

Effective Management of Teaching-Learning and Working Conditions in Vocational Education in Nigeria

AHIAUZU LEVI UCHE

Federal College of Education (Technical) Omoku,
Rivers State, Nigeria

Keywords

Effective
Management
Teaching-Learning,
Working Conditions
Supervision
Vocational
Education, Nigeria

This paper reviewed the influence of effective management of teaching and learning and working conditions as relating to the quality of vocational education. In Nigeria, working conditions in teaching and learning are variables that can positively and or negatively influence the performance of teachers and students productivity and performances respectively. Variables herein considered are associated with poor quality remunerations, inadequate planning at the national and state government level, insufficient resources for programme implementations. The findings of the work quality of effective management of education have been greatly jeopardized consequent upon poor supervisory personnel, means and methods adopted by the good or agents involved. The paper recommends conducive working environment, sufficient funds and adequate materials should be provided for teaching and learning activities. A well drawn out action Plan and time frame should be clearly stated to assist in assessing the level of implementation of the programme for national development.

1. Introduction

Teaching and learning in Nigeria vocational education institutions in recent years has not received good attention. The contending issue has been whether federal government has set up effective machinery for monitoring and supervising programmes that relates to teaching and learning input and output to ensure proper implementation. Oluoruntoba and Ajayi (2003) believed that quality supervision of vocational education could greatly be enhanced if teachers and students perform under good working conditions. They agreed that good working condition variables have been identified as motivating factors in boosting the quality of productivity of personnel in any work environment educational institutions included.

Managers in organizations who want to succeed employ good working conditions to implicitly elicit effective performance from their employers (Van den Ban & Hawkins, 1999). So should be the case of the educational institutions leaders. One important responsibility of the stakeholders in the Ministry of Education would have been their capability to effectively, employ efficient working condition variables to induce quality of supervision in vocational education sector.

However, authorities on workers' productivity have disagreed that working conditions may not be the only factor that determines a person's performance level. Herzberg (1959) pointed out in his study of "two factors theory", he opined that what influences how well a person performs in a given situation are the individual's abilities and the individual's understanding of what behaviours are necessary in order to achieve high performance of

teachers and students. The latter can be called “role perception”. Conversely, working and learning conditions are commonly observed to increase and sustain the quality of satisfaction of teachers and students, with subsequent increase in quality of productivity and performance respectively. These conditions may include high remuneration, fringe benefit, welfare services, in-service training, study-leave-with-pay, promotion, opportunities for advancement and recognition, and the work itself, retirement benefits, paid as at when due, management of staff and students problems and discipline.

The current initiative by the federal government of Nigeria to draw up an Action Plan (Immediate Actions, February 2001 to July 2001, Medium Term Actions 2002-2005 and Long Term Actions, 2006-2010) on technical/vocational education to set up goals and objectives that ascertain the extent of implementation of policy as were planned. This initiative which was also meant to make adjustment and corrections based on the outcome/output has made quality supervision of vocational education programme extremely necessary (Federal Ministry of Education, The National Master Plan for technical and vocational education (TVE) development in Nigeria in the 21st century with the Blue Print for Decade (2001-2010). Programme supervision is widely recognized as an important strategy adopted to ensure that its objectives and outcomes are strictly monitored so as to achieve its goals and objectives as were planned (Acheson & Gall, 1997).

With the growing awareness by both the Nigerian government and individuals aimed at producing a blueprint for revamping and re-positioning technical and vocation education (TVE) in our country, quality of vocational education supervision becomes inevitable (Obasanjo, serious effort was made some 44 years ago when a Federal Advisory Committee on technical education and industrial training, with Dr. Skapski as chairman, was set up and charged with the responsibility of charting a course for technical/vocational education. What was lacking in that effort at that time, according to him, was planned and systematic supervision and implementation of the recommendations of the committee’s report, titled “A National Plan for vocational education in the Federal Republic of Nigeria”.

It becomes logical, therefore, that apart from providing good working conditions for workers in vocational education unit, quality supervision aimed at strengthening the level is appropriate to make attainment of goals and objectives of vocational education realizable.

Statement of Problem

The quality of supervision on vocational education still remains a mirage because of non-recognition of good working condition as a factor for enhancing the achievement of effective teacher and students’ performance. A literature search reveals that quiet a little has been done to investigate the extent to which quality teaching and learning execution and supervision in vocational education to facilitate effective implementation of its policies and programmes. Negative outcome is still being recorded in the programme implementation of vocational education. This is substantiating by the fact that the Senior School Certificate Examination (SSCE) and National Examinations Council (NECO) results are not encouraging. The number of students who gain admission into higher institutions to read business and technical related

courses point to the fact that not much has been done to sensitize people and programme on the vocational education offerings.

Supervisory personnel in the Ministry of Education are not carrying out their functions effectively. Some opinions attribute blame on this, to lack of well drawn out plan of action on monitoring and failure to execute quality supervisions. Despite the federal government declaration of 2000–2010 as “the decade for technical and vocational education in Nigeria”, not much impact has been felt in terms of policy implementation (National Master-plan for Technical and Vocational Education, 2000). There is also an assumption that poor quality supervision of the programme is caused by lack of conducive teaching and learning working conditions. This has had a negative effect on the programme in the institutions. The inefficient implementation of the vocational education programmes is also blamed on lack of quality supervision and appraisal of the programme. There is also the lack of research evidence to indicate the influence of working conditions on the quality of supervision and administration personnel in vocational education that constituted the focal point of the problem for this investigation.

Purpose of the Study

The purpose of the study was to ascertain the influence of supervision on working and learning conditions on the quality of vocational education. Specifically, the study was designed to meet the following objectives:

1. Ascertain teaching and learning conditions in vocational education
2. Examine the contributions and expectation of supervision to vocational education programmes.
3. Determine the expectations of vocational Education.
4. Ascertain the extent to which working conditions influence quality of supervision in vocational education.

Significance of the Study

The findings of this study may be significant as it would give insight on the importance of good working and learning conditions on quality of vocational education Supervision.

The findings may create awareness in the Ministry Education Officers and planners on the need to equip its supervisory personnel properly for improved performance in vocational education administration and effective implementation of programme.

The findings of the study may provide appropriate authorities information for vocational education seminar/workshop organization and participations.

It is hoped that the findings of this study will generate other related problems for further investigation.

2. Teaching and Learning in Vocational Education

Efficient working condition is essential for increased productivity of personnel in any establishment (Oyesola, 2000). According to this course, teachers and students who are exposed to dissatisfying and shabby treatments perform poorly on their job and exams respectively. The physical working condition has a high correlation with vocational education teaching and

learning performance. Research by Edem (2000) revealed that a pleasant and attractive environment forms part of the resource power, which manifest in performances. This confirms Oludare's (2006) assertion that workers require sufficient classrooms and laboratories, adequate curriculum resources, computers, audio visual aids, constant electricity, tables, chairs, desks, to be able to function effectively. Availability of these educational inputs determines, to a large extent, the quality of productivity of personnel as well as students' educational outcomes.

Research evidence indicates that working conditions and job performance are inseparable (NUT, 1999 and Inyang, 2002). Onwuakpa (1998) stressed that the failure to provide enough materials and fund to vocational education executions has greatly hampered the growth and expansion of the programme. Participants in the vocational education are not sufficiently equipped for high productivity results. Studies also reveal that individuals tend to work well when they are happy within their work environment. Ngu (1990) emphasized that the physical facilities in which the person works must be both comfortable and secure, the people with whom he works should be friendly and capable of creating good atmosphere for interaction among them. The machines, tools and equipment with which he performs his duty must be safe for his use.

A descriptive survey of working conditions of vocational education programme showed that no good welfare scheme is provided. Workers and students enter into the programme and leave without a well defined welfare package such as health services scheme, contingency and relief packages, rent subsidy, wardrobe allowance, fringe benefits and the likes which could give them incentive to increase their productivity (Inyang, 2002). They really need to be motivated.

Writing on motivational variables and workers' performance, Rao and Rao (1997) reiterated, promotion is another means of motivating an employee for higher performance. Personnel in the vocational education are not promoted as at when due. Rao and Rao further added, promotion puts new life into the individual and activates his knowledge, skill and attitude, while the worker strives harder to be effective in his job, students also strive to advance in their skill acquisition method.

Apart from good working conditions, individuals have inner needs that they are driven, pressured or motivated to reduce or fulfil. For example, they need security, achievement, recognition and self-fulfilment. According to McClelland (1988), these needs could be actualized through payment of good salary, bonus, workman's compensation, and retirement benefits like gratuity, pension and other welfare services. But the reverse has been the case for personnel in vocational education because most of the highly trained are not placed on their rightful positions. This has culminated into brain drain which has now become a national issue.

Examining the Contributions and Expectations of Vocational Education Supervisions

The contributions of vocational education in sustaining the complex structure of modern civilization and economic progress and the needs of individuals within the society have been widely acclaimed by many writers. Zahraddeen, Aliyu, Kurya and Kurfi (2006) noted that vocational/technical education is the core of both the individual's and the society's economy. They explained that through acquisition of skills, individuals could explore his environment and harness the resources within it, which could serve him and the society. Osuala (2004) reiterated

that vocational education prepares individuals for gainful employment as semi-skilled workers or technicians or sub-professionals in recognized occupations and in new emerging programmes. Osuala further stressed, vocational education enables individuals to develop, skills, knowledge and attitude needed for success in a specific occupation. This is in line with Osisioma's (1995) assertion that vocational education helps to upgrade skills of individuals within the society and his leads to acquisition of better career opportunities. According to Osisioma the course offerings in vocational education help to improve methods and approaches in order to prepare students not only with current necessary skills, but also prepares them for new occupations. It serves as a means of national defence against poverty factored by lack of jobs skills and underdevelopment. This is in agreement with Olaitan in Obijole (2006), who stated that vocational education provides occupational and career orientation al exploration of job opportunities and requirements in business. It prepares students for entry into advancement in job within business and prepares them to handle their own business affairs and functions intelligently as consumers and citizens in a business economy.

Writing on policies, programmes and action plan for a decade of Technical and Vocational Education in Nigeria, Okebukola (2000) stressed, vocational/Technical Education is an area of high impact globalization. The economic and technical technology dimensions of globalization are driven largely by vocational/technical education. To Okebukola, it is one of the pillars of economic enterprise of nations. Also, without vocational education, the Information and Communication Technology (ICT) hub around which globalization is built cannot be easily sustained.

Vocational education inculcates entrepreneurial skills in students which result in the establishment of small and medium enterprises. It contributes to the achievement of society's goal of greater democratization, social, cultural and economic development while at the same time developing the potential of individuals for active participation in the establishment and implementation of these goals (Osuala, 2004). In agreement with Osuala (2004) and Maher (1992) "Technical and vocational skills empower young people and adults to play active roles in a development paradigm that seeks to narrow economic and gender disparities while reserving the integrity of the environment... it is no exaggeration to say that in the future the backbone of robust social and economic development in a nation will be the technical professionals". Indeed, vocational education holds the key to poverty alleviation as it is the only education that addresses the occupational needs of all (Adeniran, 2000).

Commenting on the contributions of vocational education, Aina (2000) asserted that it improves the quality of life by permitting the individual to expand his intellectual horizons and acquires constantly improved professional skills and knowledge while allowing society to utilize that fruits of economic and technological change for the general welfare. It permits the harmonious development of personality and character and fosters the spiritual, human values, the capacity of understanding, judgment, critical thinking and self-expression. Aina further added that individuals are prepared continuously by developing the necessary mental tools, practical skills and attitudes. It develops individuals' capacities for decision making and the qualities necessary for active and intelligent participation, teamwork and leadership at work and

in the community as a whole. According to Zahraddeen, Aliyu, Kurya and Kurfi (2006), vocational education is interested in good leadership. According to them, anybody who distinguishes himself or herself in an acclaimed field of endeavour in the society is looked upon as a hero or potential leader. The same is true of any nation; that could develop effectively her vocational and technical education and harness it would develop fast in wealth and power and will be recognized as a leader among nations.

However, the expectations of vocational education are varied. It is aimed at producing skilled workers not only with high level of technical education proficiency but with general copies skills that will enable individuals meet the ever changing complex demands emerging from modern technologically growing socio-economic environment. The 21st century advocacy demands that the policies of vocational education should address the employment and other socio-economic challenges such as social security currently being perpetuated by unemployable youths that tend to heighten by day (Lewis, 1997).

On the expectation of vocational education, Oduyemi (2000) stressed that vocational education should produce skilled and proficient workforce that must function at the growing edge (state of art) of technology in their various vocation and must also live as effective, self-realizing and self-fulfilling citizens of Nigeria concerned with quality and beauty in the performance as well as the common good of all in the society. Basically, vocational education was intended to stimulate interest and curiosity in technical things, the use of tools and materials. It was to provide training on safe work habits and manipulation machines for different production processes. It was to provide skills for employment and retraining for continuous professional development (Mbaba & Eko, 2007).

Stressing on the expectation of vocational education, Bartel (1976) IN *Journal of Research and Development in Education* (2007 Vol. 3, No. 2 "vocational education curricula are specially planned and designed to prepare individuals to enter into selected jobs, positions and occupations; as well as to provide upgrading skills for those who are already employed in the selected occupations" (p.30). It is not only concerned with manual skills involved in an occupation, but also with developing all competencies needed to function, effectively in employment, including the cognitive, psycho-motive and affective skills in that particular occupation.

According to Undie and Udida (2006), if properly organized, vocational education should encourage and promote upward mobility, and that vocational education is not a terminal education, a good vocational education programme should not only equip the grandaunts for the job market but should also enable them to use the skills and knowledge in the solution of their daily problems wherever they find themselves Lewis, 1997). To Lewis, it should constitute education for living and education for job.

In recent years, there has been considerable investment by the World Bank, in particular, to support educational system to collect standardized measures of achievement (Sigurdsson and Schweitzer, 1994:6). Thus, it would seem reasonable to expect that the capacity of developing countries, like Nigeria, to monitor and supervise the development of their educational systems would have improved greatly. Yet, this is not the case, especially, in vocational education field.

Very little or no progress has been made in the establishment of sustainable administration and supervision capacity, in part due to weak investment designs by the Nigerian government.

According to Zepeda (2003), supervision is concerned with process of monitoring educational programme from the formative stage in order to see that objectives and goals of the programme are successfully implemented as were planned, also finding ways of correcting imbalances in the system. Supervision is, therefore, necessary not only for the realization of the project's goals and objectives but for its capacity to develop and sustain continuous improvement in the programmes of vocational education. Supervision would help provide feedback from a wide range of supervisors to vocational education policy makers so as to assist them in ascertaining the level of implementation of the planned programmes. Esu, Enuoko and Umoren (2006) recommended a more comprehensive supervision of programme covering the input, process and output variables of vocational education. This includes curriculum evaluation which involves a systematic and scientific approach aimed at generation and maintenance of data used for assessing the strength and weaknesses of the curriculum.

However, the supervision of teaching and learning in vocational education as presently practiced cannot be said to have achieved success due to many fundamental problems which include inadequacy of trained vocational education supervisors. The supervisory criteria are not followed strictly and streamlined by the stakeholders, lack of sufficient resources to enhance movement and the jobs of the supervisors. Lack of adequate planning and monitoring at the national level, absence of professional orientation of the supervisors, some complex tasks faced by supervisors in the field and insufficient training materials and teaching aids are fast becoming pedagogically unmanageable and unavailable.

According to the National Master Plan for Technical and Vocational Education (TVE) Development in Nigeria in the 21st century (2000), vocational education administration comes under a wide spectrum of various authorities and interest groups which include:

- Ministries of Education both (Federal and State)
- Other relevant Ministries, Labour and Productivity
- Ministry of Commerce, Mines and Power, etc.
- Stakeholders - Professional bodies, Labour Unions, Non-governmental Organizations (NGOs) Parents and Tax Payers.
- Specialized agencies:
 - National Business and Technical Education (NBTE)
 - National Universities Commission (NUC)
 - National Education, Research and Development Council (NERDC)
 - West African Examination Council (WAEC)
 - National Examinations Council (NECO)
 - National Commission for Colleges of Education (NCCE)

These various bodies have not impacted sufficient on supervision of teaching and learning of vocational education programmes. Kellick (1995) has suggested that participatory supervision approach involving community members at school and village level would bring about fruitful result on both teachers and students.

Conditions and Quality of Supervision in Vocational Education

Researchers conducted on working conditions and work performance suggested that good working conditions are instrumental to high performance level. This can be associated to both teachers and students. Herzberg as cited by Ofuoko, Uloko and Ajobo (2008) has identified “the two factors theory” which are individual’s abilities and individual’s understanding of the content of the job, the latter, which is regarded as the “role perception”. An individual in work environment is willing to undertake a task which he feels he can perform, more so where the job is associated with some incentives. Consideration is also given to physical working and learning environmental conditions which, Herzberg regarded as “hygiene factor”. According to Him. These include poor pay, lack of job security and interpersonal relations (experiences or factor that dissatisfy workers). Those job experience which produce positive attitudes from the workers are psychological needs and these he regarded as the content of the job.

Oloruntoba and Ajayi (2003) indicated that good working conditions are the key factors that dictate man’s attitude to work and good salary is the most significant element. Consequently, quality of supervision of vocational education has been greatly influenced by working conditions. Supervision in the vocational education would have been carried out through development of curriculum, organization of instructional package, staffing, provision of materials, rendering of special services that would have enhance successful implementation of programmes, developing public relations and evaluating programmes outcomes against targets and plans (Olaitan, 1987).

Studies have revealed that very little has been done in the field of supervision and monitoring of vocational education programmes to ensure its proper implementation (Admed, 1991; Glanz, 2000). To them, quality supervision of vocational education seems to be debilitated due to dissatisfaction experienced by supervisors in the course of doing their work. This is demonstrated in many ways including non-payment of transport allowance, delay in promotion, irregular payment, lack of conducive physical working environment (McClelland, 1988; Etudor-Eyo & Etor, 2009).

According to Rao and Rao (1997) good working conditions constitute a means of motivating employees for higher productivity. It is often noticed that when workers are exposed to favourable working conditions, they feel satisfied and encouraged to put in more effort in performing their jobs efficiently. For as Rao put I, working conditions may include bonus, good housing policy, medical services, canteen services, educational facilities, recreation facilities, good remuneration, retirement benefits like gratuity, pension, workman’s compensation and co-operative credit. Once any of these conditions is lacking, employees are most likely to be dissatisfied and express same, they concluded. Van den Ban and Hawks (1999) and Gregson and Liversey (1986), confirmed that this is why the desired objectives of vocational education supervision has not been realized. Writing on working conditions and workers’ performance, Ekpo (1991) and NUT (1999) revealed that a pleasant and attractive working condition forms part of the worker’s resource power, which manifests in his personal power. Also contributing, Oyesola (2000) lamented that workers who are exposed to be satisfy shabby treatment perform their job poorly. This explains why supervision of vocational

education is grappling at the formative stage. Studies confirmed that vocational education supervision has suffered a setback and this has conversely affected its effective implementation (Olaitan, 1987; Osuala, 2004). This goes to confirm that there is strong correlation between working conditions and quality of vocational education supervision.

Conclusion

On the basis of these findings, conclusions were drawn that there is strong correlation between supervisions and teaching/learning conditions of vocational education programme. Favourable working and learning conditions lead to increased job and learning practices while unfavourable conditions affect negatively. Institutional conditions whether favourable or not influence the productivity of teacher and performance of students. Poor working conditions of supervisory personnel have greatly hampered effective implementation of vocational education programmes.

Recommendations

Based on the study findings and conclusions, the following recommendations are offered:

1. Educational policy planners should provide adequate funds and conducive teaching and learning environment for programmes implementations.
2. Those involved in the supervision of vocational education should be given well drawn out plan of action and time frame to guide them in performing their job as postulated by Acheson and Gall, (1997).
3. Ministry of Education should adequately monitor and supervise the progress of implementation of supervision of vocational education programme. This is in line with Aina, 2000.
4. Policy planners' on vocational education should find out problems arising from the supervisory practices and employ strategies to solve them (Akpan, 2003).

Educational Implications of the Work

Given the fact that quality supervision is not effectively carried out in the teaching and learning of vocational education due to poor working conditions, a lot of negative outcomes are bound to occur in this area. Firstly, teachers will not be able to impart required knowledge to the students since they are not properly supervised. The quality of education given to students would be sub-standard and this would make them irrelevant and non-functional in the world of work and demanded in this era of technological advancement and socio-economic environment. Furthermore, inadequate supervision of vocational education programmes will not make for effective implementation.

Another important implication of this work is the findings that the millennium development goal of Nigeria becoming technological developed and internationally relevant in the world of work global environment by the year 2020 will not be realized. Aina, 2000 attested to this fact.

References

- Acheson, K. A., & Gall, M. D. (1997). *Techniques in the Clinical Supervision of Teachers* (4th Ed.). New York and London: White Plains.
- Adeniran, T. (2000). A new understanding for a new commitment to technical and vocational in Nigeria: Vision and Action. A paper presented at special seminar on Technical/Vocational Education, held on 31st October – 2nd November, Abuja.
- Ahmed, P. (1997). Andhra Pradesh Monitoring and Evaluation Design Proposal for the government of Andhra Pradesh and the overseas Development Administration, Report.
- Aina, O. (2000). Nigerian Technical and Vocational Education in the near future (Keynote address). Federal Ministry of Education, Abuja.
- Akpan, P. L. (2003). Theories and Practice in Educational Administration, Uyo Association of Education Administration and Planning (NAEAP) held at the University of Port Harcourt.
- Ekpo, T. N. (1991). Non-Governmental Sources of Funding University Education. *Journal of Higher Education*, 1(2), 44-50.
- Esu, A. E. O., Enuoko, O. I., & Umoren, G. U. (2006). Curriculum Development in Nigeria for Colleges and Universities, Calabar Media mark Associates.
- Etudor-Eyo, E. U., & Etor, C. R. (2009). School Characteristics and Job Satisfaction among secondary school teacher staff in Akwa Ibom State, Nigeria. *International Journal of Research in Education*, 1(2).
- Federal Ministry of Education (2000). The National Master-plan for Technical and Vocational Education (TVE) Development in Nigeria in the 21st century with the blue-print for Decade 2001-2010, Abuja.
- Gergson, S., & Liversey, F. (1986). *Management and Organization*. London: ELBS/Heinemann.
- Herzberg, F.W. (1959). *The Motivation of Work*. New York: John Willey.
- Inyang, E. E. (2002). Salaries and Fringe Benefits in Civil and Public Service. Uyo: Government House Publication. *Journal of Social and Policy Issues*, 6(2) (2005) Uyo. International Research and Development Institute.
- Kellicks, T. (1995). IMF Programmes in Developing Countries: Design and Impact. London: Routedledge.
- Lewis, T. R. (1997). Towards Liberal Vocational Education. *Journal of Philosophy of Education*, 31(3), 447-489.
- Maher, T. R. (1992). *Level of Satisfaction with Pay Personnel Psychology*. New York: Little Fox Publishing.
- Mbaba, U. G., & Eko, M. J. (2007). Management of Vocational Instruction: A Panacea for Quality Assurance of Vocational Education in Nigeria. *Journal of Research and Development in Education*, 3(2), 104-108.
- McClelland, D. C. (1988). *Human Motivation*. Cambridge: University Press.
- National Union of Teachers (1999). *Study Circle Material*. Abeokuta. NUT Print House
- Obasanjo, O. M. A. (1999). An address at the opening of the National Seminar on Technical and Vocational Education in Nigeria, Abuja, Federal Ministry of Education pp. 11-116.

- Obijole, E. F. (2006). Entrepreneurship Education and the Sustenance of Democracy in Nigeria, Business Education to the Rescue. A paper presented at the 1st National Conference of Colleges of Education Academic Staff Union. Federal College of Education, Abeokuta.
- Oduyemi, O. (2000). Meeting the challenges of the 21st Century in Technical and Vocational Education. Presented at a National Seminar on Technical and Vocational Education in Nigeria, Abuja, November.
- Ofuoko, A. U., Uloko, J. A., & Ajobo, R. T. (2009). Motivational Factors and Job satisfaction in Delta State Agricultural Development Programme in Nigeria. *Journal of Social and Policy Issues*, 6(1).
- Okebukola, P. (2000). Policies, Programmes and Action Plan for a Decade of Technical and Vocational Education in Nigeria, presented at the National Seminar on Technical and vocational education in Nigeria. Abuja, November.
- Olaitan, S. O. (1987). Supervision and Inspection of Vocational Education Technical Education. A paper Presented at the National Workshop on Supervisory and Inspectorate Services on the 6-3-3-4 System of education at University of Ilorin, 13th - 16th January, 1987.
- Olaitan, S. O. (1994). Essential consideration for an effective e technical education development in Nigeria, Nigerian Vocational Association publications, Nsukka.
- Oludare, O. T., Abiodun, O. S., & Ajayi, B. A. (2006). The Status of Resources in Secondary Science Teaching and learning in Lagos State, presented at STAN 4th Annual Conference, Calabar, August 14-20.
- Onwuakpa, F. W. (1998). A descriptive survey study of resources concentration in Imo State Secondary Schools. *Journal of Science Teachers Association of Nigerian*, 36, 57-58.
- Osioma, B. C. (1995). Training Professional Accountants; which way. A paper presented at the 1995 National Conference of the Association of National Conference of the Association of National Accountants of Nigeria. (ANAN), Jos.
- Osuala, E. C. (2004). *Foundations of Vocational Education*. Enugu: Cheston Books.
- Oyesola, G. O. (2000). Physical Facilities and Productivity in Education. In F.O. Fagbamije & O.D. Durosaro (Eds.)
- Rao, P. S., & Rao, V. S. P. (1997). *Personal Human Resources Management. Text Cases and Games*. Delhi: Komark
- Sigurdsson, S., & Schweitzer, E. (1994). The use of sectoral and project performance indicators in bank-financed education operations: a first edition note. Education and Social Policy Department: World Bank, Washington, D.C.
- Van den Ban, A. W., & Hawkins, H. S. (1999). *Agricultural Extension*. London: Blackwell Science.
- Zahraddeen, U.A., Aliyu, M. M., Kurya, U. L., & Kurfi, A. K. (2006). *Entrepreneurship Education for Vocational and Technical Students* (2nd Ed.) Kano: Benchmark Publishers.
- Zepeda, S. J. (2003). *Instructional Supervision: Applying Tools and Concepts*. New York: Larchmont.
-