

STRATEGIES FOR BRIDGING THE GAP BETWEEN TEACHING AND RESEARCH IN OFFICE TECHNOLOGY AND MANAGEMENT

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Abstract

This study espoused the opinion that, teaching and research play complementary roles to each other in the sense that institutions that have heavily invested in research are investing in programs to reward teaching and conversely those heavily invested in teaching are developing an infrastructure for research. This paper discussed the concept of teaching, meaning of research, office technology and management, goals of office technology and management, the relationship between teaching and research and problems of research in Office Technology and Management were also outlined. However, the study concluded that teaching and research are not the same but each is complementary to the other, they both help in empowering the taught and in discovering new trends in technology for a reflective Nigerian society and in producing an up-to-date office managers. The paper recommends that business educators must be encouraged to embark on researches in their areas of profession.

Teaching and research have been explored by different authors or writers in different perspectives to buttress the interconnection that exists between them. The academia has survived so far because of the efforts academics have put into their diverse professions to cope with the reforms and changes that have ravaged the academics positively and negatively. These wouldn't have been achieved if teachers have not taught or given reasons to their students to discover ways of curbing for example, the incessant challenges especially in academics which range from technological advancements that have resulted in transforming the curriculum of various institutions and professions, to enlightenment on how things should be done to meet up with other challenges in life. Aarveaara and Dobson (2013) suggest that, the *raison d'être* (most important reasons for existence) of universities are teaching and research. However, the relative importance of each is sometimes in dispute. As noted by Fox in Aarveaara and Dobson (2013), the notion of combining research and teaching is rooted firmly in academic ideology and institutionalized in academic practices and indeed, in the daily lives of academic staff have been regarded as joint activities. They described another view that research and teaching (and, therefore, the preference for each, and time spent on each) are segmented and competitive, research and teaching have conflicting roles with different expectations and obligations.

Teaching and research are two vital academic activities that cannot be overlooked as they are complementary to each other. Teaching cannot thrive in the absence of research and research cannot be meaningful and useful if it is not aimed at solving a problem, educating someone and generating new knowledge. Hattie and Marsh (2004) observed that time on research is related to articles published, doctoral theses supervised, and citations. Time on teaching, however, is not related to quality of teaching. They said, those who spend more time on research do have higher research outcomes, but those who spend more time on teaching do not necessarily have higher teacher effectiveness. Hattie and Marsh (1996) also observed that good researchers are only a little more likely to be better prepared as teachers and have better teaching competencies than non-researchers. They added therefore that, good researchers are generally good teachers and the link between teaching and research is obvious.

In addition, Norbis, Arrey-Wastavino and De Leon suggested that, if there is recognition that teaching is as important as research, then it seems appropriate that institutions and individuals engaged in teaching should be able to accumulate the same level of prestige as it is gained with research activities.

The whole idea of O.T.M. came about as a result of secretarial studies; the impact of office technology has revolutionized the procedures of the 21st century office, it has to do with skills development, knowledge and abilities required by the intending office manager in order to function effectively in the modern office environment.

The Concepts of Teaching

Teaching is a way of impacting knowledge, teaching helps in the all-round development of a student, it is the process of facilitating, guiding, and generally coordinating through the provision of appropriate or good learners so that they will be able to achieve meaningful goals. It is the deliberate and systematic creation and control of those conditions in which learning does not occur. Teaching is the work of a teacher, the ideas of a particular person or group, especially about politics, religion or society, that are taught to other people. Ekpenyong (1990), opined that teaching has been conceptualised in a number of ways, namely as communication, as praxis, and as an art.

In essence, teaching can be seen as all the activities a teacher who has more experience or who is more mature engages in, to impart knowledge to an inexperienced or less mature person with the aim of changing his/her behavior in the positive direction. Eitel (2009) suggests that teaching is an abstract art. He says as a teacher, one must enter the mind of one's student with the intent to engage. A teacher must engage ones student in the process of absorbing, understanding, applying, and then retaining new knowledge.

Teaching Methods

Having been exposed to various definitions of teaching, what then is methods? A method may be defined as an overall plan for the orderly presentation of content or learning material. (Fwamwang, Oyetunde, Awotunde, Wuyep, and Ango,1996). They said a method is driven by a philosophy or an assumption about how children learn. In their suggestions, they opined that, a method of teaching must be consistent with the teachers understanding of the nature of the topic of the lesson and must be in consideration of the level of readiness of the children to be taught. Buella (2010) sees method as a series of related and progressive acts performed by a teacher and students to achieve the objective of the lesson. A teaching method therefore, comprises the principles and methods used for instruction. Commonly used teaching methods may include class participation, demonstration, recitation, memorisation, or combinations of these (Eitel 2009).

In addition, **Different teaching methods** are used to meet the purpose of making the students understand the subjects. Nowadays, technological gadgets like computer, cameras, CD's are also used frequently to enhance the impact of understanding of a particular topic. Technically speaking, teaching is an information giving process which flows from teacher to the student. The **different teaching methods** are also called instructional methods. Innovateus-www.innovateus.net/content/hat-are-different-kinds-teaching-methods.

For the purpose of this research work, teaching methods will be discussed in the following perspectives as stipulated by Buella (2010):

- i. Direct Approach/Expository Strategies:** This method of teaching includes the following approaches:
 - a. Deductive Teaching: a process of teaching that starts with a rule or general statement that is applied to specific cases/examples
 - b. Expository or Deductive Method: a telling method where facts, concepts, principles and generalizations, are stated, presented, defined, and interpreted by the teacher and followed by the application of testing of three concepts, principles, generalizations in new examples generated by the student.

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- c. Demonstration: a telling and showing method performed usually by a teacher or a trained student while the rest of the class become observers.
- ii. **Experiential Approach/Exploratory Strategies:** This method of teaching includes the following:
 - a. Inductive: an exploratory method of logic where one arrives at a fact, principle, truth or generalization. : Formulating conclusion, a definition, a rule, a principle or a formula based on knowledge of examples and details
 - b. Studying: observing, comparing many instances or cases in several instances to discover the common element and form generalization.
 - c. Discovery: is a method in which thoughts are synthesized to perceive something that the individual has not known before. : the learner gets directly involved in learning : learning is a result of the learners own internalized, insights, reflection and experiences
 - d. Problem Solving Method : it is any purposeful activity that will remove a recognized difficulty or perplexity in situation through the process of reasoning
 - e. Project Method: a significant practical units of an activity of a problematic nature carried on by students in a lifelike manner and in natural setting. It maybe a construction, an enjoyment, a problem or a learning project.
 - f. Laboratory Method: a set of first hand learning activities wherein the individual investigates a problem, conducts experiments, observes, process or applies theories and principles in simulated setting.
 - g. Inquiry Teaching : Learners are confronted with a puzzling situation and are to enter into investigative work to solve a problem
 - h. Reflective Teaching : an on-going process that enables individuals to continually learn from their own experiences by considering alternative interpretations of situations, generating and evaluating goals and examining experiences in the light of alternative goals and hypothesis. A teaching approach that brings the individual to continually learn from their experiences through analysis of their own experiences, actions, decisions, beliefs in the light of alternative goals and hypothesis. The act of teaching that focuses thought on certain phenomenon through inspection and analysis.
 - i. Metacognitive Teaching: a teaching approach where learners are trained to become aware of, and exert control over their own learning by using metacognitive processes.
 - j. Cooperative Learning Strategy : a type of group work in which two or more students interact with the common goal of mastering specific academic materials, sample approaches.

The Meaning of Research?

Research in simplified terms means searching for the facts, searching for the replies to the various queries, and also for the solutions to the various problems. Research is an inquiry or an investigation with a specific purpose to fulfill. It helps in clearing the various doubtful concepts and tries to solve or explain the various unexplained procedures or phenomena. www.mbaofficial.com. Embarking on research is a process of extending knowledge, there are different formats adopted in conducting a research depending on the kind of research you are venturing into.

According to Osuala (1982), he defined research as the process of arriving at dependable solutions to problems through a planned and systematic collection, analysis, and interpretation of data. Ojukwu (2010) defined research in Polytechnic Business Education as the systematic attempt to define and investigate significant problems that are relevant to the programme objectives of the business education offered in the Polytechnics. Furthermore, research also employs scientific methods to decipher through experimentation the cause and effects of a problem. A good working definition of academic research and writing can be given as follows:
Investigation and writing based upon the idea of scientific inquiry.

The scientific method is based on the assumption that everything in the universe is linked by cause and reaction. There is a logical explanation for all observed behavior. So a researcher using the

scientific method of inquiry starts by making assumptions about what he or she expects to find after conducting research on a topic. <http://assets.ussa.edu/files/documents/misc/research-process.pdf>.

In summary, based on the definitions explored so far, we can see that the thought of carrying out a research is as a result of discovery of an existing or up-coming problem with the aim of solving it and possibly suggesting ways to avert similar or reoccurrence of such problems. It is a logical means of investigating or experimenting with the aim of solving the problem using different types and methods as they apply to the need on ground.

Types/Methods of Research (based on Methodology)

Quantitative Research: It involves information or data in the form of numbers. It allows one to measure or quantify a whole range of things. For example, the number of people killed in an unrest, the number of children between specific ages who attend school; the average spending power in a community; or the number of adults who have access to computers in a village or town. The survey method is used in conducting quantitative research, it also uses questionnaires to get different opinions of respondents and analyse the data in order to ascertain what you want to know. Quantitative research includes the following:

Descriptive (What is the Current Situation?)

- Numerical data gathered through tests, surveys, observations, interviews
- Variables are not manipulated but are measured as they occur
- Subgroups may be compared on some measure
- Two or more variables of a group may be correlated
- Does not attempt to identify cause of differences or relationships, just if they exist

Experimental (What is the Cause?)

- At least one variable is manipulated and its effects are measured
- Subjects randomly assigned to experimental treatment and control groups who are treated the same except for the treatment variable -determines cause and effect (When intact groups are used it's called quasi-experimental)

Ex post facto/Causal Comparative (What was the possible cause?)

- Identifies an effect that has already occurred and attempts to infer cause a treatment variable (alleged cause) is identified (but not manipulated) and effects are measured
- Groups exposed to the treatment variable are compared to groups who are not
- Identification of cause can be called into question because groups were not randomly assigned and other extraneous variables were not controlled

Qualitative Research: It is aimed at giving a deeper understanding about something and therefore the researcher goes beyond numbers and statistics, it explains what the numbers represent in a research. They are used in contrast with quantitative research to ascertain the bigger picture of what is being researched. In most cases, it involves face-to-face interviews whereby individuals who are either experts or eyewitnesses are engaged in a discussion concerning the issue of research. It includes the following:

Historical (What was the situation?)

- Description of past events, problems, issues, facts
- Data gathered from written or oral descriptions of past events, artifacts, etc.- describes what was in an attempt to reconstruct the past
- Involves much interpretation of events and its influence on the present

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Ethnographic (What is the Current Situation?)

- In-depth analytical description of educational systems, processes, and phenomena within a specific context based on detailed observations and interviews
- Detailed examination of a single group, individual, situation, or site is called a case study

Office Technology and Management

The term "Office Technology and Management" is used here to describe the various courses or subjects required for work (especially at higher levels) by the would be graduates of Office Technology and Management. Sokyey and Zakka (2010) opined that office technology focuses on the office information functions, that is, word processing, data processing, graphics, desktop publishing and communication. Office technology involves the use of sophisticated, dictation, word processing and computer equipment. In essence, office technology and management implies the continuous sophistication of the office through automation, machine technology, and information technology, these technologies assist management in decision making, planning and every activity that enhances the growth of an organisation. It is a programme which emphasizes the acquisition of skills, knowledge and abilities needed to enable the recipient function effectively in a modern office environment. (Sokyey and Zakka). Iweajunwa and Lekwa (2010) added that the office is all about information handling, being in the information age which is driven by technology.

Goals of Office Technology and Management

The Office Technology and Management programme is designed to equip the students to acquire self-reliant and employable skills in various fields of endeavor.

The acquisition of vocational and technical, together with managerial skills will equip students with work competencies, technical, psycho-social and management skills which are very essential in every day interaction in business situations. The course will provide for terminal qualification as well as prepare ambitious students for further academic pursuits. The course is to provide the business world with highly skilled knowledge workers who manage information efficiently, equipped with a comprehensive range of skills including managerial, technological (multimedia) and communication skills. (Adelakin 2009).

OTM is also an aid to the fulfilment of the goals of vocational and technical education to which the National education goals are tied. These goals are as contained in the National Policy on Education (2004):

- ❖ To provide trained manpower in the applied sciences, technology and business particularly at craft, advanced craft and technical levels.
- ❖ Provide the technical knowledge and vocational skills necessary for agricultural, commercial and economic development.
- ❖ Give training and impart the necessary skills to individuals who shall be self-reliant economically.

The national education goals outlined above emphasize the self-reliant nature of O.T.M. programme as it fits perfectly well into two of the national education goals (2004) as listed below:

- a. The inculcation of the right type of values and attitudes for the survival of the individual and the Nigerian society.
- b. The acquisition of appropriate skills and the development of mental, physical and social abilities and competencies as equipment for the individual to live in and contribute to the development of the society.

The Relationship between Teaching and Research

The interconnection between teaching and research has been a dilemma in the academia owing to the differences of opinion of academics. In the course of the students learning, they are usually taught

how to carry out researches in different areas of their academic activities yet, adhering and applying the principles learned becomes a problem and therefore, insinuates difficulty.

According to Aarrevaara and Dobson (2013), although teaching is the essence of the academics' work, since it is the nearest thing to a common activity that nearly all professors do, research is what distinguishes professors within their own discipline and play a substantial role in forming hierarchies within institutions. The Ph.D., a credential which signifies competence in research has become the gold standard for entry into the profession and publications have widely become the dominant measure of productivity used for tenure and promotion review committees. They opined that the preference for teaching over research and vice versa can change as a career progresses, and other variables might influence the number of hours that academics spend on the different components of their jobs.

It is pertinent to note therefore, that research activities reinforce the ability to teach, they complement each other. The compatibility of teaching and research makes the academia dynamic because their relationships are geared towards changing things around, solving problems that have been left unsolved and answering unanswered questions.

It was discovered that most polytechnics in particular are established as mainly teaching rather than research focused institutions as compared to universities and other science oriented institutions, and this explains the variation and the gap between teaching and research. These variations differ from profession to profession and from institution to institution. This paper outlines specific relationships between teaching and research especially in OTM:

- ❖ Teaching and research are not opposed to each other, instead they are complementary and a part of a dynamic process. This is because as new knowledge is generated through research, it requires to be passed on through teaching.
- ❖ Research helps in developing teaching techniques, especially in the traditionally called professions, Law and Medical school, and or the hard sciences, where the systemization of teaching techniques is absent as opposed to the methodology to conduct research such as qualitative and quantitative methods.
- ❖ Research provides the platform for the acquisition and refinement of knowledge required for effective teaching which helps in the affirmation of an affluent society.
- ❖ Research oriented schools and departments increase students satisfaction and impacts positively on their measures of cognitive and affective development during teaching.
- ❖ Research activities provide prestige to the institution which is reflected in the quality of teaching. This is because, if there is the recognition that teaching is as important as research, then it seems appropriate that institutions and individuals engaged in teaching should be able to accumulate the same level of prestige as it is gained with research activities.
- ❖ Finally, effective teaching facilitates effective research and research productivity facilitates effective teaching. This is because research helps in generating new knowledge for teaching and have also correlated it with prestige.

Problems of Teaching and Research in Office Technology and Management

Alot of challenges have been raised in projects by students of OTM concerning different issues affecting departments and the host institutions as a whole, but very little have been done to address these issues. These issues include the following:

- **Inadequate Provision of Infrastructural Facilities:** ICT has become a pertinent part of OTM and huge financial requests for the procurement and installation of hardware and software necessary for implementation of the new OTM curriculum pose a great challenge. This has resulted in overstretched training facilities (Oludele and Dusunmu, 2013)
- **Inadequate Power Supply:** Power supply has been erratic in the nation and that has been challenging to the proper implementation of the ICT-based OTM curriculum. All the machines to be

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used as contained in the curriculum use electricity and the high cost of installing and maintaining adequate power plants seem impossible. Where OTM rely on alternative sources of power supply, the over-head cost is too high to be sustained by the departments and therefore, affects the practical exposure of graduates of OTM negatively.

- **Poor Man Power/Skills:** With the change in OTM curriculum, much should have been done to train and retrain lecturers and instructors for effectiveness. The lack of human skills and knowledge to fully integrate ICT into the programme as prescribed by the curriculum is causing delays in the implementation of the curriculum. Despite the fact that OTM lecturers were not given orientation and initial training before the implementation of the new curriculum, it is sad to note that six years after the curriculum has been changed, most OTM lecturers have not yet seen the need to acquire the necessary skills in order to teach the new ICT-based courses effectively.
- **Poor Implementation of Research Recommendations:** This discourages the students and lecturers from embarking on further researches. Teaching in OTM involves a lot of practical work especially in courses like Desktop Publishing, Webpage Designing, Database Management and administration, ICT Office Application without which the students will be half-baked.
- **Insincerity on the Part of Departments and Lecturers of OTM During Accreditation Exercises:** Where the facilities provided are not commensurate to the number of students admitted, it affects the learning process, the departments are usually lured into parading staff and equipment that are not properties of the school for accreditation purposes by NBTE which is a serious threat to the successful implementation of the curriculum. In this situation, the staff and equipment used for accreditation are later withdrawn and taken to their owners while lecturers suffer the burden of excess workload with no equipment to teach the students.
- **Lack of Funding:** This has affected both teaching and research in the OTM department. The inability of the institutions to sponsor research activities as well as training and retraining of staff have become a recurrent decimal in most OTM departments.
- **Dearth of Textbooks:** Invariably, the new ICT-based OTM curriculum has rendered the former secretarial studies instructional materials and curriculum useless and OTM teachers have not seen that as a challenge to write new books that conform to the curriculum. The inability to carry out research in this regard has and continually have telling effects on the calibre of graduates the departments will produce.

Conclusions

In conclusion, the study concluded that teaching and research are not the same but each is complementary to the other, both play significant roles in empowering the taught and in discovering new trends in technology for a reflective Nigerian society and in producing an up-to-date office managers. In addition, looking at the courses specified in the curriculum, heads of departments should encourage research in this areas in order to meet up with the present challenges and up coming ones too. It is apparent that graduates of OTM lack both practical and theoretical knowledge of the equipment that should have aided them in teaching.

Recommendations

The paper recommends among other things that for an effective teaching to take place, business educators must be encouraged to embark on researches in their areas of profession. The following strategies were recommended for improvement in the implementation of OTM curriculum in Nigerian polytechnics.

- **Provision of Adequate Infrastructural Facilities:** Provision of necessary equipment as the course demands will enhance learning abilities of students and experiences necessary for the training. OTM departments should look beyond funding from proprietors (government) to partnership with individuals and private organisations.
- **Improved Power Supply:** Power supply has been a national problem, there should be an improvement on the part of the government, proprietors of institutions, and departments of OTM particularly must be provided with alternative sources of power for effective achievement of the goals of OTM as prescribed by NBTE.
- **Training and Retraining of staff of OTM:** Capacity development is needful for staff of OTM, teachers, technicians, and other support staff should be sent on trainings and workshops to acquire relevant skills that will assist them in carrying out their duties. They must be exposed on the installation, maintenance and effective use of ICT applications, softwares, hardwares and other peripheral devices. OTM academics should focus also on self-development through registering with private institutions, attending conferences, seminars, reading materials on the present curriculum and becoming members of their professional bodies.
- **Proper Implementation of Research Recommendations:** Institutions should encourage follow-up and review of researches carried out to ensure utilization of time and money invested in conducting the research, as well as proper solutions to problems raised to prevent similar or reoccurrence of the problems.
- **Sincerity From the Entire Staff of OTM During Accreditation Exercise:** Government and management of polytechnics must maintain their integrity in accreditation periods and make deliberate efforts to develop the infrastructure for OTM. Lecturers should not allow themselves to be used and paraded to be who they are not for selfish reasons during accreditation programmes. NBTE should improve on monitoring and evaluation of the implementation process.
- **Improved Funding:** No nation thrives in this generation without proper funding of the educational sector. Government should improve funding for the polytechnics and OTM departments in particular as it will help in the effective implementation of teaching and research in OTM.
- **Availability of Current Textbooks:** Funding by the government will not only help in implementing OTM curriculum but also enhance the availability and development of current textbooks, materials, journals, and all the instructional resources needed for effective acquisition of knowledge as well as its transfer to the learners.

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