Repositioning Administrative and Supervisory Functions in Vocational Technical Education for Functionality: The E-Activity Approach

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Abstract *The world all over is of the opinion that quality and functional education are pre-requisite for the attainment of a country's development economically and technologically. Monumental studies and achieve- ments in various spheres of life by developed and developing Nations of the world are often attributed to products of high standards of education. The efficacy and efficiency of educational system lies in its ability to deliver quality education in cost-effective ways. For such educational system to stand tall in attaining these goals, re-invigorated or repositioned administrative and supervisory functions in all our educational systems in general and vocational technical education in particular must be put in place. e-activity with all of its components have the potentials of bringing these experiences to bare in vocational technical education. This paper therefore reflects on e-activity and its ability to reposition administrative and supervisory functions. It conceptually looks at administration; supervision and functionality of vocational technical education and the potentials of e-activity, its impact on education, challenges and limitations.*

Introduction

Education has long been identified as one of the most crucial allies of development. This view is supported by FRN (2004) where it stated that "no nation can rise above the quality of its education system". Education in human societies has come a long way, from its dependency on environment through its labour and craft orientation, its stage of serving as a personal embellishment and then today, from serving as a means of fostering socio-economic development to have become synonymous with growth and economic development.

Vocational Technical Education (VTE) which is seen by many as an essential educational system going by its great and intimidating qualities and potentials should be properly and adequately administered and supervised if its goals and objectives are to be attained. Also, for VTE to be functional, all processes that are involved must be strengthened, adequately and properly packaged, efficiently and effectively delivered. In order to achieve the foregoing, a purposeful and focus, based Administration and Supervision is imperative. VTE with the following potentials, namely:

-     Acquisition of skills of work;
-     Development of work attitudes;
-     Acquisition of knowledge relating to occupations of economic and social values; and
-     Development of work behaviour din its four domains, cognitive, affective psycho and perceptual

    (Usoro and Edu, 2003)

E-Activity Concepts

For the purpose of this paper, e-activity is viewed as having three (3) mutually inclusive components namely: Information Communication Technology (ICT), Computer Assisted Instruction and e-learning.

ICT is a computer based tools used by people to work on information and communication processing needs of an organization. Basically, it encompasses the computer hardware and software, the network and several other devices (video, audio, photography, camera etc) that convert information (text) images, sounds, motion into digital forms. It is an application of the combination of computing, communication, telecommunication and satellite technology. ICT when appropriately applied has the potential tools for enriching traditional means of teaching, learning and conducting research. According to Lopez (2003) ICT have provided innovative opportunities for teaching and learning experiences. ICT can be used to improve the quality of teaching and learning in any academic environment. Supporting this view, Yusuf (2005), it is widely accepted that ICT can be used to improve the quality of teaching and learning in any tertiary institution. Furthermore, he stated that ICT can make the school more effective and productive, thereby engendering a variety of tools to enhance and facilitate teachers professional activities. From the foregoing, ICT can be viewed as a tool that can enhance teaching and learning through it's dynamic, interactive and engaging content and can provide real opportunities for individualized instruction and has the potential to accelerate, enrich and deepen skills, motivate and engaging students in learning; relate school activities to work practice, help to create economic viability for tomorrows workers; contributes to radical changes in schools, strengthens teaching and provides opportunities for connection between the school and the world,.

On the other hand, Computer Assisted Instruction (CAI) is a programme of instructional materials presented by means of a computer or computer systems. Batey (1985) in his research stated that CAI is the use of computer in educational settings and most often refers to drill and practice tutorials, or simulate activities offered either by themselves or as a supplement to traditional, teacher directed instruction. He also stated that as a supplement to traditional teacher-directed instruction produces achievement effects superior to those obtained with traditional instruction alone.

Furthermore, Batey (1986), Kulik and Kulik (1987) and Rupel (1986) came out with the fact that CAI enhances learning rate. Student's learning rate is faster with CAI that with the conventional instruction and that this learning rate is accompanied with high retention.

Thus, the potential use of computer based technology in the classroom is immense and shows the range of computer use as a tool for learning and as tool employed by teachers. The use of CAI in education provides student with both skills of using the available CAI, and provides another medium by which they might make sense of the information with which they are presented.

E-learning is the facilitation of human learning through the web (internet and intranet) with the use of digital technologies by creating on-line and off-line experiences. It provides the framework of its applications in the education settings synchronously and asynchronously. According to Abimbade (2005), e-learning occurs through internet or intranet using some instructional delivery systems. The system will use a platform web browser such as: Microsoft internet explorer or Netscape navigator.

To access the viability of e-learning, consider management support, cost-effectiveness, target audience, acceptability of a web-based programme. Again, one can ask the following questions: Will e-learning provide a method of instruction that is easier, faster, cheaper, safer, or more engaging than other delivery systems? Answers to these questions will lead to the advantages/potentials of e-learning as enumerated by Abimbade (2005) as follows:

-      Flexibility, accessibility, convenience to the learner;
-      Learning at once space and own place;
-      Access the content at any time;
-      Cross-platform – sourcing from other platform

- Web-browser software and internet connections are widely available
- In-expensive global delivery and distribution of e-learning material which is accessible from any part of the world;
- Updating is easy, courses can be delivered from anywhere of the global; and
- Promotes ICT's in education and training.

Reflections on the foregoing, shows that e-activity has the capability and potentials to reposition any aspect of our educational system for greater productivity including administration and supervision.

Administration of VTE Concepts

Generally, Administration is the co-ordination of human and material towards the attainment of predetermined goals and objectives Akpan (2001) saw administration as the of persons and material resources for effective and functional teaching and learning. According to her, Vocational Technical Education Administration is a service through which the fundamental objectives of VTE system can be more fully and efficiently realized. VTE Administration involves: planning, organizing, directing, co-ordinating and controlling human and material resources to attain it's goals and objectives.

In the light of the above; the following, outlined the tasks of a VTE Administrator:
The VTE Administrator:
- Adopts a management style,
- Develops an organizational structure,
- Plans and executes an overall strategy for the content and delivery of instruction,
- Plans for and controls the fiscal resources necessary to pay for the VTE programme,
- Plans for and controls the personal resources necessary to staff the various VTE programmes
- Plans for and controls the auxiliary services necessary to operate the VTE programme
- Develops and executes a system for attending to student services
- Plans, constructs and maintains the buildings necessary to conduct the VTE programmes,
- Maintains liaison with public, private groups and individuals to whom the VTE is accountable.
- Provides for the evaluation of both the administrative structure and most crucial, the VTE programme through research.
- Participates in cooperation with the governing body, in overall policy formulation,
- Develops a system of internal and external communication. (Akpan, 1994).

Repositioning VTE for functionality connotes strengthening these tasks and their effective application for attainment of VTE objectives

Supervision of VTE Concepts

VTE supervision is that phase of school administration which focuses primarily on the achievement of appropriate instructional expectations of the school system (Akpan, 2001). This definition when critically examined has three (3) major components, namely;
- That supervision is a phase of administration.
- That supervision is concerned with the appropriateness of instruction expectations
- That supervision is that phase of administration which has pertinence for the expectations (products) of educational system.

Supporting the above,Usoro and Edu(2006) saw supervision as one of the basic requirement in administration that focuses on the tactics of efficient and proper management. Thus, it can be said that supervision is the "nerves system" of an organization. Also, Akpan, Usoro. and Usoro (2010) supporting the

above view perceived supervision as very important to management practices in the daily operations of industrial organizations through routine direction and control of employees activities. The measure of effectiveness and efficiency of an organization is determined by how effectively and efficiently the supervisors perform the basic role of motivating the employees to increase their productivity.

In Vocational Technical Education (VTE), creating an environment for optimal productivity requires that the right skills, equipment, materials, appropriate and adequate instruction and effective teaching methods for delivery to students. The task of achieving these lies with the supervisors.

To achieve the above tasks, the need for better supervisory style(s) comes into play.

Akpan, Usoro and Usoro (2010) enumerate many supervisory leadership style theories most conducive to promoting effective work group; as

- Initiative structure theory
- Life-cycle theory
- Contingency theory of leadership
- Paths-goal theory
- Situational leadership theory
- The development approach theory
- Positive management theory,; and
- Quality approach theory

Due to space, these theories could not be discussed or explain individually, but suffice to state here that generally, they are conceptual propositions which could predict, explain, and guide effective supervisory behaviour and hence effective supervision in VTE.

Functionality Concepts

Hornby (2000) noted that in architecture, functional architecture is said to be designed to serve practical purpose, beauty of appearance beings secondary. According to him, if a building is aesthetically designed but uninhabitable, it is not a functional building. In line with this, Uzuagulu (2004) explained that functionality has to do with effectiveness, efficiency and workability of something or organization. According to him, a functional education system must be effective in achieving its set goals. It follows from the above explanations, that if a system to achieve its set goals or purpose, then it is not effective and cannot be referred to also a functional system, Onyeukwu, Abassah, Hart (2010). Again, as observed by Asogwa (2004), functionality of a system is the practicability and usefulness of that system being very suitable for the purpose it was set to achieve from the foregoing and looking at the goals and objectives of VTE as stated in section 15 by FRN (2004), can we say that VTE is functional in Nigeria?

Dividends of E-Activity

With adequate and effective administration and supervision which can come through e-activities when properly applied, Vocational Technical Education (VTE) will be functional and hence its visible results and goals shall be felt and its impact on the economy shall be seen and measured.

Dividends of e-activities as outlined by Prasad (1997) has the potentials of reposition administrative and supervisory functions/tasks for functional VTE. These dividends includes:

- More educational, information and technology access;
- Learning from other;
- Partnership from enrichment
- Competitive environment
- Globalization of materials and resources

Impact of E-Activity on Education

The phenomenon of globalization is considered as the most widespread trends in many countries. It has brought about the worldwide integrations of economic and financial sectors. In the context of changing world, the central role played by education to favour social and professional integration appears to be largely reinforced. Thus the aspirations objective of UNESCO and the world body of United Nations Organization are being propelled by the globalization on education.

Challenges of E-Activity in Nigeria

Web-technology based programmes like e-learning was developed by the developed economy whose infrastructures and facilities are adequate for effective and efficient accessing these programmes from the web. A developing economy like Nigeria whose infrastructure and facilities are in a dilapidated state due to bad government have challenges in accessing the web-technological –based programmes for e-activities. The following serve as challenges for e-learning in Nigeria:

- **Infrastructural Deficiencies**: Many developing countries like Nigeria do not have adequate infrastructures and facilities for e-learning etc. They do not manufacture hardware and software needed for information technology services. In some countries there is still problem of steady power supply.

- **Global Educational Vision versus Market Vision**: For globalization to promote even development, there must be a balance view of educational vision and market forecast. This is concern with the exploiting the market demand of developing countries by developed economies for profit making. This profit making drive of collaborative arrangements may distort the priorities of education and would not promote effective partnership arrangement.

- **E-activity versus Localization of learning**: Developing relevant curriculum for international context is a difficult task. More difficult getting the educational materials develop in a particular context to suit different cultural millien.

Limitations of E-Activity

Despite the laudable potentials and advantages, e-activities have some limitations.

Bandwidth Limitations

Limited bandwidth means slower performance for sound, video and intensive graphics, causing long waits for downloads that can affect the ease of learning process.

- Static e-activities must be replaced by dynamic programmes, which takes more time and money to develop.
- Not all courses are delivered well by e-activity based instructional programmes.
- Most of our teachers are ICTs illiterate.

Not withstanding the above limitations, e-activity has come to stay. What Nigeria needs to do as developing country is to key into mass infrastructural and facility development. Our educational system from primary to tertiary should ICTs compliance. Development of both teaching and non-teaching should be a continuous e-activity so as to benefit fully in e-activity based programmes. Vocational technical education should be on first live because of its potentials to national development.

Conclusion

E-activity has come to stay and it would continue to affect structure and content of the education system. As the world march towards globalization so will the application of ICTs and hence e-activity continue to affect education delivery at all levels. Administrative and supervisory functions in VTE shall witness a boost when properly packaged CAI materials are effectively and efficiently delivered. This will in turn rob on the functionality of VTE system and hence position Nigeria as an emerging economic power house in sub-Sahara Africa.

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