nigerian Educational System. Indeed, the social demand for Environmental Education is dictated by the challenges of human environment which were posed by environmental abuses, degradation and pollution (Kuranga,2006).

Specifically, the environmental challenges we are facing in the present Nigeria include: rising sea level and erosion in the south; deforestation and desertification in the North; pollution from wood and bush burning; the carbon emission from generators and air conditioners; pollution resulting from industrial wastes and emissions etc. Climate change is also a major environmental problem which is of interest to Social Studies Educators. As the nation's economy improves, the per capita greenhouse emissions increases. Increase in per capita greenhouse emission when combined with continued gas flaring and a large population may predictably make Nigeria to become in the future a major emitter of greenhouse gases globally(Adekunle,2003).

Adekunle (2003) also submits that Greenhouse gases naturally blanket the earth and keep it warmer than it would have been without these gases. The main greenhouse gases are carbon dioxide, methane, nitrous oxide and fluorocarbon. The climate change over the past century is referred to as the beginning of global warming. Essentially, the global warming disturbs the Nigerian ecosystems and this would consequently affect food supply, health and agricultural practices of the people.

The environmental challenges however, show defects in the environmental attitudes, values, knowledge and awareness of the citizens. It is against this background that Social Studies as a problem solving discipline infuses through the existing curriculum, as a worthy innovation, the inculcation of environmental values and attitudes (Adekunle, 2003). Teaching concepts and themes of environmental education in Social Studies, is expected to create an awareness and understanding of the evolving social and physical environmental challenges together with knowledge of strategies to cope and survive in the complex human environment.

Objectives of the Study

The objective of this study is to examine the relevance of Social Studies to teaching and learning Environmental Education in Nigerian Secondary Schools. This study will go a long way to creating a holistic environmental consciousness and awareness in students and teachers as a key to future participation in community action, decision making and problem solving in issues of environment. This study will also look into the various means vis-à-vis challenges of infusing Environmental Education components into the existing Social Studies Curriculum in Nigeria.

Concept and Objectives of Environmental Education

The continuous development and promotion of Environmental Education Programmes through the Nigerian Educational System is in compliance with the recommendation of the United Nations Conference on human environment held at Stockholm in 1972. It is envisaged that the introduction of Environmental Education into the School Curriculum will bring about the development and inculcation of right environmental values and attitudes in the Nigerian citizenry (Adara, 1997).

According to UNESCO (1985), Environmental Education is an educational concept which considered environment as a scientific and aesthetic resource to be used in life long educational process, thus making people knowledgeable and aware of the environment and its problems as well as their own roles in environmental conservation, preservation and management. Isu (1993) defines Environmental Education as a process of transmission of environmental awareness to evolve positive changes in the people's attributes and to ensure sustainable use of resources in the environment. Environmental Education (EE) is therefore a necessary tool to reduce boundary of ignorance of what should be known about our environment.

Adekunle (2003), views Environmental Education as a field which not only creates awareness but also enables man to manage and control his environment. Stating the nature of the Environmental Education, Adara (1996) contends that the field has a peculiarity due to its holistic content which is meant to show relationship between technical knowledge, problem solving and the influence of the established values. According to him, this would demand a combination of techniques to effect

positive changes. This however depends on the level of environmental education of the learners.

In a related development, Jekayinfa and Yusuf (2008), regard Environmental Education as a field of education incorporated into the nation's educational system in order to enhance the awareness of the people on environmental issues at all levels of education. It is an approach to education which is hoped to bring some solutions to the deteriorating relationship between man and the environment.

Through Environmental Education, it is believed that man would be able to find a mechanism where clean environment will be adequately enhanced through consistent day-to-day increase in the knowledge of emerging environmental problems. By exposing the learners to Environmental Education, they will be adequately equipped intelligently and emotionally with necessary manipulative skills that will help them to meet the challenges posed to them by both the present and the future environment. Environmental Education would therefore be an intervening mechanism for teaching man about the world events and the laws that govern man's existence. Based on this background, is the proposed incorporation of Environmental Education in the School Curriculum to enhance the knowledge of the pupils about the events of their environment.

According to Benton (1994), Environmental Education is an instructional programme which promotes the analysis and understanding of environmental issues as the basis for effective education, problem-solving, policy making and management. Environmental Education is an instructional programme meant to increase public awareness and knowledge about environmental issues.

More importantly, Environmental Education provides skills needed to make informed and responsible decisions on environmental issues. Hence, Environmental Education as a field of study teaches individuals how to weigh various sides of an environmental issue.

Environmental Education was explained further by Adekunle (2003) as an academic field which systematically studies human interaction within the environment. According to him, it is a broad inter-disciplinary field of study that focuses on the natural environment, built environment and the sets relationship between them. The discipline is distinct from ecology and environmental science but encompasses the basic principles of the two fields of learning as well as associated subjects such as policy, law, sociology, economics etc. Of course, psychology, philosophy, politics, and even aspects of history are also integrated into Environmental Studies. Students need to learn about these fields with focus on their relationship with Environmental Education to understand and appreciate how and why man uses the environment, challenges of the environment and to examine the nature of the relationship between people in social and physical environmental settings.

The Belgrade Charter in 1975 equally summarizes the objectives of Environmental Education as programme meant to create: awareness, knowledge, attitudes and skills. The objectives of Environmental Education are: to produce people with skills, knowledge and ideas that would help them find solution to environmental problems. The knowledge of Environmental Education will also make it possible to exploit natural resources without endangering the survival of the nation it intends to develop.

History and Development Leading to the Infusion of Environmental

Education into the Existing Social Studies Curriculum in Nigeria

The idea of Environmental Education according to Adekunle (2003) dates back to 1972 in Nigeria. When Environmental Education was introduced, it was essentially a response to the resolutions of the World Summits on environmental issues and among such Conferences are: Stockholm Conference of 1972, Belgrade Conference of 1975, Tiblisi Conference of 1977 and Earth Summit of Rio de Janeiro of 1992. The experiences, recommendations and resolutions of these conferences aided the infusion of Environmental Education into the existing Nation's Educational Curriculum. The introduction of Environmental Education as a curriculum innovation therefore intends to promote environmental consciousness and awareness of the citizens.

As a matter of fact, Environmental Education is not yet a separate curriculum subject but its learning contents are being taught by infusion in Social Studies and subjects like Geography, Biology, Health Science, Integrated Science, Agricultural Science among others. The obvious status of Environmental Education in the current Nigerian Educational System, according to Adekunle (2003) and Ayanwale et al(2007), is that it is not being offered or taught as a separate subject in schools, there is no provision for it in the school time table but concepts and themes in Environmental Education are now being integrated into the Social Studies Curriculum which is to be taught by infusion.

In the revised edition of the National Commission for Colleges of Education (NCCE) Curriculum (1996), Environmental Education has been integrated into virtually all the disciplines and this of course is a good starting point and a welcome development. By

integrating Environmental Education into teacher education programme in Nigeria, this would equip the would-be teachers with knowledge and skills to teach Environmental Education in schools either as a separate subjects or by its infusion into the existing curriculum.

Noting the successes and challenges that greeted the integration of Environmental Education into virtually all the disciplines, the National Council on Education (Nigeria's highest educational policy making body) had been reported to have once passed a directive on the infusion of Environmental Education elements/ concepts in all school subjects at all levels. The decision to pass the directive was informed by the consideration that environmental problems are essentially multi-disciplinary in nature and thus cannot be neatly subsumed within a single field of knowledge (UNESCO, 1977; Okpala, 1996). In addition to this is the reluctance of some stakeholders in education to accept the introduction of the Environmental Education as a new subject, the argument of the antagonists of the proposal was based on the premise that the existing school curriculum in Nigeria is already over- crowded.

In an effort to teach Environmental Education in Nigerian schools, the Nigerian Educational Research and Development Council (NERDC) has been assigned the responsibility of integrating Environmental Education components into the broad spectrum of the existing school subjects starting with the Secondary Schools (Mansaray, Ajiboye & Audu, 1998). In pursuance of this laudable task, a national photo type Environmental Education Curriculum has been developed while efforts are being geared towards integrating the various components of this curriculum into

subjects at the Junior and Senior Secondary schools levels (NERDC/ UNESCO, 1992; Adara, 1996).

Challenges Facing the Integration of Environmental Education Components into the Existing Nation's Educational Curriculum

Lack of uniformity in the capacity of the broad spectrum of school subjects to absorb the salient environmental education concepts seems to pose a challenge to both government and other stakeholders in Education. Moreover, some subjects appear more accommodating of these concepts than the others (Benton 1994). Correspondingly, the demands on teachers would not be the same. Also, the complex multi-disciplinary nature of Environmental Education would not only demand changes in Teacher Education Programme but lack of adequate properly trained teachers to handle the programme could as well be a constraint towards effective implementation of Environmental Education (Mansaray, Ajiboye and Audu, 1998) .

Indeed, effective training of teachers to handle Environmental Education is an imperative demand. It is equally worthy of note that since the National Council on Education (NCE) approved the Environmental Education themes in 1998, no significant training either in form of seminar or workshop has been organized for the class teachers who are to handle the teaching. This is probably why Adara (1996) asserts that majority of the Environmental Education related subjects teachers seem to be ignorant of the Environmental Education themes in these subjects. Also, available empirical works on some of the curricular of these carrier subjects reveals the urgent need to enhance Environmental Education elements in them so as to promote capacity for sustainable development in Nigeria (Olagunju,1997).

To complement the aforementioned challenges of Environmental Education; Bosah (2013) affirms that inadequate knowledge of environmental issues and problems could be as a result of deficiency in school curriculum and syllabus. She went further to asserts that poor funding of education tells on the teachers, the school and pupils; and that co-ordination of Environmental Education in the school syllabus and its realization depends on educational planners and government.

Environmental Education is essential for developing a healthy and sustainable society; however, many current environmental problems are due to ignorance of basic ecological facts of life coupled with poor funding of educational subjects and courses in schools and colleges, which are needed for an overall awareness of the public through learning basic natural resources so as to ensure that on-coming generation will understand the value and importance of pollution control, resource

conservation, wildlife protection etc. (Madunewesi,2003).

Relevance of Social Studies in the Teaching and Learning of Environmental Education in Nigerian Secondary Schools

Assessing the nature, objectives and philosophical background of Social Studies as an integrated discipline, it is relevant and could facilitate teaching and learning of Environmental Education themes and concepts in Nigerian secondary schools. This is because the central focus of Social Studies is holistic study of man in his relationship with the total environment. Social Studies also as a problem solving discipline is methodical in finding out, understanding and coping with various problems confronting man in the course of survival in his environment.

With the present status of Environmental Education as an infusion in the nation's existing educational disciplines, Social Studies best suits the purpose. The curriculum of Social Studies integrates many mother disciplines and that explains why Fageyinbo (2004) refers to it as storehouse of many concepts, facts and generalizations. Over time, Social Studies has derived concepts from many areas of study including Natural, Social and Physical sciences to achieve its targeted goals, aims and objectives in the school system.

Environmental Education as one of the emerging areas in Social Studies has implications for Social Studies teaching – learning process in secondary schools. The challenges created by the emerging areas of study include: the need for the provision of materials and manpower for an enhanced Social Studies Education in secondary schools; the need for refresher courses, workshop and seminars for Social Studies teachers with emphasis on environmental issues, concepts and themes; the professional

body for Social Studies Educators, Social Studies Association of Nigeria (SOSAN)in collaboration with relevant authorities should create more awareness of the innovative ideas introduced into Social Studies curriculum by the emerging areas of study particularly Environmental Education.

Indeed, Social Studies is relevant to the demands of Environmental Education. As a multidisciplinary discipline, Social Studies is the study of how man influences his environment and how the environment in turn influences man (Fadeiye, 2005). Thus, virtually everything that relates to human living and surviving are potential areas of study to Social Studies Education. Of course, environmental degradation as a social problem offers justification for the infusion of Environmental Education concepts and themes into the Secondary School Social Studies Curriculum.

Without doubts, Social Studies provide opportunities for exploring the key dimensions of Environmental Education. Environmental Education offers opportunities for study under each of the ten themes of Social Studies identified by the National Council for Social Studies (NCSS). Specifically, the ten themes of Social Studies relevant to Environmental Education are:

- ❖ Culture and Cultural Diversity
- ❖ Time, Continuity and Change
- ❖ People, Place and Environments
- ❖ Individual Development and Identity
- ❖ Individuals, Groups and Institutions
- ❖ Power, Authority and Governance
- ❖ Production, Distribution and Consumption
- ❖ Science, Technology and Society
- ❖ Global Connections
- ❖ Civic Ideas and Practices.

The identified themes are structured and designed to guarantee environmental sustainability. Similarly,

Environmental Education spans the Social Studies discipline due to its multi – disciplinary nature. Also, environmental degradation which is one of the problems that Environmental Education intends to address is better achieved through relevant Social Studies contents. By solving the problem of environmental degradation through Social Studies teaching, the society would become a better place to live. Ololobou(1989) conceptualization of Social Studies further establishes relevance of Social Studies to teaching and learning of Environmental Education. According to him, Social Studies is an organized integrated study of man and his environment, both physical and social with emphasis on cognition, functional skills, desirable attitudes and actions for the purpose of creating effective citizenry.

More importantly, Social Studies is perceived as a discipline which helps the child to examine his environment and determine his own place in it. Social Studies do this by providing knowledge and information about environmental issues (Ogundare, 2001)

The Social Studies objectives as stated by NERDC/UNESCO (1992) have really shown the strength of Social Studies in providing learning with knowledge, skills and values that will enable the learners to understand their physical, social and psychological environment in order for them to act or behave as responsible citizens. To this end, teachers in teaching environmental education themes and concepts need to adopt either one or combination of these instructional strategies: value clarification, inquiry method, group discussion, project method, field trips / excursion method, concept mapping techniques, expository method etc.

Again, Environmental Education topics/themes can be taught in Social

Studies using any of the four approaches: infusion, imposition, insertion and framing. The use of infusion approach entails the incorporation of environmental concepts, activities and examples into existing curricular goals. By infusion, the teacher could investigate current environmental issues or concepts and incorporate it into the existing curriculum of Social Studies so as to help the learners to understand the issues/ concepts in order to build necessary capacity for development. Social Studies teacher can adopt imposition concepts/themes. Imposition refers to as an approach whereby environmental topics are only made requirements within the curriculum. This usually takes the form of a directive to Social Studies teachers from government and its Educational Agencies. The directive could be specific or restricted to particular geo-political zones and could be made general depending on the nature of the Environmental Education issue in question. Whenever such directives are issued, they are usually imposed on the career teachers. The insertion approach can be used during the review of curriculum in consultation with the NERDC and NCE for approval. By insertion, environmental unit/course could be added to the curriculum. The last which is framing, is refers to as an approach which seeks to eliminate the subjective boundaries of traditional disciplines and instead create a structure of study / field that integrates subject areas to allow for the development of environmental knowledge and skills in learners. The effectiveness of this approach depends largely on the extent and scope of the integration.

Given the nature and characteristics of Environmental Education, it can conveniently be integrated into Social Studies Curriculum. However, Environmental Education as an emerging

area of study in Social Studies needs to cross – fertilize ideas with existing concepts in biology, chemistry, physics to sufficiently stand out as a distinct discipline on its own.

Conclusion

In view of the enormous environmental challenges facing Nigeria as a nation, the infusion of environmental themes in the Social Studies curriculum becomes inevitable; more so, that it is yet to be included as a separate Secondary School Curriculum subject in Nigeria. No doubt, Social Studies is a key carrier

subject relevant for the realization of goals of Environmental Education in Nigerian Secondary Schools. Based on this background, we advocate for more emphasis on Environmental Education as an emerging area of study in Social Studies while supporting strives to conceive and design a separate curriculum for Environmental Education in the future curriculum innovative efforts. It is therefore concluded that, there should be joint efforts of government, Para-governmental and non-governmental organizations in the provision of special training for teachers who are to teach environmental concepts in our schools.

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EFFECTS OF CO-OPERATIVE LEARNING METHOD ON STUDENTS' ACADEMIC PERFORMANCE IN BASIC ELECTRICITY SUBJECT SKILLS DEVELOPMENT IN TECHNICAL COLLEGES IN OYO STATE

By

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Abstract

Instructors in Oyo State Government Technical Colleges are not well familiar with activity-based instructional method such as co-operative learning strategies as the college traditional instruction remains teacher-dominated or centred. Therefore, the study examined co-operative learning method (learning together) and gender as it affects academic performance of students in basic electricity subject skills development in Oyo State government technical colleges. Two hundred and fifty (250) of year three students were drawn from five (5) Government Technical Colleges in Oyo state. Three (3) research questions were raised while three hypotheses were formulated and tested at 0.05 level of significance. The reliability value of 0.85 was obtained using Pearson Product Moment Correlation Coefficient. The study employed a quasi-experimental design which involves pre-test, post-test and non randomized comparison group design for research question one and two while descriptive survey was adopted for research question three. Results from the study showed that co-operative learning method was more effective in improving students' skills development in basic electricity subject than teaching method. The effect on gender favoured male in basic electricity subject skills than female. The male's performance in basic electricity subject skills academic performance has effect on female counterpart to improve on their performance. This indicated that the effectiveness of co-operative learning method in students' academic performance on basic electricity subject skills development did not depend on gender. It is recommended that the National Board for Technical Education (NBTEB) should carry out a review of basic electricity subject curriculum for technical colleges with a view to integrate the use of cooperative learning approach into its teaching and learning.

Introduction

Learning is a classroom activity, knowledge and experience of the teachers acquired by the students. It requires student's direct and active involvement and participation. Students most easily scale the height of learning when they are part of a co-operative team. The teaching of basic electricity subject in Nigeria Government Technical

Colleges is new when compared with other conventional subjects in technical colleges. The teaching of basic electricity subjects in technical colleges and trade centres came into limelight before the National Policy on Education (6-3-3-4) was introduced by the Federal Government of Nigeria (FRN, 1981) which laid much emphasis on workshop practice, industrial training, production

work, theory and related courses, general education and entrepreneurship training.

Therefore, co-operative learning method is about working together to accomplish shared goal. It suggests a way of dealing with students with respect to and highlight individual group members' abilities and contributions (Permitz, 1996). According to Song and Grabowski (2005), students working together and engaging in the learning process gain so much instead of listening to the teachers above. Pairs of students working together represent the most effective form of interaction (Schwartz, Black & Strange, 1991). When students work in group, valuable problem skills are developed by formulating ideas, discussing ideas, receiving immediate feedback and responding to questions and comments by their fellow-students during the classroom interactive teaching and learning.

According to Adeyemi (2008) a number of research studies have been carried out on the efficiency of co-operative and collaborative learning in Nigeria, such studies include those of Esan (1999) and Adeyemi (2002). Torty (2010) investigated the effect of collaborative learning method on students' academic achievement and interest in English language tenses. However, achievement according to Anene (2005) refers to a measure of the students' academic standing in relation to those of other students of his age. It is a learning outcome of students which include knowledge and skills development in a course of the study such as electrical works which should not be dwindling partly due to inadequate teaching method employed by teachers (Daramola, 2000).

Basic electricity subject in technical colleges which involved battery charging, domestic installation, industrial installation, cable joining and wiring of

electrical machine are taught by electrical/electronics teachers or instructors in Government Technical Colleges (Okoro, 2006). Any of these courses or subjects under this basic electricity subject cannot be taught abstractly but rather will involve skills development which calls for this study to examine effects of co-operative learning method on school workshop for skills development us students.

Skills according to Cole (2002), are capacities to receive communication from others, and to respond to the attitudes and ideas of other in such fashion as to promote congenial participation in a common task. Therefore, skills can be developed into two directions namely adequate scientific and engineering knowledge which is creative while the other required of the machine-hand that drifted downwards (Ayoola & Busari, 2007).

Statement of the Problem

In spite of government efforts to ensure qualitative education in producing competent, self-reliant and employable products at the Oyo State Government Technical Colleges in the state; there have been persistent reports of high number of failure among graduates of technical colleges in Oyo State particularly in basic electricity subject skills development which its activities of teaching are practically centered (FME, 2003). Report of chief examiners of NABTEB (2002) indicated that teaching method and project method which is teacher dominated that had become archaic methods; are still being employed by the instructors in all Government Technical College in Oyo State. However, the short coming in this teacher-centered method of imparting knowledge can be a responsible factor for poor performance of students in basic electricity subject skills

development on public practical skills examination.

Inadequate knowledge of development skills, incompetency, fear and timid of asking questions and expressing their views and opinion are some of the challenges probably facing students in technical colleges. The use of any teaching method that is teacher centred cannot in any form offer solution to the aforementioned problems. Hence, the society is not yet benefited of students' poor performance in basic electricity subject. On this note the researcher deems it fit to critically look at the effects of cooperative learning method on students' performance in Basic electricity subjects development in Technical Colleges.

Purpose of the Study

The main purpose of the study is to determine the effect of co-operative learning method on students' academic performance on basic electricity subject skills development in Government Technical Colleges Oyo State. Specifically, the study intended to determine:

- effects of cooperative learning method on students' skills development in basic electricity subject.
- effects of gender on co-operative learning method.
- effects of co-operative learning method on students' academic performance.

Research Questions

The following research questions were raised to guide the study

- ❖ Does co-operative learning method affect students' skills development on basic electricity subject?

- ❖ Does students' gender have significant effects on co-operative learning. Is there any significant difference in the performance of male and female students taught with cooperative learning method?
- ❖ Does co-operative learning have significant effects on academic performance?

Hypotheses

Three null hypotheses were formulated and tested at 0.05 level of significance.

H₁: The use of cooperative learning method is of no significant effect on students' skill development in Basic electricity subject.

H₂: There is no significant difference in the performance of male and female students taught with the cooperative learning method.

H₃: There is no significant difference between the academic performance of students taught with cooperative learning method and those taught with conventional learning method on basic electricity subject.

Significance of the Study

The study would be of tremendous importance and beneficial to students, teachers, researchers, educational administrators, parent, stakeholders, textbook writers and curriculum planners. The application will expose teachers to different methods of imparting practical skills to students while the students will be acquiring much more skills development through the method (co-operative learning) than expository method (lectures method). It will also improve the performance of students in practice orientation, examination and as well as encourage them to offer the subject in both Government and Private Technical Colleges.

The study would provide empirical evidence which would serve as a guide to professional technical instructors, administrators, curriculum planners in their effort to help improve academic performance of students on skills development. The administrators could seize the opportunity in organizing conferences, workshops and bring in or introduce innovations in teaching and learning.

Scope of the Study

This has gone into oblivion focus of the research was on effects of cooperative learning on students' performance in basic electricity subject. The investigation was carried out in four Government Technical Colleges in Oyo State.

Methodology

Research Design

The researcher employed a quasi-experimental design which involves pre-test, post test and non randomized comparison groups design on research question 1 and 2. The experimental group was treated with skills development exposing students to the school workshop using co-operative learning method but the control group was later treated with skills development using lecture or expository method on equal half basic electricity subject students within the same given period. While the research question 3 was adopted with descriptive survey.

Population of the Study

The population comprises two hundred and fifty (250) of year three students from all five Government Technical Colleges in Oyo State. These only concerned students' offering basic electricity subject in all Government Technical Colleges in the State. The reasons for choosing year three students

was because of the students interest in basic electricity subject as career option; and their level of seriousness and committed to the practical skills practice.

Sample and Sampling Technique

Two hundred and fifty (250) of year three students offering basic electricity were selected from five Government Technical Colleges using stratified random sampling techniques to generate or involve seventy five (75) female students and one hundred and seventy five (175) male students proportionally selected from all five Government Technical Colleges. Half of the population amounting to one hundred and twenty five (125) students were used for the experimental group while the second half of the population were equally used for the control groups at two weeks interval.

Research Instrument

The instrument used for data collection for the study was titled Basic Electricity Subject in School Workshop Skills Development Test Questionnaire (BESSWSDTQ). The BESSWSDTQ was conducted on both the experimental and control groups to test their skills academic performance in basic electricity subject having exposed all of them to the using co-operation learning method and expository method within frame of work and schedule time at two weeks interval by two different instructors to administer the test instrument. The test and re-test on school workshop skills academic performance was then designed using Pearson Product Moment Correlation Coefficient twice which produced the same result at average of 0.85.

Lesson plan

The researcher prepared two set of skills development lesson guidelines, one for co operative learning method and another on expository or lecture method based on how to carry out academic

performance on basic electricity subject skills development for the study. The lesson guidelines were produced for experimental group using co-operative learning method while the same lesson guidelines were equally available for control group expository or lecture group at two weeks interval so as to enable researcher to determine each group performance.

Method of data Analysis

Data collected for the study were analyzed using means value to answer all the research questions. The pre-test, post-test, mean gain of each group (control and experimental group, boys and girls) were compared with, to determine the group that performed better. The null hypotheses were tested

using analysis of Covariance (ANCOVA) at 0.05 level of significance.

Results

The results of the data analysis were presented below in compliance with research questions and hypotheses.

Research Question 1:

Does co-operative learning method influence students' skills development on basic electricity subject?

Table 1: The mean of pre-test, post test, scores of experimental and control group on student' skills development on basic electricity subject test.

Table1: Comparing the Pre-test, Post-test and Main gain of Experimental group and Control group.

Group	N	Pretest	Post test	Main gain
Experimental group (Co-operative Learning Method)	125	4.32	23.54	19.22
Control group (Conventional Method)	125	3.20	18.40	15.20

The data presented in table 1 show that the experimental group had a mean value of 4.32 in the pretest and a mean value of 23.54 in the post test, making a pre test, post test mean gain in experimental group to be 19.22 but the control group had a mean value of 3.20 in the pretest and a post test 18.40 with a pretest and post test main gain of 15.20. With this result, the students of the experimental group performed better in the school workshop skill development test conducted than the students of control group having exposed them all, to lecture or expository method. Hence co-operative learning method is much more effective than the lecture method on students' academic

achievement test in skills development on basic electricity subject.

Research Question 2

Does students' gender have significant effects on co-operative learning?

Table 2: Mean scores of pretest, post test design on the effect of co-operative learning method and conventional learning method on academic performance of male and female on basic electricity subject.

Table 2: Comparing Pre-test, Post-test and Mean gain of Male and Female on the effects of co-operative learning method and conventional learning method on basic electricity subject.

Co- operative learning					Lecture learning			
Gender	N	Pretest	Post test	Mean gain	N	Pretest	Post test	Main test

Male	175	3.50	25.07	21.57	30	3.15	15.95	12.80
Female	75	3.57	24.23	20.66	20	3.42	14.55	11.13

Table 2 showed that male students that were taught basic electricity subject with co-operative learning in the school workshop skills development had a mean score of 3.50 in pretest while post test mean score is 25.07 making pretest and post test mean gain in the male students taught with co-operative learning method to be 21.57

However, female students that were taught basic electricity subject with co-operative learning method had a mean value of 3.57 and post test mean value of 24.23 respectively while pretest and post test mean gain is 20.66. Again, male students that were taught basic electricity subject with lecture or expository method had a pretest mean of 3.15 while post test mean is 15.95 but pretest and post test mean gain of 12.80. Meanwhile, female students taught with lecture or expository method on basic electricity subject skills development had a pretest mean score of 3.42 while 14.55 mean value of post test retest and post test mean gain of 11.13. These results however, showed that male students taught with basic electricity skills development had higher mean value than female students in skills development test. Thus there is an effect attributable to gender on the performance of students that were taught basic electricity skill development.

Research Question 3

Does co-operative learning have significant effects on academic performance?

Table 3: The analyses of mean scores and standard deviations based on the response of the respondents on the questionnaire items of the research question three (3).

S/N	Items	Mean value	S.D	Remarks
1	It takes longer time for students to achieve skills development through co-operative learning method.	2.55	0.85	Adequate
2	It takes shorter time for students to achieve skills development through co-operative learning method.	2.37	0.45	Not Adequate
3	It involves interaction of students sharing ideas within themselves to achieve skill development.	2.60	0.75	Adequate
4	It doesn't take longer time for the students to achieve skills development through co-operative learning method.	2.25	0.38	Not adequate
5	It doesn't take shorter time for students to achieve skills development through co-operative learning method.	2.30	0.40	Not adequate
6	It requires the presence of instructors before skills development can be achieved through co-operative learning	2.57	0.87	Adequate

	method.			
7	It requires the presence of lectures before skills development can be achieved through co-operative learning method.	2.32	0.41	Not adequate
8	It requires the presence of both instructors and lecturers before skills development can be achieved through co-operative learning method.	2.30	0.40	Not adequate
9	It requires the assistance of technologist before skills development can be achieved through co-operative learning method.	2.56	0.73	Adequate
10	No assistance is required from technologist before skills development can be achieved through co-operative learning method.	2.50	0.67	Adequate

In Table 3, response of the respondents to items 1,2,3,6,9 and 10 were in agreement while items 4,5,7and 8 were not in agreement indicating that the students learnt very fast and quick through co-operative learning among the students and as well as on the bases of the assistance received before and after from technologists, instructors and teachers.

H₁-There is no significant difference between the mean scores of students taught with co-operative method and those taught with conventional method (lecturing method) in basic electricity skills development subject.

Table 4: Comparing the significant difference of Standard Deviation of Co-operative and Convectional learning methods taught.

Group method	N	X	S.D	df	t-cal	t-tab	Decision
Co-operative	125	2.57	0.75	249	2.20	1.960	VS
Conventional	125	2.55	0.72				

N=Number, X=mean score, S.D=Standard deviation, V/S= very significant, df=degree of freedom, t-cal= test value calculated, t-tab=Value derived from table, N/S=not significant.

conventional method in the skills development academic performance conducted test carried out for both groups of in the school workshop skills development.

Table 4 shows that the mean value of students taught with co-operative method is higher than the students taught by conventional method. Indicating that students taught with co-operative method performed better than those taught with

H₂. There is no significant difference in the academic performance of students wer taught using through co-operative learning method and conventional method based on gender

Table 5: Comparing the significant difference of mean Groups of Male and Female.

Group	N	Mean X	S.D	df	t-cal	t.tab	Decision
Male	175	2.57	0.87	248	2.20	1.960	N/S
Female	75	2.55	0.85				

Table 5 shows that the mean value of male and female have no significant difference because the range value were very close based on the value we have above. The practical school workshop test conducted shows that both male and female students performed better.

H₃ - There is no significant difference between the academic performance of students taught with co-operative learning method and those taught with conventional method in basic electricity subject.

Table 6: Comparing effects of Co-operative Learning method and Convectional Learning Method.

Methods	N	X	S.D	Df	t-cal	t-tab	Decision
Co-operative learning method	125	2.75	0.87	248	2.20	1.960	N/S
Conventional learning method	125	2.45	0.46				

Table 6 shows that the mean ratings of co-operative learning method is higher than that of conventional learning method showing that the students learned through co-operative learning faster than students taught with conventional method as it takes much time for students to learn.

acquired through co-operative learning method. This also corroborates findings by Ukadike and Iyamu (2007).

Discussions of Findings

Table 1 and 3 results analyzed of the results justified findings of Owodunni (2012) on effect of collaborative learning methods on students academic academic in electrical installation in technical college that co-operative learning method were assisting students to understand more on skills development and performing better than the use of conventional teaching method which were more centered on teachers dominating the class work or activities.

Conclusion

Having examined the two groups of students both co-operative learning and conventional learning method, it has been clearly established that students taught with co-operative learning methods learnt faster than the conventional learning methods in the skills development leading to academic achievement as students were free to express their opinions, views, ideas and suggestions before and during the school workshop skills development exercise.

Table 2 also revealed that the application of co-operative learning has nothing to do with gender issue so as to determine the level of understanding and comprehension of the skills development

Recommendations

- The co-operative learning method should be inclusive in the curriculum as one of the method to be used for skills development in the Government Technical Colleges' school workshop.
- The teachers or instructors in vocational and technical education

- | | |
|--|--|
| <p>should have workshop guidelines on how use co-operative learning for skills development on students.</p> <ul style="list-style-type: none"> • The school management should provide a better conducive environment for the Co-operative Method to work. • There should be provision of tools, equipment and machines in the school | <p>workshop in Government Technical Colleges and in all tertiary institutions.</p> <ul style="list-style-type: none"> • The school workshop personnel should be adequately supplied at every level of education for the smooth running of students' participation in skills development to succeed. |
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ROLES OF EDUCATIONAL SUPERVISORS IN ENHANCING SECONDARY SCHOOL TEACHERS' INSTRUCTIONAL DELIVERY IN ATIBA LOCAL GOVERNMENT AREA OF OYO STATE

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Abstract

Supervising is little parenting. Supervision of school activities in education is a common feature of school administration. The activity of supervision focuses on the achievement of the stated aims and objectives of education. Supervision is an effort of a designated official towards providing leadership to teachers and other educational workers to enhance effective teaching and learning. This study investigated the concept and purpose of school supervision and the reasons why supervision is encouraged in education activities. Findings revealed evidences of relevant instructional leadership practices linked with teacher professional development that contributed to student learning. It is thus recommended that government should embark on capacity building for educational supervisors; administrators as well as teachers to enable them perform their duties effectively.

Introduction

In modern societies, education is seen as an instrument par excellence for enhancing national development. Hence, when there is a problem in the society, attention is focused on education in providing a lasting solution to the problem. Similarly, when a value is to be preserved and sustained in the society, attention is turned to education for its proper transmission and preservation. Secondary school level is the bridge between the primary and tertiary levels, The importance of secondary education made the federal government to state the broad aims of secondary education as preparation for useful living within the society and for higher education. In summary, of the aim of secondary education is to provide quality secondary education to all those who engage in it and easy transition to tertiary institution.

Education as a social service to the general populace in term of educating and providing enlightenment for its citizens need to continue to survive under the umbrella of supervision. Therefore, the important thing to note is that, If the secondary level of education is to be functional and productive, greater attention must be focused in the ways teachers perform their instructional duties. Hence, there is need for supervision activities to be carried out by the supervisor.

A supervisor is the person that is in charge and giving the opportunity and responsibility of overseeing the activity of another person or persons. And in educational field we have the educational supervisor. The educational supervisor is the person responsible to oversee and control the activities in educational system both the teachers and the students and also the school principals. However, supervision has become a

useful instrument for assessing and evaluating teachers' effectiveness and students' academic performance.

Van Deventer and Kruger (2003) state that the five basic elements of instructional supervisory roles of principals are: defining the school mission, managing the curriculum and instruction, supervising teaching, monitoring learner progress and promoting instructional climate. Budhal (2000), Van Deventer and Kruger (2003) definitions of instructional supervision imply that the Principal provides direction, resources and support the teachers as an instructional leader. The Principal has a direct and determining effect on teacher attitudes towards teaching and on his/her instruction.

The Principal supervises the heads of departments by checking their scheme of work and lesson notes, making sure they go to classes regularly, checking absenteeism, rewarding hardworking teachers, and punishing the indolent ones, assigning administrative duties to them and encouraging them to do the right things at the right time. He provides the materials for effective discharge of assigned duties and he encourages experimentation. All these are also inputs into the standard of education. Quinn (2002) points out that principals are responsible for informing teachers about new educational strategies, technologies and tools that can enhance effective instruction.

Therefore, it is evident that pre-eminent in the principal's role as an instructional supervisor is his/her ability to motivate and inspire teachers with the end goal of exerting a positive influence on instructional practice and ultimately learners' achievement. According to Fink and Rescink (2001), instructional leadership entails the ability of the Principal to create both intellectual and

social capital. The principal should develop a community of professional learners or a nested learning community in which teachers trust, depend on, and learn from one another (collegiality and collaboration).

He/she must also participate in making curriculum choices, establishing expectations for the quality of student work and the quality of teaching and organizing targeted opportunities for teachers to learn more about teaching strategies and methods. Thus, the principal has to be a visionary who leads the school community in its development to use teaching and curricular strategies that are more effective and also support teachers' effort to implement effective instruction. Instructional supervisory activities by the principal are laudable and often open to criticism by teachers. Supervision is a sensitive job which demands a lot of time and energy in planning and implementation by the principals.

Classroom visitation is one approach to principal's supervision of instruction in his schools. It is an extremely valuable tool for the principal to use in improving instruction in schools. Classroom visit for supervision is not made by a super ordinate observing subordinate or less qualified teacher. It is not a situation whereby the expert visits the class to discover what is wrong and then directs the teacher to change certain methods of teaching. Classroom visitation is a process wherein the Principal or an external officer learns or observes what is going on in the classroom in order to be helpful to the teacher.

Durotolu (1999) asserts that the principal, through classroom visitation might discover something that will help the teacher improve instruction. Also, the principal may learn something that will be helpful in making him or her better

Principal. Thus the Principal must utilize the best professional behaviour in the use of instructional supervision to improve instruction.

Wood (1979) remarked that supervision of classroom instruction enables the Principal to better understand the educational programme, teachers and their methods of teaching, the students and their learning abilities or disabilities and to observe the teaching-learning process. The Principal should not abdicate his supervisory responsibility by delegating the instructional supervision to a subordinate in the school. Knezevich (1975), remarked that "curriculum is what the school is about. Every school administration at every level must keep in touch with what is being taught and how much is being learned"

In general, the major function of the supervisor is to assist others to become efficient and effective in the performance of the assigned duties. As part of this general function, supervisors also perform the following roles in the school system especially at the secondary school level.

Instructional Leader:- Instructional leadership is one of the most important roles of supervisor. Supervisor leads other teachers in instruction to make them as effective as possible. They also lead teachers in developing and implementing an effective plan of instruction. Supervisors have to adapt to meet the needs of the people and the particular environment rather than practice a normative kind of leadership. Instructional leaders improve the quality of instruction by furthering profession growth for all teachers. Supervisors should be flexible enough to deal with any situation and should maintain a good relationship with their staff.

Assessing Student Progress:- A supervisor assesses students progress

towards the established standards by the regulatory agencies, and also facilitates the planning of various types of instructions. Supervisors ensure that teachers are utilizing information from a variety of valid and appropriate sources before they begin the planning of lessons or teaching. Supervisors determine if teachers are using the numerous evaluation processes available to assist in planning meaningful instruction.

The supervisors ensure that teachers are preparing and maintaining adequate and accurate records of students' progress. This will include the regular and systematic recording of meaningful data regarding students progress on specific concept and skills related to the standards for each subject for the grade level they are teaching. In conclusion, from the foregoing, it is evident that the role of supervisor in a school system especially in the secondary schools in Nigeria is very crucial. Thus, for effective supervision of instruction, supervisors should be able to discharge their functions as expected if the goals of education are to be attained.

Onoyase (1991) states that supervision is an organizational behaviour system, which has the function of interacting with teaching behaviour system for the purpose of improving learning situation for the students. However, instructional supervision has to be carried out with the school system and every system has various forces that present themselves as challenges that may affect effective functioning of the entire system.

More so, there are challenges facing supervision in Nigerian schools particularly the secondary school education. These challenges present themselves in form of problems such as:

Poor Incentive:- In Nigeria context, several people are not directly involved in

a particular process or a given assignment due to the high level of corruption in the country. This act may at times affect the way in which instructional supervision is being done in the secondary schools.

Limited Educational Resources:-

School administrators as well as instructional supervisors would require certain resources to put things in order before supervision. Therefore, non – availability of such resources would affect the supervision exercise.

Administrative Issue:- Administrative inadequacies emerge when planning fails to specify the scope of responsibilities and results that instructional supervision is expected to bring about in a school.

Lack of Pre-Professional Training For Supervisors:-

One of the major challenges facing supervision in Nigeria secondary schools is the issue of competence and technical knowledge of the instructional supervisors. Most often than not, in Nigeria, political affiliation at times dictate who get a particular assignment without recourse to the technical competence of the person. Some supervisors were appointed based on their level of involvement in the government of the day and not as a result of their skills they possessed.

Corruption among major stakeholders in the School System:-

When funds are misappropriated in schools, instructional supervisors are in the best position to identify this problem but if they are been duly rewarded, such problem will continue unabated which would affect the standards that should be achieved in the school system.

Political Instability:- The frequent change of government usually brings about incessant change of government policies regarding instructional supervision. This act usually affects the

effective supervision of instruction in schools. In other words, inconsistent policies on how instruction in schools should be supervised and the categories of people to be involved would adversely affect and pose a big challenge to instructional supervision especially in secondary schools in Nigeria.

Statement of the Problem

If education would be one of the tools to realize the goals of transformation agenda of the present government in Nigeria, there is the need to improve upon the quality of learning in secondary schools through effective supervision of instruction. Problems such as inadequate funding, lack of capacity building among major education stakeholders, poor motivation for educational supervisors, among others, are bane to secondary school development in Nigeria.

Purpose of the Study

The purpose of this study is to investigate the roles of educational supervisors in enhancing secondary school teachers' instructional delivery in Atiba local government area of Oyo State.

Hypotheses

The following hypotheses were formulated for the study.

Ho1: There is no significant difference in the role of experienced supervisors and unexperienced supervisor in enhancing secondary school teachers' instructional delivery.

Ho2: There is no significant difference between male and female supervisor's role in enhancing secondary school teachers' instructional delivery in Atiba local government area of Oyo State

Research Design

The study adopted survey research design involving collection of data on the roles of supervisors in enhancing

secondary school teachers' instructional delivery in Atiba local government area of Oyo state

Population of the study

The population of this study is made up of all the teachers in the secondary schools in Atiba local government area of Oyo state including TESCOM officials.

Sample and sampling techniques

Five (5) selected secondary schools and some TESCOM officials were used. One hundred (100) of them were randomly selected based on eighteen (18) respondents from each school and ten (10) from the TESCOM officials. Schools selected are;

1. Alaafin High School, Oyo.
2. Community Secondary School Oke-Olola, Oyo.
3. Oranyan Grammar School, Oyo.
4. Community Grammar School, Isale Oyo.
5. Commercial Secondary School, Oyo.

Instrumentation

The instrument for data collection for this research work is the questionnaire. It is used because of its advantage of widecoverage.

Validation of Instrument

For this study, the face and content validity were adopted in order to allow for competent assessment of items which is included in the questionnaire and finally for corrections and amendment before final administration.

Reliability of Instrument

The test and re-test method was used to ascertain this. Questionnaires were administered on the respondents randomly selected from among the study population within a time interval of two weeks. A co-efficient of 0.82 was obtained.

Method of Data Analysis

The data collected was analysis through the use of simple percentage and t- test statistics.

Table 1 Names of Schools and distribution respondents for the study.

S/N	Name of School	Number of Respondents	Percentage
1	Alaafin High School, Oyo	18	18%
2	Community Secondary School Oke- Olola, Oyo	18	18%
3	Oranyan Grammar School Oyo	18	18%
4	Community Grammar School Oyo	18	18%
5	Commercial Secondary School, Oyo	18	18%
6	TESCOM Official	10	10%
	Total	100	100%

Table 2: Sex Distribution of the Respondents

Response	Respondents	Percentage %
Male	67	67%
Female	33	33%
Total	100	100%

Table 3: Respondents' Years of Experience

Years of Experience	Number of respondents	Percentage%
1-5 years	35	35%
6- 10 years	20	20%
11-15 years	25	25%
16- above	20	20%
Total	100	100%

The result in Table 3 shows that 35% of the teachers have worked between 1-5 years, 20% had working experiences of 6-10 years, 25% had 11-15 years of working experience and 20% had 16 and above years of working experience.

Results

Ho1: There is no significant difference in the roles of supervisors in enhancing Secondary School Teachers' instructional delivery.

Table 4: Supervisors and Secondary School Teachers' Instructional Delivery based on Experience

Variable	X	X	SD	SD ²	df	t - Cal	t - cri	p	Remark
Experience	50	25.4	0.25	0.0625	98	27.9	1.64	0.05	Significant
Teachers' Instructional Delivery	50	24	0.042	0.001764					

Interpretation of result: Since the t – calculated value (27.9) is greater than t – critical value (1.64) at alpha level of 0.05 and degrees of freedom of 98, the null hypothesis which states that there is no significant difference in the roles of supervisors in enhancing Secondary School Teachers' instructional delivery based on their experience is not accepted. Because, for an effective supervision to take place, it requires that

the supervisor must have years of experience which would have made him or her expert so as to ensure proper and effective execution of education programme.

Ho2: There is no significant difference between male and female supervisor's role in enhancing Secondary School Teachers' instructional delivery.

Table 5: Supervisor's Gender and Secondary School Teachers' Instructional Delivery

Variable	X	X	SD	SD ²	DF	t – Cal	t – cri	P	Remark
Supervisors' Gender	50	25.4	0.25	0.0625	98	39.05	1.96	39.05	Significant
Teachers' Instructional Delivery	50	24	0.042	0.001764					

Interpretation of result: Since t – calculated value (39.05) is greater than the t – Critical value (1.64) at alpha level of 0.05 and degree of freedom of 98. Therefore, the null hypothesis which states that there is no significant difference between male and female supervisor's role in enhancing Secondary School Teachers' instructional delivery is not accepted. Because, male supervisors are considered to be more effective in

supervision unlike a female that most of the workers (teachers) will be taking for granted because difference in gender. Meanwhile, the male supervisors usually act fast and quick in given an order unlike a female who will be considering some things.

Ho3: There is no significant difference in the roles of supervisor in enhancing Secondary School Teachers' instructional delivery based on their leadership styles.

Table 5

Secondary School Teachers' Instructional Delivery based on Leadership

Variable			SD	SD ²	DF	t – Cal	t - cri	P	Remark
Supervisors' Leadership Style	50	24.6	0.15	0.0225	98	21.2	1.96	0.05	Significant
Teachers' Instructional Delivery	50	24	0.042	0.001764					

Interpretation of result: Since t – calculated value (21.2) is greater than t – critical value (1.64) at alpha level of 0.05 and degree of freedom of 98, the null hypothesis which states that there is no significant difference in the roles of supervisor in enhancing Secondary School Teachers' instructional delivery based on their leadership styles is not accepted. For a successful effective management of secondary education, the supervisor must take cognisant into the types of leadership style to be used. More

so, we have different type of people in the education sector (school) with different type of behaviour. Therefore, the supervisor should be able to think on the leadership style to use, so that the roles of supervisors will lead to effective management of secondary education.

Conclusion

The primary objective of carrying out this research work was to assess the roles of educational supervisors in enhancing secondary school teachers'

instructional delivery in Atiba local government area of Oyo State. The primary objective of the supervision process in secondary schools is to offer teacher direct assistance to improve their performance towards the goal of increasing students learning. To achieve the goals of supervision in secondary schools, efforts should be geared towards overcoming most of the challenges facing supervision.

In addition, if education would be one of the tools to be used to realize the goals of transformation agenda of the present government in Nigeria, there is need to improve upon the quality of learning in secondary schools through effective supervision of instruction.

Recommendations

The primary objective of the supervision process in secondary schools is to offer teachers direct assistance to improve their performance towards the goal of improving students' learning. To achieve the goals of supervision in secondary must be geared towards overcoming most of the challenges facing supervision.

In addition, if education would be one of the tools to realize the goals of transformation agenda of the present government in Nigeria, there is needed to improve upon the quality of learning in secondary schools through effective supervision of instruction in the following ways:

Adequate Funding:- Government at all levels must strive to make adequate fund

available to education sector in order to produce the necessary materials that will aid effective supervision of instruction in secondary schools.

Capacity Building among Secondary School Teachers:- In order to ensure adequate and effective supervision in secondary schools in Nigeria, government need to embark on capacity building of supervisors, administrators as well as teachers to enable them perform their duties effectively. This can be done through regular training, induction programmes, seminars and workshops to equip them with necessary skills and keep them abreast of the current trends in the school system.

Selection Of Qualified Supervisors:- One of the ways of ensuring effective supervision of instruction is to select or appoint personnel who have technical skills about education especially at the secondary school level. Government should not sacrifice the merit and competence on the altar of political afflation. Qualified personnel in the field of education with sufficient knowledge, skills and experience in secondary school education should be appointed as supervisors in order to exhibit all scene of professionalism in carrying out their functions in the school system.

Teachers are also enjoined to co-operate with educational supervisors to enhance secondary school teachers' instructional delivery in secondary schools.

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ROLES OF ADULT EDUCATION TOWARDS NATIONAL TRANSFORMATION

By

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Abstract

This paper focuses on the roles of adult education towards national transformation. It takes a critical look at the evolution of adult education in Nigeria, the role of adult education in national transformation, National Policy on Education and Adult education, challenges hindering the implementation of adult education policies. These include lack of personnel and motivation, lack of adequate teaching staff, and administrative bottleneck. The finding offers that effort should be made to remove any form of administrative bottleneck that may likely hinder the successful implementation of adult education programmes, substantial amount of money should be allocated to adult education programmes in the annual budget, the use of mother tongue as language of instruction should be encouraged at the basic level of adult education programmes.

Introduction

Generally, education is viewed as the most important instrument for change, progress and development by all societies the world over. The fundamental purpose of investing in education is to inculcate in the individual, skills, values, and attitudes to improve the quality of life; enhance their productivity and their capacity to learn new skills and aptitudes which will enable them function effectively in the society. It is also a tool in capacity building and maintenance of the society. It is a weapon of acquiring skills, relevant knowledge and habit for survival in the changing world. Education is widely regarded as a veritable instrument for social change, national development and integration.

Adult education therefore embraces all forms of educative experiences needed by men and women according to

their varying interests and requirements at their different levels of comprehension and ability in their changing roles and responsibilities throughout life. It occurs whenever adults find themselves in the process of learning how to help satisfy primary nutritional, housing, clothing and health needs and also when they endeavour to learn how to ensure a greater degree of social justice and more active participation in the cultural and political life of their communities. Thus, adult education incorporates anything that enlarges men's understanding, activates them, helps them to make their own decision and to implement those decisions for themselves (Fasokun, 2000).

Anyanwu (1987) sees adult education as a response to educational need of men and women. Adult Education emphasizes the whole range of part time educational provisions for persons whose

social and economic responsibility give them adult status within a community. Thus, adult education is seen as part of the wider process of life long learning, and includes fundamental or remedial, general, vocational, professional, civic, social, cultural and recreative education for adults of all ages. Life long learning is not restricted to adults alone. It is only a concept that states that adult education is a continuous process which starts from womb to tomb.

Faura (1972), cited by Okenwa (2013), states that Adult education is a substitute for the basic education missed at the initial stages, and who have received only a very incomplete education. By this they posit that basic education is meant for those who were not opportuned to early schooling at all or those who were drop out due to circumstances beyond their control. But the scope of Basic Education is more than this. It compliments elementary or professional education for those who have responded to new demands. It is the prolongation of education, as it offers further education to those who have already received high-level training. It is a means of individual development for everybody. One or other of these aspects may be more important in one country than in another, but they all have their validity.

Linderman (1961), cited by Anyanwu (1999), maintains that adult education has implication for all shades of mind. It has meaning among others for those who are eager to learn, those who require freedom, those who cherish creativity and those who promote specialization. Adult education sets on to bring about a maximum of readjustment of attitude within the society, to any new and changed sets of attitude and behaviour considered to be more desirable for better living in the society.

Therefore, as a field of practice, it is concerned with the dissemination of knowledge, the training of the mind in objective reasoning, and the teaching of skills and techniques which may enable recipients to fulfill themselves and thereby play a meaningful part in the development of the society to which they belong.

This paper examines the role of adult education in national development, traces the evolution of adult education in Nigeria, examines the problems associated with the implementation and profer suggestions to address the problems associated with the implementation of Nigeria National Policy on Education.

The Evolution of Adult Education in Nigeria

All over the world, adult education evolved as a result of the emergence of a clearly felt social and economic needs for a critical mauss of adults to acquire a basic mastery of the skills of reading, writing and calculating. The rapid spread of adult education globally was as a result of dedication of small but determined groups of educators of adults with a strong sense of mission. Such group first formed national associations designed to bring about coordinated actions. This made them turn their attention to what they perceived as the universal right of adults to education.

In the case of Nigeria, education was, and remains, a priority of the traditional, unlettered society. The Nigerian adult was thus adequately catered for in the society. The promotion of traditional education was done out of school, essentially at home, the centre for character training, and base for the introduction of vocational education. The type of traditional learning that was put in place can be described as life-long communal practice processes and relationships were valued. Places of

worship public gatherings, homes and the entire society were used as places of learning. This type of learning is comprehensive and meet the aspiration of the various cultures.

This arrangement gave way when the westerners, the Christian and Islamic missions came. Ejiogu (1991) cited by Akinteye and Ojeleye, (2010), asserts that the church undertook the business of education not because it regarded education as good in itself, but because it found that they could not do their own proper work without giving its adherents and especially its clergy, as much of the formal learning as was required for the study of sacred writings and for the performance of their religious duties. The missionaries established their own denominational schools and the colonial government also entered the scene.

The early mission schools were established in the village parishes and most of the teaching took place in that setting. Apart from teaching the essential three Rs-reading, writing and arithmetic's, adult villagers were taught rudimentary hygiene, house building and agricultural skills opposed to the oral traditional learning. The arrival of the missionary and the colonial government led to the development of educational system. Classes were introduced in primary, secondary and tertiary levels, yet, these could not take care of those who for one reason or the other could not receive formal education. This led to the introduction of adult education to take care of adults who needs special helps.

The Role of Adult Education in National Transformation

The education of adults is the vehicle for involving the population in addressing the transformation and, in doing so, creating an environment for dealing with it. The rapidity of the basic cultural change which the transformation

represents means that the education system which we have inherited from the colonial masters was aimed at two goals. The education of the next generation and addressing the changes fostered by industrialization through the education of the next generation is no longer capable of dealing with both of these critical functions. Changes are no longer occurring between generational cycles but two or three times within a generation. This means that the education of youth, which is essential to all societies, cannot merely by educating the next generation, deal with the rapidly and in immensity of the transformation. The education of adults has thus become a separate function, necessary for dealing with changes represented by the great transformation.

Iyamu (2014) sees national transformation as a radical structural and fundamental reappraisal of the basic assumptions that underline our reforms and development efforts. He went further to say that, it is reactions to the unsatisfactory state of affairs with a strong will correct the deficiencies in the system. Thus, if the goals of national transformation, which is to transform the whole economy is well pursued, it will lead to national development.

Nyerere (1976), opined that, development has a purpose and that purpose is the liberation of man. It is man's ability to act deliberately for a self determined purpose, which distinguished him from the other animals. The expansion of his own consciousness, and therefore of his power over himself, his environment and his society, therefore development denote liberation of man . Hence, development is for man, by man and of man.He went further to say that a country needs to be fully aware of the fundamental importance of education as a means of development and as part of

development. Education increases man's physical and mental freedom to increase their control over themselves, their own lives and the environment in which they live.

UNESCO (1976) as cited by Omolewa (1981) opines that, *adult education is the entire body of organized educational process whatever the content, level and method, whether formal or otherwise, whether they prolong or replace initial education in schools, colleges and universities as well as apprenticeship, whereby persons regarded as adult by the society to which they belong gain knowledge, improve their technical or professional qualifications or turn them in a new direction and bring changes in their attitudes or behaviour in the two fold perspectives of full personal development and participation in balance and independent social, economic and cultural developments.*

This definition indicates that adult education has to be directed at helping men to develop themselves. It has to contribute to an enlargement of man's ability in every way.

National development, according to Oyekola (1993) cited in Bello, Ojeleye and Okemakinde (2006), is a situation in which a nation develops socially, economically, politically and in all spheres of human endeavours; and the liberation of citizens from traditional forms of beliefs, attitudes and practices. This definition was further complemented by Anyanwu (1999) when he identified the major elements which adult education must conform to bring about national development. These are:

- ❖ **Effective participation** of the masses in decision making on matters that affect their well being.

- ❖ **Harmonious development** of society in a way that promote healthy growth in no way bedeviled by precarious dependence on the whims of others.

- ❖ **Educational development** of all citizens, with a view to eliminating class dominance and the social hierarchies that produce elitist structures and practices.

- ❖ **The growth of communities** with genuine control over technologies for meaningful development, concerted approach and continuing cooperation among all the agencies responsible for such basic services as education, agriculture, health, welfare and civil competence.

It is not possible to exhaust the contributions of adult education to national transformation. Suffice it to say that a sound government and wise political action rest squarely on education. The economic recovery of Nigeria by Nigerians depends directly on education. Education is the key to progress. But at the bottom of any dynamic system of education is the adult education. It is the hope of nations. This is in line with the words of former Director General of UNESCO as cited by Omolewa (1981):

It is not the children of today who hold the destiny of Africa in their hands. It is the adults. So, it is only by establishing effective communication with the adult population by helping them to adjust to a rapidly changing world, that an immediate impact can be made on the urgent problems of society and essential progress be brought about.

National Policy on Education and Adult Education

The National Policy on Education (2008) has laudable programmes aimed

at upgrading the relatively low status of adult education in Nigeria. It further identifies ways of building into adult education programmes, a clear cut incentive mechanism and promotions. The policy documents, clearly recognizes the importance of adult education for the successful implementation of programmes that can bring about national transformation. It clearly states that, "mass literacy, adult and non-formal education encourages all forms of functional education given to youths and adults outside the formal school system, such as functional literacy, remedial and vocational education. The National Policy of Education (2004) further lists the purpose of adult education as follows:-

- i. Provide functional literacy and continuing education for adults and youths who have never had the advantage of formal education or who did not complete their primary education. These include the nomads, migrant families, the disabled and other categories or groups, especially the disadvantaged gender.
- ii. Provide functional and remedial education for those young people who did not complete secondary education.
- iii. Provide education for different categories of completers of the formal educational system in order to improve their basic knowledge and skills
- iv. Provide in-service, on-the-job, vocational and professional training for different categories of workers and professionals in order to improve their skills; and,
- v. Give the adult citizens of the country necessary aesthetic, cultural and civic education for policy enlightenment.

Having stated these objectives, the policy makers went further to recommend ways by which these objectives could be achieved. A careful study of the recommendations reveals plans put in place towards ensuring an effective and efficient adult education programmes.

The policy proposes that, the Federal Government would establish National Commission for Mass Literacy, Adult and Non-formal Education. To complement the efforts of the Federal Government, each state should also establish a mass Literacy Agency as part of the overall national efforts to eradicate mass literacy in Nigeria. The commission shall monitor and evaluate the mass literacy programmes and facilitate communication between the commission and the state agencies.

Further more, in order to eradicate illiteracy at the shortest possible time, the policy also recommends that;

- i. There shall be a nation-wide mass literacy campaign based on various strategies including that of "each-one-teach-one" or "fund-the-teaching-of-one", "Participatory Rural Appraisal (Regene rated Freirean Literacy through Empowering community techniques' PRA/ REFECT)
- ii. State agencies for mass education shall be responsible for the regulation of all adult and non-formal education classes.
- iii. Mass literacy, Adult and Non-Formal Education shall continue to be under the supervision of ministries of education.
- iv. Mass literacy programmes shall be provided free to the beneficiaries.

Looking into the contemporary Nigeria context, it is regrettably that there

is a wide gap between policy formulation and policy implementation. Disparities between these two, leads to a large extent unnecessary failure and painful consequence. In view of these, the paper harvest some of the problems associated with the implementation of the policy so that adult education programmes will be repositioned for better results.

Problems Associated with the Implementation of Adult Education Policies in Nigeria.

It is an established fact that every organization has obstacles that hinder or prevent its development, adult education like other organization also have the same problems that hinders the implementation of the policies, such problems are:

- i. **Lack of personnel and motivation:** Trained personnel in adult education are very few.
- ii. **Ignorance:** Many adult thought learning is for children and youth, when they are age they feel discouraged to go to school.
- iii. **Lack of adequate teaching staff:** Report from the various state in the country revealed the shortage in the supply of staff in adult school
- iv. **Ethnicity:** Nigeria is a multi-cultural society, this leads to the problems of if it is not me, or some one from my geographical area at the helms of affairs at the implementation office, the programme would never "see the light of the day".

Okenwa (2013) identifies fifteen problems that hinder the proper implementation of adult education policy, which are summarized as follow:

- i. **Inadequate funding-** Funds for programme planning, delivery, monitoring and evaluation is generally inadequate. In Nigeria, government has not committed enough resources to the programme to get desired result. Many programmes like, NDE, NAPEP etc introduced by Federal government has eaten deep into the resources committed to adult education.
- ii. **Dynamism:-** Most facilitators find it difficult to change with time, they use one method to teach different group of learners. Some of them don't go for refresher courses to learn about varieties of methods, techniques and approaches and how to apply, them appropriately.
- iii. **Administrative bottle-neck:-** At times when programmes are initiated and organized by government, implementation may be difficult such that implementation of the programme would result in being over taken by events. Government bureaucracy encourages delay in decision making and the implementation of tasks.
- iv. **Voluntary Teaching and attendance:-** It is not always part of government priority to employ facilitator for adult learners let alone of encouraging the learners. Hence, the idea of voluntary teaching and attendance at adult education centre affect the programme, both the facilitators and the learners develop a "take it or leave it" attitude towards adult education programmes.
- v. **Unstable government attitude:-** Incessant change in government during military regime had effects on adult education. Each military leader

whatever interest they had in adult education, because of their short stay in office would be dismantled with impunity and all the laudable programmes put in place on adult education were often dismantled. The story is not different with democratic government, leader, are not so interested in adult education hence, little allocation of funds are made for adult education programmes

Conclusion

Nigeria like most developing countries have placed undue emphasis on formal education while apparently neglecting adult and non-formal education. Thus, it is most immediately productive and profitable for the national economy. What seems to be needed more in Nigeria today is development-oriented non-formal education to ensure the principle of self reliance both in national and individual terms. Adult literacy and adult education are necessary to ensure an enlightened government and citizenry, whose insights, activities and decision are very vital to the cause of education and the achievement of national goals.

Recommendations

To solve the problems identified in the implementation of the National Policy on Adult Education in Nigeria, the following are being suggested;

- ❖ Government at all levels should allocate substantial amount of money to adult education programmes in their annual budget.
- ❖ 2. Effort should be made to remove any form of administrative bottle-neck that may likely hinder successful implementation of adult education programmes.
- ❖ 3. Facilitators of adult education programmes should be encouraged to go for refresher courses in adult education methods and techniques for instruction delivery.
- ❖ 4. Evaluation of adult education programmes should be based on continuous activities that do not pose any threat to the adult participants
- ❖ 5. The use of mother tongue as language of instruction should be encouraged at the basic levels of adult education in order to achieve something tangible, but at post literacy and higher levels English language could be applied.

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LANGUAGE OF QUESTION: INTERSECTING SEMANTICS IN SOLVING WORD PROBLEMS IN MATHEMATICS

BY

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Abstract

Solving word problems are part of the many Mathematics questions students face in examinations. Word problems have been observed to have semantics implications which border on students' readability skill and understanding the language of the questions. The research was therefore conducted to find causes of students' inability to read and understand some of these questions that do not come in numerical format. Two hundred students were randomly sampled from eight junior secondary schools in Ibadan North Local Government Area of Oyo State. The samples were classified into two groups of equal proportion, one as control group while the other was the experimental group. Three hypotheses were tested. Descriptive and inferential statistics were used in analyzing the data collected. It was revealed that the experimental group taught with discussion method demonstrated a better understanding of the topic taught than the control group. It is therefore, recommended that the semantic aspect of word sums should be adequately taught to enhance learners' better understanding. It is equally suggested that teachers teaching Mathematics should be well-grounded in the area of word sums. Finally, generous efforts should be extended towards the teaching of this aspect in the class.

Introduction

Language proficiency and Mathematics proficiency appear to be linked, such that lower language proficiency tends to translate into poorer Mathematics performance (MacGregor & Price, 1999). This, in essence, points to the role of English language in constructing, selecting and teaching word problems in Mathematics.

Word problems are faced with language that differs from everyday usage and which is thereby potentially difficult for "problem solvers"

(Zevenbergen, 2000). Thus, in Mathematics, specific language such as "numerator", "hypothense", "minuend" "exponent", and so on must be acquired. Meanwhile, some common words, such as "table", "product", "rational," "even", "odd", and so on carry different meanings in Mathematics than in daily English language. Even with Mathematics, some words have different meanings in space versus number contexts (e.g. base and square).

Symbolic language is another area of comprehending word problems in Mathematics. Pupils must learn symbols

for operations like greater than and less than, the meaning of brackets and parentheses and so on. Use of symbols may also differ from one country to the other. For example, decimal point is used in the United States to separate whole numbers from fractional parts while other countries use a comma.

In Mathematics, the usage of prepositions becomes challenging as they often perform important and sometimes confusing functions. Dale and Cuevas (1992) posit that the same preposition can signify different actions as in the expressions 3 multiplied by 10 versus 3 increased by 10. Furthermore, Dale and Cuevas note that prepositions in general and the relationships they indicate are critical lexical items in the Mathematics register that can cause a great deal of confusion.

In a related manner, word order, such as “subtract x from y” can also be perplexing. So, too, can different ways of saying the same expressions, such as “24 divided by “8 ” or “24” divided into 8 parts”. Essentially, logical reasoning carries its own Mathematics language like (“therefore,” if then”), to which students must become accustomed.

Thomason (2012) posits that Semantics is the study of meaning of linguistics expressions . The language can be a natural language such as English or an artificial language like a computer programming language. He equally points out that the idea that meaningful units combine systematically to form larger meaningful units and understanding sentences has been the most important theme in contemporary semantics The word and its meaning is a paramount tool in building grammatical structures, eloquence or semantic insinuations.

Jackson (2002) explains that the study of the ways in which language

“means” is called semantics. To him, language is meaningful and that all its part serve the purpose of communicating meaningfully. Palmer (1981) explains that Semantics is not a single well-integrated discipline. It is not a clearly defined level of linguistics, not even comparable to phonology or grammar. Rather it is a set of studies of the use of language in relation to many different aspects of experiences to linguistic and non-linguistic context, to participants in discourse, to their knowledge and experience, to the conditions under which a particular bit of language is appropriate. In a similar vein, Saeed (2006), opines that semantics is the study of the meanings of words and sentences, it is the study of how meaning is communicated through language. Essentially, Lyons(1988), Allan (2002), Aitchison (2002), Bloom (2000, Janssen (2011), Fox and Lappen (2005) and Soames (2012) all isolate semantics as” the science of meaning”. A critical look at this shows that “semantics” can be classified into pragmatic semantics which studies the meaning of utterances in context, sentence semantics which studies the meaning of words and lexical semantics.

This paper is anchored on lexical semantics. Lexical semantics, according to Cruse (1986) is concerned with the meaning of words. What words mean, why they mean what they mean, how they are represented in speakers mind and how they are used in text and discourse. Outside linguistics proper, lexical semantics overlaps with disciplines such as philosophy, psychology, anthropology, computer science, Mathematics and pedagogy. Within linguistics, it crucially overlaps with what is traditionally referred to as lexicology, which is the overall study of the vocabularies of languages, encompassing topics such as morphology and etymology and social, regional and

dialectal aspects of the vocabulary (Cruse, Hundsnerscher, Job, & Lutzver 2002).

Lexical semantics also provides the foundation for various fields of applied research, such as research in language acquisition and learning (Robinson & Ellis, 2008; Gullberg & Indefrey, 2010);, Putz & Sicola, 2010). It is also the foundation for computational linguistics (Pustejovsky, 1995) (Asher & Lascarides, 2003) and lexicography which is the art and science of dictionary making (Bejoint, 2010).

Chapelle (2012) established five key questions in lexical semantics and these are:

- What is the nature of meaning in language?
- What is the relation between words and their meaning?
- How are meaning of words learnt and stored?
- How are meanings of words communicated and understood by language users?
- How and why do meanings of words change?

Essentially ,the answers to these five questions make up the fundamental theoretical assumptions and commitments which underline different theories of lexical semantics.

MacGregor and Price (1999) posit that there is a link between language proficiency and Mathematics proficiency such that lower language proficiency tends to translate into poorer Mathematics performances. This not only points to the role of literacy skills in learning other content areas, but it also has important implications for constructing, selecting, and teaching mathematical word problems. Barnwell

(2002),states that Mathematical discourse involves the use of mathematical symbols. Such symbols range from numerals to more specialized notation. These symbols have a syntax of their own, so $2x$ and $2x$ may mean different things. Barnwell ,thus asserts that matching tasks could support the connection of symbols with the related words.

Thus, readability issues must be considered in order to stimulate students' performance in word problems. Thomas (1997) emphasizes that real help can only be offered through the ability in identifying areas of difficulty such as context and linguistic. Readability is a critical issue to consider in constructing word problems. Word and sentence length are often key considerations in standard readability formulae. For instance, MacGregor, (1993;) and Rastall, (1994) opine that prepositions may have multiple meanings and can only acquire meaning in context. For example, "in the box" versus "on the box".

Readability of a text depends not only on word and sentence length but also on its linguistics and conceptual organization. Agnihotri and Khanna (1992) posit that readability of a text depends on the assumptions a writer makes about the prior knowledge of the reader and the writer's success in facilitating the reader's access to the text's content and textual schemata.

Gatsby (1995) offers some steps to solving word problem in Mathematics the first step is to read the problem entirely, the second is to work in an organized manner while the third step is to look for "key" words as certain words in English indicate certain Mathematical operations. For example:

English Terms	Algebraic Symbols
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Sum	+
Add	+
In addition	+
More than	+
Increased	+
In excess	+
Greater	+
Decreased by	-
Less than	-
Subtract	-
Difference	-
Diminished	-
Reduce	-
Remainder	-
Times as much	X
% of	X
Product	X
Per	/
Divide	/
Quotient	/
Quantity	()
Is	=
Was	=
Equal	=
Will be	=
Results	=
Greater than	>
Greater than or equal to	≥
Less than	<
Less than or equal to	≤

In another vein, Addition (+) could mean: combined, increased, total of, sum, added to, together, while subtraction could also mean: minus, less than, less, fewer than,

difference, decreased.

According to Renninger (1992), a student is not only engaging in a task when he or she works on a 'passage or a

word problem. He or she is confronting the structure of a domain and a canon for its instruction. Bilsky, Blachman, Chi, Mui and Winter (2009) emphatically stated that comprehending verbal Mathematical problems involves processes different from those involved in comprehending other types of discourse, such as stories. Driver(2005), suggests a wide range of strategies needed in language proficiency in Mathematics. According to Driver, a matching activity in which learners match algebraic expressions with equivalent linguistic expressions is necessary.

Looking at it critically, the importance of language in the learning of Mathematics has always been underestimated as Mathematics has always been thought of as a solitary subject and the belief that Mathematics is mechanical, not creative. (Khalid, Khairul & Tengah 2007). Clemens (2002) sums it up that anyone who has paid attention to the direction that Mathematics has taken over the last several years will notice that it is highly verbal. Therefore, developing classroom communication in English is important as it helps in the development of thinking ability which in turn aids students in Mathematical skills.

Statement of the Problem

It is a common perception that secondary schools across Nigeria have recorded mass failure in Mathematics at the certificate examination. A look at the situation shows that many Nigerian students of Mathematics have readability problem . This is clearly seen whenever they are asked to solve word problems in Mathematics ,It was discovered that many of these students did not understand the questions presented to them clearly especially word problems. The study, therefore, was undertaken to investigate the relationship between students` proficiency in English language and Mathematics learning. Essentially, the

study explored the difficulty in learning Mathematics which are attributable to low proficiency in English language.

Purpose of the Study

This study was designed to investigate the place of semantics in solving word problems in Mathematics. Students often have difficulty substituting English terms for algebraic symbols and equations. There is the need for complete understanding of the English terms used to help translate problems in algebraic equations. Thus, the study aims at examining how English language can be simplified when teaching students on how to solve word problems in Mathematics.

This study seeks to see the importance of semantics or meaning when teaching learners word problems in Mathematics .The study also seeks to discover the difficulties students have in learning word problems and the various available ways of solving such difficulties.

Significance of the Study

This research work has great value in the educational system especially in secondary schools. If proper consideration is given to the capability of Mathematics teachers to speak and use fluent and correct English in the expression of Mathematical terms, then there will be great positive change in the comprehension level of students in Mathematics.

Scope of the Study

The area chosen for the purpose of this study is Ibadan North Local Government Area of Oyo State. This local government consists of thirty six government secondary schools and numerous private owned schools. However, the study is limited to a few students of Mathematics in some selected junior secondary schools due to certain constraints including time and financial.

Methodology

Population of the study: The population for this study consist of all the junior secondary students in selected secondary schools from Ibadan North Local Government Area of Oyo State.

Sample and Sampling Technique: Simple random Sampling Technique was used to select eight junior secondary schools. In each school, twenty five students were randomly selected for the

study, A total of two hundred (200) junior secondary students were used for the study. The schools selected for the study were considered equal on the basis of their facilities and location in urban areas. Intact classes from the sampled schools were used. The eight schools selected for the study were grouped into two : Group 1(4) and Group 2(4) of one hundred (100)students each. The grouping is as follows:

	GROUP 1	GROUP2
1.	I.M.G Grammar school, Oje-Igosun, Oje, Ibadan	Agbowo Grammar school, Bodija, Iso-Pako, Ibadan
2.	Methodist Secondary school, Favos, Bodija, Ibadan	Ikolaba Grammar school, Ikolaba GRA, Ibadan
3.	Mount Olivet Grammar School, Bodija , Ibadan	Anglican Grammar School, Oritamefa, Ibadan
4.	Olabisi Onabanjo High School, Bodija, Ibadan	Emmanuel High School, U.I. Ibadan

Validity and Reliability of the Instrument: The instrument was validated by experts in the schools of Languages, Sciences and Education at Emmanuel Alayande College of Education, Oyo. A test re-test method of reliability was adopted to calculate reliability co-efficient of the instrument, the reliability coefficient was 0.72.

Instrumentation

For the study, the students were given questions on word problems to answer. The questions were multiple choice questions. The questions were designed to know the understanding ability of students in words and Mathematical signs written in English language.

The questions were designed into two parts, the first part was a multiple choice question with options A and B where students are to read and interpret the word problems and give a solution to it and the second part is a fill-in the gap.

The questionnaire contains a total of forty (40) questions.

In order to get the needed data, the class intact method was used. The questions were administered to both groups without being taught to determine the students' previous knowledge. The questions were later re-administered to a selected group that had been taught. Lastly, the two groups were later taught the same topic, and a third test of the same questions was administered.

Analysis of Data and Results

Descriptive and inferential statistics were used in analyzing the data collected. Analysis of co-variance pre-test scores as co-variants was employed.

Test-Retest Reliability

Reliability means consistency. It is the degree to which an instrument will give similar results for the same individuals at different times. Reliability can take on values of 0 to 1.0 inclusive.

Table 1. Correlations

	Test 1	Test 2
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Pearson correlation	1	808**
Test 1 G1 Sig (2 tailed)	100	.000
N		1
Pearson Correlation	.808**	.000
Test 2 G1 Sig (2 ted)	.000	1
N	100	100

** Correlation is significant at the 0.01 level (2-tailed).

Decision Rule

If the test-retest reliability coefficient is greater than 0.5, the test is reliable. From the test-re-test result, the Pearson Correlation is 0.808.

Decision rule: If the test is reliable, there will be a high positive correlation between the scores since, $r=0.808$ is greater than 0.05, there is a high positive correlation between the scores.

Research Hypothesis 1

H₀: There is no significant relationship between language meaning and Mathematical expressions.

Table 2: Analysis of Variance of language meaning and Mathematical expressions

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1161.852	14	82.989	16.704	.000
Within Groups	422.308	85	4.968		
Total	1584.160	99			

Decision Rule

Accept H₀, if $F^c < F^t$

Reject otherwise and accept H₁.

From the ANOVA result, the value of our calculated F-statistic is 16.704.

Thus: $F^t = 16.704$

$F(14,85) = 1.809$

$F^{10.95}(14.85) = 1.809$

Decision: Since, $F^c (16.704) > f^t (1.809)$ at 5% level of significance, the null hypothesis (H₀) is rejected and we concluded (with 95% confidence) that there is significant relationship between language and Mathematical expressions.

Research Hypotheses 2:

H₀: There is no significant place of emphasis on semantics in the teaching of word problems in Mathematics among junior school students.

Table 3: Analysis of Variance of place of emphasis on semantics in the teaching word problems in Mathematics.

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	943.834	14	67.417	8.950	.447
Within Groups	640.326	85	7.533		
Total	1584.160	99			

Decision Rule

Accept H_0 , if $F^c < F^t$

Reject otherwise and accept H_1 .

From the ANOVA result, the value of our calculated F-statistic is 8.950

Thus: $F^t = 8.950$

$$F(9,99) = 1.809$$

$$F^{0.95}(14,85) = 1.985$$

Decision: Since, $F^c (8.950) > f^t (1.985)$ at 5% level of significance, the null hypothesis (H_0) is rejected and we concluded (with 95% confidence) that there is significant place of emphasis on semantics in the teaching of word problems in Mathematics among Junior Secondary School students.

Research Hypothesis 3: H_0 : There is no effect of learner's readability on their learning output in word problems in Mathematics

Table 4: Analysis of Variance of learners' readability on their learning output in word problems in Mathematics.

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	831.112	14	59.365	6.701	.427
Within Groups	753.048	85	8.859		
Total	1584.160	99			

Decision Rule

Accept H_0 , if $F^c < F^t$

Reject otherwise and accept H_1 .

From the ANOVA result, the value of our calculated F-statistic is 6.701

Thus: $F^c = 6.701$

$$F(9,99) = 1.809$$

$$F^{0.95}(14,85) = 1.985$$

Decision: Since, $F^c (6.701) > f^t (1.985)$ at 5% level of significance, the null hypothesis (H_0) is rejected and we concluded with 95% confidence that there is effect of learner's readability on their learning output in word problems in Mathematics.

Discussion of Findings

This study has identified some of the gaps that could be filled when solving word problems in Mathematics. The study

revealed that relationship existed between language meaning and Mathematics. This study revealed that the relationship which existed between language meaning and Mathematical expression was $r = 0.808 > 0.05$ level of significance. This shows that the null hypothesis (H_0) that says there is no significant relationship between language meaning and Mathematical expressions was not accepted. This is in line with Barnwell (2002) findings that Mathematical symbols have a syntax of their own which requires proficiency in English language.

The study also shows that there was significant relationship between semantics and the teaching of word problems in Mathematics among junior secondary school students. Since $F_c(8.950) > F_t(1.985)$ at 5% or 0.05 level of significance, the null hypothesis (H_0) was rejected and the alternative hypothesis (H_1) was accepted. This agreed with the findings of Mac Gregor and Price (1991) which showed that there is a link between language proficiency and Mathematics proficiency such that lower language proficiency tends to translate into poorer Mathematics performances.

Lastly, the findings also revealed that there was effect of learners' readability on their learning output in word problems in Mathematics. Therefore, the null hypothesis that there is no effect of learner's readability on their learning output in word problems Mathematics was not accepted since $F_c(6.701) > F_t(1.985)$ is at 5% level of significance. This supports Thomas (1997)'s findings that readability is a critical issue to consider in constructing word problems. He found that word and sentence length are often key considerations in standard readability formulae. It also supports the findings of MacGregor (1993) and Rastall

(1994), that readability of a text depends not only on word and sentence length, but also on its linguistics and conceptual organization.

Conclusion

This research work was able to find out that various factors affected learning and understanding of word problems which is an all-encompassing topic in Mathematics.

The study was carried out to investigate the place of semantics in solving word problems. Two groups were involved in the study revealed that students do better in solving word problems in Mathematics if their knowledge of English language is improved.

Recommendations

Based on the findings, the following recommendations are made:

- Teachers of Mathematics must realize that every Mathematics lessons should be a language lesson. They should be encouraged and motivated to attend workshops, seminars and conferences to be equipped with variety of teaching strategies to encourage learning in solving word problems for the students.
- Principals should ensure that teachers assess their students regularly in order to develop their English language skills.
- Extra lessons could be organized for students in both English studies and Mathematics for better performance in both subjects.
- Teachers of Mathematics also need to improve themselves in English language so as to enhance their teaching capabilities.
- Students should be encouraged to attach much importance to English language at all time.

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INFRASTRUCTURAL DEVELOPMENT AS A TOOL FOR ECONOMIC TRANSFORMATION IN NIGERIA

By

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Abstract

This research work examined, with econometric criteria, the effects of infrastructural development as a tool for economic transformation using OLS methods with Cobb-Douglas Production Model, which is based on the BLUE assumptions. The result shows that 99% systematic variation in real per capita GDP proxy for economic transformation is caused by variation in infrastructural development parameters both social and physical infrastructural facilities. However, The overall significance of the entire Cobb-Douglas model or the goodness of fit of the model as measured by the F-statistic shows probability value of $P(F^)=0000$ which is significant at 1% level of significance, hence we conclude that variation in expenditure on education, gross capital formation, construction, health and transportation affected economic transformation and ultimately affected sustainable development in Nigeria. More so, the analysis applies with econometrical criteria and showed that the model had overall significance and the coefficients were positively significant. This study therefore recommends that government should endeavour to invest heavily on infrastructural facilities and proper implementations of the budgeted resources with adequate maintenance fund for infrastructural development. Government should also monitor the budgeting system as well as the implementation, in order to ensure the actualization of the benefits of the budgeted resources so as to promote economic growth and over all transformation of the economy.*

Introduction

The role of infrastructural development on economic growth has been well documented in the literature. Infrastructural development, both economic and social is one of the major determinants of economic growth, particularly in developing countries (Onakoya, Salisu & Oseni, 2012; Edun, Akinde & Olaleye, 2013; Patunola, 2014). Direct investment on infrastructure creates: production facilities and stimulates economic activities; reduces transaction costs and trade costs improving competitiveness and provides employment opportunity to the poor. In contrast, lack of infrastructure creates bottlenecks for sustainable growth and poverty reduction.

According to Sanusi (2012), Nigeria requires an annual investment of about US\$10billion over the next ten years in order to reduce its infrastructural deficit. This sum is grossly more than the

20% of \$1billion allocated for infrastructural development by the Nigeria Sovereign Investment Act. In his key note address at a stake holders forum, the former CBN Governor, Mr. Sanusi noted that the current level of infrastructure deficit in Nigeria is a major constraint in the national vision of becoming one of the largest economies by the year 2020. The foundation upon which sustainable economic progress can be built in Nigeria is, arguably, inextricably linked to the availability and sufficiency of infrastructure.

The current level of infrastructure deficit in Nigeria has been identified by Sanusi (2012) as the major constraint towards achieving the nation's vision of becoming one of the 20 largest economies in the year 2020. He further proffered that about 70 percent of the 193,000 kilometres of roads in the country is in poor condition; that enterprise surveys show that the power outages the nation experiences amount to over 320

lost days a year, with over 60 percent of the population lacking access to electricity with over \$13 billion spent annually to fuel generators and that Nigeria, which once had one of the most extensive railway systems in Africa, could now barely boast of a functional route either for passengers or freight.

According to National Bureau of Statistics (NBS) over the last decade, Nigeria's infrastructure spending contributed 1.9% (approximately \$4 billion) per annum to GDP. The recommendation of the Asian Development Bank in the KPMG report is that in order for a developing country to sustain growth and development, not less than 6% of GDP should be invested on infrastructure, (Onakoya, Salisu & Oseni 2012).

To a comparative extent, the public sector is attributed to the fiscal and monetary actions of government. These actions pressure purpose the need for effective allocation of resources, sense of identity and fulfillment, social cohesion and fairness dealing with structural development at all unit of the society. Unfortunately, the case of public sector to achieve efficiency and equity for the best interest of her citizens remains dismay. Rather than promote social, cultural, economic and infrastructural development, the nation's economy is rather deteriorating, there is gross inequality, uneven allocation of resources, unemployment, ravaging poverty and social incontinence

Infrastructural development in developing countries has not been given adequate attention by successive government in Africa and Nigerian government cannot be exonerated for this. Some scholars have even acknowledged the important role of infrastructure in stimulating foreign direct investment, among them are Wheeler and

Moody (1992), Loree and Guisinger (1995), Richard et al. (1999), Morisset (2000), Asiedu (2000), Sekkat et al. (2004), argued that infrastructural development is a necessary condition for foreign investors to operate successfully as poor infrastructural development increase costs for firms. Infrastructure should therefore improve the investment climate for FDI by subsidizing the costs of investment by foreign investors and increase their (ROI) return on investment. As the availability of good infrastructures like roads, railways, highways, ports, communication networks and electricity with a stable polity would increase productivity and thereby attract higher levels of FDI. Wei (2000) opined that, "location with good infrastructure is more attractive than the others". Asiedu (2002) analyzed some countries (34) concluded that with good infrastructural development the countries were rewarded with more investments.

However, for a country like Nigeria with many nearby developing countries, infrastructural development could be a comparative advantage to attract investment. According to Edun (2011), this is why it is imperative for the country to invest more on infrastructural facilities and try to bring down the escalating price of cement, with incentives for investors to enter the building material market; it is this infrastructural development that will act as the foundation for FDI attraction into the most populous nation in Africa.

In the context of either neo-classical or endogenous growth models, the effect of FDI on economic growth of the recipient country differs in the recent growth models from their conventional counterparts. The conventional economic growth theories are being augmented by discussing growth in the context of an open economy rather than a closed one

and the emergence of externally based growth models, even with the inclusion of FDI to economic growth. The traditional theorists confine the possible impact of FDI to the short run level of income, when actually recent research has increasingly uncovered an endogenous long-run role of FDI in economic growth determinants. The neo-classical model believed FDI could only affect growth in the short run because of diminishing returns of capital in the end. Barro and Sala-i-martin(1995), asserted that, in contrast, with the conventional neo-classical model which postulates that long –run growth can only happen from both exogenous labor force growth and technological progress.

The rise of endogenous growth models made it possible to model FDI as promoting economic growth, even in the long run through the permanent knowledge transfer that accompanied FDI. As an externality, this knowledge transfer with other externalities will account for the non-diminishing returns that result in the long run growth (De-Mello, 1997). Therefore, if growth determinants, including FDI are made endogenous in the model, Long run effects of FDI will follow creating a channel for technological spill over from advanced to lagging countries in the flow of FDI.

A number of theoretical expositions that demonstrate the linkages between infrastructure and economic growth have been provided in the endogenous Growth theories. Canning and Petroni (2004) investigate the long run impact of infrastructure provision on per capita income in a panel of countries over the period 1950 to 1992 and provide evidence that in majority of cases infrastructure stimulate long run growth effects. Udjo et al. (2000) also identify infrastructure as having both direct and indirect impact on the growth of an

economy. Infrastructure is said to add to economic growth and development by raising efficiency and providing facilities which enhance the quality of life. Infrastructure as defined by Akinyosoye (2010) is the “unpaid factor of production” which tends to raise productivity of other factors while serving as intermediate inputs to production. The services engendered as a result of an adequate infrastructure base will translate to an increase in aggregate output. Canning and Fay (1993) also found that the developing countries demonstrated a high rate of return on transport infrastructure which compared favourably with those of developed countries.

Infrastructure is a key component of the investment climate, reducing the cost of doing business and enabling people to access markets. Good infrastructure is critical to advance in Agriculture, it is a key to enable trade and integration, important for offsetting the impact of geographical dislocation and sovereign fragmentation and critical to enabling Nigeria to break in to world market; and is fundamental to human development, including the delivery of health and education services to poor people. Infrastructure investment also represents an important untapped potential for the creation of productive employment. In spite of this obvious importance of infrastructure to the nation, governments, both at federal and state level have continued to pay lip service to infrastructure provision. This has undermined growth prospect in the country. We shall now take glances at the condition of some of the country’s major infrastructure. (Yerima, 2013).

Good infrastructure also helps saving on logistics costs and palliative investments such as electricity generators; on the time to get to work or

to organize production processes with the attendant effect on labour productivity; on communication and information exchange time and costs; and on health expenditures due to less stress and better environmental conditions. Recent developments in ICTs and broadband networks are particularly suited to support the expansion of productive activity. For example, the World Bank (2009) notes that a 10% increase in broadband penetration increases GDP growth by 1.4% in developing countries, on average. The availability of infrastructure may help to attract investment, deepen markets and generate agglomeration economies through attracting productive capacity to a specific location. Located in places where disadvantaged groups are situated and when affordable access is addressed, energy, water, roads and communication facilities will have a direct impact on reducing inequality and making growth more inclusive. Gender sensitive or tailored health and social infrastructure, for example, can improve the security of women and girls and help their free movement and education. Proximity between jobs, residential locations and infrastructure, especially in disadvantaged areas, will contribute to narrowing spatial disparity and improve economic opportunities for all (Edun, Akinde & Olaleye, 2013)

The processes of industrialization have and will continue to take place against, and perhaps due to, large shifts in the spatial distribution of people. In 2009 the world achieved a historical landmark when the population living in towns and cities reached 50%. Urbanization, which over recent years has taken place mainly in developing countries, is posing both challenges and opportunities for inclusive and sustained growth and structural change.

Some cities are growing at rapid and unmanageable rates resulting in large and growing slum areas; overcrowding and pollution; unhealthy and unsafe environments; and inadequate housing, energy, health, water and sanitation, transport and leisure facilities. They are also highly vulnerable to the effects of climate change. Yet, where properly governed, managed and planned, spatial inclusion can be achieved as the concentration of people allows for cheaper and more efficient provision of services and infrastructure and easier communication and knowledge exchange. Population concentration lies at the basis of the innovation capacities and the agglomeration economies necessary for industrial and economic transformation and, hence, provides the potential for huge improvements in human wellbeing. To ensure environmental sustainability, infrastructure development should take into account the carbon constraint, energy security, and the need for climate adaptation. (Patunola, 2014).

Statement of the Problem

Infrastructural development in Nigeria is at crossroads in spite of its being critical to the economic productivity. When infrastructure is lacking both quantitatively and qualitatively in any area, resort will be made to self help. According to survey report on infrastructure and households, most of Nigerians rely on street vendors and private neighborhood for water supply and only about 39% treat their water for safe drinking. The survey also indicated that 83% of household experience unexpected interruption in electricity power supply daily, and between 47%-67% experience damage to their household appliances due to fluctuating

voltage. Majority of household rely on vended and well water for their daily use. This source water is not so hygienic and hence is unfit for consumption. In addition poor road conditions constraint movement of goods from one point to the other, while poor drainage systems has worsened the problem of flooding in most parts of the country.

Objectives of the Study

The main objectives of this study are to empirically examine the impact of infrastructural development on economic transformation in Nigeria.

Justification of the Study

Many countries in Africa have come to realize that there is a robust relationship between economic transformation and infrastructural development for their economies to grow. Both theoretical and empirical analysis of the literatures has shown this relationship.

However, none has been able to prove with microeconomic analysis and econometric analysis that infrastructural is a basic tools for economic transformation of both the individual and the economy as whole this paper has attempted to fill this gap. Therefore, economic transformation is related to a quantitative and sustained increase in the country's per capita output or income, accompanied by expansion in investment in both social and physical infrastructural per Head to see microeconomic and macroeconomic effect of infrastructural development. However, economic transformation is a wider concept than economic growth; it means growth plus change, which includes quantitative changes in economic wants, goods incentives, institutions, productivity and knowledge or upward movements of the entire social system.

Research Questions

- i. Is there any significant relationship between infrastructural development and economic growth in Nigeria?
- ii. Has infrastructural development transformed Nigeria Economy?
- iii. Is there any significant impact of infrastructural development on economic transformation in Nigeria?

Theoretical Foundation

This study used Cobb-Douglass production function as the theoretical basis of modeling the relationship between infrastructural development and economic transformation. Production function is a function that shows relation between the input and the output in economic growth. Only the abundance of labor is not enough, the accumulation of wealth and the improvement of technology is also very important. Hence, all of the factors that can affect the economic growth should be considered (Boopen, 2006).

In this study, a Cobb-Douglas Production Function is structured as follow:

$$Y_t = F(K_t, L_t, H_t) = A_t \cdot K_t^{b_1} \cdot L_t^{b_2}$$

where,

In the function, A_t means the improvement in technology over time; H_t stand for Human capital development level over time. Y_t stand for the Real GDP Per Capita at current price of the year t ; K_t stand for the stock of productive assets Physical Infrastructural Facilities (proxy by gross fixed capital formation, transportation, construction) of the year t ; L_t stand for rate of investment in Social infrastructural development (human capital) (proxy by expenditure on education, Health) year t , and b_1, b_2 stand for the output elasticity of physical infrastructural facilities and Social Infrastructural resources (human capital investment), the dependent variable is the growth rate of real Gross Domestic

Product (GDP) per capita proxy for economic transformation.

Regression Model

The Cobb-Douglas function includes exponent item, which will be hard to deal with (Boopen, 2006). Logarithm of both side of the Cobb-Douglas Production Function is taken as follows:

$$\ln \text{RGDPPC} = b_0 + b_1 \ln \text{TPH} + b_2 \ln \text{CPH} + b_3 \ln \text{AEPH} + b_4 \ln \text{HPH} + b_5 \text{PGFCF} + U$$

Where $\ln \text{GDP}$ is natural logarithm of Gross Domestic Product per capita, where $\ln \text{TPH}$ is natural logarithm of Transportation per head, $\ln \text{CPH}$ is natural logarithm of construction of infrastructural facilities, $\ln \text{AEPH}$ is natural logarithm of Expenditure on Education per enrolment as one of the investment in social infrastructural, $\ln \text{HPH}$ is the natural logarithms of Health Expenditure per Head. $\ln \text{GFCF}$ is natural logarithm of gross fixed capital formation; and U measures the error term.

Sources of Data

Data on GDP, Gross Fixed Capital Formation (GFCF), Transportation, Expenditure on Construction, Expenditure on Health and Expenditure on education are taken from the CBN Statistical Bulletin of 2013. Data on Population and transportation are obtained from World Development Indicator database of 2013; the data covers 1980 to 2013.

Method of Estimation

The method of Ordinary Least Squares (OLS) is used in the model parameter estimation. The parameter estimate obtained by OLS have some optimal properties like best Linear and unbiasedness (BLUE) and the method has been used in a wide range of economic relationships with fairly

satisfactory results. In addition, OLS is an essential component of most other econometric techniques.

Method of Evaluation

The evaluation consists of deciding whether the estimates of the parameters are theoretically meaningful and statistically satisfactory. For this purpose the three basic criteria ('a priori'. Statistical, econometrics) are used to evaluate the model specified.

The 'a priori' criteria: This refers to the signs and magnitude of the coefficients of the variables.

Statistical Criteria: This study makes use of statistical criteria like standard error, t-statistics, probability value and coefficient of determination. Higher standard errors imply inefficient estimates while low standard errors imply efficient estimates.

Econometrics Criteria: The econometrics criteria aimed at investigating whether or not the assumptions of the econometrics method is satisfied. The econometrics criteria make use of the F-test in testing the overall significance of model and the stability of coefficients.

Data Presentation

A time series data was used for this study which covers a period of thirty four (34) years (1980-2013). The data collected were of Real GDP, Gross Fixed Capital Formation (GFCF) and Expenditure on education, Expenditure on Health, Expenditure of transportation, Expenditure on Construction, Data used in this study were obtained from Central Bank of Nigeria Statistical Bulletin, CBN Annual Report and statement of Account and Federal Office of Statistics, Data on Population are obtained from World Development Indicator database of 2013

Analysis of Results and Discussion

Time series data were used for the analysis. E-view 7.2 Windows | econometric package was used to process the data obtained.

The OLS result obtained is presented below:

Dependent Variable: LPGDP

Method: Least Squares

Date: 03/04/14 Time: 15:24

Sample: 1980 2013

Included observations: 34

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.722657	0.562839	8.390783	0.0000
LTPH	0.095147	0.280439	0.339277	0.7369
LPGFCF	0.920242	0.317496	2.898434	0.0072
LCPH	0.047683	0.074109	0.643417	0.5252
LAEPH	0.131160	0.068338	1.919283	0.0652
LPHH	2.872646	1.756047	1.635859	0.1131
R-squared	0.990310	Mean dependent var		-4.292026
Adjusted R-squared	0.988580	S.D. dependent var		2.178010
S.E. of regression	0.232751	Akaike info criterion		0.081093
Sum squared resid	1.516850	Schwarz criterion		0.350451
Log likelihood	4.621411	Hannan-Quinn criter.		0.172952
F-statistic	572.3350	Durbin-Watson stat		0.944749
Prob(F-statistic)	0.000000			

Numbers in parenthesis under the parameter estimate of the corresponding standard errors. This establishes that the degree of error terms is considerably minimized and hence the estimates are reliable. The parameter estimates comply with a priori expectations which explain that the economic transformation is grossly dependent on two main factors of production Physical capital accumulation of physical infrastructure and social

capital accumulation of social infrastructural resources in the economy.

Considering the magnitude 1% increase in Per capita GDP (proxy for economic transformation) is brought about by 9% increase in transportation services per Head(LTPH), 92% increase in (LPGFCF) gross fixed capital formation per head, 4% increase in (LCPH) Construction of infrastructural facilities 13% increase in (LAEPH) for Total Expenditure on Education per Enrolment,

287% increase on (LPHH) Expenditure on Health. This postulates that an increase in general infrastructural development will lead to increase in Real per capita GDP. The estimated value of R^2 (goodness of fit) of 0.99 or 99% shows that 9% systematic variation in Real per capita GDP proxy for Economic transformation is caused by variation in Infrastructural Development. This equally ascertains that apart from the parameters or outside the scope of this analysis accounts for about 1% variation in the Economic Transformation which is covered by the error terms (μ).

The adjusted R^2 when the degree of freedom is considered with the number of explanatory variable also explain the 99% variation in economic transformation proxy by real per capita GDP. However, the analysis is statistically significant. The overall significance of the entire model or the goodness of fit of the model as measured by the F-statistic shows that the F-statistic calculate (F^*) is greater than the F-statistic tabulated (F) at 5% level of significance, hence we accept the alternative hypothesis that variation in expenditure on education, gross capital formation, construction, health and transformation affected economic transformation and ultimately affect sustainable development in Nigeria. However, the analysis applies with econometric criteria showed that the model had overall significance and the coefficients are stable.

Summary of the Findings

Based on the empirical review, we could deduce that infrastructural development is a key to economic transformation of any nation. All models designed by the previous researcher showed that infrastructural development is the pivot for all worked transformation programmes in the world ever.

However, The overall significance of the entire Cobb-Douglas model or the goodness of fit of the model as measured by the F-statistic shows that the F-statistic calculate (F^*) is greater than the F-statistic tabulated (F) at 5% level of significance, hence we accept the alternative hypothesis that variation in expenditure on education, gross capital formation, Construction, health and Transportation affect economic transformation and ultimately affect sustainable development in Nigeria. More so, the analysis applies with econometrical criteria and shows that the model has overall significance and the coefficients are stable.

Conclusion

The paper has reviewed the impact of infrastructure on economic transformation. The results of the paper are consistent with similar results of other countries like the United States of America, South Africa and so many other countries. The study has ascertained that investments in infrastructure both directly and indirectly significantly affected economic transformation growth in Nigeria. It was also found that direct investment on infrastructure created production facilities that stimulated economic activities. It reduced transaction costs and trade costs improving competitiveness and finally provided employment opportunity to the poor. In contrast, lack of infrastructure created bottlenecks for economic transformation and poverty reduction.

Recommendations

Arising from findings from the study, the following recommendations are made:

- ❖ Government should ensure that proper implementations on the budget with regards to
- ❖ infrastructural development, mostly at the grassroots is made and also

increase level of security so that many invested infrastructural facilities will not be damaged in the country.

- ❖ Government budgeting policies should positively impact on the sub-economic sector, that is, education, which encompassing is the security and the heartbeat of any nation, showing that the government of the day promotes

infrastructural and economic development of the nation.

- ❖ Government should monitor the budgeting system as well as the implementation, in order to ensure the actualization of the benefits of the budget allocation so as to promote economic transformation and sustainable development in Nigeria.

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THE USE OF ABUSIVE WORDS IN THE STYLE OF NEW GENERATION YORÙBÁ PLAYWRIGHTS

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Abstract

This paper investigates the use of abusive words or insults in the style of the new generation Yorùbá playwrights. The new generation Yorùbá playwright in the context of this paper are those who wrote their plays in the first ten years of this millennium (2000-2010). In Yorùbá society, abusive words words/insult could be traced to the Yorùbá poetic forms like Ìjálá, Ekún iyàwó, Esa Egúngún, Sàngó pipe though its usage is for entertainment purposes to make their audience to be lively. Though their predecessors also make use of abusive words in their plays, it is not as elaborate as in the works of the new generation Yorùbá playwrights. The two referents 'abusive words' and 'insult' will be used interchangeably in this paper. The data for analysis are excerpts from four plays of the new generation Yorùbá playwrights. The plays are Adeoye's Òge Ìwòyí (2001), Akínyelé Adétúnjí's Alárédé (2004), Olúwágbemiga Akínbámi's Ìpinnu Lánlèyin (2004) and Bólánlé Dosunmu's Ìyá Yáàdì (2004). The study reveals that the new generation Yorùbá playwrights' use of abusive words and insults is to show an aspect of Yorùbá culture and also to entertain their readers, to make them feel lively. This aspect constitutes a kind of style among the selected playwrights. The study recommends that the new generation Yorùbá playwrights should be cautious in the use of abusive words so that their targeted audience may not copy the negative aspect of their plays since literature is supposed to educate and entertain people.

Introduction

The traditional literary forms constitute a component part of Yorùbá culture. The Yorùbá literary artist does not believe in art for art's sake. To the artist, the message being passed across to the audience is important and the mode of effective transference is very important. In Yorùbá culture, the literary genres are used both for entertainment, and religious purposes. For religious purposes, we have Sàngó pípè, Oya pípè, Èsù pípè, Èsà Egúngún etc while for entertainment we have Ekún iyàwó, Ràrà sísun, Dadákúádà, Orin Èfè, Etíyerí, etc.

The new generation Yorùbá playwrights are familiar with the poetic forms and make use of them in their

plays. In Yorùbá poetic forms, the use of abusive words is of paramount use. The word abusive words means to damn, scold, swear at, revile, fulminate an interactant. Ọnádẹkọ. T. (2005) explains that insults may ensue when the interactants are playing, quarrelling or fighting. It is pertinent to note that the literary artists weave their rendition on the major themes to be discussed, ìjúbà (homage paying), èfè or àwàdà (jest) abusive words (èébú) and major songs pertaining to the poetic form. The use of abusive words is part of Yorùbá culture and its usage is significant in the poetic forms. For instance, in an ìjálá rendition, a man proposes to be a friend to a butcher. The butcher girl rain abusive words on the man that he is so small in stature like

a pounds meat. The man now advises his friend to be careful of butcher girls.

E dákun béè bá lówó lówó (please, when you are blessed with money)

E má yan alápatà lálè (don't be a concubine to a butcher)

Lójó tí mo yan alápatà lálé (the day I made a butcher girl my concubine).

Se ló kó mi ti gbogbo ara papò móra (she pressed me together)

Ó ní kín ní yìí (she said this thing)

Ko jèràn nán lo (is not more than pence meat). It is an insult to equate a fledged man with a meager meat of nine pence.

Classification of Insults/ Abusive words

The word abusive words connotes 'to scold', 'swear at', 'revile', 'fulminate' an interactant while insult can be thought as an insipid way of speaking or acting that hurts or intends to destroy a person's feeling, dignity, ego and peace of mind. Insults may be passed from a grown-up to a younger one in order to deflate his/her ego. Ònádèkó, T. (2007) classified insults into two (a) direct inventive (b) Innuendo. Direct inventive insult is the type in which it is created by the participant who intends to cast aspersion upon the other participant. Invariably the story, organ, etc he is alluding to is not a true feature or part of the physiognomy of the recipient. The major aim is to demoralize the other participant. An example of such an inventive insult is:

"Omo aláíníran, taa ní ko rántí ìtàn rẹ̀?"

Wá, je kí n so fún o, omo odò ní ìran bàbá rẹ̀ n se fún ìran bàbá mi nígbà iwàsé. Loolé kí o lo bí bàbá rẹ̀, o kó mòtá

A nonentity, who doesn't remember your history?

Let me tell you this, your grandfather serves as a househelp to my own grandfather in the past. Go home and ask your father. You don't know history.

This kind of inventive insult is a way of alluding to invented history. The addressed speaker in this speech sense may be a young person who does not know what has transpired in the past. The speaker merely creates it to display the cruelty of his mind by insulting the boy's forebear. According to Ònádèkó (2007), the direct inventive can be classified thus again into Direct, Elicit, Inform.

Synopsis of the plays

Akínyelè Adétúnjí, Aláradé

In *Aláradé*, Agbo and Joké got married. Agbo is the hero of the play. Apart from Joké that is the legal wife, he keeps other girls outside his matrimonial home. The truth is revealed to Joké, the legal wife. The issue is resolved through the intervention of Agbo's parents (in line with Yorùbá saying: 'àgbà tó jẹ̀ ìsébì, ẹ̀ pe ara yín jọ' which means that those elders that ate the piece of kolanut during the wedding time should call themselves together").

Akínbámi Olúwagbémiga's Ìpinnu Lánlẹ̀yìn

Ìpinnu Lánlẹ̀yìn: There are two friends, Kafayat and Saarat in this play. They are women of high social class who attend parties and enjoy drinking beer and pepper soup. Her son (Thompson) fell in love with the lady of his choice called Àbèjò, a decent and mature lady. Saarat, Thompson's mother dislikes the lady, and goes ahead to look for a girl of her choice for his son to marry. She forces Sussan Spere on her son with the help of charm. The marriage does not succeed because Sussan even connived with thieves to burgle the new house where they live in. The truth of the matter

is revealed and Saarat goes back to beg the family of Àbèjò, the lover of his son. Thompson and Àbèjò married each other and have children.

Bólánlé Olàdiméjì Dòsùnmú's Ìyá Yáàdì

Ìyá Yáàdì (Mother in Israel) is the heroine of the play. She is the wife of a pastor who joins the occultic group to help the ministry of her husband. As the church progresses, she accuses her husband of giving much attention to the young ladies that are coming to him for counseling. She requests that her husband be afflicted with sickness. The church organizes a three day revival for her husband to be delivered of his sickness. Her secret was revealed that her husband sickness is from the occultic group; they send her away from the church.

Abraham Adéoyè - Oge Ìwòyí

Oge Ìwòyí is written by Abraham Adeoye. The playwright portrays a family that is wallowing in poverty. The heroine of this play, Sade is a student, who joins her friends in prostitution business because of her poor family background. She is so deep in prostitution that she has committed abortion five times within a short period of time. After wasting her life in prostitution, she joins a church and marries a pastor called James. In order to be pregnant, she goes from one hospital to the other where she is told that she can never be pregnant again in her life. On hearing this report, she poisons herself. She was resuscitated through the help of her caring husband and neighbours.

Direct Insult

A. Direct insult can be verbal or inform or elicit. It is verbal when it involves the use of words. An insult is a direct exchange when the prior speaker issues a command. e .g.

(a) Kúrò níwájú mi - (Leave my sight) – (direct)

(b) Àbí èmi ní o n bá wí? (Am I the one you are talking to
(it always comes in form of a question) “Elicit”

(c) Wo ojú re bí ojú àgùntàn, elénu yíya bí igbá - (Inform)

(Look at his face like that of a sheep, his mouth as torn as broken calabash). The inform insult is always in form of a statement.

B. Innuendo insult. It is an indirect way of insulting a participant. This type is deep rooted in Yorùbá culture and is usually used during some festivals to correct the bad behaviour of some important personalities in the society. It may be in an indirect form, but the society at large will definitely know whom they are referring to.

An example is:

Inú Igbó lòpe n gbe, eníkeni kì í kolé adètè sígboro

(Palm trees always reside in the bush, no one will build a lepers colony in the town)

This innuendo insult was used by the opponent of a political party who symbolized their logo with a palm tree to degrade the party as confined to the ‘bush’. We must also note that there is structure in abusive words. Ònádèkó, (2005) posits three ways. It has an opening, a middle and a closing just like every other human discourse (Sacks et. al 1977, Sinclair and Coulthral 1975 and Akíndélé 1986).

3.0. Extracts/Analysis of Abusive words from the Selected Plays

In *Ìpinnu Lánlèyìn*, abusive words were used among the characters. When Saraat and Kafayat were exchanging pleasantries and Sosun (the house help)

was standing with them, Kafayat remarked:

Kafayat: Òré mi, níbo lo ti rí omo onífun eran báyí gbà, èyí tí n wò hàún bí

àsèsèran oorun yíí?
(*Ìpinnu, p.2*)

Sarat: Bí o bá tiè ri, kò ma gbó èdè kankan, o luko ju ewéélá lo

Sarat: Ko ara a re kúrò nibi. Kí o wa ibi gbà ní kíá, dindinrin, ti n dín

róbó, tí ó tún n tàá lówìn se ojú re fo, o ò ríran mo pé mo ní àlejò? Òde ní ilé ajá

(*Ìpinnu Lánléyìn, p. 3*)

Sosun: Ó ó rí bí àjàkù apèrè

Obo lágídò, dòpèmú, omo tí ko lajú, jáde sí èyìnkùlé jòó, dindinrin

(*Ìpinnu Lánléyìn, p. 4*)

When Àjinni and Àbèjò were discussing about the food they will take as breakfast for the day, they were contemplating of taking vegetables and cold agidi (èko tútù). Her mother replied

Àjinni: ... òkú oúnje, iwó lo mo ikú tó pa oúnje (*Ìpinnu Lánléyìn p. 7*).

The use of the abusive words continues on pages 10, 13, 19, 20, 22, 30 and 34.

The three kinds of the mode of abusive words are found in the examples given above. We have 12 words relating to abusive words in the two extracts above and they are direct, elicit and inform.

- i. Onífun eran –
(A nonentity) (inform)
- ii. tí n wo háun bí àsèsèyo òòrùn-
One who is looking furious: like
the rising of a sun (inform)
- iii. àfira kó ara re kúrò níbi -leave my
sight quickly (direct)

iv. dindinrin tí n dín róbó - a
nonentity, that prepares been cake
(inform)

v. tí ó tún n tàa lówìn – that
also sells on credit (inform)

vi. Sé ojú ré fò? – are you blind?
(Elicit)

vii. O ò ríran mó? – can't you see?
(Elicit)

viii. Òde ni ilé ajá – verandan is the
house of dogs
(inform)

ix. Òbọ Lágídò – monkey (inform)

x. Dòpèmú – a nonentity (inform)

xi. Omo tí kò lajú – uncivilized girl
(inform)

xii. Dindinrin - a nonentity (inform)

The playwright, Olúwágbémiga Akínbami makes use of the three forms in which we can classify the mode of insults. He makes use of direct, inform and elicit forms.

In *Aláredè*, when fighting ensues among two women, the use of abusive words was in display;

Ohùn akókó: É é è è, abóko-kúúú

Olówó síbíi, ààyò oko, aboko lójú ará

Oníyèyè kú níjò òjòó ro... so ti gbàgbé pé

Aláte rògòdì lo doko dúró de olósinsín ní?

Ìwo eni ilèélé ti won ìí téní fún yíí, eni rí nnkan he, to féé kú nítorí eee-
(*Aláredè, p. 3*)

Ohùn Keji: Sé èmi lo pè lábókokú? Tèmi tie dáa,

Ìwo n kó? Iyáálé ìya! Iyáálé ìsé. Opa-tóro-da-náín nu. Àpà Amùsùà! Èèke sà-n-án tóko re ó dáa lókòwò – nù-ún –o

E bá wa bèèrè, èrè da? Ojú owó n kó?

O tí fi gbogbo re jè ìpápánu tan! Onjekúje àbàjúfú lókè àyà Eèke sà-n-án tóko è ó dáa lókòwò – nu-un –o

Ó ti té lónìí, o ó faté tédìí! N o bú o, o ó sí bú bùmù

(Aláradè, 3)

Ohùn akókó: Èmi loníjekú je?

Ohun Kéjì: En-en ìwo ni. Ìwo wòiwòì bí ìdin èlú- (Aláradè, p. 3)

Ohun akókó: Se gbogbo yín n gbó bí kinní rán-un rán-un bí obe elebà yíí ti n sòrò sí mi o?

Sé e gbó bo se n bu mi?

Òrò tólógbon bá so enu wèrè ní won ti í gbó o. E yà fún mi lónà, e jé n firaa mí hàn-án

N ò ní gba ru e lówó iyàwó kankan Ìwo èfon ò-léran-nítàn lásánlásán yíí

N ó nà ó ní...

(Aláradè, p. 4)

Ohùn Kéjì: O ó na taa ni? O sóo ni àbí ó bolénu re? méjilá rè ò tó béè!

Ògúndíran: Àwon obìnrin wònyí tún gbe wónran-wòn-

rán wònyíí dé lónìí! Lónìí lóla bí ekún apokoje

Ògúndípe: Bùòda mi, e tètè wáa mu àwon wèrè tí mo ko jo, ti mo n pe lóbìnrin wònyíí soo... (Aláradè, 4).

The use of abusive words still continues on pages 5, 14 and 44. In the two excerpts above, we can point out the following thirty abusive words.

- (i) Abókokú – (die-hard lover)
- (ii) olówò síbí – (expert chef)
- (iii) ààyò oko – (favourite wife)
- (iv) aboko lójú ara! (one that has a part that husband likes)
- (v) Oníyèyè kú níjò òòjò ró- (one who acts ludicrously dies on a rainy day)

(vi) Sóo tí gbàgbé pé?- (have you forgotten that?)

(vii) Alátèè rògòdì ló dóko dúró de olósìnsín ní? (one that cooks 'ate' soup retains husband for the fry-fry woman)

(viii) Ìwo eni ilẹ̀ẹ̀lẹ̀ tí won ì í téní fún yíí- (you of the base level that detest honour)

(ix) Eni rí nnkan he, tó fe kú nítorí rẹ- (one that sees a gift and wants to die because of it)

(x) Se èmi lo pè labokoku? (are you calling me husband a die-hard lover?)

(xi) Íyáálé ise (Senior wife)

(xii) Òpá-tóró-da-nain-nu (One who makes three pence sales and throws away nine pence)

(xiii) Àpà (prodigious/extravagant person)

(xiv) Amùsùà! (spendthrift/prodigious person)

(xv) È è ke-sàn-án tóko rè ó dá a lókòwò nu-un (nine times has her husband given her capital for trade)

(xvi) Ó ti fi gbogbo re jèpápánu tan (she has spent everything on snacks)

(xvii) Oníjekúje (a glutton)

(xviii) Abà júfú lókè àyà (one heavily endowed with upper chest)

(xix) O ti te lónìí (you have been disgraced today)

(xx) Ó fàte tédìí (you have received your disgrace)

(xxi) N ó bú o, o ó sí bú bùmù (I will abuse you without any regard)

(xxii) Èmi loníjekúje (Am I a glutton?)

- (xxiii) Ìwo woiwoi bí ìdin èlú (you that bubble like an indigo maggot)
- (xxiv) ...kínni ran-un ran-un bí obè eléba yíí.(one who looks like a detestable soup)
- (xxv) Sé e gbo bí o se n bu mi (don't you hear the way, she was raining abusive wordss on me)
- (xxvi) O ó na ta ní? (you will beat who?)
- (xxvii) O só o ni, àbí ó bó lenuù re? (did you say it, or it is a slip of the tongue?)
- (xxviii) N ó nà ó, gbogbo nnkan ní yóò ma wù ó je... (I will beat you silly and you will crave for all kinds of meal).
- (xxix) Àwon obìnrin wònyí tún gbe wónran-wònràn won yíí de lónìí? (these women have started again with their problems)
- (xxx) Bùòdá mi, e tètè wá mú àwon wèrè tí mo kó jo ti mo n pe lóbìnrin wònyí so o. (My brother, please come and look after these mad women that I am calling wives)

The playwright, Akínyelé Adétúnjí has spiced his play with thirty abusive words and expressions to make the characters appear real in Yorùbá society.

We also have ample examples of abusive words from *Ìyá Yáàdì* by Bólánlé Dòsùnmú. For example, when *Ìyá Yáàdì* was insisting that her husband should agree with her so that Omolabí (her son) will be a pastor in his stead and the husband (Àlùfáà) was reluctant in supporting her, she rains abusive words on him thus:

Ìyá Yáàdì: Dáké nìbè
(shut up)
Kí lò n so, tí kò dùn lenu re

What are you insinuating ?

Gbédógbédó ti gbédó tan, o kù sówó gbénu

gbénu

The artist has done his own part, but for the critic

Kín ní won yóò so pe o se won tí won ko nì fí omo mi joyè àlùfáà?

What will they give as an excuse of not making my son to be a pastor?

Kí lo se ti enikan kò se rí?

Has he done something extra-ordinary?

... se èyí n ojú ò rírí ni, àbí èyí je ohun ti etí o gbo rí

Is it strange to hear that, or eyes have not seen such a thing before?

Another example is when *Ìyá Yáàdì* and Adérópò (her daughter) were discussing about her fiance (Ìfétóbi) and *Ìyá Yáàdì* was encouraging her daughter to break up the relationship between *Ìfétóbi* and herself, but Adérópo objected to that advice. In order to discourage her daughter from marrying her fiance, she made use of abusive words as follows:

Ìyá Yáàdì: Dáké enu re -

Ìwo òpònú ayirada yíí, (*Ìyá Yáàdì*, 18)

Shut your mouth!

You are a nonentity

Another example is when the elders of the church were condemning the evil act of Omolàbí (the pastor's son) who put one of the girl in the church in a family way. Her mother reacted violently to their plight by using abusive words to insult the elders.

Ìyá Yáàdì: E fí tiyín se tíyìn o

Òwò díèdìè lára n fé ke?

Se èyin o mo pé omo àlùfáà ni Omolàbí?

... bàbá ojú yín ní mo n ti o.

Baba,

... se omo mi náà ni e pe àpèjo lé lórí...
(*Ìyá Yáàdì*, p. 37)

Hold your peace!

Respect is reciprocal

Don't you know Omolabi to be a pastor's son?

I don't want to dishonour you

Is this meeting on my son's case?

Ìyá Yáàdì: Ìwo okùnrin yíí, gale
gàlè re n pòjù

Dùndú re n láta

Ta ló gúnyán fún o, tó ní tobè o sòro?

You this man, you are gallivanting too much

Who is your confidant?

Bólánlé Dòsùnmú as a playwright has demonstrated his familiarity with Yorùbá abusive words and has used them in the play to make the play true to life and to reflect Yorùbá culture. We can also note that the use of these abusive words at times can be because of modernity. In modern day, when a person wants to get something by force, one can make use of insulting words so as to have one's way. We have an example of *Ìyá yáàdì* in this case.

Abraham Adéoyè, in *Òge Ìwòyí* also incorporates abusive words in his play

Ma dáa lohún járe, omo tí o róòkán yen - Don't mind the uncivilized girl.

Egbé ajá lásánlásán... (*Òge Ìwòyí*, p. 4) - A nonentity

Kín ló pa wá pò, ki lo n wá wá fún? (*Oge Ìwòyí* p.5) – Why are you

looking for us?

Níbo lo forúko sí télè tí ó n jé dàání...
(*Òge Ìwòyí*, p. 5) – Where did you
hid your original name?

... O n se bi elégbè (*Òge Ìwòyí*, p.7) - You are behaving foolishly.

Bísí, o o rí ara ilé re, ìgbà yíí-láààrò re
(*Òge Ìwòyí*, p.8) – Bisi see your friend,
coming at the late hour.

Òjè tirè ti ga ju ti wa lo báyií, a ti là á lójú tan
(*Òge Ìwòyí*, p. 8) – She is now in an
high class, she is now civilized.

Ohun to ba wù ú, ko fí ara re se (*Òge Ìwòyí*, p.17) – Let her do whatever
she likes with herself.

The use of abusive words also continues on pages 6, 18, 22, 25 and 45.

Analysis of abusive words in the selected plays

In this paper, we analyze abusive words as it has been classified by Ònádèko (2005). An insult can be passed on people either verbally or non-verbally. It is verbal when it involves the use of words and it can be “direct, inform or elicit” (Berry 1981; Akíndélé 1991). It is a “direct exchange” when the prior speaker issues a command. It is ‘elicit’ when it comes in form of a question and ‘inform’ when it appears as a statement. The new generation Yorùbá playwrights make use of the three categories in their written plays portraying their knowledge of the Yorùbá culture.

Examples of ‘Direct Insults’ in the Selected Plays

Ko ara re kúrò nibí/ kí o wa ibi gbà ní kíá
(*Ìpinnu Lánléyìn*, p. 13)

Dáké n bè re (*Ìyá Yáàdì*, p 13)

The use of direct insult is not in elaborate use in other plays under study. This may be due to the fact that the playwrights prefer to use the other types of insults.

Examples of 'Elicit' insults in the Selected Plays

'Elicit' when the insult comes in form of question

- (a) Se ojú rẹ̀ fọ́? (*Ìpinnu Lánláyìn, p. 3*)
- (b) O ò ríran mo? (*Ìpinnu Lánláyìn, p. 3*)
- (c) Sé èmi lo pẹ̀ lábókokú (*Aláradè p. 3*)
- (d) Ìwo n ko? (*Aláradè p. 3*)
- (e) E bá wa bèèrè, èrè da (*Aláradè p. 3*)
- (f) Ojú owó n ko? (*Aláradè p. 3*)
- (g) Sé é gbó bo se n bú mi (*Aláradè p. 3*)
- (h) O ó na tani? (*Aláradè p. 4*)
- (i) O so ó ní, àbí o bo lénu rẹ̀ (*Aláradè p. 4*)
- (j) Kín ní wón so pé ó se, tí won ko ni fí omo mi joyè àlúfàá. (*Íyá Yáàdì, p. 13*)
- (k) Kí lo se tí enikan ko se ri (*Íyá Yáàdì, p. 13*)
Are you blind?
Can't you see?
Am I the one you called die-hard loven?
What of you?
Please enquire on our behalf, where is the profit?
What of the capital?
Can't you hear her insulting me?
You will beat whom?
Did you say it or it slipped?
Why would my son not be ordained?
What has he done strangely?

Elicit insult is of paramount use in the selected plays. It may be due to the fact that questions generally are being used to evoke responses among the addressees.

Examples of inform insults in the selected plays

The inform insults come as statement. At times, those statements may not be true about the person being addressed. This is purpose is to deflate the person's ego, and to make him sad.

Oníyèyè kú nijo òjò ro (*Aláradè p. 4*)

(One who acts ludicrously dies on a rainy day)

That person being addressed may still be living up till this day, it is only to deflate ego.

É è è abókokú (die-hard lover) (*Aláradè p. 4*)

Olówó síbí (expert chef) (*Aláradè p. 4*)

Ààyò oko (favorite wife) (*Aláradè p. 4*)

Eni rí nnkan he to fe kú nítorí e (*Aláradè p. 4*)

(One who wants to die for a gift)

All these abusive words are just to deflate the ego of the interactant. The attributes may not be true of the character of the interactant. All playwrights under study make use of it in an elaborate form.

Conclusion

This paper has examined the use of insult/abusive words in the plays of the new generation Yorùbá playwrights. The new generation Yorùbá playwrights makes use of the three categories of abusive words in their plays which are elicit, inform or command. The paper recommends that the Yorùbá playwrights should be cautious in the use of abusive words so that the young generation will copy the good aspect of our culture, and not the negative ones.

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BIBLIOTHERAPY AS A TOOL FOR NURTURING THE GIFTED CHILDREN

By

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Abstract

This paper examines the relevance of bibliotherapy for the gifted and talented children in their educational system. Bibliotherapy is the use of literature to address problems or current issues in the lives of children. For some children, a favourite story, poem, or song can be a comfort in a trying time. Introducing a new story of book can be equally helpful for children because it helps to clarify feelings and validate emotions. Making up their own stories or modifying a favourite one can also get children to talk and think about issues at hand. Some misconceptions about gifted children are also discussed. Purpose and relevance of bibliotherapy as well as method of using bibliotherapy with the gifted children were also stressed with recommendations. Parents should incorporate bibliotherapy into everyday interactions with their children.

Introduction

All students require opportunities to learn, grow, and be challenged to strive for excellence. Students with exceptional talents and learning potentials have needs that require specific knowledge and attention. With careful nurturing and appropriate education, gifted students have the potentials to make a unique contribution to their communities and the world. Without this, the price one pays is “lost academic growth, lost creative potentials and sometimes lost enthusiasm for educational success, professional achievements and substantial contributions to the society” (Borders & Paisley, 1992).

Borders and Paisley (1992) assert that bibliotherapy consists of the selection of reading materials, for a client which has relevance to that person’s life situation. The idea of bibliotherapy seems to have grown naturally from the human inclination of identity with others through their expressions in literature and art. For instance, a grieving child who reads (or is read to) a story about another child who

has lost a parent will naturally feel less alone in the world.

The terms gifted and talented can be a source of confusion. There are explanations of how they differ but no widely accepted one. For this reason the term “gifted” will be used throughout. In the large community and even within schools there are many misconceptions about gifted students. Six of the more common misconceptions about gifted students are:

- 1. Gifted students are high achievers:** It is true that some gifted students are high achievers but not all are. One of the biggest issues today in both gifted and regular education is underachievement (McCoach & Siegle, 2003). Often the reasons are complex and have more to do with issues outside of school such as stress, instability, family situations and societal values. Nonetheless, the power of the school to turn this around can be very significant.
- 2. All children/people are gifted:** Although all students are unique, have a valuable contribution to make, have

relative areas of strengths and deserve an education that allows them to reach their potential (whatever that may be), not all students are gifted (Borders & Paisley, 1992).

3. Gifted students will do fine with or without special programming:

Some gifted students will do fine in spite of an unchallenging school experiences. This is particularly true if their parents provide enriching activities outside the school. However, some turn off, never develop good work habits and motivation, and for all intents and purposes their giftedness "dies".

4. Gifted students come from advantaged homes:

Some gifted students, and many of those who are identified as such do come from advantaged homes but there are many gifted students from less advantaged backgrounds who do not stand out as gifted. The challenge is proper and comprehensive in identification notwithstanding.

5. Co-operation learning or other forms of group work are an effective way to meet the needs of gifted students:

The advantages of co-operative learning are well documented and while it is important for all students to learn to work with others of differing abilities, heterogeneous, cooperative learning should be used sparingly and judiciously with gifted students. Often such experiences provide no intellectual challenge; the gifted student does a disproportionate, or sometimes no, work; and the total experience is negative.

6. Gifted students have trouble getting along with peers:

Generally speaking, this is not the case that gifted students do have troubles getting along with their peers. Often,

gifted students are leaders, both in and out of school, and throughout their lives. The exception may be those who are "profoundly gifted" and may have little in common with age mates in terms of interests. However, even with this population this is not always true.

Definition and concept and Bibliotherapy

Bibliotherapy is an adjunct to psychological treatment that incorporates appropriate books or other written materials, usually intended to be read outside of psychotherapy sessions.

Bibliotherapy as a technique has proven effective in both the classroom and in child therapy (Borders & Paisley, 1992; Lenkowsky, 1987). Through reading, or being read to, a story similar to their own lives, children are able to experience and deal with an issue objectively which can then be applied to their own problems or issues. The stories should show the child that there is a way out, others have the same issues, and you are not alone. Bibliotherapy sends the message to the child that is acceptable to talk about this and together we can work out a solution. Hebert (1991) cautions that the simple act of reading a story is not bibliotherapy. Follow-up discussion must be incorporated in order to reinforce the issue at hand. Added outcomes of such discussion include fostering inter personal relationships and problem solving skills. Discussions provide a forum for the child to better understand what is being said in the story and to apply it to her/his situations. It is important to note that the ramifications of these techniques are greater for high ability children because of their ability to empathize, which allows them to identify with the characters, to understand metaphor, and to become absorbed in the story with a meta-understanding of the issue. Bibliotherapy is an old concept in

library science. The ancient Greek maintained that literature was psychologically and important, posting a sign above their library doors describing itself as a "healing place for the soul". In the US, it is documented as dating back to the 1930s. The basic concept behind bibliotherapy is that reading is a healing experience. Literary sources can assist with the resolution of complex problems. It was applied to both general practice and medical care especially after World War II, because the soldiers have a lot of time on their hands whilst recuperating. Also, the soldiers felt that reading was healing and helpful. In psychiatric institutions, bibliotherapeutic group flourished during this time. The patient became preoccupied with the books and the engagement seemed to be good for their general sense of wellbeing, for a variety of reasons. Today, health care workers and institutions recognize the wide and varied use of bibliotherapy within a range of scenarios.

Bibliotherapy can assist children in building confidence and self-esteem. It attempts to normalize a child's world by offering coping skills and reduce their feelings of isolation, reinforcing creativity and problem solving. It also gives parents an opportunity to discuss their children's issue with the children.

Bibliotherapy is useful because it allows the children to step down from his/her problem and experience it from an objective viewpoint. It offers the child a safe avenue to investigate feelings. For an adult having a deal with a child in distress, it can also provide a nonthreatening way to broach a sensitive subject. Always remember, bibliotherapy is a conversation starter, not ender. It should be used to open up communication. Handing a book to the child in the hopes that he/she will understand your intention is not helpful.

Connection needs to be facilitated and open expression should be encouraged.

Purpose of Bibliotherapy

The goal of bibliotherapy is to broaden and deepen the clients' understanding of the particular problem that requires treatment. The written materials may educate the client about the disorder itself or be used to increase the client's acceptance of a proposed treatment. Many people find that the opportunity to read about their problem outside the therapist's office facilitates active participation in their treatment and promote a stronger sense of personal responsibility for recovery. In addition, many are relieved to find that others have the same disorder or problem and have coped successfully with it or recover from it. From the therapist's standpoint, providing a client with specific information or assignments to be completed outside regular in-office sessions speeds the progress of therapy.

Bibliography has been applied in a variety of settings to many kinds of psychological problems. Practitioners have reported successful use of bibliotherapy in treating eating disorders, anxiety and mood disorders, agoraphobia, alcohol and substance abuse, and stress related physical disorders.

Relevance of Bibliotherapy

Bibliotherapy: is an expressive therapy that uses an individual relationship to the content of books and poetry and other written words as therapy. Bibliotherapy is often combined with writing therapy. It has been shown to be effective in the treatment of depression. This result has been shown to be long-lasting.

Bibliotherapy of course can be done with all students, particularly

students who might be experiencing a divorce in the family, a learning disability, adoption, etc. TI wants to talk a bit about using developmental bibliotherapy specifically with gifted students. A fair amount has been written already about what bibliotherapy is and why it's important to do with gifted students. Essentially by having gifted students read literature and/or biographies featuring gifted children or adults, the student can gain insights into their own giftedness. Through bibliotherapeutic reading, the gifted kids are presented with ideas for how to cope with some of the struggles they encounter because they are gifted. These struggles may include trouble finding meaningful friendship, existential depression, dealing with high expectations (whether internal or external), and being a unique learner when most around them don't learn as they do.

In addition to helping them learn new strategy for dealing with their various social and emotional issues, bibliotherapy with gifted kids can help them to better understand themselves, their sensitivity, and their quack. It can allow them to learn about themselves vicariously and to know that they are not alone those others have-and-have had-the same concern or problems. It can expose them to new ways of thinking about and seeing the world around them. And it can help them gain insight into themselves by connecting with or identifying with a character in a book who is similar to them or who has similar obstacles to overcome.

The reality is that gifted kids don't always have everything going for them, despite what others may misperceive about them in that regard. They are certainly not all in need of clinical therapy, but; as I point out to the parents of my students- raising (or teaching) a gifted

child is usually not the cakewalk that everyone assumes it to be, because they come packaged with all those worries, sensitivities, quack and surprises, together with their unique intelligent (I have heard parents eyes tear up when I say that to them. It is often their first acknowledgement from someone after the family that raising their gifted child is far more of a challenge than others realize).

Bibliotherapy with gifted students

Bibliotherapy is the process of having a student read a book to learn about social or emotional issue or developmental needs by identifying with a character from the book. The students reflect on the struggle or problems the character is having can learn from the characters need or conflict. Readers are presented with ways to cope and can better understand themselves through reading. They can learn that there are some others who have the same feelings, concern or problems and that they are not alone. They can connect with the character and gain personal insight into themselves through reading about other gifted people. Students develop a more positive self-image and can change attitude and values by reading about other gifted people. It promotes mental and emotional health. Adding this to a reading programme adds debt to reading and challenges the reader to make complex analyses. They connect to the character and this allows a deeper understanding of the character.

Anyone who has contact with a child who is experiencing emotional turmoil or confronting a new issue that is confusing can use a technique like bibliotherapy. Counsellors have used this technique quite successfully since the 1950s and 1960s. Lenkowsky (1987) points to its use as a planned therapy with three components: identification,

catharsis, and insight. The use of bibliotherapy in the classroom seems to have its root in the 1970s with the use of picture books with children (Jalongo, 1983). The popular trend in children's literature to include more emotionally laden and real-life subject matter has increased the use of bibliotherapy today. The quality of available literature is outstanding. There seems to be a greater awareness of real life issues and multicultural sensitivity among book authors and publishers. Not only are bibliotherapies approaches useful within the context of a classroom or therapy session, but more and more parents are finding it beneficial in helping their children deal with the stress of modern life. Taking the time to read a story with a child, if done in an emphatic, understanding atmosphere, can reinforce a positive sense of worth and increase the parent/child bond.

Borders and Paisley, (1992) identify forms of bibliotherapy: developmental and clinical. Clinical bibliotherapy is employed by trained personnel, for use with children in therapy situations and is just one aspect of the treatment process that deal with deep problems. Developmental bibliotherapy is used to anticipate issues before they become a problem. For instance, reading a story about a child who is frightened about going to first grade with your kindergartner is developmentally appropriate and can prove to be helpful in allaying some of their fears. This type of bibliotherapy is useful with children who are progressing through the normal stages of growing up and who may benefit from an exploration into issues relevant to their age of experiences, e.g. bedwetting, nightmares, or fights between friends. It is when the issue becomes problematic for the child and/or family that professional help is required. If you find yourself asking questions such as the

following, then maybe you need to consult with a professional. "Is this an issue I feel comfortable dealing with alone? I have tried everything I know, now what do I do? A therapist may ask you to become part of the therapy by recommending to you certain books to read at home, but this will be in addition of the work being done in the office. The most important thing to remember is that your child is getting the help with the issue before it becomes a major life trauma.

For those parents who are looking for ways to use literature with their children, there are several sources for appropriate books for and about children. Some authors include bibliotherapies at the end of their works. One suggestion by Silverman is to consult a librarian who in addition to him or her own expertise, can point you to the resources like book finder, when kids need books (Spredemann-Dreyer, 1994). This work allows you to find books by subject, author, or title and includes items for children from 2-18 years. It is a helpful resource that is continually updated but just one example of many guides available to you. It is worth the trouble to explore the shelves of local libraries and bookstores; do not timid about asking for help.

Using annotated bibliotherapies and suggests by other is a good source for idea on materials. The best way to select a story is to read the story. Is may take time to find an appropriate book for use with your child. You want it to be closely related to the issue at hand, offer suggestions for coping strategies, and include a protagonist your child can relate to. Characters in stories are either humans or animals, ask yourself who will be more appropriate for your child? Can they make the leap from an animal character to their own life, or will they see such a book as babyish? The storyline

and characters do not have to match your situation exactly, but be sure that is some commonality. There are many good stories available so do not compromise. Closing a story that a child cannot relate to will negate your good intentions. Take your time, visit libraries and bookstores. Chances are you will find many more adults in the children's section than you anticipate.

Conclusion and Recommendation

Bibliotherapy has been vastly researched to ensure its usefulness for all students. It has many drawbacks that include unavailable literature on certain topics that students may be struggling with, many students not being ready to face their issues and read, and students and parents defensively implementing the therapy.

The resistance of using bibliotherapy is based on a lack of assertiveness, negative attitudes, anxiety, depression, sexual dysfunctions, and negative behaviours. The major issue that

lies behind bibliotherapy is the lack of research that has been concluded on this therapy device.

Advantages of bibliotherapy include teaching students to solve problems, help students cope with teasing, name calling, mockery, fears, sexuality changes, anxiety, and death.

From the submission of this paper, the writer hereby recommends the following:

- i. Government should make available qualified and trained specialist teachers to handle the education of the gifted and talented children generally;
- ii. Government through recommendation from the schools, should always supply relevant and adequate materials into the school libraries for gifted and talented children.

Therefore, if the aforementioned recommendations are implemented, there would be improvement on the education of children with giftedness and talentedness.

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DESIGN OF 1KVA PURE SINE WAVE POWER INVERTER AS BACKUP SOURCE OF POWER FOR PHYSICS LABORATORY

By

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Abstract

Power inverter is an electronic device that has the ability to convert the direct current (DC) from the battery or solar cells (panels) into an alternating current (AC) which is the conventional form that powers many electrical appliances. It maintains a continuous supply of electric power to the connected loads or equipments when the utility power is not available. In this research, the design of 1000W pure sine wave power inverter is presented. The methods implemented for the design were two circuit topologies. The circuit topologies were DC-DC converter and DC-AC inverter topologies. The DC-DC converter in the design made use of a high switching frequency transformer, enabling the reduction of size of the parts and to meet the efficiency constraint, while the DC-AC inverter circuit made use of a microprocessor to digitally pulse the transistors on the inverter side of the circuit. This resulted in pulses at precise time intervals. The slope and magnitude of the output signal were exact, as opposed to the unstable signal generated by other power inverters that used analog technology. Implementing the microprocessor also allowed for the different alarms and tests which deal with the health and safety concerns. This pure sine wave inverter will be useful as backup source of power for laboratory.

Introduction

Companies, Industries, Organizations, Homes among the others are posed with a major problem of power shortage especially here in Nigeria. Although in developing countries, shortage of power is a problem commercially and domestically. With increase in power consumption without change in the amount of power supply, under such conditions, failure will occur unpredictably and without any warning due to stresses on the inadequate sources of power. Hence, there is need for the alternative source of power which could fill in the gap and cover the lapses of shortage in power supply especially in our laboratories.

Overcoming this obstacle led to the invention of DC/AC power inverters.

Inverters are generally used in a host of applications that include variable speed drive, uninterruptible power supplies, flexible AC transmission systems, (FACTS), high voltage DC transmission systems (HVDCTS), active filters among the others (Geethalakshmi & Dananjayan, 2010).

An inverter is a device which maintains a continuous supply of electric power to equipment or load by supplying power from a separate source, like battery, when utility power is not available. It is inserted between the source of power (typically commercially utility power) and the load. For alternative energy systems, inverters

are the essential step between a battery's DC power and the AC power needed by standard household electrical systems. In a grid connected home, an inverter/charger connected to a battery bank can provide an uninterruptible source of backup power in the event of power failures, or can be used to send extra alternative energy power back to the utility company. Batteries produce power in direct current (DC) form, which can run at very low voltages but cannot be used to run most modern household appliances. Utility companies and generators produce sine wave alternating current (AC) power, which is used by most commonly available appliances today. Inverters take the DC power supplied by a storage battery bank and electronically convert it to AC power.

An inverter used for backup power in a grid connected home will use grid power to keep the batteries charged, and when grid power fails, it will switch to drawing power from the batteries and supplying it to the building. For a business at home or office, a reliable power source is invaluable for preventing lost data on computer systems. Most modern inverters also include overvoltage and under voltage protection, protecting sensitive equipment from dangerous power surges as well (Alaskan, 2006).

An inverter is a device that takes a direct current input and produces a sinusoidal alternating current output source. An inverter needs to be designed to handle the requirements of an energy hungry household yet remain efficient during periods of low demand. The efficiency of inverter is highly dependent on the switching device, topology and switching frequency of the inverter (Mushairi, 2006).

Mobility and versatility have become a must for the fast-paced society today. People can no longer afford to be tied down to a fixed power source location

when using their equipments. Overcoming the obstacle of fixed power has led to the invention of a DC/AC power inverter (Dustin *et al* 2004).

An inverter with the use of many batteries is capable of generating power for hour's even days depending on the capacity of the battery and the load connected to it, and this power could be very crucial since in some office set-up, a failure of about one minute could cause losses that could run into millions. The ability of the inverter to change over automatically gives it an advantage over some UPS and they find applications in the following areas;

- The computer field: An unpredictable power failure can wipe out the information stored in the memory bank of the complete data base system.

- Air traffic system: Radar and essential aircraft information are on constant display in air traffic control system, and mains failure could cause a break out of radar and lead to unprecedented disaster.

- Other processes like boilers, flame detectors, etc.

- Domestic uses include items like TVs, CD players, fans, light points, boilers, etc.

Design and Methodology

Design Requirements

Power electronic systems are used widely to convert electric energy from one form to other using electronic devices. Four basic power electronics functions are AC to DC conversion, DC to AC conversion, DC to DC conversion and AC to AC conversion. These basic functions are used to build power supplies, DC transmission systems, electric drives and others (Mushairi, 2006). The methods implemented for this design were two circuit topologies. The circuit topologies were DC-DC converter and DC-AC inverter topologies.

The design that will be implementing will solve the problem associated with modified sine wave inverters by using a microprocessor to obtain a more efficient and smooth means of switching the inverter's transistors. This will reflect in the overall design a greater efficiency, less power loss of heat, the ability to power even the most sensitive digital devices, minimize the size of the final product, and make it a more versatile product in the global economy.

There are several factors involving power that can be easily overlooked by the average person. These issues deal

primarily with efficiency but are not limited to it. First, the amount of power consumed by the load must be looked at. Different devices call for different power wattages, because of this fact, our inverter would not be able to power larger devices that require a lot of power. This does not affect the efficiency of our device, it is just one of its limitations. Next, the sensitivity of the load being driven should be considered. This means the output signal of the inverter must provide a cleaner signal without distortion for more sensitive devices. The amount of undesired harmonics present in our output signal would need to be limited.

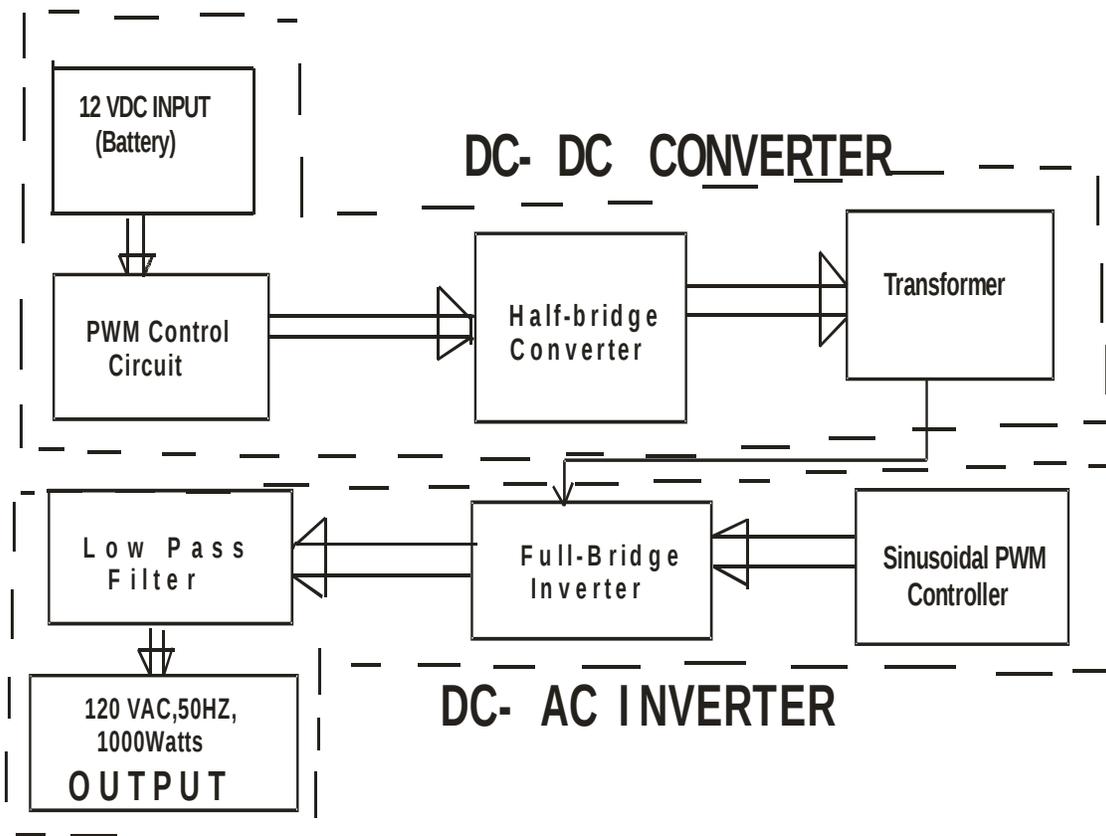


Figure 1: Power inverter block diagram

The DC-DC converter consists of a battery which supplies the 12 VDC input voltage to the circuit. Then the Pulse Width Modulation (PWM) control circuit which is used to pulse the half bridge converter. The half bridge converter will chop up the 12 VDC supplied by a battery so that an AC is seen by the transformer.

The transformer is responsible for boosting the voltage by stepping up the voltage from the half bridge converter.

In the DC-AC inverter stage, the sinusoidal PWM controller circuit produces two output pulses with varying duty circles in order to drive the full bridge

inverter circuit. The full bridge inverter converts the DC voltage supplied by the DC-DC converter into a desired AC voltage. The low-pass filter eliminates the

switching frequency and multiples of the switching frequency. At the final output the 240 VAC is being generated.

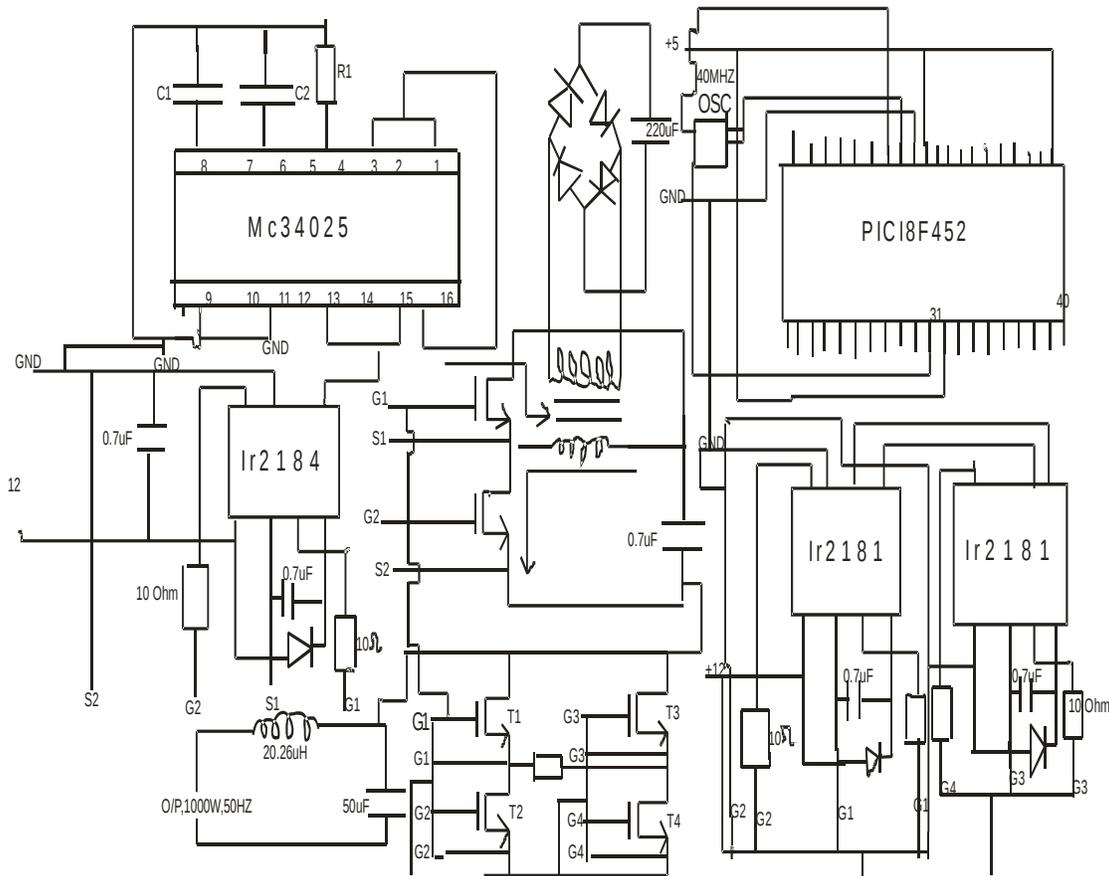


Figure 2: 1000W Pure Sine Wave Power Inverter Model Circuit

The Power Supply Stage

The power supply stage is specially designed for the charging of the battery in other to power the voltage controller of the circuit. The most readily available power source, the 240V/50Hz A.C wall outlet is used in the project. For a charging voltage of 240 VDC, this unregulated supply needs a transformer of $12\sqrt{2} = 16.97V_{rms}$.

To achieve a fast charging rate, an 18V transformer is required for charging. A bridge rectifier was selected to rectify the transformer output and a capacitor of 1000µF was used to filter the rectified voltage. The switch type used is a positive voltage regulator of 12V with three terminals. The cutoff frequency for the low pass filter used can be set by the following formula and diagram:

$$F_{cutoff} = \frac{1}{2\pi\sqrt{LC}}$$

(1)

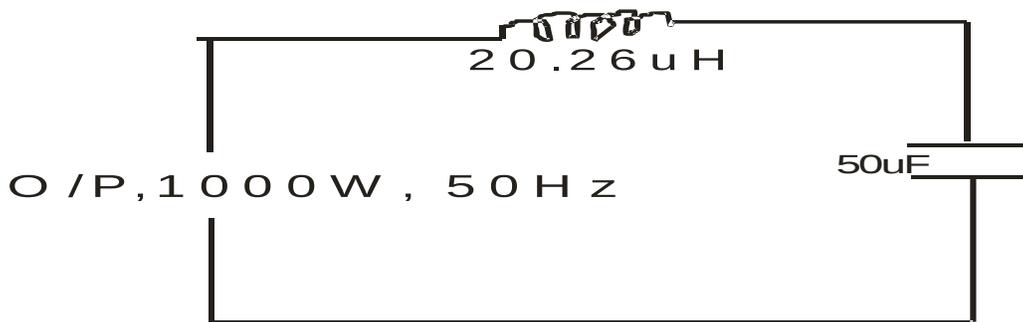


Figure 3: Low Pass Filter Circuit

The Battery Charging Stage

The charging circuit is a constant voltage type. The charging voltage is derived from a constant regulated D.C voltage while the control for the charge is composed of transistors connected as switch. This circuit is made of a voltage controller to automatically shut down the charger when the battery is fully charged by a D.C voltage source, which is the charging voltage. A 12V relay was also used in this design.

DC-DC Converter Stage

The inverter stage is made up of the pulse width modulator, push- pull

amplifier, driver circuit and the MOSFET driver circuit. The DC/DC step up converter in this design used a high frequency transformer, enabling us to reduce the size of the converter considerably. The use of a high frequency transformer also enables us to meet our efficiency constraint. A high switching frequency improves the efficiency of the inverter.

The Pulse width Modulator

The pulse width modulator produces the timing signals that trigger the gates of the MOSFET. The IR2181 transistor was used in this project.

From the IR2181 data sheet, $F = \frac{1.3}{R_T C_4}$
 (2) IR2181 data sheet, <http://www.irf.com/product-info/datasheets/data/ir2181.pdf>.

$$R_T = \frac{1.3}{FC_4}$$

Where F = Frequency = 50Hz, Capacitor value, C₄ as a matter of choice is chosen to be 2.6μF. R_T and C₄ is the frequency determining resistor components used for the circuit as shown in figure 2.

$$R_T = \frac{1.3}{50 \times 2.6 \times 0.003} = 10\Omega$$

The MOSFET Driver Circuit

MOSFETs were chosen for use in this project due to its fast switching rate and ruggedness. The IR2184 MOSFET gate driver circuit was added to the PWM control circuit for two reasons. First of all, it was chosen to amplify the 5V signal

from the MC34025 PWM chip to obtain a 12V signal, enough voltage to fully turn on the transistors of the half-bridge circuit. Secondly, the IR2184 MOSFET gate driver was used to provide electrical isolation between the control circuit and

the voltage needed to operate the half-bridge circuit. The signal from the push-pull amplifier driver circuit was used to trigger the gate of MOSFET to enable it to start conducting at the rate at which the pulses switches. 10Ω resistors were connected between the output from the driver circuit and then gate of the MOSFET to prevent static electricity from getting into the gate. This was necessary because the gates are prone to

fluctuating electricity which can damage them. Since a large amount of power is needed, the MOSFETs have to be cascaded to get the desired amount of power at the output.

The power output needed is 1000VA. By applying a power factor of 0.7 (due to loss). The output power = 0.7 x 1000VA = 700watts.

For power to be equal to 700watts. According to Akande et al, (2007);

$$I = \frac{P}{V}$$

$$I = \frac{700}{12} = 58.33A \text{ (Using 12V battery).}$$

The Transformer Choice

$$\text{Primary winding; } I_p = \frac{P}{V} = \frac{1000}{12} = 83.33A$$

$$\text{Secondary winding; } I_s = \frac{P}{V} = \frac{1000}{240} = 4.17A$$

Each half of the centre tapped transformer will therefore carry 4.17A. Hence, a transformer with the following parameters will be required:

Primary winding: 12V, 83.33A

Secondary winding: 12-0-12, 4.17A

The transformer used in this project is to step up the voltage from the half-bridge

converter to provide the approximate voltage and frequency values used in this work.

The MOSFET Choice

The same MOSFET type can be employed. The only change will be in the number of MOSFETs employed. The power output is 1000VA. By applying a power factor of 0.7 (due to losses).

The output power = 0.7 x 1000VA = 700watts.

For power to be equal to 700watts;

$$I = \frac{700}{12} = 58.33A \text{ (Using 12V battery).}$$

This implies that the power element must have a current handling capability in excess of 58.33A. Using the IRFF740A power MOSFET {P_D (MAX=200W)}.

Using the design parameters and formulae below according to Akande et al

(2007), Alade and Akande (2010) with G = Power gain, P_{out} = the AC output power, P_{dc} = DC input power, η = the efficiency, V_{out} = output voltage, V_{cc} = supply voltage, I_{dc} = direct current, R_L = load resistor and V_L = input voltage.

$$(3) \quad V = IR$$

$$I = \frac{5}{10} = 0.5A$$

$$(4) \quad P_{in} = I^2 R$$

$$P_{in} = 0.25 \times 10 = 2.5W$$

$$P_{out} = \frac{V_{out}}{8R_L} \quad (5)$$

$$P_{out} = \frac{340}{8.0 \times 10} = 4.25W$$

$$(6) \quad G = \frac{P_{out}}{P_{in}}$$

$$G = \frac{4.25}{2.5} = 1.7$$

$$(7) \quad P_{dc} = V_{cc} I_{dc}$$

$$P_{dc} = 12.0 \times 0.5 = 6.0W$$

$$\eta = \frac{P_{out}}{P_{dc}} \times 100\% \quad (8)$$

$$\eta = \frac{4.25}{6.0} \times 100\% = 71\%$$

The output power obtained in equation (5) above is used by the microcontroller which eventually provides 300W continuous power and 600W of peak at the output of the inverter with pure sine wave signal.

The following equation gives the minimum charge which needs to be supplied by the capacitor:

From IR2181 data sheet, <http://www.irf.com/product-info/datasheets/data/ir2181.pdf>.

$$Q_{bs} = 2Q_g + \frac{I_{gbs(max)}}{f} + Q_{Is} + \frac{I_{cbs(leak)}}{f} \quad (9)$$

The elements of the equation above were determined from data sheets as;

Q_g = Gate charge of high side FET = 110nC

$I_{cbs(leak)}$ = bootstrap capacitor leakage current = 250μA

Q_{ls} = level shift charge required per cycle = 5nC

I_{gbs} = quiescent current for the high side driver circuitry =230 μ A

By substitution, $Q_{bs} = 9 \times 10^{-3} C$

$$\text{From } C = \frac{Q}{V}$$

(10)

$$C = \frac{9 \times 10^{-3}}{12} = 0.7 \mu F$$

Conclusion

The design of 1kVA pure sine wave power inverter demonstrated above if well assembled and integrated will undoubtedly supply 300W of continuous power and 600W of peak power for the electronic gadgets at the power outage. This will be most helpful in laboratories and prevent damage of sensitive apparatus. In this study, the methods implemented for the design were two circuit topologies. The circuit topologies were DC-DC converter and DC-AC inverter topologies. The DC-DC converter in the design made use of a high switching frequency transformer, enabling the reduction of size of the parts and to meet the efficiency constraint, while the DC-AC inverter circuit made use of a microprocessor to digitally pulse the transistors on the inverter side of the circuit.

In this design, the P1C18F252 and 1R1281 transistors used were specially designed to produce optimum pure sine wave output. Some of the inverters in the market, unless otherwise told are either square wave or modified sine wave inverter that capable of generating great noise and high total harmonic distortion and eventually cause havoc to our sensitive devices. But with this pure sine wave power inverter, the sensitive

devices are guaranteed from expected damages as a result of amount of unwanted harmonics and some other possible defects that can be caused by square wave and modified sine wave power inverter. This nonfuel and soundless power inverter is an alternative to the fuel type, noisy, and costly electric generators.

Recommendations

Future work could be done to the loss of power in the transformer due to flux imbalance to better the transformer to meet the project requirements. Also, future work could be done to the output power shortcomings the size of the Print Circuit Board (PCB) traces by laying out larger traces so that the PCB layout could handle the current requirements of this project.

Again, with more time and effort, the PWM programme that was used by the microprocessor to digitally pulse the MOSFETs of the full bridge inverter could be modified to be more efficiently operated to correct the failure of total harmonic distortion caused by the PIC programme. Once again, future work could be done to better layout of the PCB to regulate the length of the traces leading from the PIC to the MOSFETs of the full bridge inverter.

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THE STATE OF PUBLIC GOODS AND SERVICES IN IBARAPA REGION

By

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Abstract

This study explored the state of available public goods and services (PG&S) in the three local governments in Ibarapa region. It also examined whether the probable pressure on PG&S is a function of overpopulation or bad governance. Using participant observation and interview methods of data collection, this study mirrored the state of slaughter houses, public conveniences, drains and refuse disposal, street lightings, potable water and security. Situations in the study area reflected PG&S inadequacy, resulting in untold hardship and suffering of individuals and organizations. Majority of the residents interviewed were of the opinion that this inadequacy was not a reflection of high population number but the three local governments' in Ibarapa Region insensitivity to the plight of the citizenry. This paper calls for governance that will not compromise delivery of PG&S and should reduce the effect of overpopulation by managing public resources efficaciously in favor of the masses.

Introduction

The resources to be considered in assessing the quality of life, include clean water, clean air, food, shelter, warmth, safety and security. Other life sustaining resources are medical care, employment, education, electricity, proper sewage treatment, wastes disposal and energy supplies. Public goods and services (PG&S) such as sanitation, police services, fire protection, libraries, infrastructure maintenance (roads, bridges, and communications networks), police, national defense, public education and street lighting are usually provided by the governments. The most touted reasons why governments should provide these PG&S are the size of funds required and because a market failure has occurred and the market has not provided them. Public goods have two distinct aspects: non excludability and non rivalrous consumption (Riley, 2012; WHO, 2014 and Cowen, 2014).

In Nigeria, PG&S (infrastructure) deficit appears as a major constraint to Nigeria's development. Experts such as Adémólá-Olátéjú (2013), Akpan-Nsoh (2013) and Emejor (2013) noted that the infrastructure base in the country is grossly inadequate to meet the demands of development. Still speaking on the infrastructural deficit plaguing the country, Shamsuddeen Usman, (former Nigeria Minister of National Planning) lamented that, it is clear that Nigeria cannot grow the economy at the desired rate, reduce poverty to an appreciable level and create jobs in sufficient quantity for its teeming youths, given the current state of her infrastructure, adding that inadequate infrastructure is one of the main reasons responsible for the country's inability to compete effectively in a highly competitive global economy.



Plate 1: Collapsed Bridge near Iseyin, km 35, Abeokuta-Sokoto road. This road will be impassable during the rainy season. Picture snapped on 23rd January, 2014.

Plate 1: collapsed Bridge at Iseyin, km 35, Abeokuta-Sokoto road. This road will be impassable during the rainy season. Picture snapped on 23rd January, 2014.

Present roads in Nigeria, relative to our population and size, are not enough. Every bridge in Nigeria including rural ones carries more traffic than originally intended. The rolling blackouts and inefficiencies of power generation and distribution is the chief reason behind the collapse of our token industrial base. The Tincan and Apapa ports handle 100 times the volume it was originally designed to handle. Across Nigeria, conditions at many of our game reserves, state parks, recreation areas and historic sites are deplorable at best. The World Economic Forum also ranked Nigeria 146th in primary education (Adémólá-Olátéjú, 2013). "Nigeria ranked 115 in the overall World Economic Forum Global Competitiveness Ranking; ranked 130 out of 144 countries in 2012/2013 (Emejor, 2013).

Potable water in most towns in Nigeria is still a luxury; and this defines the limit of cleanliness of our immediate environment; hence we are battling with cholera, malaria other ailments associated with unkempt environment. Unemployment of youths is the bane of insecurity in our society; leading to the emergence of 'vigilante' which is a result of bad governance, the inability of the

Nigeria Police and other security agencies to curtail crimes. Adejumo (2006) summarized it all as the impact of infrastructure (PG&S) inefficiencies in Nigeria has been severe and has lasted for several decades and is reflected in constrained domestic growth, impaired international competitiveness, and poor foreign investment.

In many developing countries, Nigeria inclusive, people's incomes are not enough to cover the cost of their basic necessities. Poverty is also a symptom of poor basic services, scarce financial resources and low returns from natural wealth such as oil, gas, minerals and fisheries while revenues from public investments and taxes are exposed to corruption and embezzlement (Poverty at large: A dark spot in humanity, 2009). This situation is quite worrisome; with Nigeria's population which is incredibly high, 9th most populated country in the world, 5th in population density with an average of 30people/per sq.km; meaning that many people crowded into small places.. This places competitive stress on the available basic life sustaining resources leading to diminished quality of life.

Experts are sharply divided in their opinions on whether the strain on available PG&S is a function of overpopulation or bad governance. For instance, Nielsen (2006), Farrell (2013) and Tal (2013) saw overpopulation as a very serious problem. According to Nielsen (2006), overpopulation places competitive stress on the basic life sustaining resources leading to a diminished quality of life. Farrell (2013) lamented that Earth has only one real problem, but population growth is the cause of the Earth's problem, not the result. While Tal (2013) opined that overpopulation is not just about food shortages and human suffering. It remains the leading driver of hunger, desertification, species depletion and a range of social maladies across the planet. The author opposed Ellis' (2013) view and demanded for the basis upon which the scholar's newest cornucopian assurances were made; by asserting that after studying the ecology of agriculture in China and talking to archaeologists, the scholar reached the conclusion that technologies have always been able to overcome any anticipated exceedance of carrying capacity.

Ellis (2013) argued that overpopulation is not a problem and not an important cause of stress on available PG&S. Simon (2009) added that higher population density leads to more specialization and technological innovation, which in turn leads to a higher standard of living. The writer claimed that human beings are the ultimate resource since we possess productive and inventive minds that help find creative solutions to man's problems, thus leaving us better off over the long run (Moore, 1998). Our species are better off in just about every measurable material way (Regis, 1997). Some countries have managed to increase their

carrying capacity by using technologies such as modern agriculture, desalination and nuclear power, a position supported by Tal (2013). The good news is that public policy matters (governance) can reduce overpopulation. Many countries, such as Bangladesh, Iran, Singapore and Thailand adopted policies that encourage small families, make birth control available, provide better social security and most of all empower women. The results are remarkable ... the quality of education, housing and health improved as a matter of course". This made Sowell (1988) and Williams (1999) to see overpopulation as 'non-issue'. The authors posited that poverty and famine (stress on PG&S) are caused by bad governance and bad economic policies, not necessarily by overpopulation.

Various scholars attempted to define governance; for instance, Edemhanria (2009) defined governance as the process by which authority is exercised in the management of a country's economic and social resources in the interest of the majority of the citizens. Rhodes (1997) defines governance as the minimal state: the use of markets and quasi-markets to deliver 'public' services'. Azeez (2002) saw governance as a sub-set of governance wherein public resources and problems are managed effectively, efficiently and in response to critical needs of society. The author concluded that "good governance has been an elusive challenge in Nigeria as in most other African countries". Mohammed (2009) highlighted reasons for not having good governance to include military rule, corruption and bureaucratic bottlenecks. This tragic failure also characterized development administration in the states nationwide. Gboyega (2003) argued that within a decade it (LGCs) became obvious that rather than unifying the nation for rapid socio-economic development, extreme centralization had

created conditions for massive corruption and inefficiencies in the delivery of PG&S. Local governments were all but extinct and even state governments were no more than extensions of the federal government.

Though the global scale defines values which ultimately impinge on local communities; it is at the local scale where we lead our daily life that we suffer lack and deficiency in supply of life sustaining resources. In Nigeria, LGCs (the third-tier of government) were purposefully created to bring governance close to the people and as growth pole centres capable of spreading development at the grass-root level. Accordingly, the main functions of these LGCs are essentially about provision of PG&S. This is as spelt out in the fourth schedule, section 7 of the Constitution, Federal Republic of Nigeria (1999). The functions of LGCs amongst others as contained in section 1 (e), (f), (h) and 2 (c) herein paraphrased, include provision/establishment, maintenance and regulation of slaughter houses, slaughter slabs, markets, motor parks, public conveniences, sewage, refuse disposal, roads, streets, street lightings, drains, public highways, parks, gardens, open spaces, health services and other public facilities.

Objective of the Study

Undoubtedly, PG&S power the national economy and support a society. As such, it is pertinent to find out how these LGCs fare in terms of meeting their constitutional mandates of providing, maintaining and regulating PG&S in their respective territories. In view of this, this paper focused on the state of selected PG&S in Ibarapa region; the three LGCs have been selected. In doing this, these constructs were adopted: (i) the quantity, quality and adequacy of PG&S provided and (ii) maintenance of the PG&S provided. If the state of PG&S is found to

be deficient, inadequately provided or poorly maintained; this study attempts to found out whether this deficiency is a function of overpopulation or bad governance. This study was limited to these three LGCs in Ibarapa region, Oyo State, Nigeria; i) Ibarapa Central; ii) Ibarapa East; and iii) Ibarapa North. The current state of selected PG&S provided by these LGCs were explored. In doing this, this study isolated overpopulation and bad governance as probable causes of stress on available PG&S, other causes such as corruption, accessibility and acceptability, were not considered.

Clarification of Concepts

Public goods and services: It refers to basic life sustaining resources and infrastructures. There are used interchangeably to mean PG&S provided by the three LGCs in Ibarapa region. Precisely, slaughter houses, public conveniences, drains and refuse disposal, street lightings, potable water and security were the PG&S considered. By Nigerian constitution, potable water and security should be provided and maintained by the state and federal governments respectively, but they are included because of their importance.

Pressure: It refers to feeling that everything seems to have become too much or overloaded and wonder whether individuals and organizations really can cope with the strains placed. Herein, pressure refers to strains, pains, sufferings and agonies accompanying the struggle in reaping the benefits of these PG&S, which in many cases are inefficiently supplied.

Governance: It is used in a large sense to mean the functioning of LGCs towards securing the well being of its citizens in their territories; in terms of delivery of PG&S towards making citizenry comfortable and happy.

Overpopulation: It does not depend only on the size or density of the population, but on the ratio of population to available

sustainable resources, and PG&S; it also depends on how the selected PG&S are maintained throughout the study area.

The Study Area

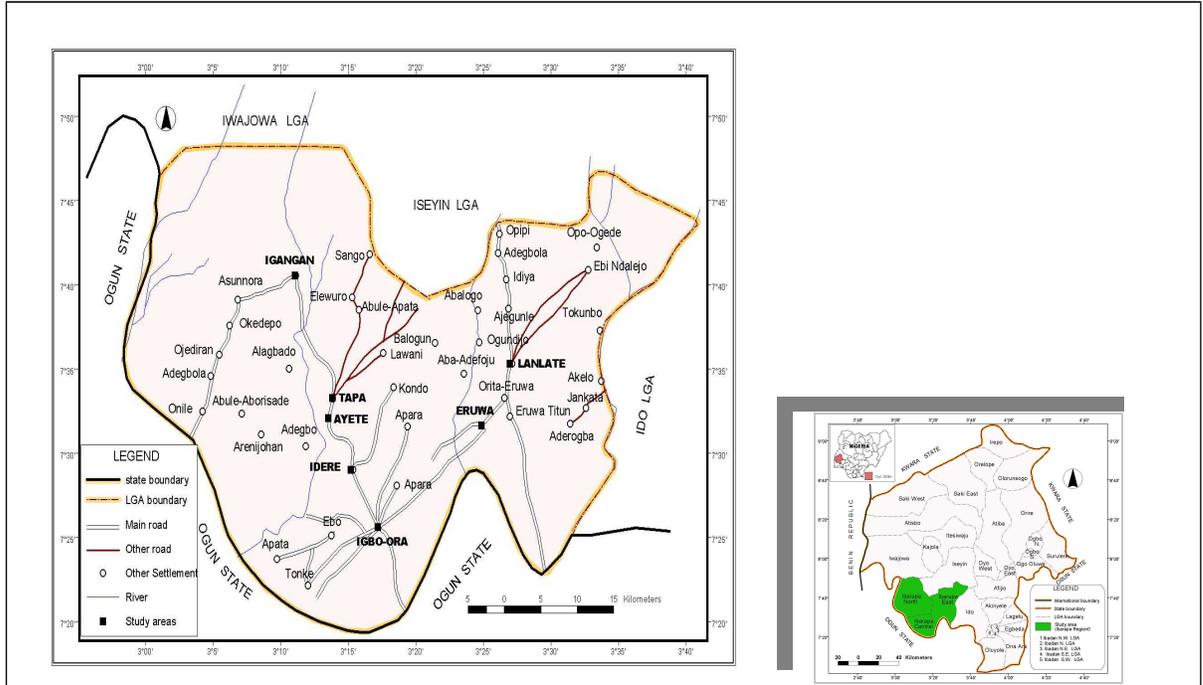


Figure 1: Ibarapa Region

Ibarapa region falls within latitude 7° 35' N and 7° 45' N and longitude 3° 10' E and 3° 40' E, located in Oyo State, Nigeria, comprises of 7 major towns, jurisdictionally partitioned into 3 LGCs.

- (i) Ibarapa Central; consisting of Igbo-Ora, Idere and other villages with headquarters at Igbo-Ora. It has an area of 440 km² and a population of 102,979 at the 2006 census.
- (ii) Ibarapa East; consisting of Eruwa, Lanlate and surrounding villages with headquarters at Eruwa. It has an area of 838 km² and a population of 118,226 at the 2006 census.
- (iii) Ibarapa North; consisting of Ayete, Tapa, Igangan and surrounding villages with headquarters at Ayete. It has an area of 1,218 km² and a population of 101,092 at the 2006 census. PG&S provided and

maintained by the three LGCs include slaughter houses/slabs, markets, motor parks, public conveniences, refuse disposal, roads, street lightings, drains and primary health centres.

Theoretical and Empirical Studies

The theories of public goods as put forward by Samuelson (1954), "marketability" of goods and services by Atkinson and Noord (2001) and the general theoretical framework for examining the social value of shared infrastructure as provided by Frischmann (2005) were considered relevant in this study.

Samuelson (1954) developed the theory of public goods; and defined a public good, as a "collective consumption good", goods which all enjoy in common in the sense that each individual's consumption

of such a good leads to no subtraction from any other individual's consumption of that good. This is the property that has become known as non-rivalry. In addition a pure public good exhibits a second property called non-excludability: that is, it is impossible to exclude any individuals from consuming the good.

Atkinson and Noord (2001) focused on the issue of "marketability" of goods and services. In principle government intervention here is justified by the assumption that the distribution of such goods and services.

- (i) Public goods and services: this category comprises the provision of essential "pure" public goods and services that cannot be rationed by the price mechanism and therefore would not be supplied in efficient amounts if markets were used to make them available.
- (ii) Merit goods and services: Government provision of such goods and services is justified because of a conviction that they would otherwise be provided in less than the efficient amount, because a significant number of consumers lack the required purchasing power, while externalities give these goods and services a public goods element.
- (iii) Economic services: this refers to the provision or co-funding of private goods or services by the government. Intervention has often been felt to be desirable in markets for goods and services that are prone to natural monopolies, where externalities are judged to result in inefficient supply if provision is left to the market, or where particular groups of providers are felt to warrant assistance.

- (iv) Social transfers: these are transfers that provide support for income and living standards. Beneficiaries may include those whose market income is low or has declined sharply, or who face exceptional expenses due to old age, disability, sickness and unemployment.

Frischmann (2005) provided a general theoretical framework for examining the social value of shared infrastructure and sees commons-based management of infrastructure serving three basic purposes.

- (i) It diffuses pressure within market and political systems to 'pick winners and losers' and leaves it to users to decide what to do with the opportunities (capabilities) provided by infrastructure. (ii) It helps keep certain opportunities for using the infrastructure open and available for the future rather than narrowing its current and future uses.
- (iii) It creates a "spillover-rich environment" where "new and unanticipated innovations, knowledge and social capital" can be developed; innovations that can contribute to both economic growth and social welfare.

Notable geographers such as Ayeni (1980), Idachaba (1982), Abumere (2002), Olayiwola and Adeleye (2005), Akintola (2007) and Oguzor (2011) wrote about the deplorable state of infrastructure in rural Nigeria. While, Akinwale (2010) examined the menace of inadequate infrastructure in Nigeria and found out that attempts to enhance infrastructures in Nigeria failed due to negligence and corruption and urged the government to rapidly improve the provision of these infrastructures. Alabi and Ocholi (2010) studied the level of success of infrastructure provision by the

government of Kogi state; the 3 senatorial districts were selected as case study and found out that proposed infrastructure projects were not executed due to lack of fund, and private-public partnership was suggested.

Methodology

This study adopted survey design and it is qualitative in approach covering a cross section of three LGCs in Ibarapa region. It was explorative and descriptive because it examined the state of selected PG&S in 3 LGCs in Ibarapa region. The study was explanatory because statistical tests and procedures were employed in comparing the state of selected PG&S in three LGCs in Ibarapa region. Data used for this paper were obtained from participant observation, interview and archival materials such as published articles and official documents. The participant observation was conducted by five lecturers and one hundred part-one students of the Department of Geography, Emmanuel Alayande College of Education, Oyo, Lanlate Campus during the 2013/2014 session local geography fieldtrip. A total of 200 residents in the three LGCs were randomly interviewed. The observation and interview mirrored different issues such as the state of

(i) Slaughter houses/slabs considering facilities provided within and regularity of cleaning;

(ii) Public conveniences regarding facilities provided within and regularity of cleaning; iii) refuse disposal in terms of regularity of clearing refuse bins; iv) street lightings with respect to duration within which streets were lightened; and v) drains in terms of cleaning. In each of the three LGCs, the study found out if the probable deficiency is a function of overpopulation or bad governance. The data were grounded in the theory of "marketability" of public goods and services as put forward by Atkinson and. Noord (2001).

Findings

Slaughter houses

The observation shows that needed utilities at the slaughter houses in the three LGCs were grossly deficient. None is provided with electricity, refrigerated meat van, cleaners and security; even the state of the source of available water at the slaughter house located at Ayete was in deplorable condition (see plates II and III). The physical surrounding of these slaughter houses was unkempt, not cleaned and fumigated; as such they are potential sources of cholera. There is need for improvement in the provision of these needed facilities. 146(73%) of the residents interviewed were of the opinion that the inadequacy can be traced to bad governance.



Plate II: The unkempt surrounding of a slaughterer at Lanlate, IBELG



Plate III: The unkempt surrounding of a slaughterer house at Ayete, IBNLG.

Public conveniences

Ibarapa is a region of undulating highlands with a pocket of undulating plains running into valleys, hills, ridges, inselbergs and rock outcrops of varying heights; hence the difficulty in drilling the ground; also, the belief that it is a dirty habit to build toilet within the house. Hence most buildings in the study area are without toilet facilities. As such, residents defecated in the bush and adjoining lawns especially at nights (see plate VI). Observation reveals that IBELG took up the challenge and in 2011 built

these public conveniences. Water was provided, but there is no electricity; the old man in the picture is the janitor, cleaner as well as the security. A fee of N10:00 is charged for each use. 128(64%) of the respondents suggested that there is need for improvement as regards provision of electricity, cleaners and security especially at night. They wanted LGCs to provide more public conveniences. 160(80%) of the residents interviewed were of the opinion that the inadequacy could be traced to bad governance.



Plate IV: Public convenience provided by BELG

Drains and Refuse disposal

The refuse bins were not regularly cleared; most times the refuse were cleared once in a week; in areas where they were not located or over filled, residents dropped their refuse anywhere, even in the drains. When it rains erosion finds it difficult to flow, thus exerting force on the bridge, leading to the collapse of

the bridge, as shown in plates V and VI. Most of the drains were defective structurally; some of the drains were constructed using blocks instead of concrete or stones; again the culverts do not drain into the streams. Where the drains were not blocked water do not flow, even when it rains. Sadly enough these drains were not cleared even for several

years. 158(79%) of the residents interviewed were of the opinion that the inadequacy is a reflection of government's insensitivity to the plight of the citizenry. The residents wanted the LGCs to increase the number of personnel, machinery and equipment

deployed to refuse collection and cleaning of the drains in the study area, such that the refuse could be cleared and the drains cleaned at regular interval and the environment would be neater.



Plate V: Blocked drain at IBELG



Plate VI: Collapsing Bridge at IBELG; note the leaders of tomorrow playing as they want to ease themselves

Street lighting

Nearly all the street lights provided by the LGCs were not functioning; even those provided about four years in Lanlate through house of representative federal constituency contract awards were almost moribund. Observation reveals that major

streets in Igbo-Ora, Idere, Eruwa, Lanlate, Ayete, Tapa and Igangan towns for several weeks could be in darkness, even when the street lights were powered by solar energy. The respondents expected the LGCs to provide more light in other streets and the existing ones should be monitored and maintained.



Plate VII: A typical non functional solar powered street Light

Potable Water

Sources of potable water open to residents in the study area include borehole, deep well, well, stream, sachet and bottled water. During dry season, the study area experienced shortage of potable water; as such several hours were lost in the search for potable water. Plates VIII and IX show some of the

sources wherein residents bought 25 liter of water at price ranging between N5:00 and N10:00 depending on season and if the water is to be delivered at doorstep. (182)91% of the respondents opined that the supply of potable water in their neighborhood was inefficient, they added that this inefficiency is as a result of failure of the governments to meet their

constitutional role of providing needed PG&S. It is pathetic, when people in this millennium drink water (for a fee) from

bad sources such as shown in plate VIII, it is a case of people crying and getting no comfort.



Plate VIII: A source of (fee paying) potable water at Ayete, IBNLG

Security

The residents described their neighborhood as not being secured. According to them, the following crimes are common; invasion of farms by herdsmen, armed robbery, tribal conflict and kidnapping. The residents agreed that insecurity in their neighborhoods is a function of unemployment of youths in this society. It is also a product of the excruciating effect of economic policies which are not masses friendly coupled with governments' failure to provide palliatives. They expected government at all levels to provide employment and enabling environment within which the teaming youths could be gainfully engaged. Again, the Fulani herdsmen who were accused of been responsible for invasion of farms and the armed robbers need to be apprehended and dealt with according to law of the land. The Nigeria Police, the 'local vigilante groups' and other security agencies in the study area should be provided with enough tools and incentives to curtail these crimes.



Plate IX: The search for potable water! Common scene in the months of January and February

Conclusion

The findings show gross deficiency in the supply and management of PG&S such as slaughter houses, public conveniences, drains and refuse disposal, street lightings, potable water and security. This implies that citizens in the study area were exposed to private companies and individuals who exploited them by providing some of these PG&S (such as potable water) at prevailing market price. This position controverts Atkinson and Noord (2001) on the issue of "marketability" of (public) goods and services and Edemhanria (2009) who suggested that governance should be the management of a country's economic and social resources in the interest of the majority of the citizens. However, this finding corroborates Azeez (2002) who noted that "good governance has been an elusive challenge in Nigeria as in most other African countries" and Gboyega (2003) "local governments were all but extinct and even state governments were no more than extensions of the federal government".

This paper supports the view of Tal (2013) and recognizes overpopulation as a serious problem; and that high population numbers are putting strain on the available PG&S. Similarly, in support of Edemhanria (2009) and appreciates the fact that problems of poverty and governance are inextricably linked; and governance should not compromise delivery of PG&S and benefits to those who need them most as governance is an essential precondition to improving the lives of the poor. Finally, this study indicates that overpopulation is not a strong variable in explaining the inadequacy in provision of PG&S in Ibarapa region but bad governance. This inefficiency is as a result of failure of the three LGCs in Ibarapa region to meet their constitutional role of providing needed PG&S.

This country has the resources to provide basic life sustaining amenities; It is time for governments in Nigeria to assuage poverty and give her citizens comfort by efficaciously delivering these PG&S particularly at the grassroots where people's incomes are not enough to cover the cost of their basic necessities.

Recommendations

Public, spirited individuals, corporate bodies, charity organizations and religious institutions could in partnership with the three LGCs provide PG&S at little or no cost in the study area. The three LGCs in the study area should deliberately redistribute available PG&S specifically in favor of the rural poor. As a matter of urgency, residents in the study area should be provided with alternative cleaner and cheaper sources of potable water, especially at Ayete and in the surrounding villages. The security agencies should be provided with enough tools and incentives to nail crimes at its bud. The worn-out parts of street lighting should be replaced and maintained accordingly. The slaughter houses should be made cleaner.

Since small and medium scale enterprises are the engine of economic growth and development; they are not labour intensive and needed low capital. Efficient supply and maintenance of PG&S could be deliberately used as a strategy to kick start small and medium industrialization thus creating jobs for the teaming youths and reducing poverty to an appreciable level.

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RENEWABLE ENERGY AND INDUSTRIALIZATION IN NIGERIA: PROBLEMS AND PROSPECTS

By

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Abstract

The study investigated the efficacy of the renewable energy in caring for the industrial growth and development in Nigeria. Renewable energy is that form of energy obtained from sources that are essentially inexhaustible, unlimited and rapidly replenished or naturally renewable such as water, sun, wave, refuse, bio-fuels etc. Nigeria is an energy resources rich country, endowed with abundance of renewable energy (RE) resources, providing her with great capacity to develop an effective natural energy plan. However, Nigeria is yet to exploit these huge available energy potentials for industrial growth and development, due to challenges such as poor integrated institutional framework, lack of access to capital, lack of coordination and linkage in renewable energy programmes and inadequate funding of renewable energy. It is recommended that a rural electrification drive based on photovoltaic power systems should be pursued for supplying energy, the Nigeria government should partner with leading countries in the area of renewable technology. Also a deliberate policy to develop local capacity and distribution of solar thermal appliances should be formulated and the law that prohibits a state from developing its own electricity generation should be reviewed.

Introduction

Renewable energy is a clean energy that comes from resources which are naturally replenished on a human timescale such as sunlight, wind, rain, tides, waves and geothermal heat. (Steve, 2011). Renewable energy obtained from these natural resources can replace convectional fuels in four distinct areas: electricity generation, hot water/space heating, motor fuels, and rural (off-grid) energy services. About 16% of global final energy consumption presently comes from renewable resources, with 10% of all energy from traditional biomass, mainly used for heating, and 3.4% from hydroelectricity. New renewable (small hydropower, modern biomass, wind, solar, geothermal, and bio-fuels) account for another 3% and are growing rapidly (Renewable 2010 Global Status Report).

At the national level, at least 30 nations around the world already have renewable energy contributing more than 20% of energy supply. National renewable energy markets are projected to continue to grow strongly in the coming demand and beyond (International Energy Agency, 2012). Wind power, for example, is growing at the rate of 30% annually, with a worldwide installed capacity of 282, 883 megawatts (MW) at the end of 2012. Renewable energy resources exist over wide geographical areas, in contrast with other energy sources, which are concentrated in a limited number of countries. Rapid deployment of renewable energy and energy efficiency is resulting in significant energy security, climate change mitigation and economic benefits (International Energy Agency, 2012).

In international public opinion surveys there is strong support for

promoting renewable sources such as solar power and wind power (Bulletin of the Atomic Scientist, 2011). While many renewable energy projects are large-scale, renewable technologies are also suitable for rural and remote areas and developing countries, where energy is often crucial to human development (Vincent, 2012). Renewable energy has the ability to lift the poorest nations to new levels of prosperity (Sambo, 2010).

Availability of reliable power supply and economic development are easily correlated. Industrial outputs and productivity are linked to efficient delivery of electricity to end users. Within the Nigeria contexts, the power generation landscape is dominated by output from thermal and hydroelectric power plants with installed capacity and those coming on stream cumulatively accounting for roughly 13,000MW to date (Sambo, 2005). These sources have long supported and will remain the main focus for development of the ESI, utilizing essentially fossil fuel such as gas and abundant hydro-resources. These sources hold significant promise if harnessed efficiently despite their negative environmental footprint. Hydropower is seen as ultra clean but with unpleasant consequences on the physical environment and displacement of host communities. (Okafor, E.N.C. and Joel Uzuegba C.K.A, 2010).

The electricity supply industry is fraught with multifaceted challenges such as non-availability of gas, operation and maintenance difficulties, defective delivery/dispatch and planning systems as well as under-funding. One believes that it is time for our energy policy makers

to change their frame of reference and accept that other energy sources can play a significant role in addressing our energy deficit debacle. The focus should be in developing credible policies aimed at encouraging investment in renewable energy sources such as wind and solar power (Ogunleye, 2009).

Nigeria is well placed to exploit its abundant solar energy resources considering its geographic location around the equatorial sun-belt. The country receives abundant sunshine all year round ranging from 6.70kwh/m²/day in Borno State to roughly 4.05kwh/m²/day to 5.85kwh/m²/day in location such as Calabar in Cross-river state. The Federal Capital Territory has a daily horizontal solar radiation ranging from a high of 6.07kwh/m²/day to a low of 4.42kwh/m²/day during the month of August. This level of solar radiation across the country can support huge deployment of solar power distribution entities (Timothy, 2005).

On a competitive scale, solar technology in Nigeria is weighed below that of other widely known energy sources due to technological and economic drawbacks; in addition to deep rooted policy inertia. Accordingly, for Nigeria to make any significant progress in developing its renewable energy potentially, major policy initiatives must be developed and leveraged upon to drive interest and encourage investment. Solar power generation has the potential to ultimately achieve grid parity within two decades primarily from scale economies, research and improvement in technology (Sambo, 2009).

Table 1.1 Top 10 Countries by nameplate Windpower Capacity (2012 year end)

S/N	Countries	Windpower Capacity (MW)	% world total
1.	China	75,564	26.71
2.	United State	60,007	21.21
3.	Germany	31,332	11.07
4.	Spain	22,796	8.06
5.	India	18,421	6.51
6.	United kingdom	8,845	3.13
7.	Italy	8,144	2.89
8.	France	7,196	2.54
9.	Canada	6,200	2.19
10.	Portugal	4,525	1.60
	Rest of world	39,853	14.09
	WORLD TOTAL	282,883	100%

Source: Global Wind energy Commission, GWEC, 2012

Renewable energy can be particularly suitable for developing countries. In rural and remote areas, transmission and distribution of energy generated from fossil fuels can be difficult and expensive. Producing renewable energy locally can offer viable alternative (REN , 2011).

Technology advances are opening up a huge market for solar power: the approximately 1.3 billion people around the world who don't have access to grid electricity. Even though they are typically very poor, these people have to pay far more for lighting than people in rich countries because they use inefficient kerosene lamps. Solar power costs half as much as lighting with kerosine (Kelon, 2012).

An estimated 3 million households get power from small solar PV systems (Sambo, 2010). Micro-hydropower configured into mini-grids also provides power. Over 44 million households are biogas made in household-scale digesters for lighting and/or cooking, and more than 166 million households rely on

a new generation of more-efficient biomass cook stoves (REN, 2010).

Renewable energy projects in many developing countries have demonstrated that renewable energy can directly contribute to poverty alleviation by providing the energy needed for creating businesses and employment. Renewable energy technologies can also make indirect contributions to alleviating poverty by providing energy for cooking, space heating and lighting.

The incentive to use 100% renewable energy has been created by global warming and other ecological as well as economic concerns. Renewable energy use has grown much faster than anyone had anticipated (Paul, 2013). The intergovernmental panel on climate change has said that there are few fundamental technology limits to integrating a portfolio of renewable energy technologies to meet most of total global demand (IPCC, 2011).

Statement of the Problem

Nigeria is facing significant challenges in reforms and providing the required impetus for development of its power sector. The country's Electricity Supply Industry (ESI) has been plagued by variety of legacy, structural and institutional challenges which have resulted in overall decline in service levels across generation, transmission and distribution segments of the industry. In response, the government over the past one decade and a half has initiated various transformational project, including the National Integrated Power Project (NIPP) aimed at increasing capacity, upgrading existing infrastructural as well as encouraging investment in the sector through various privatization and market liberation initiatives (Energy Commission Nigeria, 2003). These privatization programmes have presented myriads of policy and regulatory challenges and have placed additional burden on policy makers and industry regulations as they try to contend with the dynamic phase that the ESI is undergoing at the moment (Williams J.H. and GhSadan, R., 2006). Huge sum of capital have been invested by government in their attempt to find lasting solution to the industry's sub-optimal performance. However, the growing deficit in terms of power generation and power demand when considering our economic growth trajectory of around 6% per annum remains formidable (Bank 2006).

There is pressing need to accelerate the development of the electricity supply industry to meet rising energy demand and to support industrialization of our burgeoning

economy. The issue that calls for urgent attention is how to address the multifaceted challenges facing the industry from a practical stand point (Iloeje, 2002).

Objectives of the Study

- To identify the renewable resources available and their applications in Nigeria
- To determine the prospect of harnessing renewable energy in Nigeria.
- To identify some challenges of renewable energy options for industrialization in Nigeria.
- To offer feasible solutions to identify challenges towards utilizing the potentials of renewable energy in Nigeria.

Sources and Potentials of Renewable Energy in Nigeria.

Renewable energy sources in Nigeria are:

Hydropower. Flowing water creates energy that can be captured and turned into electricity. This is called hydroelectric power or hydropower. The most common type of hydroelectric power plant uses a dam on a river to store water in a reservoir. Water released from the reservoir flows through a turbine, spinning it, which in turn activates a generator to produce electricity. It does not necessarily require a large dam. Some hydroelectric power plants just use a small canal to channel the river water through a turbine.

A small or micro-hydroelectric power system can produce enough electricity for a home, farm or ranch.

Table 1.2 Nigeria Three Large Hydropower Stations.

S/N	Name of hydropower plant	Year established	Installed capacity (MW)	Availability as at June 2010 (MW)
1.	Kainji	1968	760	465
2.	Jebba	1986	578	482
3.	Shiroro	1990	600	450
		Total	1,938MW	1,397MW

Source: Energy commission of Nigeria, ECN (2005).

Table 1.3: Existing small hydropower station in Nigeria.

S/N	Location	State	Installed capacity KW)	Current status
1.	Kwall falls	Plateau	6000	IPP (Operational)
2.	Kurra falls	Plateau	19,000	IPP (Operational)
3.	Bakalori	Sokoto	3,000	Dam construction-completed Electromechanical equipment-never installed.
4.	Tija	Kano	6,000	Dam construction-completed Electromechanical equipment-never installed
5.	Ikere Gorge, Dam Iseyin	Oyo	6,000	Dam construction-completed Electromechanical equipment-never installed.
6.	Oyan	Ogun	9,000	Dam construction-completed Electromechanical equipment-never installed
7.	Wayan Dam	Bauchi	150	Completed 2006 (Technical assistance from UNIDO)
8.	Ezioha-Mgbowo	Enugu	30	Completed 2006 (Technical assistance from UNIDO).
9.	Challawa Gorge Dam	Kano	7,000	Dam construction-completed Electromechanical equipment-never installed.
10.	Gurara Dam	Niger	30	IPP –under construction
11.	Tunga Dam	Taraba	400	Under construction- electromechanical system on site (technical assistance from UNIDO).
		Total	56610KW	

Source: Energy Commission of Nigeria, ECN (2005).

Bioenergy. The potential for bioenergy development is high. Nigeria has all the vegetation regions of West Africa except that of the desert. Agriculture is the

dominant economic activity, which contributes 41% of Nigeria's GDP and employs the highest labor in the country. Roughly 75 percent (74 million hectares) of Nigeria's total land (98 million hectares) is arable and about 40 percent of this is cultivated, leaving the remaining 60% of arable land barren (UNFCCC, 1997). If Nigeria's farmland is cultivable, it would have medium for good productivity if properly managed. Policy, institutional and technological approach is inevitable to harness bioenergy potentials in the Country (Karkezi et.al, 2004), Nigeria's biomass resources include wood, forage grasses and shrubs, animal wastes and other wastes from forestry, agriculture, municipal and industrial activities, and aquatic biomass (Bugage,2009). Biomass (fossil fuel) is made up of hydrocarbons that readily burn to release heat. Its easy availability and simple technology conversion make it the most widely used source of energy in the country (Bugage 2009; UNFCCC, 1997).

Solar Energy. Nigeria has high potential to harness energy from sun (Timothy, 2005). The Country falls within the tropics of Cancer and Capricorn where the abundance of sunlight is inevitable. This energy whose reservoir is the Sun is one of the energy resources whose availability is infinite if it is developed. Furthermore, unlike the conventional energy resources, solar energy development is not as capital intensive. Therefore, it is fundamental to proffer the strategy of diversifying energy resource development outside the conventional energy resource (Timothy, 2005). This means that the proceeds of the sale of the conventional energy resources which are in high demand should directly be channeled towards the development of other non-conventional, less capital intensive and non hazardous energy resources in the Country (ECN, 2003). With the abundance supply of solar energy in

Nigeria, efforts need to be geared towards research and development of solar electricity conversion by both direct and indirect methods (ECN and UNDP,2015). Over the years, the sun's energy had been wasting without utilization towards renewable energy harnessing from it.

Wind Power. This is a secondary form of solar energy. Experts reported that approximately 2.5% of solar energy captured by the atmosphere is being converted into wind (REEFN,2007). The development of wind power plants is being undertaken by many organizations in the Country for the generation of electricity in their quest to exploit renewable energy sources. For instance, in Katsina State, the current Governor, Alhaji Ibrahim Shehu Shema established a Biogas project at Kurfi village, some 30 kilometers away, south of Katsina city, also a 10 megawatts wind farm project at *Lambar Rimi* village, near Katsina city, northern Nigeria (Ladan,2012). With wind energy available at an annual average speed of 2.0 m/s near the coast to 4.0 m/s at the northern borders, the country can possess enormous potential to develop and utilize energy from the wind for electricity generation (ECN & UNDP,2005). The coastal regions of the south and the northern part of the country are possible suitable sites for wind energy exploitation (Richard,2004). There is need to embark on research to determine actual values for wind energy potential.

Ocean Energy. It takes a special configuration and a high tide of a coastline and an arrow estuary which can be dammed, to be a tidal power site of value. Only about nine tidal sites have been identified in the World. Two are not in use (Russia and France) and generate some electricity. Damming estuaries would have considerable environmental impact, like their abundance in Nigeria.

Areas in southern part of the country have, for a long time considered places for tidal power sites (Gyuk,2003). Developing them would not have negative effect on the fisheries and other sea-related economic enterprises, rather it will not disturb the habitats of millions of birds which use the areas as part of their migration routes. Tidal power is not a significant power, but the end product is electricity (Gerald,2006).

Challenges of Renewable Energy Options for Industrialization

The success of renewable energy scale technologies for small and large industries in Nigeria has been limited by a number of factors (Sambo,2012) which include:

- Poor integrated institutional framework
- Lack of co-ordination and linkage in renewable energy programmes.
- Lack of access to capital
- Inadequate finding of renewable energy.
- Lack of subsidies by the government towards renewable energy technologies.
- Insecurity of investment in the country.
- The non-passage into law of the national energy policy, its draft master plan and the renewable energy master plan
- Inadequate technology transfer window and poor research and development support.

Conclusion

In view of the abundant and potentials of renewable energy resources in all the six geo-political zones of the Nigeria, it would

provide a major breakthrough on finding a solution to the energy crisis in the manufacturing and industrial sector of economy. Energy is indeed a catalyst for economic and industrial growth and development. The use of renewable energy resources to meet these developmental targets should be done in such a way as to make it sustainable, taking all the environmental factors into consideration.

Recommendations

In this respect, the following are suggested framework in the harnessing of renewable resources in Nigeria for industrial developments.

- A rural electrification drive based on photovoltaic power systems should be pursued for supplying energy to small and medium scale farms and business. With the development of new and cheaper technologies for photovoltaic conversions, such as the use of poly crystalline silicon and nano-technology depositions, the capital cost for this should be coming down. Operating costs are almost negligible.
- A deliberate policy to develop local capacity and distribution of solar thermal appliances should be formulated.
- The use of Integrated Energy Planning (IEP) framework by local and national government in Nigeria that focuses on the requirements of rural population and make a range of appropriate energy resource available taking into consideration the environmental impacts.
- The law that prohibits a state from developing its own electricity generation should be reviewed and if possible repealed.

- The University of Technology across the country should be empowered financially to act as renewable energy research and development centres for the country.
- The government should partner with leading countries in the area of renewable technology.
- Development of workable strategies to integrate renewable energy for industrial development concern into decision making.

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INDIGENOUS, MORAL AND CIVIC EDUCATION AS PANACEA FOR GOOD GOVERNANCE AND NATIONAL SECURITY

By

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Abstract

Education is the key to development. It is the first and the most potent catalyst to freedom, emancipation from ignorance, poverty, superstition and underdevelopment. But in order to achieve this noble goal of a developed, civilized and decent society, education has to be a standard one with indigenous moral and civic background because quality education engenders national development. Today, Nigeria as a country is not adequately developing technologically because of her low standard of education, social decay, lack of proper, genuine and progressive orientation as manifested in the complete degradation of our social values. It is in the light of this that this paper traces the historical development of Nigeria's system of education since independence and calls for a standard, sound moral and civic education, believing that this will serve as a panacea for good governance and national security. The paper treats the historical background of western education in Nigeria, history of western education, the impact of western education, civic education and the way out of the current decay in the education sector. The paper concludes by laying emphasis on technical, commercial and polytechnic education with the introduction of an indigenous moral and civic education in order to hasten national development and promote good governance.

Introduction

HISTORICAL BACKGROUND OF EDUCATION IN NIGERIA

Before the arrival of the European missionaries and colonizers, Africans have their own ways of educating their young ones through story telling, folktales, riddles, jokes, praise - singing, oral tradition, proverbs, myths, culture and traditional religions. Traditional education is often peculiar to community and it is ethnic based because it varies from one ethnic group to another. The major goal of such method of education is to produce complete, and responsible adult man or woman who would continue to respect societal values right from the family level to the community and indeed for the promotion of peace, love and operation and cordial relationship. Traditional education does not have a

time limit; rather it lasts from the tender age to adolescence and to adulthood, till the right experience is acquired. It is also not crowned with a certificate, but the beneficiary is recognized as a complete and reasonable one with the full knowledge and experticism expertise in societal values. Good characters and moral training are the basic concepts of indigenous education i.e the respect for elders and good behaviours are seriously and vigorously taught including honesty, courage, humility, perseverance and respect for the gods and belief in the Almighty God, whom they strongly believe is the creator of Heaven and Earth. The belief in destiny is also strongly enshrined in indiginenous education .Whatever happens to any human being is predestined according to African mythology. Though as a good as indigenous African education is, it has its

negative effects. They are: un necessary fear, superstition, strict and unchallenged instructions. The young ones are threatened with severe consequences by the gods: i.e Ogun, The god of Iron, Sango. The god of thunder or Sanpanan the god of misles.

Traditional education however takes care of local professions, though farming is the basic profession for Artisans who are trained in the indigenous ways, based on each clan or family's trade and practices by their ancestors. In the African setting, trades such as : blacksmithing, hunting, local business of buying and selling, basket weaving, cloth weaving, palm wine tapering, local alcoholic drink making, tribal marks scarification praise singing, talking drum making singers musicians, butchers, meat retail selling, shoe making etc. all those trades are learnt within individual family circles because they are hereditary and special names are given to family members of each profession – on the African/ indigenous education, one can rightly conclude that the society cherishes a polytechnic type of education since there was no white collar job then.

Every member of the society, male or female grows with the trades of his or her lineage. However, to make it a complete standard education, societal values, such as communal works are encouraged especially with farmers during harvest seasons and with hunters (group hunting expeditions) during the dry seasons. Before the arrival of the Europeans with their western education, there was no job seekers, no unemployment etc. so there was no salary no pension nor gratuity . Finally, indigenous education makes it easier for traditional rulers to govern peacefully and in a secure environment.

WESTERN EDUCATION IN NIGERIA

According to Oyelade (2014), Western Education was introduced to Nigeria as far back as the latter part of the 15th Century when the Portuguese came into contact with the area now called Nigeria. These Portuguese were in search of commerce. Lagos and Benin were their first places in 1472, (Osokoya, 2002). It should be noted that the aim of these first Europeans was not to educate the indigenous people they met but they were compelled to do so because of the necessity to speak the same language and to share the same faith with them, in order to facilitate and boost their businesses. This first initiative of introducing Western education was however frustrated by the slave trade. African traditional chiefs were more interested in the acquisition of firearms to boost their role as middle men in the slave trade than Christianity and Education. So they were not interested in educating their subjects.

A second and now successful attempt to introduce Western Education took place in the 19th Century, with the establishment of missionary schools in Lagos, Badagry, Abeokuta and Ibadan, The success this time around was probably due to the abolition of slave trade in 1807 (Oyelade, 2011). Thus, the British Missionary School was established in 1792, followed by London Missionary Society in 1795 and the Church Missionary Position in 1799. Later, many other missionaries followed suit establishing schools and Churches that is education and religion. Among them were Church Missionary Society (CMS) 1842, the American Baptist Mission (ABM) (1855), The Roman Catholic Mission (RCM) 1860 and Hope Waddle Training Institute, Calabar in (1895). It is worth mentioning that the first Christian Missionary Schools in the North were

established in 1857 by Rev. Samuel Ajayi Crowther and Rev. J.C. Taylor at Iddah now in Kogi state. The school curriculum was more of Colonialism than a real intention to educate and develop the nation. The curriculum for both Primary and Secondary Schools were an initiation of the English School system as it failed to cater for the need of the Nigerian Society- The textbooks were imported and there was no adequate teaching methodology. The missionary education campaign was not successful as such in the predominantly Muslim North- However the Dutch Reform Church RCM made some in road in Non-Muslim pagan areas of the far North. In 1890 the Colonial administration established a Department of Education with Hans Visser as Director to take Charge of the system of education for the protectorate of Northern Nigeria.

IMPACT OF WESTERN EDUCATION ON SOCIAL LIFE.

It is an undeniable fact that Western Christian Education brought Africa in general and Nigeria in particular to the limelight in terms of literacy, modern civilisation, awareness, change of attitude from local to modern ways of life, social behaviour, worship of the true and only God, etc. it also bought about the development of local languages, especially Yoruba language. This led to the publication of a Yoruba journal titled Iwe Iroyin (News paper) in 1859. it was published in Abeokuta. Through Christian Education which is the harbinger of Western education, educationists, Doctors, Lawyers and Engineers were produced. The development of local language also led to translation of the Bible in Yoruba by Samuel Ajayi Crowther. Another fundamental impact of Western Education is that it laid the foundation upon which the present educational

system, the 6-3-3-4 system is based, with the aim of developing the nation.

As good as it may look; the Western/Christian education was not fashioned to bring technological advancement for the country it was a deliberate policy of assimilation and training of the black man to serve his white masters better. Instead of a realistic, sound and standard education that can take the country to higher height in terms of technological advancement in the comity of nations, the European aim was to train interpreters, teachers, clerics, nurses and mid-wives ,medical doctors, half baked engineers without in - dept knowledge of high technology, just to serve their interests first and indirectly that of their immediate environment. Nigerian educational System since Independence, operates 3 levels of Education viz: Pre Nursery, Nursery and primary School as one tiers; Secondary education i.e Secondary School, Grammar School, technical/Commercial School and tertiary institutions such as Universities, polytechnics and Colleges of Educations, School of Professional training such as School of Nursing and School of Agriculture, School of Fishery, and a lot of others, all encapsulated in the 6-3-3-4 system of education with different bodies charged with the responsibility of planning, implementing and overseeing their programme and activities.

Thus, we have State Universal Basic Education Board (SUBEB)

UBEC – Universal Basic Education Commission for Federal Government Primary School Education

SUBEB – State Universal Basic Education Board

TESCOM – Teaching Service Commission

NTBE – National Board for Technical Education is the supervisory body for

polytechnics, monotechnics, technical Colleges, Colleges of Technology and any other institutions where technical education is impacted.

As it is all over the world, universities other wise called ivory tower are the apex institutions of higher learning charged with the responsibility of training highly qualified academic and professional; man power in all spheres of life and human endeavour. Nigeria can now boast of 128 (One hundred and twenty eight Federal, State and Private Universities, 102 Colleges of Education and 85 Polytechnics Federal, State and Private ones.

Despite all efforts put at making education the catalyst for rapid and steady development of the country, it is of our opinion that much has not been really achieved in terms of a robust technological break through despite colossal amounts of the country's resources expended on education at all levels. This is because the white men have not really laid down the basis of a standard and resource oriented education that could lead to technological and scientific discoveries as the case is in nearly all European countries. Nigerian education is fashioned in a way that the country will always depend on Europe and Asia and the United States of America for her growth. African countries are subjected to consumers; economies that will always depend on overseas countries. We continue importing goods and European machineries' without any hope of the much needed transfer of technology. After going through the rigours of education from the least to the highest qualification, our next expectation is to look for white collar jobs in the classroom, lecture room, laboratories, offices, companies and industries where Europeans are always the real technologists.

Socially, our society has become Europeanized. Every body wants to live like a white man, dress like him, think like him and use his language as a medium not only of instruction but also that communication in the society. Our local/indigenous language has been jettisoned. Our societal values, culture respect for elders, religions customs e.t.c have been set aside and every aspect of our African social life has been turned upside down. All these negative trends in our life are a clear pointer to wrong and awkward educational back ground. The society is disoriented because of leadership problems. Our educational system has only succeeded in turning out a weak and an incapable political class.

CIVIC EDUCATION

It has been observed that ignorance is the major obstacle to decent behaviour, proper orientation and positive thinking. What is civic education? We can see civic education as a discipline that aims at teaching the virtues of a decent society such as good behaviours, discipline, respect and consideration for others, selfless service to the community and the society at large, respect for social values, religions, colour and ethnic tolerance through mutual understanding. Banks (2005) cited by clement Chukwueloka Okam and Halilu Lawal holds that the ideals and values which are. routed in civic education emerged about a century ago as a kind of panacea for solving problems confronting mankind.

Russel (1977) called the world a mad place. He observed that since the first world war, the world ceased to be constructive because men will not apply their intelligence in creative values which are conducive for international cooperation and understanding for the sake of making progress, but rather persist in retaining the division of man kind into hostile groups.

Such hostile groups are: forces of religion i.e Christians versus Muslims, Muslims against them selves such as the shite against the Sunni` as it is in the on-going conflict in Syria and Iraq, sex: rape, divorce, forced marriages, wrong religion education, class feeling and competition, social and economic injustices, stupidity and insanity as a result of poor level education and ignorance, ruthlessness, agreed, unjustified killings, intolerance, hatred unfair/imbalance judgments, power consciousness political in balance even instability distribution of National wealth and position fraud, embezzlement, dishonestly, money laundering, disloyalty, betrayal of trust, unpatriotic practice and a host of other social vices. With the current political and socio-economic situation in the country of which the leaders are deeply involved, coupled with the negative, shameful and criminal acts being committed on daily basis in the society, the panacea is a sound moral and civic education to forestall chaos and anarchy. In the view of Orisa (2014), basing his submission on Nigerias current position that 70% of Nigeria citizens are illiterate, (Mezieobi & Uzoagba, 2009). The question of how the country's citizens with such high illiteracy level would be able to know their right and duties remains a subject of debate.

Citizens therefore need the school subject that will be able to address the issue of knowing their rights and duties. He defines civic education as a training program that teaches about the political system. NERDC (2007) states that civic education lays emphasis on:

- i. Our values
- ii. Citizenship
- iii. National consciousness and National identity
- iv. Human right and rule of law.
- v. Representative Democracy

- vi. Duties of obligation of citizen
- vii. Nigerian constitution.
- viii. Social issues
- ix. Peace and conflict
- x. National Economic life

Ikeagbu, Mezieobi, Ajileye, Abdulrahaman and Anyaoha (2009), assert that civic "education is specifically designed in content and function to produce good useful... informed, active, responsible and morally up right citizens"

But the major goals of civic education outlined by Mezieobi & Mezieobi (2011) are:

- 1) To produce responsible citizens
- 2) To equip one with knowledge and understanding about how government in a given polity works (principles and practices) particularly in a democracy
- 3) To make its beneficiaries become aware of their rights, duties and obligation.

CONCLUSION

With the current socio- economic and socio- political trends in Nigeria coupled with ignorance, lack of patriotism, ethnic marginalization, religions bigotry, inordinate political ambition in effective and inefficient system of education, unemployment and the struggle for almost inexistent white collar jobs, the best thing for the country's educational planners and policy makers is the introduction and implementation of a indigenous moral and civic education. Emphasis should also be on technical, commercial and polytechnic education so that at the end of the day, our young school leavers would not become a nuisance to them selves and a threat to the society's security. Nigerian schools should train hands that would not continue to train half baked and

professionally in competent job seekers. They should be able to fit in into the society and be capable of engaging themselves in self – relevant vocations and live decent life.

RECOMMENDATIONS

A standard, well planned, well organized and well executed educational programme in a sine qua non for good governance and national security backed up by a strong, discipline and well equipped military. To achieve this objective, indigenous languages must be strongly developed encouraged and used as medium of instruction. The fact that Nigeria has over 300 ethnic group should not be an excuse for making English as the nation's, lingua France and medium of instruction. India is made up of 845 tribes while Malaysia has over two thousand ethnic nationalities yet Indian for example has been able to develop Hinder the language of the majority and sixteen other regional languages. Below are suggestions for a standard education capable of bringing about positive changes.

Our major languages should be taught and made media of instruction in our schools in the areas where they are spoken by the majority

A well planned moral education based on African traditional education where societal value would be taught through oral literature made up of story telling, folktales in which good characters, responsible behaviours respect for elders and constituted authorities, selfless service/ sacrificed to the community and the society are embedded should be entrenched in the curriculum. The struggle for money at all cost, material wealth, inordinate struggle for political power should be deemphasized and discouraged.

Honesty, transparency, contentment, perseverance, endurance and other good, virtues of a decent society should be imbibed into the learners` mind, especially the teenagers because they are agents of change.

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IMPROVING JUNIOR SECONDARY SCHOOL MATHEMATICS TEACHERS COMPETENCY THROUGH RE-TRAINING PROGRAMMES IN OYO STATE

BY

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Abstract

The study assessed the effectiveness of re-training programme on Mathematics teachers' competency. This research was carried out on 120 teachers from Junior Secondary Schools in Oyo Central and Oyo North Senatorial districts of Oyo State, Nigeria who came for re-training programme at Emmanuel Alayande College of Education, Oyo. Three hypotheses were formulated for the study. The study made use of the pre-test and post-test of Teachers' Mathematics Achievement Test (TMAT). The TMAT comprised 100 multiple choice questions drawn from topics in Junior Secondary School Mathematics curriculum which was validated by two experts in Mathematics education. The Tests of normality were carried on the three hypotheses while the significant of difference on the variables were tested at 0.05 level. Findings revealed that the performance of Mathematics teachers improved significantly from the pre-test level to the post-test. A significant difference existed between the mean performance scores of male and female teachers in Mathematics. There was no significant difference on teachers' performance based on location. Re-training of mathematics teachers will exact positive changes in their performance, sharpen their skills and competencies. It was recommended that all junior secondary school mathematics teachers should be given a chance of participating in their programme from time to time irrespective of their gender and school location.

Introduction

Mathematics has been with man since the creation of the world. In Nigeria today, society, parents, and students seem to associate better performance and achievement in Mathematics to a variety of factors for which teacher is inclusive. Teacher re-training programme is an aspect of professional development that deals with enhancement of teachers in classroom processes and personal traits. It plays significant roles in the success of any educational system most importantly to young people that are just joining the teaching profession (Salman, Ogunlade and Ogundele, 2012). Re-training programme for Mathematics teachers is an approach whereby on the job need of Mathematics teachers are identified, work cooperatively and collaborately to share ideas, address and

solve difficult problems, build a local resource network based on interaction and experience and take the lead in teaching and learning activities. Ferriter, Hill and Cohen (2005) opined that good teachers form the foundation of good schools and improving teachers' skills and knowledge is one of the most important investments of time and money that local, state, and national leaders make in education.

As the society changes, so also Mathematics changes since its study and use at any point in time is geared towards serving the need of the society (Azuka, Jekayinfa, Durojaiye, and Okutoza, 2013). Mathematics is the language of sciences and technology that requires competent or quality teachers to handle its contents. One of the ways to ensure this is to provide regular, relevant and

contextualized training and development for teachers to enhance their qualities (Salman, Ogunlade, and Ogundele, 2012). The new Mathematics curriculum added some introductory topics in matrices, modular arithmetic, simple calculus, simple co-ordinate geometry, logical reasoning and financial Mathematics like annuity. All these require good teaching approach which can better be achieved through updating of knowledge of both old and newly employed Mathematics teachers in urban and rural areas.

Some Mathematics teachers in training or employed may have poor knowledge of the subjects they are expected to teach especially where the status of teaching is low and the educational standards of entrants to teacher preparation courses are poor. There may be lack in the handling of Mathematics methodology and some other related Mathematics courses giving way to inefficient teaching of Mathematics when in school. Therefore, the re-training of teachers is one area of teacher production that needs a deserved attention in the Nigerian educational system (Nwagbara and Edet, 2013).

The National Teachers' Institute was mandated by the Act No. 7 of 1978 to organize programmes for the updating of knowledge and pedagogical skills of teachers at all levels of the nation's educational system (Sharahu, 2011). In line with this, Arop, Eju and Ekpeni in Nwagbara (2014), noted that the basic concern of teacher training workshops and seminars is to bring change in the attitude of teachers. They emphasized that teachers re-training contribute towards not only to shape and modify teachers' attitude but also to develop certain teaching skills which are necessary to improve performance in the teaching profession. According to Sharahu (2011), there has not been any

systematic attention to update regularly the knowledge and pedagogical skills of teachers in the light of changes in the curriculum and the wider society. This neglect has, in turn, affected the quality of teaching in schools. It is in recognition of this that the Federal Government, through the Ministry of Education, directed the institute to begin the re-training of Junior Secondary School teachers.

It is in line with all the above that the Oyo State Government organized re-training programme through State Universal Basic Education Board (SUBEB) in order to meet the goal of teacher in-service professional development of Universal Basic Education Board which is to improve the overall quality of teaching and learning at the classroom level with the specific objectives to: update teachers' subject scope; sharpen their skills and methodology; improve their instructional skills and practices; empower them to have a more positive impact in their classrooms; encourage them to try new methods and materials within their schools; and train them on lesson plan development, pupil-centred techniques, critical thinking, classroom organization and continuous assessment of pupils' learning.

According to Azuka, Jekayinfa, Durojaiye and Okwuoza (2013), the teacher factor is very prominent in determining the quality and the output of any educational system. Hence teachers are regarded as the "hub" around which every other factor affecting the quality of education revolves. In other words, irrespective of the quality and quantity of buildings, curriculum, books and other infrastructures that are provided in any educational system, in the final analysis the success and performance of the educational system will depend on the teacher. In particular, the knowledge of the curriculum by the teachers is very

important as no educational system can rise above the level of the teachers. In the Mathematics class a teacher cannot effectively teach students what he does not know. According to Nurudeen (2007), the acquisition of mathematical knowledge can be through various sources such as natural, formal, non-formal or informal. The formal source, which is the concern of this paper requires a teacher to teach the contents of Mathematics. Moreover, the role of the Mathematics teacher cannot be over-emphasized because he is the main actor of learners' achievement in the subject. Fayemidagba opines that teachers' knowledge of the subject matter content of a discipline had influence on students' achievement and Alio had identified teachers' method of presenting problems solving strategies as a contributing factor to high failure rate in Mathematics (Nurudeen, 2007).

According to Rhett and Allain in Salman, Oyinlade and Ogundele (2013), excellent teachers are continually trying to make themselves better by continually trying to learn. In other words, all Mathematics teachers, be it male or female can be made better teachers by requiring them to learn more and this could be better enhanced through re-training programs. According to Swanepoel and Erasmus in Nwagbara (2014), teacher re-training should result in the following: Improve the standard and performance of teachers once their training needs have been identified; prepare the teachers for future positions; increase their literacy levels; competencies and skills; and help them to make better decisions and increase job satisfaction.

The involvement of Mathematics teachers from various areas in re-training will help in improving the performance of the students. Suzanne and Lawren, in Chianson (2012) have it that students in

rural schools perform poorly in Mathematics because they do not always have access to the same level of federal funding as urban and suburban schools and this can limit the opportunity students have for learning Mathematics.

If Mathematics teachers are monitored effectively and selected regularly to attend re-training programmes as and when due, it will go a long way at improving their teaching skills thereby improving the performance of students being taught in various examinations. Ajibade, Adeniyi, and Arikewuyo as cited in Nwagbara (2014) have drawn the attention of all and sundry to the inestimable value of training and development which they see as an avenue to acquire more and new knowledge and develop further the skills and techniques to function effectively and improve performance.

Objectives of the Study

The study aimed at testing if there is any significant improvement in the problem solving competencies of junior secondary school Mathematics teachers who received instruction at the re-training programme via the pre and post-test in Oyo Central and Oyo North senatorial districts.

Also, at determining if school location and Mathematics teachers' gender have significant effect on the re-trained Mathematics teachers' performance in both the pre and post-test.

Hypotheses

The following three null hypotheses were tested at 0.05 significant levels.

Ho₁: There is no significant difference between the performance of Mathematics teachers at the pre and post-test.

Ho₂: There is no significant difference in the performance of Mathematics

teachers in the post-test based on gender.

Ho₃: There is no significant difference in the post-test of Mathematics teachers based on school location.

METHODOLOGY

Research Design

The study made use of pre and post-test approach. The Mathematics teachers were given the test at the beginning of the re-training program on various topics based on junior secondary school Mathematics curriculum. At the last day of the re-training, the same test items were administered as post-test to the same group. The answer scripts were collected for marking and data were collated.

Sample and Sampling Technique

One hundred and eighty (180) Junior Secondary Schools Mathematics teachers were selected for the re-training programme from Oyo Central and Oyo North Senatorial districts out of which scores of one hundred and twenty

Mathematics teachers that participated in both pre and post-test were used.

Research Instrument

The instrument used for the study was a Teachers' Mathematics Achievement Test (TMAT). The TMAT comprised 100 multiple choice questions drawn from topics in Junior Secondary School Mathematics Curriculum. The instrument was validated using two Mathematics lecturers from Emmanuel Alayande College of Education, Oyo, Nigeria.

Data Analysis

The hypotheses of the study were first tested using normality test before involving the computation for the mean, standard deviation and difference of means of the two groups. Significance of difference on the variables of pre-test scores and post-test scores were tested at 0.05 level of significance.

RESULTS

Ho₁: There is no significant difference between pre and post-test scores of Mathematics teachers.

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
Pre-test and post-test of the respondents	.086	240	.000	.987	240	.023

a. *Lilliefors Significance Correction*

It is not normally distributed since the $p = 0.023 < \alpha = 0.05$, hence we resolve to non-parametric related samples.

Table 1: Comparison of mean scores of pre and post-test

Test	Mean (x)	S.D.	p	α	N	df	Decision
Pre-test	22.4167	5.1850	0.023	0.05	120	119	Rejected
Post-test	30.3833	5.6512					

Table 1 shows that the mean score difference of the pre-test and post-test was significant at 0.05 level. As indicated, the p value was 0.023 while the α level was 0.05 at 119 degrees of freedom. This is to say that there was a significant difference in the performance

of Mathematics teachers at the end of the re-training exercise and hence the null hypothesis is not accepted.

Ho₂: There is no significant difference between the performances of Mathematics teachers in the post-test based on gender.

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Post-test of the Respondents	.143	120	.000	.959	120	.001

b. Lilliefors Significance Correction

It is not normally distributed since the $p = 0.01 < \alpha = 0.05$, hence we resolve to non-parametric independent samples.

Table 2: Comparison of mean scores of the post-test based on gender

Test	Mean (x)	S.D.	p	α	N	df	Decision
Male	30.83	5.06	0.898	0.05	120	119	Rejected
Female	29.38	6.81					

Table 2 shows that the mean scores were significant at 0.05 alpha level. The mean performance of the male Mathematics teachers is better than those of female Mathematics teachers. The p value was 0.898 at 119 degrees of freedom. Therefore, the null hypothesis

which states that there is no significant difference between the performances of Mathematics teachers in the post-test based on gender is not accepted.

Ho₃: There is no significant difference in the post-test of Mathematics teachers based on location

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Post-test of the Respondents	.143	120	.000	.959	120	.001

c. Lilliefors Significance Correction

It is not normally distributed since the $p = 0.01 < \alpha = 0.05$, hence we resolve to non-parametric independent samples.

Table 3: Comparison of mean scores of the post-test based on location

<i>Location</i>	<i>Mean (x)</i>	<i>S.D.</i>	<i>p</i>	<i>α</i>	<i>df</i>	<i>Decision</i>
Rural	29.29	5.85	0.048	0.05	119	Rejected
Urban	31.55	5.23				

Table 3 shows that the mean scores of rural and urban Mathematics teachers were significant at 0.05 alpha level. As indicated, the p value was 0.048 at 119 degrees of freedom. This is to say that there was no significant difference in the post-test of Mathematics teachers based on location. Hence the null hypothesis is not accepted.

Discussion of Findings

From the analysis and results, findings revealed that the performance of Mathematics teachers who received the re-training programme improved significantly from the pre-test level to the post-test level. Test of hypothesis one led to the rejection of the null hypothesis. The positive impact of the re-training programme on Mathematics teachers was revealed in the study. This finding collaborates that of Obanya in Nwugbara (2014) that affirms that development oriented academic conferences, re-training of professional teachers lead to a continuous re-skilling and systematic formal exposures to advanced and innovative teaching methods.

Also, the findings showed that male Mathematics teachers have mean score better than the female counterparts. The implication is that male and female Mathematics teachers differed in their performance in Mathematics. The difference could be due to the fact that the female Mathematics teachers may not have enough time to read and practice at home after each day's re-training due to household chores or other factors not considered in this study.

The results of the third hypothesis showed that there was significant difference in the performance of Mathematics teachers based on school location.

Conclusion

On the basis of the findings in this study, it is concluded that re-training of Mathematics teachers exact positive changes in the performance of teachers and sharpen their skills and competencies which will end up improving their productivity. Gender difference in performance of the teachers was also significant in favour of male teachers but with a minimal mean difference. Thus, female Mathematics teachers can teach effectively as the male teachers.

Since Mathematics is one of the core subjects in Nigeria schools, periodic re-training programme would go a long way in improving the teachers' qualities, efficiency and more importantly competency which would in turn improve students' academic performance in Mathematics irrespective of school location.

Recommendations

Based on the findings of this study; the following recommendations are made:

1. Re-training workshops/programme should be organized regularly for Mathematics teachers in Oyo State.
2. Oyo State Government should ensure that the re-training programme go round all the Mathematics teachers in Oyo State to enhance competency.

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| <p>3. The trained teachers should serve as mentors in their various schools to other Mathematics teachers who are yet to benefit from the programme.</p> <p>4. All junior secondary school Mathematics teachers should be given a chance of participating in the programme from time to time</p> | <p>irrespective of their gender and school location.</p> <p>5. There should be a follow up on all kinds of seminars, re-training and workshops organized for Mathematics teachers in order to determine its impact on students' academic performance.</p> |
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INFORMATION AND COMMUNICATION TECHNOLOGY: TOOL FOR EFFECTIVE TEACHING AND LEARNING IN PUBLIC SECONDARY SCHOOLS IN OYO STATE

By

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Abstract

This paper examined the utilization of Information Communication Technology (ICT) as a tool for effective teaching and learning in public secondary schools in Oyo State. Traditional methods of teaching are no longer sufficient in achieving educational objectives. To enhance effective teaching and learning process, the paper discusses the roles of ICT and ways of utilising ICT in teaching and learning processes, the concept of teaching, challenges of ICT utilisation is also examined and possible ways of utilisation of ICT. The use of ICT in teaching learning process is an indispensable tool for achieving educational objectives, it is therefore recommended that all teachers in secondary schools must be exposed to ICT through in service training as revealed in the paper in order to enhance teaching learning process.

Introduction

The twenty first century has been described as an era whereby every conceivable activity has gone virtual and electronic (Aduwa – Ogiebaen & Iyamu, 2005). This is because the world has been reduced to a global village through Technological Advancement and the Resultant Computer Based Message System (CBMS) that have evolved into electronic network for information, business services and entertainment.

Webopedia (2010) defines Information Communication Technology (ICT) as the study or business of developing and using technology to process information and aid communication. According to Januszewski and Molenda (2008), ICT is the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources. Information and Communication Technology is defined as the creation, collection,

storage processing, transmission, display and use of information by people and machine (Asite & Oghiagbephan, 2010). Nnachukwu (2010) sees ICT as a set of technological tools and resources utilised or create, communicate, disseminate, store and manage information. These tools and resources include computers, the internet broadcasting technologies such as radio, television and telephone.

Traditional methods of teaching are no longer able to meet the needs of today's learners; new technologies provide opportunities including the ability to facilitate learning to individual needs (Rahman, 2009). The influence of ICT on teaching methods depends on the knowledge and skills of students and teacher and the implementation of ICT in courses teaching as an important job, the teacher should know what to teach and how to teach convincingly.

The development in the education sector in developed and developing countries attest to the fact that ICT has become a central focus of many

countries' educational policies and as such, its use and integration has become widespread in various school systems (Young, 2002; Farrell & Isaacs, 2007). Most experts in the field of education agreed that when properly utilized, ICT holds great promise to improve teaching and learning processes in addition to shaping work force opportunities (Heinch, Molenda, Russell & Smaldind, 2004).

The use of ICTS in teaching-learning process is a relevant and functional way of providing adequate knowledge to learners in order to assist them imbibing the required capacity for the world of work. In teaching and learning process ICTS offer powerful learning instrument that require new skills and understanding of students and provide new ways to engage students, such as virtual learning environment.

The Concept of Teaching

Teaching is a process by which one person helps others to achieve knowledge, skills and attitudes. It is the passing on of ideas, knowledge, attitudes, beliefs and feelings to someone, with the aim of bringing about particular changes in the person's behaviour (Ogunwuyi, 2010). She also considers it as a series of interrelated activities engaged in by teachers to bring about change in learners behaviour.

Teaching involves series of activities; It is a human function which means human beings are involved, that is the teacher and the learner. The pivotal role of teaching in the entire process of education cannot be over emphasized, more so when we consider the fact that it is the teaching-learning process that allows individual to acquire the relevant knowledge and skill that makes him or her to be a useful member of the society. Therefore, teaching surveys and actualises the objectives and purpose of individual educated. She further says that

for any activity to be referred to as teaching; it must satisfy five criteria. These are:

- ❖ A person is consciously and deliberately doing the act-called the teacher.
- ❖ Someone is being taught-called the learner
- ❖ Someone is being taught-called the subject matter.
- ❖ There is at least an intention on the part of the teacher that learning takes place-instructional objectives.
- ❖ It must involve methods or procedures that are morally and pedagogically sound and acceptable.

In an educational context, teaching cannot be imagined without the teacher, the learner and content. The major function of teacher at any level of educational systems is to create an enabling environment in which desirable change in behaviour could be achieved. Generally, in formal education setting, instruction comprises both teaching and learning but teacher may be physically present (e.g face to face teaching) or absent (e.g the use of televised programme or computer assisted instruction).

The presence of teacher in the classroom is to guide the learner and to facilitate teaching and learning process towards the achievement of pre-determined objectives in education. However if the teacher is not around, instruction may be used. In such a context, instruction will imply an interaction between the tutee on one hand and the tutor (or the materials on the other). (Brune, 1996). Efforts should be made by teachers especially by secondary school teachers to stimulate and influence learning, thus utilization of ICT will be an important catalyst for the

necessary changes required. Meaningful learning as envisaged by the constructivist theory is already the focus of ICT utilization in teaching and learning processes of knowledge construction (Duffy & Cunningham, 1996; Olorundare 200; Grier & Johnston, 2009).

ICT and Educational System

Adesope and Adebayo (2007) defined ICT as the term used to describe the tools and processes to access, retrieve, store, organize, manipulate, produce, present and exchange information by electronic and other automated means. These include hardware, software and telecommunications in the forms of personal computers, scanners digital cameras, handhelds/PDAs, phones, faxes, modems, CD and DVD players and recorders, digitalized video, radio and TV and programs like database systems and multimedia applications.

As a result of the advancements in information and communication technology (ICT), the world is fast becoming a global village. In research, ICT provides opportunities for schools to communicate with one another through e-mail, mailing lists, chat rooms, and so on. It provides researchers with a steady avenue for the dissemination of research reports and findings (Yusuf & Onasanya, 2004). ICT provides quicker and easier access to more extensive and current information and it can be used to do complex mathematical and statistical calculation (Yusuf, 2005). ICT in school can enhance teaching and learning through its dynamic, interactive and engaging content and also provide real opportunities for individual instruction.

Information and communication technology has the potential to accelerate, enrich and deepen skills; motivation and engage students in learning; helps to relate school experiences to work practices; helps to

create economic viability for tomorrow's workers; contributes to radical changes in school; strengthens teaching, and provides opportunities for connection between the school and the world (Marshall & Taylor, 2008).

Education witnessed unprecedented changes brought about by new technologies worldwide during the twentieth century. In the twenty first century, information and communication technology continues to have tremendous impact on teaching and learning (Alege, 2008). The changing role of the teacher in an ICT environment cannot be over-emphasized. The incorporation of ICT into the educational curriculum has been promoted as a key step in bridging the digital divide (Marshall & Taylor, 2008)..

Advances in information and communication technologies, particularly the emergence of the Internet as a major source of global information have encouraged tertiary educators to develop rich technology-based learning environments. Birch and Sankey (2008) asserted that information and communication technology (ICT) provides academics with an opportunity to create rich learning environments for their students which enhanced by the wealth of information and resources on the Internet, as well as the inclusion of range of web-based learning elements.

Ways of Utilising ICT for Effective Teaching-Learning Process

Students' performance at senior secondary school level had also been reported to be poor (Akinfe, 2012 and Ugodulunwa and Dadughun, 2011). This trend as reported by researchers, may be because most students in Nigeria Secondary School are daily confronted with challenges of coping with their academics under serious emotional strains occasioned by long walk to school, poor school environment, and above all

been taught by teachers who are not technology compliant and unmotivated teachers without ICT competent skills. Couple with this, is the attitude of parents who more often than not, are being tossed by the wind of economic incapacitation of adequate provision for the family. This, most often keep them away from the children and thereby unable to monitor their academic progress.

In recent times, it was reported that students perform poorly in Senior Secondary School Science subjects and researchers have traced the problem to the medium through which knowledge is imparted to learners. Findings have related effective usage on academic achievement (Tremblay, Ross, & Berthelot 2001). From the study, it was discovered that other factors such as class sizes were found to be related to higher academic achievement, while no relationship was found to exist between the presence of computer in the classroom and the achievement of third grade students (Tremblay et al., 2001).

In the United States, similar work has been done assessing the results of National Assessment of Education Progress (NAEP) tests. These tests, administered nationally every two years in mathematics and reading alternately, assess the effect of a number of variables, including computer use, on academic achievement. The most recent analysis available (Johnson, 2000) used the scores on the reading test for students in grades four and eight. The analysis revealed that students who used computers in the classroom at least once in a week do not perform better on the NAEP reading test than those who used computers less than once a week. This was noted to be true and it accounted for the comfort and training with computers that teachers reported: The analysis was

restricted to teachers who reported that they were moderately prepared to use computers for instructional purposes.

Also, Milan (2006), found that teachers limited the usage of ICT in Biology teaching due to, ICT phobia, its usage inadequate skills in and poorly equipped ICT laboratory. According to him when teachers use ICT to teach their subjects, students do understand and the most powerful effect is achieved when the students study alone or are in groups applying software which are focused on particular task. Thus, concluding that utilisation of ICT while teaching has positive effect on student's interest in Biology. He therefore, asserted that ICT can make education quality better, because the content of multimedia helps illustration and explanation of demanding concepts using methods inaccessible through the sources of traditional methods.

In a similar study by Hussain, Asaf , Amir, Dahar and Akhtar (2010), results showed that the traditional teaching method does not enhance academic abilities of the students at desirable level. It is clear that the students performed better when taught in technology based learning environment.

It is pertinent to note that technology has changed the way people live, work and learn. The use of technology in education is one of the main challenges for education policy makers since traditional methods of teaching are no longer sufficient in teaching-learning processes (Rahman, 2009).

Yusuf and Onasanya (2004). citing Micken Exchange of Education Technology (1999), identified three major ways of using ICT for teaching and learning. These are Information and Technology (IT) assisted learning, technology as a tool and computer and

information science. Information Technology (IT) assisted learning is divided into computer-assisted learning, which is interaction between a student and a computer system designed to help the student learn (drill and practice), tutorials, simulations and virtual realities, and Computer Assisted Research where ICT is used as an aid to doing library and empirical research.

Technology as a tool involves the use of hardware and software; word processor, graphic packages, digital camera, presentation, application, databases and spread sheet among others. This hardware does not have limited educational purpose, but they are designed to help people extend their abilities to work.

Nwosu (2003) noted that combined with the traditional source of information (teacher and books) ICT presents itself as a versatile teaching and learning aid which certainly can improve the efficient teaching and learning process. She reported that recent research findings shows that classroom teachers who had adequate personal and professional development in ICT utilization generally had their students performed better than those of their counterparts who did not. According to Abolade and Yusuf (2005) and Olorundare (2005), ICT application to the teaching learning process can assist the educational system in the following ways:

- It accelerates and deepens students' basic skills in any school subject especially English, Mathematics and the Sciences.
- Teachers are provided with efficient and effective tools to take care of students' individual differences.
- It helps to update students' academic knowledge and instructional practices

- It motivates students to learn, be independent and hence, be responsible
- It prepares the individual learner to economically survive and become productive in today's world of work which depends on ICT. There are opportunities for close cooperation with colleagues in the same or even other fields through networking and internet services.
- Educators are challenged to new methods of acquiring knowledge through knowledge sharing and be ultimately connected to the world.
- Unrestricted Access of teacher and students to relevant information developments in subject areas. Other experts' peers and policy making institutions can also be readily contacted.

The above potentials of ICT utilization at the classroom level make this tool an inevitable acquisition at our school levels. Enrichment of course content, effective and efficient delivery of knowledge and skills and faster evaluation of learning outcome and peculiar problems faced by barriers are all area ICT can be focused on. ICT could be used to prepare lesson plans and worksheet, writing students' reports collecting and analyzing students' achievement. In the area of classroom management, the attendance and discipline of students could be easily monitored through proper recording and analysis.

The content to be taught can be enriched through search of internet by teachers. Information, practices and specific skills that are unknown to the students and teachers or which are not documented in the traditional source of information could be readily downloaded from the internet, therefore the students

and teachers will have up-to-date knowledge. Newly concepts in a particular subject area or topic can be easily obtained and these could bring improvement in what is taught and how they are taught.

ICT has the potentials to enhance teachers' ability to wade into many problems confronted in teaching-learning environment in our educational system in Nigeria. Also, ICT can make the school more efficient and more productive engendering variety of tools to support and facilitate teachers' professional activities. It assists a lot in dealing with the problem in teaching relating to large classes, boredom and lack of interest.

ICT as a veritable tool could be used to enhance quality of education in various ways by increasing learner motivation and engagement, by facilitating the acquisition of basic skills and by enhancing teaching-learning process. Daramola (2006) affirms that ICTs are transformational tools which when used appropriately can promote the shift to a learner centered environment. It tools can be effectively utilised in the form of simulation and modeling (Baggol-Lavelle, et al 2003; Olorundare 2001).

For instance there are phenomena that take place over a short or long period of time or that may involve dangerous materials and devices to practice in the laboratory, using computer-related programme and devices can be used to stimulate the processes and outcomes. Students' understanding of the relevant concepts or phenomena would be enhanced. Sensor device can be utilized in the laboratory to record things such as light, temperature, pressure, weight or moisture.

Roles of ICT in Teaching-Learning Process

According to Mishra (2012), utilisation of ICT is in relation to maintaining the quality of education at school level. Use of ICT in teaching-learning process improve the quality of education, produce enabled persons, societies and nations. Most importantly it is needed for the necessary skills and competency demands of meaningfully living in a competitive world. The teacher is noted to be at the centre of the whole educational programmes. And as noted, teaching is said to be nation building activity. So the teachers must be skilled in the use of technology for learning and should be avail conversant with internet facilities to receive latest information related with teaching and learning.

Bhasin (2012) posits that effective utilisations of ICT in education entail both "assimilation" and "accommodation" processes between existing pedagogical culture. In addition, the conceptual premises of information for development programme also reiterated that ICTs have great potential for facilitating the fulfillment of educational objectives, achievements and for enhancing solutions of educational problem. ICT is being used to leverage advantage by accessing quality free resources such as curriculum frameworks, teaching and learning resources, and online tools. This strategy, enables education officials, teacher trainers, educators, and students to play central roles in the realization and actualization of educational objectives.. Keengwe, Jared, Pearson, Donna and Smart (2009) posit that technology is a strong tool which can be used to support active, inquiry-based learning if and when it is supported by technology-based tools such as database, analytic software, and composition software. They noted that if used appropriately, technology can

enable students to become: (a) capable information technology users; (b) information seekers, analyzers, and evaluators; (c) problem solvers and decision makers; (d) creative and effective users of productivity tools; (e) communicators, collaborators, publishers and producers; and (f) informed, responsible and contributing citizens.

Therefore, teaching with technology helps to capture students' attention and engage them in the learning process and the result of using these tools ultimately relies on the effectiveness of the instructor's instructional approaches. Technology is not a substitute for good instruction; rather effective teachers must integrate technology in their lessons to engage the multiple learning styles of the diverse learners in the classroom. Moreover, the most effective way to benefit from the use of technology tools is to integrate them into the curriculum as opposed to integrating curriculum into the existing technology. Furthermore, there should be some form of support for teachers in the use of technological tools. Therefore, technology integration is a process in which computers and other technologies are used as tools to support the tasks of teaching and learning.

It is time to fully integrate technology into the educational settings because skillful use of technology supports the development of process skills such as, higher order skills, adaptability and collaboration that are essential to success in a rapidly changing information age (Koc. 2005).

Challenges of ICT Utilisation in Teaching-Learning Process in Public Secondary Schools.

The challenges militating against effective utilisation of ICT in Nigeria are of multifarious diversions. Idogho and Ainabor (2010) and Nwachukwu (2010),

summarized such challenges to lack of qualified personnel, high cost, weak infrastructure, lack of relevant software, limited access to internet, sustainability and equity.

Lack of qualified personnel: According to Ojo (2005), the crops of teachers who are expected to bring reform into Nigerian education system went through the traditional system without any exposure to ICT. It became a difficult problem for these set of teachers to acquire adequate mastery of skills and content that are embedded in ICT. The re-orientation and re-directing our value system towards the latest development around the world have put many teachers in a state of disarray to whole-heartedly embrace the teaching technology. Many of these teachers especially in primary and secondary schools have lukewarm attitude to be computer literate.

High Cost: Information and Communication Technology facilities are expensive and unaffordable to many individual, private and some government establishments. As questioned by Nwachukwu (2010), with the poor funding of education sector at present in Nigeria, how many schools and colleges are been equipped with ICT facilities. Idogho and Ainabor (2010) similarly noted that the maintenance of these facilities is not only high but the provision of conducive atmosphere for maximum operation of the facilities and their gadgets also require a lot of money.

Weak infrastructure: Necessary infrastructure such as electricity is lacking or being operated at epileptic level. Okorji et al (2007) opine that there is no part of Nigeria that can boast of regularly electricity supply. Where electricity is not stable and constant as in the case of Nigeria, it is difficult to keep high technological equipment functioning. In rural areas most in habitants do not have

access to electricity when denies them the usage of ICT and other electronic devices.

Lack of adequate trained management manpower: There is lack of adequate trained management manpower for the development, maintenance and operation of ICT to serve the increase demand of Information Technology Service in Nigeria. In the word of Idogho and Ainabor (2010), there is acute shortage of trained personnel in application software operating systems, network administration and local technicians to service and repair ICT facilities. Also seriously lacking are spare parts needed for proper use of ICT facilities.

Lack of relevant software: Nigeria lacks the relevant software for example; the software that is appropriate and culturally suitable to the Nigerian education system is in short supply. There is great discrepancy between relevant software supply and demand in developing countries like Nigeria, (Idogho Ainabor, 2010, citing Anujeonye, 2008).

Limited access to Internet: There is inadequate funding of internet connectivity because it is capital intensive. There are few internet providers that provide internet services in Nigeria, such internet providers made up of Nigerians are in partnership with foreign information and communication companies. Most of these companies provide poor service to customers. Those that provide reliable services charge high fees, hence limited access to the use of internet (Idogho & Ainabor, 2010). Nwachukwu (2010), also observed that there is wide range of disparity in access to ICT between the rich and the poor, men and women, boys and girls.

Sustainability of programmes: Opine that laudable programmes are initiated and embraced, however abandoned within a short period (Nwachukwu, 2010

citing Udezi, 2008). He further says that sustainability of ICT programme has four components namely;

- (a) **Social sustainability:** This is a function of communication involvement that is, the services that parents, political leaders, community leaders and other stakeholders can offer to schools in the communities.
- (b) **Economic sustainability:** This refers to the ability of the schools to finance ICT enabling programmes.
- (c) **Political sustainability:** This involves issues of policy and leadership in decision making. The political-will to sustain ICT enabling programmes.
- (d) **Technological sustainability:** This demands that planners must embrace realistic technology that is affordable, cost effective and have abundant spare parts including technical support.

Lack of government financial commitment towards development of Information and Communication Technology sector: Most time enough funds may not be made available and this makes it difficult to maintain both material and human resources.

Time allotted on the school time table: The time allotted to each subject on the school time-table must be reviewed to accommodate the use of ICT in teaching learning processes.

Conclusion

Could be deduced that ICT in teaching learning process is a powerful tools to help learners access vast knowledge, resources, collaborate with others, consult, share knowledge, solve problem, reduce boredom, motivate learners to learn and help teacher to

overcome the problem of over population in the classroom.

Recommendations

To enhance effective teaching learning process there is the need to ensure that teachers as well are well prepared to use new learning processes and materials in ICT tools for learning.

- There is urgent need for training and re-training of lecturers, teachers and students at all levels of education system to be computer literate.
- Government and other philanthropic individuals should be involved in the supply of ICT facilities and equipment to schools and colleges.
- There should be adequate provision of funds by the government to procure ICT software for easy accessibility by the teachers.
- The teaching of ICT should be introduced in the school curricula at all levels of our educational system with emphasis on practical application for better utilisation.
- ICT professional should be encouraged through good remuneration based on improved

salaries and conditions of service for better productivity.

- ICT facilities should be made available at affordable prices to be procured by teachers at government subsidised rates.
- Supportive Infrastructures such as electricity and telecommunication services should be improved and adequately enhanced for maximum utilisation.
- ICT centers should be established by the Government at strategic places to provide services to people, especially the teachers.
- Government and the non-governmental organisations should be encouraged to assist in connecting the nation to the internet for timely access to up-to-date information.
- Government should encourage capacity building through conferences, seminars and workshops that are based on ICT at subsidised rate for teachers.
- Government should sustain ICT programmes in schools in order to create conducive learning environment for teachers and students.

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SCIENCE AND TECHNOLOGY EDUCATION: A TOOL FOR ADDRESSING NATIONAL SECURITY CHALLENGES

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Abstract

This paper makes a review of the strengths and significant roles of Science and Technology education in resolving the challenges of National security in Nigeria. It discusses the concepts of national security, science, technology, Science and Technology and poverty. It equally examines the likely causes of national insecurity as well as the roles of science and technology in tackling national security challenges. The paper recommends that an enabling environment should be createjd where scientific inventions, innovation and industry can flourish NAFDAC should be empowered to make improvements to our food safety system; and that science and technology education should be included in all our well-informed policy decissions by those in governments among others.

Introduction

Global concerns in the last two decades is the apparent spread of physical violence associated with political or communal armed insurgency, civil war, internal insecurity as well as a number of worrisome security-related challenges. In other words, national security is one of the issues that currently engage the attention of governments and people all over the world. This is because the main purpose of the State is to guarantee the security and growth of the country through the attainment and sustenance of national goals (Barth, 2013).

The word "insecurity" as used above is a form of conflict simply defined as a fight, struggle, opposition or disagreement. The same concept is defined by American Heritage Dictionary of English Language (AHDEL,2013) as a state of being subject to danger or injury. Insecurity in whatever form spells nothing but doom and does no one any good. Perhaps,this accounts for the illustration of the tragedy of the last two decades as images of distraught resulting in destitute people fleeing for their dear lives. (Allen & Thomas, 200).

Meanwhile, security issues are not limited to military coups. There are other security issues that have challenged and are still challenging the current democratic political system. In Nigeria, these include petty crimes, domestic terrorism, civil or organised protests resulting from a number of socio-political developments. The problem was further compounded by the arrival of the Niger Delta militants and later Boko Haram. The terrorist and insurgent groups continue to threaten Nigerians and their allied interests. Violence persists within the states creating instability and placing civilian populations at risk.

The proliferation of highly destructive weapons and advanced delivery systems remains particularly worrisome. Additional challenges in some parts of the country include natural disasters, narcotics and human smuggling, security at major events and the spread of infectious diseases. The major cause is unemployment which stands as a socio-security challenge. Most of the major players are youths who have no jobs and needed to survive the economic hardship. Foreign power may also act as a threat to internal security of

a nation by either committing or sponsoring terrorism or rebellion without actually declaring a war. Threat to internal security in any form is harmful to a country's vital interest of maintaining, peace, national unity and national development.

As earlier on pointed out, Nigeria, (Africa's most populated nation) is not left out as more lives are lost on daily basis through road crashes, infant mortality, ignorance, illiteracy, poverty and diseases which could have been prevented if not for the lack of care and commitment by our various governments. It should also be noted that the developed nations such as UK and USA are equally faced with similar security challenges on daily basis. However, the major difference between them and our country is on how the security threats are managed; how knowledgeable and prepared they are; and how they deploy resources against the threats. We equally differ on how patriotic and united the citizens are against the threats of insecurity (Adejumo, 2011).

Equally worthy of note is the fact that we now live in an era when "Science and Technology (S&T)" affects every aspect of life and society. Science is not only an academic area studied by inquiring minds but also to enhance national power. Boren(2013) opined that the scope of national security has expanded to include not only the traditional concerns of protecting well-being of the citizens, but also the challenges of global society including sustainable development, economic degradation, global diseases and hunger, population growth and migration; and economic competitiveness. Science and technology therefore needs to be embraced by those in governments since it is the ultimate duty of government(s) to protect lives and properties. This is

evident from chapter 12 section 14, sub-section 2(b) of Nigeria's constitution which states that :

the security and welfare of the people shall be the primary purpose of government".

This statement is a pointer to the reason why those in government are usually indicted either directly or indirectly for the security challenges in the country.

National Security Concept of National Security.

Opinions differ as to the exact meaning of the term "National Security". The term came into being in the United States of America shortly after the World War II and centered around war before it now encompasses a broad range of facets, all of which impinge on the non-military or economic well-being of a nation. The simplest definition of the term is that of freedom from threat from military threat or political coercion. This same concept was defined by Macmillan (2013) as the protection or the safety of a country's secrets and citizens. Recent international debates have however emphasised the need to see security in the broader sense as the struggle to secure the most basic necessities of life such as food, health, shelter, transportation, power and security (Barth, 2013). This is because, these broader human needs are important for the attainment of national security and overall peace and development of any nation like Nigeria.

Robert, in Bulus (2011) posited that any society that seeks to achieve adequate military security against the background of acute food shortages, population explosion, low level of productivity and per capital income, low technological advancement, inadequate and insufficient public utilities and chronic problem of employment has a false sense of security.

Taking cue from these definitions, it becomes obvious that social problems arising from the absence of the aforementioned basic human needs can indeed lead to security threats and conflicts. This accounts for recent social unrest in various countries in Africa that have roots in the failure of government policies to provide or manage the basic human needs of their citizens (Barth, 2013).

To National Defence College, definition of national security should include elements of power. It therefore views national security as an appropriate and aggressive blend of political resilience and maturity, human resources, economic structure and capacity, technological competence, industrial base and availability of natural resources and finally, the military might.

For the purpose of this paper, national security is seen as a nation's measurable state of the capability to overcome multidimensional threats to the apparent well-being of its people and its survival as a nation-state at any given time, by balancing all instruments of State policy through governance. Borrowing from the words of Orok (2000), an encompassing definition of national security should view individual, national and international security from a holistic perspectives as there are interplays between the three of them. If the individual is not secure, the state cannot be secured, and if the state is under attack from an external source, the State and the individual cannot be secured.

Science, Technology and “Science and Technology”

Science means different things to different people based on individual analysis to suit different purposes and circumstances to which it is subjected to. It however has its origin in the latin word ‘Scientia’ meaning ‘to know’ (Mapaderun

& Raimi,1998). Thus, it has the same meaning as philosophia. However, in common usage, the term science is used to connote the distinctive methods by means of which knowledge is acquired, refined and certified (Busari and Sodipo,2009). It equally means a body of organised knowledge resulting from these methods when put into operation. Science is therefore both product and process of investigation and research.

The process of science in question refers to the methods by means of which information is gathered, analysed, synthesised and disseminated. Such processes include observation, classification, measurement, collection of data, experimentation among others (Ogunbowale,1998; Adeoye & Aiyedun, 2003). Scientific products on the other hand simply means the library of knowledge in the form of facts, concepts, principles, laws, theories etc. It should however be noted that science is not only an academic area studied simply by intellectually inquiring minds but, could also be used to enhance national power. It is indeed the foundation of what is today known as technology.

It would be a gross understatement to vilify technology merely as "applied science". It is much more than that. Technologists would mostly conceptualise ideas independent of scientific advances. But, they might have to fall back on science for the materialisation of some. They are mostly concerned about the requirement of the market. If the market demands a higher efficiency motor, they would find out avenues to make it possible with or without the help of science. They would mostly be using real time data and experimental results for optimisation, rather than theoretical calculations.

Science is be concerned with knowing the causes of the acts of nature.

While technology is concerned with imitating the nature and improving it. In other words, technology deals with the application of scientific knowledge to solve problems of life in the society (Busari, Ogundipe & Dan-Ologe,2006).Technology is thus developed by human beings so as to make life more comfortable. In technology, ideas are translated to concrete products and processes.

The slight variations in the meanings of Science and Technology notwithstanding, they are allies. Neither is a sub set of the other (Chatterjee, 2015). Just like technology sometimes requires theoretical research for advancement, science often requires advances in technology to measure and record their observations. Thus, they are interdependent and inseparable. The integration between them is that Science creates new technology which in turn facilitates the progress of science as seen in the area of Computer Science.

Equally worthy of note is that originally, "Science and Technology" were different in nature but with their integration today, the term 'Science and Technology' has now come into use and it refers to the entire integrated field of 'science', 'technology' and 'science and technology'. It is also observed that 'Science and Technology' has been the foundation of civilisation and culture since the dawn of history, and it has shown remarkable progress in the 20th century. The century is noted for:

- a. increased life expectancy of human beings due to medical advancement;
- b. greater human mobility and expanded commerce as a result of development in transportation including railways, automobiles and airplanes;
- c. turning of the whole world into a global village via advancements in telecommunications, computer etc (Busari et al, 2006).

Causes of National Insecurity

Going by the definition of security as a struggle to secure the most basic necessities of life such as food, health, shelter, transportation, power and security; it is obvious that the absence of, or poor access to, these basic human needs can lead to security threats and conflicts in any nation. The same view was shared by Kuffour,(2012) who identified imbalanced development that involves horizontal inequalities as an important source of conflict in any country. According to him, this can cause a nation the opportunity to be the giant nation. To Inyang, (2012), hunger is the main cause of insecurity and this hunger is caused by unemployment and poverty. Some authorities also include disasters and events causing serious environmental damage as security threats. To this end, poverty, unemployment and disasters could be the major causes of National Insecurity.

Unemployment and national security

Youth unemployment is in itself an indicator of several possible malfunctions and wrong doings as far as public policy and the very structure of a society and an economy are concerned. Unemployment, though not always itself, poses a series of serious problem to democratic character, liberal system as well as the integrity of the society web itself. It causes absence of income and opportunities for a better life and preservation of status quo of an individual's or family's life. It could also cause an increase in overall street crime and criminal activity. There could also be exploitation of the situation by extremists and terrorists. The stance was corroborated by the Economywatch, (2013) when it submits that unemployment leads to financial crisis and reduces the overall purchasing capacity of a nation. This in turn results in poverty followed by increasing burden of debt. Now, poverty

can be described to imply a financial condition where people are unable to maintain the minimum standard of living.

Climate Change and national security

One of the biggest issues of this generation is climate change. It is occurring at unprecedented rates because huge quantities of carbon dioxide, methane, and other greenhouse gases are being released to the atmosphere daily. This results in the rise of global temperatures leading to severe fluctuations in weather with its attendant effects on agriculture and living conditions of citizens. People are displaced and how these people will be accommodated elsewhere becomes a problem. Such people become security threat in the society causing poor population distribution.

Poverty and National Security

While describing poverty, Peter Townsend in Allen & Thomas,(2000), opines that:

individuals, families and groups in a population can be said to be in poverty when they lack the resources to obtain the right types of diets, participate in activities and have living conditions and amenities which are customary or at least widely accepted and approved, in the societies to which they belong. Their resources are so seriously below those commanded by the average individual or family that they are in effect, excluded from ordinary living patterns, customs and activities.

The implication of this definition is that poverty is multifaceted. It could be in form of poor health, food insecurity, poor access to public services and infrastructures, illiteracy and ignorance, voicelessness and social exclusion, as well as low level of household income as manifested in Nigeria where the major streets are full of beggars. Similarly, the percentage of households' access to

“safe” water in Nigeria is 48 % for rural dwellers as against 71 % for the urban dwellers (FOS/UNICEF, 2000).

Poverty was a threats to survival

Poverty has a potential of exposing a newly born child to increased risks of illness such as malaria and diarrhoea, due to unsanitary living conditions, poor access to safe water and inadequate sanitation; and may also make the new child malnourished; due to household food insecurity or ignorance about good child feeding practices. In addition, large family size (due to lack of awareness of and access to family planning), the mother's need to work and the father's tendency to fulfil his parental responsibilities leave the child inadequately cared for. The situation is further compounded by poor access to health care services which may be due to low income and to the mother's low level of education resulting in the child not being immunized. All these factors result in a much higher probability of death even in early childhood.

National Security and Environmental Sanitation

One of the most fundamental problems affecting millions of Nigerians is the lack of access to safe sources of water supply and adequate means of disposing human wastes, as well as adequate refuse and drainage facilities . For instance, there is this habit of defecating and urinating in the bush close to the home or near water sources such as rivers, and the indiscriminate disposal of wastes and domestic water. Such habit constitutes the most significant factors associated with high prevalence of diarrhoea and typhoid diseases in our communities.

National Security and Imbalanced Development

Imbalanced development as used here refers to distortions in the geographical distributions of infrastructures thereby leaving certain communities with difficult physical access to such facilities e.g. health facilities like hospitals. Such development in the words Kuffour, (2013), is an important source of conflict and disaffection among communities. Similarly in Nigeria, while the people in the so-called high class category have unhindered access to virtually all the good things of life e.g. twenty-four hours' supply of electricity, the low and middle class people hardly get two to three hours' supply of the same electricity. While corroborating this view Dare, (2000), observed that less than three per cent of the respondents in a study he carried out on environmental management in Ekiti, Ogun, Osun and Oyo States slept under Insecticide Treated bed (ITNs).

National security and natural disasters

Natural disaster in any form – earthquakes, forest fires, landslides, volcanic eruptions, tsunamis, outbreak of epidemic – is one of the greatest threats to national security and public well-being. Each of these has caused more damages to properties and to citizens' lives than any other factor. It is on record that a disaster has claimed more than ten thousand (10,000) lives, displaced countless numbers of family and destroy more than two hundred thousand (200,000) houses at once, while the recent "ebola" outbreak has claimed close to eleven thousand (11,000) lives in Africa, Nigeria inclusive Nigerian Television Authority (2015).

Role of Science and Technology in Tackling National Security Challenges

It has been remarked that, In present age, science and technology have

become more prominent and are pivot on which growth and development of a nation rotate. Nations are classified as powerful, world power, developed, developing or underdeveloped according to their level of scientific and technological breakthrough" (Adegoke, 2004 in Adegoke & Ogunrinade, 2007.

If this remark is anything to go by, it becomes evidently clear that instability, insecurity and other threats to our well-being as a nation can only be surmounted in the presence of a well planned science and technology education programme, but how? An attempt is hereby made below to proffer solutions to this question.

Information and Communication Technology (ICT), an offspring of science and technology, offers enormous opportunities for addressing national security challenges; tackling unemployment and creating wealth. With ICT, the law enforcement agencies can locate criminal callers within the cellular networks. This explains why sim card registration is being pursued much more aggressively so that every telephone number in use could be uniquely identified as belonging to an identified person.

Science and technology have equally been found very useful in addressing problems of food insecurity which is an index of national insecurity by making importation and consumption of food from all over the world easy through transportation developments and scientific progress in freezing and refrigeration technology which allows us to preserve food for a longer period of time. Microwaves and gas ovens which are products of science could also be of help in reducing the time of cooking. The knowledge of science and technology is also useful in improving crop production via hybridization and mechanisation.

To effectively undertake disaster counter measures, full utilization of science and technology would be of utmost importance especially in the process of predicting and preventing natural disasters, limiting damages caused when disaster strikes and in recovering rapidly in its aftermath. For instance, to minimize damages caused by earthquakes when it occurs, improved earthquake-proof construction and structures are essential.

Similarly, a widespread adoption of science and technology continues to dial up demand for those who can provide technical assistance in a number of (professional) fields. There is now a long list of job opportunities for graduates of science. They can find work as health care practitioners, teachers, farmers, top-level managers in the private or public sector and even as writers. Science and technology therefore, has a potential for raising the living standards of individuals and tackling problems of unemployment and poverty by providing means of livelihood for science experts. Thus, it ensures national security. On a larger scale, it could help in transforming natural economy to a diversified and self-sustaining economy.

However, achieving the above stated requires an atmosphere of peace and mutual trust among the citizens. Hence, the need for our government to produce leaders who are national in outlook. This will help to mould the contending ethnic and religious groups into harmony and remove the perceived mutual distrust among them.

Conclusion and Recommendations

In this era of scientific and technological revolution, surmounting the

challenges of national security and turning the fortune of the country around is inconceivable without a strong, solid and sound science and technology education base. Therefore, for country to be globally competitive, to create an economy that is built to last and ensure national security, it is hereby recommended that:

- ❖ an enabling environment must be created where scientific invention, innovation and industry can flourish; i.e. our education must be to innovate
- ❖ the National Agency for Food Drug Administration and Control (NAFDAC) should be empowered and given resources to make real improvement to our food safety system;
- ❖ on food security, organic farming could be adopted to minimize the use of pesticides and antibiotics in our food;
- ❖ smart policies should be put in place that would lead to greater growth in clean energy generation, and limit greenhouse gas emissions from our vehicles. For instance, reducing our dependence on oil could be of help;
- ❖ our Government should strongly support investment in research and development that will spur ground breaking innovation and investments in health IT and health research to improve the health and wellness of our people so that we can continue to unravel clues to treating or preventing some of life's most daunting and debilitating diseases and develop new medicines.

With all these measures in place, the security and liberty of our nation and her citizens is guaranteed. Life thus becomes meaningful to all and sundry.

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ROLES OF HIGHER EDUCATION IN ENHANCING GOOD GOVERNANCE AND EFFECTIVE STATE CAPACITY IN NIGERIA

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Abstract

Higher education has been documented as a good a pivot for the strengthening of governance in Nigeria. This is globally recognized and to put Africa on this pedestal, UNESCO as an international organization has begun to take steps that can aid good governance in Africa. This paper however submits that the Nigerian state as an institution has some constraints like corruption and antagonistic internal relationships among others that can serve as impediments to attaining governance through higher education in spite of international supports in this direction and that it is when these constraints are tackled headlong that higher education can serve such a purpose. Suggestions such as the eradication of corruption and the strengthening of democratic values among Nigerians are therefore provided in order to achieve this noble goal.

Introduction

The imperative for higher education is that basic education is not enough to provide much impetus for individuals to acquire necessary skills to achieve their dreams and to reach their potentials. Higher education is, to this extent, a necessary condition in the contemporary world to equip people with necessary skills to enhance their economic capacities and ultimately strengthen governance in the society. Yet it is not sufficient to guarantee this enviable feat. The political environment remains very much important. It is no gain saying that knowledge plays a significant role in societal development. It is the development of human knowledge that has produced strides in science and technology, even social engineering. As noted by UNDP (1996) cited in Ugbuehi, (2012), technology is expected to result in industrial or commercial products of value to mankind, and also it is a make-or-break factor in the delinking of economic growth and natural resources base. There is no technology without power of skills. According to Mazrui (2008) *power of skills arises because, by the end of the*

*twentieth century, international stratification and influence would be based not on who owns what but on who knows what'. Consequently, education, particularly higher education is a *sin-qua-non* for the importation of skills for the development of the economy for the overall national development and this has been exemplified in the development of Europe, America and the Asian tigers like China, India, Singapore as concrete examples (Osisioma, 2012).*

The African case has become a peculiar instance because it remains the only continent yet to advance technologically. Recognizing this problem, the UNESCO and its partners in 2009 organized the World Conference on Higher Education (WCHE), which has produced a UNESCO ADEA Task force on Higher Education and Research in Africa with eight areas of focus in Africa. The World Bank also recognized the fact that technological revolution has allowed the expansion of education particularly the tertiary sub-sector, and therefore supported the creation of Africa Virtual University in order to fill this gap (Barka, 2013). Government of various African

countries including Nigeria have also established and been funding higher education at various categories. Nigeria in particular has more than many higher institutions of learning, yet the desired result, the national development has not been attained. The educational attainment in Nigeria has not resulted in poverty reduction which shows that Nigerian human capital development is low. Our educational system has not led much to skills acquisition, rather mere schooling has been achieved. This problem bothers on knowledge generation, knowledge transmission or dissemination, but much more on conversion to skills for development i.e technology, which can be blamed on both the citizenry and the political authority.

One of the greatest challenges facing Nigerian state today is its ability to strike the balance between aspiration for national development and ineffective state capacity which has turned the state to be a class or group in power for selfish interest, making the established rules represent the thinking of the class in power. The problem therefore is not the framework, or policy instrument, but how the state can use its power, particularly in the Weberian sense, in which the transformation agency in policy of the government can be accepted by the dominant sub-group of the state and in which their accumulative instinct can be curtailed to allow for implementation of policies that support national development including the one that propels higher education for strengthening governance in Nigeria. The objective of this paper therefore is to explain the importance of higher education in the society, identify the state capacity as an instrument that can make or break the ideals or objectives of higher education in Nigeria. Based on the identified problems that render state ineffective in Nigeria, suggestions will be

proffered with the view to engineering higher education for strengthening of governance in Nigeria.

Conceptual Analysis

Higher Education

As stipulated by the National Policy on Education (2013), higher education is called tertiary education and is described as the education given after secondary education in universities, colleges of education, polytechnics, monotronics including those institutions offering correspondence courses. Corroborating National Policy on Education, Olagbenro (2009) describes higher education as the education provided by universities, vocational institutions, polytechnics as well as colleges usually after the completion of secondary school education. The training at this level is expected to be specialised in nature, leading to high-level qualification. It helps in advancing learning and knowledge with a role in the transmission and transformation of knowledge and helping to achieve the economic and social development of a nation. It plays important role through its graduates who normally should provide leadership roles in education as researchers, teachers, consultants, politicians, farmers, bankers, medical practitioners and managers. He stressed further that these leaders are expected to create and apply knowledge and innovations, and also provide analytical perspectives on developmental problems and service to the public and private sectors. It is also defined as post-secondary education, tertiary education or third level education which is an optional final stage of formal learning that occurs after secondary education, often delivered at the universities, academics, colleges, seminaries and institute of technologies.

Higher education is also available through college level institutions including

vocational schools, trade schools, and other career colleges that award academic degrees or professional certificates. Higher education can therefore be described as education received after secondary school for the purpose of training the individual for the world of work with the objective of contributing to the development of the society based through various aspects that it provides. The National Policy on Education (2013) provides that tertiary education shall, among other goals, contribute to national development through high level relevant manpower training, develop and inculcate proper values for the survival of individuals to be self-reliant and useful members of society and acquire both physical and intellectual skills which will enable individuals to be self-reliant and useful members of the society (Federal Republic of Nigeria, 1998).

Governance

According to World Bank (1992), cited in Roberts (2002), governance is the manner in which power is exercised in the management of a country's economy and social resources for development. Governance is also said to have three distinct aspects: (i) the form of political regime (parliamentary or presidential, military or civilian, and authoritarian or democratic); (ii) the process by which the authority is exercised in the management of a country's economic and social resources; and (iii) the capacity of government to design, formulate and implement policies, in general, to discharge government functions. Governability, refers to the ability of a country's political institutions to direct its economy and society, ability dependent on the characteristics of both the government and the society Bogdaner, (1991), cited in Roberts, (2002). There is also good governance which suggests

that governance can be bad. Good governance not only embodies effective exercise of economic, political and administrative authority in managing a country's affairs, it is also a virtuous process made up of institutions, institutional arrangements, mechanisms, people's participation and dialogue. It is driven by synergy, strategy and political will to negotiate and compromise decisions and governmental actions (Ojukwu, 2011).

State capacity

This is the ability of the state to use its authority to effect desirable changes in the society. At economic level, it is the ability of the state to act authoritatively to transform the structural basis of the economy to achieve economic growth. This has been termed Edigheji (2006) as the transformative capacity of the state, that is the ability of the state, to adapt to external shocks and pressures by generating ever-new means of governing the process of industrial changes. As noted by Ekpo (2013), an effective state should possess the capacity to perform the following critical functions:

- i. Coercive capacity – monopolising the legitimate use of violence;
- ii. Extractive capacity (extracting resources);
- iii. Assimilative capacity – shaping national identity;
- iv. Regulatory capacity – regulating society and economy; and
- v. Steering capacity – maintaining internal coherence of state institutions.

A capable state is, as Obianyo (2009) put it, "one that effectively fulfils its obligations to its constituents by providing and satisfying a range of goods both tangible and intangible, that assure its people of a secure public space wherein they can live and love, produce and

reproduce and pursue the enjoyment of the fruits of their labour and love”.

A good government must therefore demonstrate its capacity in delivering certain essential material and non-material goods to its citizens which indicate the existence of good governance in the polity. Essentially, effective state capacity therefore is to pave way for the guarantee of governance that is good enough to enhance the living standards of the people, and education sector is one of the means.

Higher Education and State Capacity towards Good Governance in Nigeria

It is not that the significance of education in the society has not long been realized. In democracy for instance it is held that an educated electorate is an asset for democracy. The people should be literate if not highly educated in order to be able to learn more and exercise their judgement in matters of common concern. It is believed that an electorate can make best use of the facility provided by the mass media for instance (Gaubu, 2007). Adedeji and Bamidele (2003) also note that the rationale behind investment in human capital (education) is based on three main arguments:

1. that the new generation must be given the appropriate knowledge that previous generations have already accumulated,
2. that the new generation should be taught how the existing knowledge can be used to develop new products to introduce new processes and production methods, and improve the efficiency of organizations in business, government and social services.
3. That people must be encouraged to develop entirely new ideas, products, processes, methods through creative approaches”.

But the contention is which level of education is much needed than the other level for national development. Friedman and Rose Ogbuehi (2012) hypothesised that there was no evidence that “higher education yields ‘social benefits’ over and above the benefits that accrue to the students themselves”. To them higher education instead promotes “social unrest and political instability. This position has however been refuted by recent development in the world that suggests that higher education is both a result and a determinant of income, and can produce public and private benefits. Higher education may create greater tax revenue, increase savings and investment, and lead to a more entrepreneurial and civic society. It can also improve a nation’s wealth, contribute to reduced population growth, improve technology and strengthen governance. In terms of the contribution of higher education to a nation’s economy, some scholars and commentators have attributed the leaping of India, China and some other South-east Asian countries into world economic stage to decades-long, successful efforts to provide high quality, technically oriented tertiary education to a significant number of citizens (Ogbuehi, 2012; Sen, in Mabogunje 2009).

Bloom (2004) cited in Barka, (2013) also state that higher education has array of economic and social benefits which impact both individuals and society. With regards to the individuals, the positive economic effects of higher education include access to better jobs and higher salaries and benefits, professional mobility and capacity to have savings, which put together contribute to individual's improved health and life expectancy, improved quality of life for offspring, better consumer decision making, increased personal status and more leisure time. As for the economic

benefits of higher education for the society, there are: increased tax revenues, greater productivity, increased consumption, increased workforce flexibility, and decreased reliance on government for financial support.

Socially, it contributes to a reduction in crime rates, an increase in community services, good governance and increased quality of civic life, social cohesion and appreciation of diversity and an improvement in one's ability to adapt to and use of technology. The position of this paper is not in contention with the opinion that supports correlation between higher education and national development, thereby conforming to Maxwell's (2003) supposition that education should not only provide individuals with what to think but also how to think on how to create an enduring social and economic value.

Currently in the world, there is much concern on the economic predicament of Africa. Poverty is widespread. The World Bank which remarks that Africa has in recent times experienced economic progress also alerted that African people still experience increased poverty. According to World Bank *"despite these successes, still more people are likely living on less than \$1.25 a day in sub-Saharan Africa today than at the turn of the millennium"* (Tadaferua, 2013). Why Mo. Ibrahim blames it on absence of visionary leadership: *"We are not seeing the kind of visionary leadership that will help us make the transition from our twentieth century challenges to becoming dynamic twenty-first century players on the global stage"*. He however comes up with a suggestion that that Africa must rise to *"use science, data and innovation to drive development based on facts and not speeches"* (Tadeferua, 2013).

In Nigeria, several actors have been making efforts on higher education, both locally and internationally, and have contributed to the development of Nigeria. For instance, in 2009, UNESCO and its partners organized the World Conference on Higher Education (WHCE) in Paris preceded by regional conference. At the end of the Conference, a UNESCO ADEA Task -Force on Higher Education and Research in Africa was established. It was tasked to develop a set of strategic orientation from the stock taking conducted in 2008 in the Africa region. This document identifies the following areas of focus for higher education in Africa.

- Financing,
- Improvement of access to higher education,
- Quality assurance, harmonization of higher education convention,
- Improvement of the working conditions of staff in African tertiary education,
- Improvement of sciences, technologies and promotion of research and innovation,
- Enhancement of relevance, efficiency and effectiveness of tertiary education,
- Promotion of partnership and cooperation and creation of an African Higher Education and Research Area.

The aforementioned are efforts at strengthening governance in Nigeria through higher education. This is a good hope, but the constraints of state capacity remain the enemies of Nigeria's ability to strengthen governance. These state capacity constraints affect the prospect in strengthening good governance through higher education in Nigeria. Then what are these constraints.

Nigeria has attained certain developmental feat through higher education since independence and even

before it. The current economic development of Nigeria is due mainly to the contribution of the graduates of its universities, polytechnics and all tertiary education institutions. It is pride to recognise Nobel Prize Winner Professor Wole Soyinka, the Late Professor Chinua Achebe, Professor Buchi Emecheta, Professor Ifi Amadiume and many brilliant female and male engineers, doctors, teachers, artists who are serving at home and in the global Diaspora (Barka, 2013). This has nonetheless led to advancement in science and technology and ultimately socio-economic development and progress that Nigeria earnestly needs in the world of 21st century that is technology-propelled. This has been due to some constraints that confront the capacity of Nigerian state to effectively do this.

Capacity Constraints of towards Higher Education for Good Governance

As much as Nigeria would have used higher education for National development, several man-made constraints have continued to prevent Nigeria's State from effectively performing its function to the society. These include, among others, factors discussed below.

Corruption: Corruption has been a very serious problem grass-hopping Nigerian economy inspite of extant laws and agencies erected to prevent it. It is argued that the type of economic system in place influences the degree of corruption in an economy. The capitalist market economy for instance has features of excessive corruption, greed, profit motive and self-interest as against the socialist type. It is observed that at initial stage of capitalist development, it is natural that primitive accumulation will be the order of the day. The US and UK are said to have experienced this. The kings and queens were said be involved in

bribery and corruption scandals like paying members of parliament to present their interests. In the USA exchanging of money for votes was in vogue. The problem however is that Nigerian corruption case is a deviant type. The proceeds or loots from corruption in America, Europe, or elsewhere are domiciled in these countries, thereby helping in the growth and development of these economies (Ekpo, 2013).

The Nigerian loot were taken out to the developed countries like U.K, US, Switzerland through money laundering, helping the economies of the recipient countries and further widening the development gap between the developed economies and underdeveloped economies like Nigeria. According to Anunu (2012), within 13 years of democracy, Nigeria lost ₦8 trillion to corruption. This is apart from the #94.0 billion siphoned in Nigeria before the arrival of democracy in 1999 (Akpeninor, 2007). As it is today, there are decaying infrastructure, inadequate facilities, moribund laboratories and obsolete equipment, unsightly toilets and hostels, and generally poor learning environment have been blamed, *inter alia*, on corrupt practices among the management of the Nigerian tertiary institutions, which include the pro and vice chancellors in the areas of fraud, contracts inflation, embezzlements and other scams (Tell, 20 2014). The implications of all these corrupt practices are on the capacity of tertiary institutions for generating, transmitting, disseminating and converting knowledge for social use. Therefore corruption in this area cannot be exonerated from low quality of our tertiary institutions' graduates.

Antagonistic Internal Relationship: Nigeria has a state is weak in cultural development that is, a gradual graduation of a society; without loss of its

cultural district identity. This is achievable through incremental adjustments to the ethics, values and ways of life of the people in a manner that promotes good societal relationships (Ariyo, 2006). Different sections, groups and extractions of Nigeria are either in inter-ethnic rivalries or religious crises at one time or the other since the 1960 independence. The case of Nigeria is centrifugal social forces, rather than centripetal behaviour on the part of both the leaders and followers. Each group sees the other as its competitor instead of co-operator, and as such there is no “adoption of more natural, empirical, and analytical outlook leading to political participation as equal partners” an hallmark of modernization, using the philosophy of Almond and Powell (1966), in Gauba 2007). Any country where this flourishes shall never attain a “melting pot” as was achieved in the US through the process of cultural assimilation, based on “universal citizenship, legal equality, and equality of opportunity” as bedrock of political modernization, upon the thought of James Coleman and Pye (1965) in Garba, 2007).

The northerners in Nigeria have taken the presidency to be their perpetual office and are always ready to fight against its occupation by any other section of the country through violent means particularly religious crisis and this is against national unity. As Mahdi (2001) observes, “Some Nigerian Muslims feel politically marginalized because they lost their position of political prominence, which they cherished in lieu of their lesser levels of education, development, and representation in the Civil Service and the upper rungs of the military”. This suggests political reason behind both Sharia legislations and Boko Haram crises in some states in northern Nigeria. Boko Haram terrorist cases are now recorded on higher institution campuses in Nigeria.

A typical scenario here is the detonation of a bomb by a female suicide bomber in the library of the Federal College of Education, Kontangora on the 12th of November, 2014 where 10 students were killed, apart from 13 students that were killed through the same factor at the Federal College of Education, Kano in September the same year (Kukogho, 2015). In this instance of hobbesian state of nature where life is solitary, brutish, nasty and short, no serious knowledge generation, dissemination and transmission can be achieved in tertiary institution campuses in Nigeria,.

High Absorptive Capacity: Oil producing countries possess different capacities to cope with the stress that the political system experiences. Philips (1994), in Kristilolu (2003) identified the difference between oil producing countries. He categorised them into low and high absorbing countries. This is used in relation to LDC oil exporting countries.

The ‘low – absorbing’ nations refer to affluent, specialist, oil dependent export economies with low population and very high per capita income, which makes the need for efficient non- oil export activities not so crucial. In this category we have Saudi Arabia, Kuwait and Abu Dhabi. The ‘high absorbing’ nations urgently need efficient non-oil export sub -sector as their very high population figures make their income from oil export though huge, inadequate to guarantee high per capita figures and rapid accumulation. This group includes Nigeria, Iran, Iraq, Mexico and Indonesia. Oil money has never translated the oil exporters particularly the high- absorbing nations from indebtedness, low GAP per capita, high infant mortality rates, low doctor to patient ratios and high illiteracy among others. Thus significant is the observation of Kristilolu (2003) that there is a significant

difference in the development profiles of low absorbing and high absorbing oil exporting nations as low absorbers display substantial economic development, while the high absorbers have little to show for massive incomes they received from oil exports since the price hike of the 1970s. Among oil exporting States of OPEC, Nigeria has the highest population and the sixth in terms of supply side. When Nigeria is compared to Saudi Arabia, Venezuela and Kuwait the room for high absorptive capacity is wide for Nigeria.

This is why the high-absorbing nations have not been free of various forms of crisis as a response or challenge to the capacity of the state. It is not that the low absorbing countries don't experience challenges from the citizens but the high per capita helps in dousing the tension. Within the Middle East for instance, the "Arab Spring" of 2011 covered both Tunisia, Egypt, Libya, Bahrain, Yemen and Syria and Saudi Arabia, but Saudi Arabia as a low absorbing oil exporting nation was able to nip the revolts or social revolution which were organised against Arab World authoritarian regimes that were mostly interested in regime survival rather than fundamental political change that can result in the redistribution of wealth in the bud.

Low Utility of Externally Available Knowledge Pool: All nations of the world either developed or developing have their Diasporas, and these Diaspora possess both material and human resources. Thus the role of Diaspora in national development is globally recognized. Apart from financial remittances the men of Diaspora provide technical support, endowment in educational institutions and as such have been sources of "brain gain" or "brain circulation" a reverse trend of brain drain

(Adeleke, 2013). African countries, especially Nigeria is behind in terms of technological advancement, and one of the revolutions that Nigeria needs is power of skill which some Asian countries of equally economic pedestal with Nigeria in the 1960, 1970 and 1980s like India, Malaysia etc. have attained. Thus, a paradigm shift from technophobia (fear of technology) to technophilia (love of technology) is urgently needed. Then our school curriculum, particularly the tertiary level must reflect this (Olagbenro, 2009, quoted in Adeleke, 2013).

The countries of South- East Asia have achieved this feat and have transited to globally recognized economy, driven by improvement in science and technology. The Diaspora of these countries helped their home countries indeed in this respect. As Osioma (2012) remarked, most Asian scientists in European and American Universities helped in research centres, and spend a sizeable amount of their time working there. The government provided the necessary support of funding and conducive environment to individual scientific and technological projects, an attempt that has worked for countries like China, Singapore and South Korea etc. Nigeria needs to learn from this.

Conclusion

This paper has been a critical outlook of the capacity of the Nigerian state in being a fulcrum for prompting higher education for the strengthening of governance, and ultimately development in Nigeria. Though over the years, higher education has helped Nigeria in making some advancement, it has nonetheless been adequate in making Nigeria economically competitive in the 21st century world. This is as result of capacity ineffectiveness of the Nigerian state that manifests itself in several ways including corruption and low absorptive capacity, inter alia. Therefore, the poor state of

governance cannot be isolated from the way higher education is being run in Nigeria which is being shaped by the way the Nigerian state is being run.

The ineffective capacity of the Nigeria is a major clog in the wheel of cultivating higher education for upgrading the quality of life of Nigerians through higher education. The current experience of the living standards of the large segment of the Nigerian population has been very abysmal since they live below the poverty line. It is therefore hoped that if the suggestions offered above are accepted and put into use by all the concerned stakeholders, the objective of harnessing higher education for the enhancement of good governance in Nigeria will surely be achieved.

Recommendation

To enhance good governance through higher education, there is need for the capacity of the state to be effective, and this can be achieved through the following suggestions:

There is need for Nigerian state as an institution to exorcise itself of corruption and be selfless in the pursuit of national goals. The funds being stashed away to foreign accounts by the few political elites can be used to upgrade our higher education campuses to global standard and ultimately equip the students with necessary skills that can motivate technological advancement

through which there will be economic growth, hence good governance in the land. This does not exclude the management teams of tertiary institutions in Nigeria.

The diversification of the economy from mainly resource base which breeds the syndrome of economic mismanagement should be taken serious.

There is also the need to strengthen democratic values among Nigerians to be cooperative rather than been conflictively competitive and that good governance must strengthened to place higher education on a pedestal where it will further strengthen good governance. Nigeria needs more of cooperative association than antagonistic type in order to have synergy for development.

In addition, it becomes highly imperative that Nigeria's Diaspora human resources particularly in the area of science and technology must be optimally tapped to help revamp our higher education. We need more than their financial remittances though good for economic injection. Nigeria should seek external assistance more in the area of human capital development than financial aid that stops at the top for the selfish use of those who control the apparatus of government.

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