

**IMPACT OF ICT STAFFING TRAINING AND DEVELOPMENT IN FEDERAL
POLYTECHNIC.OFFA,
KWARA STATE**

By

Gold Oluwatoyin Mukhtar

ND/22/LIS/PT/031

SUBMITTED TO

**DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE,
INSTITUTE OF INFORMATION, COMMUNICATIONTECHNOLOGY,
KWARA STATE POLYTECHNIC, ILORIN**

**IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF
NATIONAL DIPLOMA (ND) IN LIBRARY AND INFORMATION SCIENCE, KWARA
STATE POLYTECHNIC ILORIN.**

JULY, 20

CERTIFICATION

**This is to certify that the project was carried out by Gold Oluwatoyin Mukhtar
with matric number ND/22/LIS/PT/031 of Library and Information Science Department,
Kwara State Polytechnic.**

Mr Aremu B.A
Project Supervisor

Date

Mr Sodiq A.S
Project Coordinator

Date

Mr Isiaka A.O
Head of Department

Date

External Supervisor.

Date

DEDICATION

This project is dedicated to God Almighty.

Abstract

The evolution of ICT has brought new dimensions and styles to the processes and activities aimed at equipping and empowering the skills of an organisation staff. This study investigates the impact of ICT on staff training and development in Federal Polytechnic, Offa, Kwara State. It adopted case study method with purposive sampling to obtain data from twenty staff of the ICT department of the Federal Polytechnic, Offa, through the use of questionnaire. It concludes that ICT has been effective on staff training and development and has assisted the Polytechnic in achieving her objectives on staff training and development programmes and recommends that the Polytechnic should constantly be conducting assessment of training needs with ICT, before deciding to be using ICT for training of her staff.

Keywords: Federal Polytechnic Offa, Information Technology, Communication Technology, Information Communication Technology, Staff Training, Staff Development, Staff Training and Development.

Chapter One

Introduction

1.1 Background to the Study

Information and Communication Technologies are referred to as technologies that provide access to information through telecommunications. It is similar to Information Technology (IT), but focuses primarily on communication technologies. This includes the Internet, wireless networks, cell phones, and other communication mediums (ElHazzam, 2015). Johanian, Zayed and Asadi (2012) defined ICT as all the facilities which are designed for transferring, storing and processing of data. They further state that the facilities may include all the software and hardware applications such as computers, telecommunication facilities like mailing services, fax networks, telephone and Internet.

Information and Communication Technology are the machines, devices or gadgets that are designed to be used in the generation, organisation, storage, preservation, access, sharing, transfer, utilisation and dissemination of information. It includes any communication device or application encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems, as well as the various services and applications associated with them, such as video-conferencing and distance learning (Lynch and Lee, 2012).

ICT potentially allow people, anywhere in the world, to access information and knowledge almost instantaneously by expanding the information base, lowering information and search costs, and creating information goods. It can facilitate searching, matching and sharing of information and contribute to greater organisation and collaboration among economic agents (Cantoni, Jereissati and Leonardo, 2019). ICT, therefore, cut across all sectors of economy and society, and the internet can be an important catalyst of development for individuals, communities and countries. For

instance, ICT can provide extensive and growing access to information, services and applications that may add value to people's lives, enhance their productivity and enable them to access new opportunities (International Telecommunications Union [ITU], 2016), training and development.

According to iProject (2019), staff training and development is a broad term covering multiple kinds of employee learning. Training is a program that helps employees learn specific knowledge or skills to improve performance in their current roles. Development is more expansive and focuses on employee growth and future performance, rather than an immediate job role. George and Scott (2012) opines that Training is effort initiated by an organization to foster learning among its workers, and development is effort that is oriented more towards broadening an individual's skills for the future responsibility.

Training and development, as posited by Engetou (2017) are a continuous efforts and programs designed to improve staff competence and organize performance as a goal to improve on the staff's capacity and performance. These programs are designed to make an individual to be well equipped with skills, knowledge, ability, and competence. As such, most staff need necessary SKAC to bring out substantive contributions towards extensive training to ensure the organisation's growth. For organisation staff to be flexible and effective in their job, they need to acquire and develop knowledge and skill, and for them to believe that they are valued by the organization they work for, then they need to see valuable signs of commitments to their training needs.

Armstrong (2009) noted that training and development is an aspect of staff capacity building that must be faced by every organization, and its major aim is to improve the employees' competencies such that the organization can maximize effectiveness and efficiency of their human resources. It can be an advantage for an organisation if they win the hearts and minds of their workers, getting them to identify with the organization. According to Cole (as cited in Engetou, 2017), staff training and development must be an investment if workers are to be equipped to perform well. The processes of staff training and development are parts of the entire human resource management approach which results in staff being motivated to perform. However, training and development vary from organisation to organisation in relation to the quality and quantity of training factors, which may include: The degree of change in both the external and internal environments, current suitable skills in the existing workforce and the level to which the management see training as a motivating factor in the workplace.

1.2 Statement of the Problem

Before the advent of ICT, staff of every organization has to be physically present at programmes organized for them on training and development. But since its emergence, staff training and development have become programs that can be easily organized by organizations through webinars, teleconferencing, videoconferencing, electronic fora, etc., because these programs can be easily organized at regular intervals, staff convenient hours, saves the time and efforts of staff, and also facilitate quick and easy comprehension of training and development programs' contents.

As beneficial as ICT is to staff training and development, many organizations are finding it difficult to leverage on it because of various problems like lack of technical know-how, poor internet facilities, cost of purchasing ICT gadgets, insufficient funding and inadequate staff skills among other things are causing drawbacks on prospective effects of ICT on staff training and development. Therefore, this research is designed to study the impact of ICT on staff training and development in Federal Polytechnic Offa, Kwara State.

1.3 Objectives of the Study

This study will be guided by both general and specific objectives. The general objective is to determine the impacts of ICT on staff training and development in Federal Polytechnic Offa, Kwara State.

The specific objectives are:

1. To know whether ICT is being used for staff training and development in Federal Polytechnic Offa,
2. To know how staff training and development are being conducted with ICT in Federal Polytechnic Offa,
3. To determine the types of staff training and development programs that are being conducted with ICT in Federal Polytechnic Offa,
4. To assess the attitudes of staff of Federal Polytechnic Offa towards ICT for training and development programs,

5. To identify the challenges associated with ICT on staff training and development in Federal Polytechnic Offa; and,

1.4 Research Questions

The study intends to answer the following questions:

1. Do Federal Polytechnic Offa uses ICT for staff training and development?
2. How does staff training and development are being conducted with ICT in Federal Polytechnic Offa?
3. What types of staff training and development programs are being conducted with ICT in Federal Polytechnic Offa?
4. What are the attitudes of staff of Federal Polytechnic Offa towards ICT for training and development programs?
5. What are the challenges associated with ICT on staff training and development in Federal Polytechnic Offa?

1.5 Significance of the Study

The findings of this study will contribute immensely to the existing body of knowledge in the realms of ICT and staff training and development. Specifically; all stakeholders, such as managers and administrators, policy makers, students, researchers, corporate bodies, internet services providers (ISPs), information technology firms and human resource management firms are to be from this study as its results will be serving as guide on how to integrate ICT with staff training and development in order to enhance employees' productivities.

1.6 Scope and Limitations of the Study

This study covers only the Federal Polytechnic Offa, Kwara State. The staff of Federal Polytechnic, Offa, is the respondents of this study and all the data that will be used in arriving at conclusions and results of this study are to be obtained from them. Data generated from any

other sources apart from the staff of Federal Polytechnic Offa cannot be used for this study and its analysis.

1.7 Operational Definition of Terms

Impact: These are the roles or influence ICT are expected to have on staff training and development in Federal Polytechnic, Offa.

ICT: These are computer systems, telecommunications devices and storage gadgets that are influencing or playing significant roles in the training and development of staff of Federal Polytechnic Offa.

Staff: These are the employees of Federal Polytechnic Offa, who are expected to feel the impacts of ICT on their training and development.

Staff Training: These are the programs, courses and events designed and tailored towards exposing the staff of FPO to trends and issues in their fields of interests, which can be influenced by ICT.

Staff Development: These are improvement in skills, abilities and competencies of staff of FPO, which are achieved through the influence of ICT.

Federal Polytechnic Offa: This is a medium level human capital training tertiary institution of learning that is situated in Offa, Kwara State, where ICT is expected to influence training and development of its staff.

Reference

- Armstrong, M. (2009). *Armstrong's Handbook of Human Management Practice*, 11th. Edition. England: Prentice Hall.
- Cantoni, S. L., Jereissati, T. & Leonardo, M. (2019). A2I for decent work and economic growth. In IFLA and TASCHA. *Development and Access to Information 2019*. The Hague: IFLA. Pp.29-35.
- ElHazzam, M. (2015). The Effect of ICT on Human Resources Management Practices: A Case Study of Number of Organizations in South West Algeria. In *International Journal of Innovative Research in Engineering and Management (IJIREM)*. Vol.2, issue 3.
- George, S. A. & Scott, B. W. (2012). *Managing Human Resource*, 16th Edition. California: University Press.
- International Telecommunications Union. (2016). *ICT Facts and Figures, 2016*. Geneva: ITU. Retrieved February 17, 2019, from <https://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2016.pdf>
- iProject (2019). *Impact of Information Communication Technology (ICT) on Staff Training and Development in John Harris Library in University of Benin, Edo State, Nigeria*. Retrieved on 19th October, 2019 at: <https://iproject.com.ng/library-science/impact-of-information-communication-technology-ict-on-staff-training-and-development-in-john-harris-library-in-university-of-benin-edo-state-nigeria/index.html>
- Johanian, R., Zayed, N. N. & Asadi, A. (2012). The Impact of Information Technology and Communication Training on the Performance of Human Resources in Educational Organizations. In *World Applied Sciences Journal* 16 (6): 850-855.

Lynch, J. & Lee, K. (2012). Encyclopedia of E-Leadership, Counseling and Training. New Zealand: IGI Global.

The Federal Polytechnic Offa (2019b). 10th Convocation Ceremony for the Award of National Diploma, Higher National Diploma and Prizes. Offa: The Federal Polytechnic Offa.

The Federal Polytechnic Offa. (2019a). History of Fedpoffa. Retrieved on the 23rd of November, 2019 at: <https://portal.fpo.edu.ng/Default.aspx?tabid=218>

The Nation. (2017). FEDPOFFA gets new Rector. Retrieved on 26th November, 2019 at: <https://www.google.com/amp/s/thenationonlineng.net/fedpoffa-gets-new-rector/amp/>

Chapter Two

Review of Related Literature

2.1 Introduction

This chapter is designed to point out positions, assertions, statements, opinions and conclusions of various authorities on the subject under study. According to Issa (2013), review of related literature involves the collection of ideas, views, positions and opinions expressed in various writings of recognized authorities as well as findings of previous researches in one's area of investigation.

Literature review can be best understood by arranging relevant topics in order of importance or seniority. Therefore, this chapter will be arranged in the following order:

2.2 Information Communication Technology: Conceptual Explanation

2.2.1 Components of ICT

2.2.2 Some of the ICT Gadgets Used for Staff Training and Development

2.3 Staff Training and Development: Conceptual Explanation

2.3.1 Staff Training and Development in Nigeria

2.3.2 Aims and Objectives of Training and Development

2.3.3 Assessment of Training Needs

2.3.4 Types/Methods of Staff Training and Development

2.3.5 Principles of Staff Training and Development

2.3.6 Problems of Staff Training and Development

2.3.7 Evaluation of Training and Development Programs

2.4 Conclusion

2.2 Information Communication Technology: Conceptual Explanation

Information and communications technology (ICT) is an extended term for information technology (IT) which stresses the role of unified communications and the integration of telecommunications (telephone lines and wireless signals), computers as well as necessary software, its storage and the audio-visual systems, which enable all users to access, store, transmit, and manipulate information (Albert, 2017). The term ICT is also used to refer to the combination of audio-visual and telephone networks with computer networks through a single cabling or link system. There are large economic incentives (huge cost savings due to elimination of the telephone network) to merge the telephone network with the computer network system using a single unified system of cabling, signal distribution and management.

ICT has no universal definition, as "the concepts, methods and applications involved in ICT are constantly evolving on an almost daily basis." The broadness of ICT covers any product that will store, retrieve, manipulate, transmit or receive information electronically in a digital form e.g. personal computers, digital television, email and even the modern day robots. ICT (information and communications technology – or technologies) is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as videoconferencing and distance learning (Chandler and Daniel, 2012).

ICT is the study, design, development, application, implementation, support or the management of computer-based information systems. The term is commonly used as a synonym for computers and computer networks, but it also encompasses other information distribution technologies such as television and telephones (Chandler and Daniel; Munday, Rod and August as cited in Albert, 2017). According to Okauru (2011), ICT is the digital processing and

utilisation of information by the use of electronic computers. It comprises the use of machines and electronic media for the storage, retrieval, conversion and transmission of information.

ICT is much more than computers and the Internet or even telephony, even though the digital divide and issues of Internet governance were much of the focus of IT based industries (International Telecommunications Union [ITU], 2015). Applications of ICT can be divided under two broad categories. The first are those largely dependent on traditional telecommunications networks (including the Internet) that enable on-demand communications to provide information tailored to the user's convenience and needs. How that information is processed, whether it is used at all, and whether it is transformed into knowledge is left to the human user who asked for that information in the first place. The second group of ICT applications, for want of a more appropriate name, we shall call Human Independent, where information is processed and decisions are arrived on the basis of preset criteria without human intervention at the time of decision making. These can be nearly passive systems, or part of a larger system (embedded ICT).

Information Technology (IT) and Information and Communication Technology (ICT) are similar concepts that can be used interchangeably. IT implies communication and therefore it becomes obvious that the two terms are synonymous (Womboh and Abba, as cited in Jimoh and Igwe, 2011). IT and ICT as synonymous terms are mainly used in educational and governmental circles. ICT is an umbrella term that includes all technologies for the manipulation and communication of information. ICT encompasses any medium to record information (magnetic tape/disk, optical disks (CD/DVD), flash memory, etc.); technology for broadcasting information - radio, television; and technology for communicating through voice and sound or images - microphone, camera, loudspeaker, and telephone to cellular phones. Thus, ICT makes more explicit that technologies such as broadcasting and wireless mobile telecommunications are included with electronic technologies and means of capturing, processing, storing and disseminating information between sources, terminals, persons and organisations.

2.2.1 Components of ICT

ICT comprises of three major components. These components are the various units of tools, processes, methods and machines that can be used for capturing, manipulation, organisation,

sharing, storage and dissemination of information. The components of ICT, according to Igwe (2011a) are as follows:

- Computer Systems,
- Storage Devices, and;
- Telecommunication Gadgets.
- **Computer Systems:** Computer is an electronic device that is capable of accepting data (input) in the form of coded electronic signal, storing the data and applying prescribed processes to such data on the basis of a set of predetermined instructions called programs (Ijebor, 2011). Madu and Adeniran (as cited in Ijebor, 2011) also posited that computer accepts input fed into it using any of the input devices, such as keyboard, scanner, punch card, etc., processes such data with amazing speed with a set of programs called instructions and supply the resulting new information in line with user's needs.

The computer system comprises of the input, the central processing and the output units. The input unit is the part of the computer system where instructions are being passed into the computer system. This unit has various devices like keyboard, mouse, scanner, stylus pen, camera, etc. In the same vein, the processing unit is the aspect of the computer system that process instructions that are being passed into the computer system through the input devices. It has the memory unit (RAM and ROM), the control unit and the arithmetic logic unit (which performs the functions of arithmetic calculation and projections within the computer system.

Finally is the output unit. This unit is responsible for providing and giving out the end product of inputted and processed data in the form that is desired by the computer user. There are various devices can assist the computer system in providing this task. Some among them are printers, monitor/visual display unit, speakers, projectors, plotters, etc.

- **Storage Devices:** Igwe (2011a) argues that one of the best components of ICT is the ability to save - that is to store information. The storage devices are also known as secondary storage (in the case of those that are not in-built with the computer system. They are external media of storing information. These storage devices are needed to store

and transfer software, data and information from (Ijebor, 2011; Igwe, 2011b) one ICT gadget to another. These secondary storage devices include magnetic disks (hard disk, floppy disk and zip disk), magnetic tape, compact disks, USB flash drive, memory cards, etc.

- **Telecommunication Gadgets:** These are referred to as any device used to transmit information such as sound, images and files over long distances. The telecommunication devices being used nowadays include telephony, internet, radio and television (GreenBook, 2020). Kolawole and Igwe (2012) itemised these gadgets as telephones, facsimile transmission, network systems, the Internet and its services (electronic mail, World Wide Web, news groups, file transfer protocol, video and teleconferencing, etc).

2.2.2 Some of the ICT Gadgets Used for Staff Training and Development

ICT is a complex concept that can be applied and integrated to all aspects of humans' lives. In the case of staff training and development, ICT cannot be left behind because its application and integration to staff training and development facilitates quick and prompt delivery of trainings, reduces the energies to be expended in trainings by both trainers and trainees, and it also increases the efficiency and effectiveness of staff training and development programs.

In furtherance to this, the list of ICT gadgets that are being used for staff training and development programs are inexhaustive, which this study will review some of them below:

- **Telephones:** This concept is derived from telephony, which means types of voice equipment used for interactive communication between two distant places. According to GreenBook (2020), telephone as a reliable telecommunication facilities with a corded device, which proves to be an important means of communication in homes and offices. Mobile phone is a telephony that can be used for staff training and development by the participants and used for training purposes. It needs to be tied with a service provider to make it work. The network signal will come from cell phone towers. The basic functions of mobile phones used to be only making and receiving calls and messages. As time went by, some features are added such as calendar and games. There are also now smartphones which can be considered portable computers for their advanced functionality. They have 3G and Wifi capabilities that allow them to have an access on the internet. They made it

possible for video conversation on staff training and development to be done over the phone.

- **Internet:** The Internet, as an important product of ICT is a collection of vast information resources of interlinked computer networks (Kolawole and Igwe, 2012). It is also a worldwide network of computers that makes it possible for thousands of dissimilar physical networks that are not connected to one another and that use hardware technologies to connect and operate as a single communication system to enhance transmission and sharing of information on staff training and development.
- **Electronic Mail:** This service makes possible the exchange of messages and information between and among organisations and institutions over the Internet (Kolawole and Igwe, 2012). It allows training organisers and participants to send memos, letters and files containing data/information of all types from one user to another and many with e-mail addresses.
- **Teleconferencing:** Computer Hope (2017) describes teleconferencing as the process of conducting a conference call or meeting over telephone lines or data communications lines connected to multiple separate locations. Teleconferencing is commonly managed at a central point and each of the users or locations that want to participate in the call must dial into that central point.
- **Projectors:** These are output devices that project an image into a large surface, such as white screen or wall (TechTerms, 2020). They may be used as alternatives to monitor or television when showing video or images to a large group of people. Projectors come in many shapes and sizes. Though, they can be mounted on ceilings or may be freestanding and portable. Ceiling mounted projectors are typically larger, especially ones that project a long distance (such as 30 feet or more). These projectors are commonly used for organising training, conferences, seminars, etc.
- **Microphones/Megaphones:** These are devices that capture audio by converting sound waves into electric signal. This signal can be amplified as an analogue signal or may be converted to a digital signal, which can be processed by a computer or other digital audio device (TechTerms, 2020).

- **Transponders:** This is a wireless communications, monitoring, or control device that picks up and automatically responds to an incoming signal (Rouse, n.d.). It is the subsystem that provides the connecting link between transmitting and receiving antennas of a satellite. It is one of the most important sub-systems of space segment subsystems. Transponder performs the functions of both transmitter and receiver in a satellite. It helps in transmission and reception of signals from large geographic location through the satellite for the purposes of training organisation staff through virtual presence.
- **Video Conferencing:** Video conferencing, as opined by Kagan (2019) is a technology that allows users in different locations to hold face-to-face meetings without having to move to a single location together. This technology is particularly convenient for business users in different cities or even different countries because it saves time, expense, and hassle associated with business travel. Uses for video conferencing include holding routine meetings, organising training, conferences, seminars and workshops, negotiating business deals, and interviewing job candidates.

2.3 Staff Training and Development: Conceptual Explanation

Training and development according to Elozieuwa (2012) is a process that enables organizational members to acquire knowledge and skills they need to perform their jobs effectively, take up new responsibilities and adapt to changing circumstances. Thus, it enables organizational members to become better performed. It is important, however, to distinguish the two terms. Training primarily focuses on teaching organizational members how to perform their current jobs and helping them acquire the knowledge and skills they need to be effective performers. It is usually for non-managerial state. Development on the other hand, is technically managerial inclined. It focuses on building the knowledge and skills of organizational members, so that they are prepared to take on new responsibilities and challenges. The use of initiative between the managers and non managers also differ. For managers or administrators, the expectations, including use of initiatives, is wider when compared with non-managers (Agbaeje, 2014).

Training is a planned process to modify attitudes, knowledge, skill or behaviour through learning experience to achieve effective performance in an activity or range of activities. Training tends to be a short process on a specific topic, with specific learning out-comes. It facilitates learning

by focusing on implementation and performance. Senyucel (2013) explains that training is a very effective way of increasing employee knowledge and skills in various ways. Firstly, during training, the trainer manages to get the employees in a safe environment where everybody feels safe to interact and learn. Secondly, during training the chances of having interruption are low unlike during work, where almost every minute there is something else to do. Thirdly, it is easier to and cost effective to deliver training to employees during the training event rather than teaching or showing certain skills to different individuals in different times. Lastly, there is the element of social interaction. It is argued that learning in groups increases individual learning.

From the point of Dessler (2011), training means giving new or current employees the skill they need to perform their jobs. In any case, training is a hallmark of good management, and a task that managers ignore to their peril. Having high potential employee does not guarantee they will succeed. Instead, they must know what you want them to do and how you want them to do it. It is not always easy to tell where training leaves off and, management development begins. The later, however, tends to emphasize both long-term development and a focus on developing current or future managers or directors. Management development is any attempt to improve managerial performance by implanting knowledge, changing attitudes or increasing skills, The management development process consists of assessing the company's or organization's strategic needs, appraising managers current performance and developing the managers.

Nda and Fard (2013) refers to development as activities leading to the acquisition of new knowledge or skills for purposes of growing. Organizations provide staff development programs for their staff in order to enhance their capabilities. Staff development is gaining an increasingly critical and strategic imperative in organizations in the current business environment. Thus organizations need to invest in continuous staff development in order to maintain staff as well as the organization success (Khawaja and Nadeem, 2013).

Bhaskar, Bateman and Snell (as cited in Elozieuwa, 2012) described development as teaching managers and professional staff broader skills needed for their present and future jobs. In today's competitive environment, an organization has to be concerned about the development of the management team-supervisors, middle-level managers and top-level executives. Management development focuses on developing in a systematic manner, the knowledge base, attitudes, basic skills, inter personal skills and technical skills of managerial cadre. Since staff are such a vital

gas in the success of any organization, special attention needs to be provided for the development. Technical or operating staff must also be trained and re-trained continuously, but it is very important to have a managerial cadre that possesses skill and motivation.

Goldstein and Ford (as cited in Shepherd, 2012) submitted that training and development play an important role in the effectiveness of organisations and to the experiences of people in work. Training has implications for productivity, health and safety at work and personal development. All organisations employing people need to train and develop their staff. Most organisations are cognisant of this requirement and invest effort and other resources in training and development. Such investment can take the form of employing specialist training and development staff and paying salaries to staff undergoing training and development. Investment in training and development entails obtaining and maintaining space and equipment. It also means that operational personnel, employed in the organisation's main business functions, such as production, maintenance, sales, marketing and management support, must also direct their attention and effort from time to time towards supporting training development and delivery. This means they are required to give less attention to activities that are obviously more productive in terms of the organisation's main business. However, investment in training and development is generally regarded as good management practice to maintain appropriate expertise now and in the future.

Although training and development are used almost interchangeably with reference to individual employees, there are however, distinctions of emphases and scopes. Broadly speaking, training is regarded as applying principally to the improvement of skills and hence learning how to perform specific tasks while development is an unfolding process carried on as a form of growth and maturation. Training is more a short-term process of utilizing as systematic and organized procedure by which non-managerial personnel learn technical knowledge and skills of definite purposes. Development on the other hand, is a long-term educational process, utilizing a systematic and organized procedures by which managerial person learn conceptual and theoretical knowledge of general purposes. This distinction can be depicted in the following manner:

S/N	Training	Development
-----	----------	-------------

1	Usually a short-term process	Invariably an on-going long term process
2	Imparted mostly to non-managerial personnel's	Designed mainly for managers and executives
3	Confined generally to the area of hands-on and technical skills,	Relating more broadly to the level of interpersonal and decision-making skills.

Diagrammatic or tabular illustration of differences between Staff Training and Development (Eloziuewa, 2012).

2.3.1 Staff Training and Development in Nigeria

The Nigeria staff training and development is chiefly based on the assumption that there is a basic shortage of skilled and executive staff. According to Ejiofor (2010) this diagnosis of shortage of staff led to the prescription of multiplying training and development institutions like the Industrial Training Fund (I.T.F), the Administrative Staff College of Nigeria (ASCON), the Center for Management Development and the Institute for Policy and Strategic Studies (NIIPSS). In addition to these institutions, the government expounded education at all levels. In particular, many polytechnics and universities were established, moreover, not willing to be out done, some state government, also established their own universities and polytechnic.

The private sector also reacted by establishing universities, management consultancy firms expending training facilities, launching journal and making use of the government through the Center for Management Development and the Industrial Training Fund (Ejiofor, 2010). As the operation arm of Nigeria Council for Management Development (C.M.D) since its inception in 1973 has plunged vigor into discharging its role as initiation of new management programmes. Consultant to various sector of the economy, co-coordinator of management institutions at tertiary level, and mentor of professional association in addition to being directly involved in management development and training. The centre has initiated the establishment of professional associations like Nigeria Association for Management Consultant (NAMCON), the Nigeria

Association of Small Scale Industries (NASSI) etc, has also sponsored many management development programmes like train the trainers programme etc.

This Administrative Staff College of Nigeria (ASCON) is like the Center for Management Developments (CMD), a post tertiary institution established to cater for the training and staff public sectors while the Industrial Training Fund (ITF) is set up to encourage and promote the acquisition of skills in the industry and commerce with a view to generating a pool of indigenous trained staff sufficient to meet the need of the economy (Elozieuwa, 2012). The scarcity of qualified and well-developed manpower has acted restrictively in many ways in laying the economic growth and development in Nigeria. He maintained that emphasis placed by any organization on the training and developments of its employees have implicitly emphasis placed on productivity.

Nigeria staff development programme do not recognize the fact that a mere knowledge of what is to be done does not necessarily guarantee that it is done, leading a horse to the stream does not make the horse to drink water. A good training programme merely leads the executive to the stream of management but wanting to practice what has been learnt is another matter.

2.3.2 Aims and Objectives of Training and Development

The objectives of training and development (Armstrong, as cited in Elozieuwa, 2012) are to develop the competency of employees and improve their performance, help people to grow with the organization in order to meet the future human resources need from within and to reduce the learning time for employees starting in new jobs on the appointment, transfer or promotion.

Paauwe and Boselie (2015) opined that in practice, though, training and development is a field that appeals to a number of related (sub) disciplines involving academics with different backgrounds, and more importantly, also their own way of operationalizing the concept in terms of a range of HR practices of training and development. Also Nwachukwu (2012) and Bhaskar (2011) believed that there are necessary factors that are instrumental to the aims and objectives of training and development, and they are as follows:

a) The primarily purpose of training is to establish a sound relationship between the worker and his job - the optimum man-task relationship.

- b) To upgrade skills and prevent obsolescence. The jobs that employees do are not static. They change, sometimes without necessary awareness, since technology advances are getting increasingly more rapid. To keep pace with changing technology, mechanization, automation, electronic data processing etc. training becomes mandatory for employees in order to update them, teach them newer skills and increase their efficiency.
- c) To develop healthy, constructive attitudes. Training programmes in organization are aimed at molding employee attitudes to achieve support for the organizational activities and to obtain better cooperation and greater loyalty.
- d) To impart broad-based knowledge relating to the plant, machinery, material, product, quality and standards to factory, workplace and work environment.
- e) To prepare employees for future assignments, people are not generally satisfied if they continue to work in the same position or at the same level for long. Mobility is a major factor in motivation. One of the objects of training is to provide an employee an opportunity to climb up the promotional ladder or to move on to assignments which will help upward mobility.
- f) To increase productivity. The most efficient and cost effective ways of performing jobs are taught to the employees which naturally leads to enhanced productivity, i.e. increased output at higher quality. Initiative and creativity among employees is also fostered.
- g) To minimize operational errors. Since training is an effort to provide to the employee opportunities to acquire new and improve existing job-related skills, it follows that operational mistakes will be significantly reduced. Unnecessary repetition, wastages and spoilage of materials is brought down; deficiencies in methods of doing work are ironed out in training sessions thereby also reducing the hazard of accidents. Consequently, a safer and better work environment is recreated.
- h) To enhance employee confidence and morale. With greater knowledge and finely honed skills, the employee approaches his job with greater confidence and sureness. His belief in himself and his ability increases manifold and so, simultaneously, does morale.

i) To bring down cost of production. Because better, more cost effective methods are taught, because mistakes and errors are minimized, because productivity is improved, because quantity standards are adhered to more strictly and because confidence is engendered, significant strides are automatically taken in the areas of cost control and economics in the production process.

j) To bring down labour turnover and absenteeism. Training is a powerful tool that breeds in the employee a sense of pride as well as of belonging. Both these contribute in a major way to checking and reducing labour turnover as well as absenteeism.

2.3.3 Assessment of Training Needs

Training need as any shortfall in terms of employee knowledge, understanding, skill and attitudes against what is required by the job, or the demands of organizational change. This is a very crucial and fragile position in the organizational strategic management Cole (2016). Dessler (2011) was of opinion that when it comes to the issue of staff training and development, you do not first and foremost assume that the under-performing of current employees is training only. He submitted that performance analysis is the process of verifying that there is a performance deficiency and determining whether the employer should correct such deficiencies through training or some other means (like transferring the employee). That the researcher believes also could to an extent change or improve the employee attitude to work, if found out to be.

In agreement to that statement, Onah (2010) held that there are many ways of overcoming deficiencies in human performance at work, and training is only one of them. When training staff conduct a comprehensive training needs analysis in their organization, they will focus on four main sources for their information: a) Organization level data (e.g. about the management structure, communication channels products/ services offered, personnel requirement), b) Job-level data (e.g. about individual jobs/ roles, and skill requirements), c) Individual data (e.g. performance appraisal data, training records), d) Competence standards (i.e. occupational standards agreed nationally for different levels of responsibility).

Logically speaking, training ought to be imparted where there exists a need for it. For Bhaskar, hence, before the formulation of training programmes it is important the training needs are

carefully and systematically identified. Areas where training could bring about tangible, lasting, benefits must be defined in clear-cut terms. If this effort remains vague or ambiguous, this organization could end up wasting a great deal of time and money. Over the years, many writers and scholars have gone about suggesting ways and means of carrying out an objective identification of such areas. But the one model which was first evolved in 1961 but which has stood the test of time is the McGlee and Thayer model. This model advocates a three-prolonged approach, viz: a. Organizational analysis. b. Task analysis. c. Man analysis (Seyuncel, 2013; Bhaskar, 2011; Armstrong, 2014).

- a) **Organizational Analysis:** This is an attempt to train the searchlight on the organization as a whole. Without doubt, training needs must be looked at against the backdrop of organizational objectives and strategies. Unless this is done, time and money may be wasted on training programmes that do not advance the cause of the organization.

People may be trained in skills that they already possess or the training budget may be utilized frivolously in giving employs some rest and entertainment instead of providing them with required inputs or the allocation may be frittered away on frills and fancies without meeting the real needs of personnel. This is the reason why a comprehensive analysis of organizational structure, objective, culture, processes of decision-making, future objectives, and human resources needs to be made.

The analysis would assist in pin-pointing deficiencies drawbacks and weaknesses and the kinds of mechanisms that would need to be evolved in order to minimize them. Along with this, an analysis of the organization's external environment and internal climate is also essential. Trends in union activity, accidents, illnesses, turnover, absenteeism and on-the-job employee behaviour – all provide relevant information as well as vital clues as to the areas where training can provide supportive therapy to cure debilitating weakness within and without the system. The entire analysis begins with an understanding of the short term and long term good of the organization as a whole and for each department specifically.

- b) **Task Analysis:** This requires a careful examination of the jobs to be performed after training. Four basic steps are involved here: i. A systematic collection of information that

explains and elaborates the details of how jobs are done. ii. This leads to the setting of standards of performance for various jobs. iii. An examination of existing or better methodologies of doing jobs so that prescribed standards are met, iv. Exploration of the knowledge, skills, abilities and other characteristics necessary for effective task performance.

Essentially, task analysis entails a detailed examination of jobs, their components, various operations required to be performed and the conditions under which they are to be carried out. The focus, clearly, is on the task rather than on the individual performance and the objective is to derive some concrete notions about the training needed for task performance. An analysis of the jobs and their various components give us clear pointers as to the requirement of skills and knowledge as well as attitudes that need to be inculcated in employees. c.

- c) **Man Analysis:** As opposed to task analysis, the concentration here is on the individual employee, his abilities, his skills, his knowledge and attitude also the inputs required for the performance or individual growth and development in terms of career planning. Of all the three aspects, this is no doubt the most complex. The immense variety and unpredictability of human behaviour and the often amorphous, ill- defined inter linkages between human performance and other aspects of work, make Man Analysis a demanding and highly specialized task.

Overall, however, the broad general idea is that the difference between desired performance and actual performance is the individual's training needs. As already indicated in the section on Task Analysis performance standards are set in order to establish basic norms and targets, which individual employees are expected to attain. Yet, inspite of uncertain reliability, performance review data can provide information vital for decision making on the kind of training needed and it's utility for individual or groups of employees. Assessing the need for training does not end here.

To evaluate the results of training and to assess what training is required in the future, needs must be analyzed regularly and at all the three levels indicated below: a. At the organizational level, needs must be analyzed by managers who set organizational goals,

b. At the task level, needs must be identified by specifying how the organizations goals are going to be achieved, c. At the individual level, needs must be indicated by the working and non-agers who perform the tasks achieve prescribed goals (Elozieuwa, 2012).

2.3.4 Types/Methods of Staff Training and Development

After the objectives and the needs have been determined and trainers and trainee in the organization have been selected, the programme is run. From the analysis of training needs and translating them into behavioural objectives, the training manager works out the content and facets of the training. What skills are going to be taught, what kind of employee development is sought, what long or short term objectives are proposed? All these will determine the design and details of the training programme.

To be really useful, however, the method chosen should meet the minimal conditions needed for effective learning to take place, i.e. the training method should do the following:

- a) Motivate the trainee to improve his or her performance.
- b) Clearly illustrate desired skills.
- c) Provide for active participation by the trainee.
- d) Provide an opportunity to practice.
- e) Provide timely feedback on the trainee's performance.
- f) Provide some means for reinforcement while the trainee learns.
- g) Be structured from simple to complex tasks.
- h) Be adaptable to specific problems.
- i) Encourage positive transfer from the training to the job.

Broadly speaking Cole (2016) and Dessler (2011) among others have common and identical notions on most methods or forms of staff training and development. Here are some tested methods below:

- **Lectures:** This is the time-worn didactic method where an instructor orally communicates his ideas, concepts and theories to a group of recipients. It is often the most widely used and also the most economical. With time, the method has been embellished by some effective ornamentation. Slides and overhead projectors, video tapes motion pictures, reading lists, closed-circuits TV, etc, are new part of the modern-day lectures amory. This has certainly improved the quality of lecture-oriented communications which has proved to be particularly useful when concepts, theories, instructions and procedures are to be imparted.

The lecture method is also the most economical since a large number of people can be trained simultaneously saving man hours and money. Yet the drawback is that listeners play a large non-participatory role. They may ask questions but they never get the feel of what is being talked about. Furthermore, participants do not share each other's experiences and hence the learning is confined to what the lecturer has to say.

- **On-the-Job Training:** This form of training is perhaps the most commonly used. The learning that takes place is centered on the job. The employee is placed into the real work situation and shown the jobs, its methodology and logistics by an experienced employee or supervisor. The trainee uses the machines and tools he will use once the training is completed. He learns in the same environment where he will, in the near future, be working at his future supervisors and peers and familiarize himself with the nitty-gritty of day-to-day operations.

Although this programme is relatively simple and fairly economically, if not handled properly, the costs can be high in damaged machinery, unsatisfied customers and poorly taught workers. This automatically implies that trainers must be carefully selected and trained. The trainer himself should be properly motivated and adequately rewarded for doing his job-well. He should also be well-unversed with effective training techniques

- **Vestibule Training:** Here, the working environment is stimulated as closely as possible for the trainee so that his training experience resembles the work that he is shortly going to be called on to perform. For example, airline pilots could learn in a simulated cockpit, astronauts could learn to cope with zero-gravity in simulated conditions; a machine

operator trainee could work on a machine under the supervision of an experienced worker, and so on. The idea is that the trainee learns in conditions simulated to the real one until he or she has picked up well and can move on to taking up the task individually. This method would turn out to be rather expensive unless the number of trainees is fairly large. Yet if handled well, it can prove to be very effective under certain circumstances.

- **Off-the-Job Training:** Excluding apprenticeship, vestibule training and on-the-job training, all other forms of training are grouped under the umbrella term off-the-job training irrespective of whether the training is conducted in classrooms, vocational schools or elsewhere. Although there are a wide variety of off-the-job methods, the most frequently used one are the conference discussion, programmed instruction, computer-assisted and simulation approaches.
- **Job Rotation:** This is a training device that makes it necessary to move the trainee from one department or unit to another to master what goes on in that section. The essence of this programme is to broaden his experience in different jobs.
- **Role Playing:** This is a technique of training where the trainee plays the part of a certain character or acts in an event. He is taught to do a job or make decisions the way he thinks his boss could have done it. Role playing is very exciting as it challenges the imagination of the employee. Role playing promotes retention as it heightens imagination, ingenuity and resourcefulness.

Nevertheless, Cole (2016) submitted that majority of organizations; however, do have a positive policy on training and development. In some cases, this may be no more than to state that the company will provide resources to ensure that key skills are maintained within the organizations, in other case, the policy may refer comprehensively to the various actions it will take to ensure not only a regular supply of skills, but also a high degree of personal motivation through development opportunities provided by the company. For the purpose of this chapter, it will be assumed that organizations see an important role for training and development in the provision of skills and the improvement of employee motivation.

2.3.5 Principles of Staff Training and Development

At the very heart of training theory lies learning theory or in other words, the principles of learning are basic to all training programmes. Irrespective of the type or method of training, it is imperative for the trainer to keep in perspective some of the principle of learning which have been developed over the past century. This is essential in order to promote efficient learning, long-term retention and application of skills and knowledge learned in training to the actual job situation. The following is a summary of some of the vital principal of learning that are applicable to the design and implementation of training programmes.

- a) **Motivation:** An individual must be motivated to learn. A person must recognize the need to learn and derive satisfaction from the learning experience. To learn, you must want to learn. If a trainee is not interested or demotivated, then the learning outcome is going to be insignificant and the organization's expenditure would be instructions. Conversely, too much intensity about learning and outcomes may result in setting over-amid-times goals and actually demotivating the employee. Perhaps the most effective way of raising a trainee's motivation is goal setting.

Goal setting has a proven track record of success in improving employee performance in a variety of settings and cultures. Goal theory has three important implications for motivating trainees: i) The objectives of the training programme should be made clear at the outset. ii) Goals should be challenging and difficult enough for trainees to derive personal satisfaction from achieving, but not so difficult that they are perceived as impossible to reach. iii) Ultimate goals should be supplemented with sub goals which would act as mileposts along the way.

Also, while goal setting clearly affects the trainee's motivation, so also do the expectations of the trainer, the higher (but realistic) the expectations, the better the trainees perform.

- b) **Practice:** Time must be provided for practice and repetition of subject matter that has been learned. There is an ocean of the truth in the old adage practice makes perfect. For anyone learning a new skill or acquiring factual knowledge, there must be the opportunity to practice what is being learned. This increases the length of time that the training materials will be returned, and makes the learning more reflexive so that tasks become

automatic. Additionally practice enables the quality of performance to be retained particularly during periods of emergency or added stress. Finally, practice facilitates the transfer of training to the job situation which, in a sense, is the most vital of all training objectives.

- c) **Reinforcement:** Learners need reinforcement of appropriate behaviour. Psychologists have confirmed through research that learning is greatly increased by providing positive and immediate reinforcement of the desired conduct. Reinforcement may be in the form of praise, money, promotion or other forms of recognition. For learning to take place and be internalized to the required extent, trainees need to be provided with some form of incentive or reward.

This reinforcement, or the acknowledgement that what has been acquired is desirable, can be either extrinsic or intrinsic, i.e. either external praise or some tangible reward or alternatively, an inculcation in the individual of a sense of advancement or progress.

- d) **Feedback:** Bhaskar (2011) opined that to be told how someone is progressing is a very important facet of a trainee's progress in imbibing the training. Feedback is a form of information about one's attempt to improve and in fact is vital for learning as well as for trainee motivation. During the training process, therefore, it is useful for the trainee to be informed how well he is progressing. The acknowledgement of results is an effective motivator-constant and periodic feedback had positive effects on the trainee's learning process.

Broadly speaking, feedback by providing direct information about the correctness of his responses, allows the trainee to make adjustment in future behavior. Secondly, it acts as an indication that the trainer is interested in the employee and thereby makes the learning process more interesting and maximizes the willingness to learn. Finally, enable trainees to self-assess their progress and maintain performances at required levels.

In order to prove effective training and development programs, feedback should follow the completion of various stages of the training programme. On the conclusion of each stage, the trainee should have a clear perspective of the progress he is achieving, the

drawbacks in his performance if any, the encouraging aspects, and whether any behavioural or attitudinal correctives need to be adopted.

2.3.6 Problems of Staff Training and Development

Problems of training and development are challenges and factors associated with the planning, implementation and completion of training and development programs. Onah (2010) stated that one of the reasons for training problems is inability of the ministries to post administrator to job that are directly related to the areas of their training. Ideally, training should be related to the job assignment after a training programme.

There is also reluctance on the part of government to release many officers for training programmes. This is because training is expensive in terms of money and time involved in maintaining officers during their programmes. In the planning and implementation of government programmes, the level of their performance in this area can decrease considerable if many administrators are released at the same time.

Therefore, the following factors constitute the problems of training and development:

- **Lack of Capacity:** This has to do with the glaring incapacity of the organization to attract and retain high quality staff. Also part of the incapacity is the inability or unwillingness of the public organization to invest reasonably on staff development and training instead of this, local government workers who are fortunate to further their skills do so secretly out of fear of being victimized.
- **Corruption:** Amujiri (2012) rightly noted, one of the most fundamental problems facing Nigeria today is Corruption. Corruption has weakened the efficiency of government in Nigeria, increased opportunities for organized crime, eroded confidence in the justice of the political order, discouraged the habit of hard work, dedication, honesty and discipline, add to tax payers burden, rendered patriotism nearly impossible and made nonsense of public accountability.
- **Employees' Restiveness:** Most employees set limited career objectives and goals. Due to this, they mostly retrain training and development programmes and in a situation where

they honour it, they won't pay attention to the messages of the trainee, which at the end will add no value to their skills and abilities.

- **Cost of Organising Training:** Most organisations find it difficult to afford the fee required to enroll their employees for training and development programmes and this has caused the reason some of them don't consider training of their employees at all.

2.3.7 Evaluation of Training and Development Programs

Evaluation is important since in evaluating, one tries to judge the value or worth of the activity, using the available information, Elozieuwa (2012). An attempt is made to obtain information and feedback on the effects of a training programme and to assess the value of training in the light of that information. Evaluation also enables the effectiveness of an investment in training to be appraised. Given the quantum of time and money that is put into training programmes, managements requires to know about the methods of instruction being employed whether training inputs are having an impacts on unproved, productivity and how efficiently and usefully, training course are being conducted.

Evaluation helps management to weigh up and take a view on the following questions: a. How relevant are the programmes to the organizations needs and objectives?

b. What changes are necessary in the existing programmes in order to realign them to the organizational goals? c. What are the areas where training is of real and lasting value?

d. What are the opportunity costs? Could money have been better results in terms of organizational effectiveness? e. Is the investment in terms of time and money inadequate or too much? How can an optimum, standard be evolved?

Moreover, the criteria used in evaluating training programmes will vary according to the objectives of the programme, but broadly; there are three types of criteria; internal, external and participant reaction. Internal criteria refers to the programme content and in particular to the absorption by the trainees of instructions, guidelines, facts, imparted skills and techniques, etc include as inputs in the programme.

External criteria are concerned with the broad, overall objectives of the training package such as development of interpersonal equations, acquiring of new perspectives becoming more decision-oriented, cultivating greater self-awareness, changing of personal management styles, going through attitudinal transformations etc-all such as increased turnover, over the years, experts have identified five distinct approaches leading to a comprehensive evaluation of a training programme or package.

- **Observation:** Here the trainees are closely observed during the programme in order to assess their behaviour strengths and weakness in different situation. The observation must, however, be specific, systematic, quantifiable and recorded. It must also be conducted by trained expert who know what they are looking for. In this method, the manner of assessing the quality of training and identifying improvements and deficiencies is the most direct.
- **Rating:** Training programme or system is broken up into its various component parts such as presentation, educational matter or content, audio-visual aids, trainee interaction, etc. these individual elements are then rated according to a predetermined scale by experienced and qualified raters who assess each aspect independently. Based on their rated assessments, management can take decisions on future changes/modifications.
- **Trainee Surveys:** This refers to the reaction of the participants as to how they have been achieved during the course of the training. It also seeks information on contents, reading material, presentation, trainer's ability and relationship with other participants. Additionally, participants are requested to indicate their experience with classroom facilities, boarding, lodging, etc; and provide suggestions for improvement.
- **Trainee Interviews:** This method is somewhat similar to the previous one with one major difference the views and opinions of the participants are determined individually or in groups by skillful questioning instead of in writing. Here the expert is usually able to obtain more precise information and gauge the real feeling of the trainees as to the strengths and weaknesses of the programme. Interpretational ambiguities can thus be removed and objective and useful recommendations can be formulated.

- **Instructor Interviews:** Finally, the observations and recommendations of instructors can be collected and tabulated. This may be done both in writing as well as orally, i.e. to them. Their views on various components provide a valuable source of feedback in ensuring that the system is consistent with the needs/of both trainees and organization (Amujiri, 2012; Dessler, 2011 and Shepherd, 2012).

2.4 Conclusion

This chapter has taken explanatory approach to vividly discuss the conceptual explanation of ICT; it highlights the components of ICT and various ICT gadgets that can be used for staff training and development. The concept of staff training and development is also discussed before tracing the historical background of staff training and development in Nigeria. It further reviewed the aims and objectives of staff training and development and capture the assessment of training needs before overviewing types/methods of staff training and development, principles of staff training and development, problems of staff training and development and made its submission by advocating the evaluation of staff training and development due to its importance to monitoring the effects of staff training and development on the staff of an organisation.

Reference

- Agbaeze, E. K. (2014). "Empowering administrators for relevance and excellence: The case of training and development". Journal of Business and Management Technology, Abia State Polytechnic, Aba. Volume 6. Pp 51-52.
- Albert, G. (2017). ICT Services and Tools. Monrovia: Steep Books Ltd.
- Amujiri, B.A. (2012). "Corruption in Nigeria: A critical perspectives. A book of Reading". Journal of Public Administration, UNN. Pp 68.
- Armstrong, M. (2014). A hand book on Human Resources Management Practice. (10th Edition). London: Cogan Page.
- Bhaskar, C. (2011). Human Resources Management; A contemporary text. (3rd Edition). Delhi: Sterling publishers private limited.
- Chandler, G. & Daniel, U. (2012). Introduction to ICT. Britain: Standfordshire Press.
- Cole, G.A. (2016). Management: Theory and Practice. (6th Edition). USA: Book power/ ELST.
- ComputerHope. (2017). Teleconferencing. Retrieved on the 3rd of January, 2020 at: <https://www.computerhope.com/jargon/t/teleconf.htm>
- Dessler, G. (2011). Human resources management (12th Edition). Pearson: Florida International University.
- Ejiofor, P.N.O. (2010). Management in Nigeria. Onitsha: Africana Publishers.
- Elozieuwa, F. O. (2012). Impact of Staff Training and Development on Work Attitudes in Imo State Public Service: A Case Study of Local Government in Orlu Senatorial Zone.

University of Nigeria, Nsukka. M.Sc. in Public Administration and Local Government.

International Telecommunications Union [ITU] (2015). Information and Communications Technology (ICT). United States: WSIS

Issa, A. O. (2012). Practical guides to project writing for students in Polytechnics, Colleges and Universities. Offa: Wunmi press

Igwe, K. N. (2011). Issues in the automation of libraries and information centers. In Jimoh, R.A and Igwe, K. N. (Eds). Information and Communication Technology (ICT) Systems for Library Services. Offa: Wunmi Commercial Press.

Jimoh, R.A and Igwe, K. N. (Eds). (2011). Information and Communication Technology (ICT) Systems for Library Services. Offa: Wunmi Commercial Press.

Khawaja, A. & Nadeem, J. (2013). Training and Development Program and its Benefits to Employee and Organization: A Conceptual Study. European Journal of Business and Management. Vol.5, No.2.

Kagan, J. (2019). Video Conferencing. Retrieved on the 3rd of January, 2020 at:
<https://www.investopedia.com/terms/v/video-conferencing.asp>

Kolawole, A.A. & Igwe, K.N. (2012). Online resources virtual libraries for information services in the digital era. Offa: Wunmi Commercial Press.

Nda, M. M. & Fard, R. Y. (2013). The impact of employee training and development on employees' productivity. Global Journal of Commerce and Management Perspectives. Vol. 2(6): 91-93

Onah, F.O. (2010). Human resources management. (2nd Edition). Enugu: John Jacobs Books.

Rouse, M. (n.d.). IoT Agenda: Transponders. Berkeley: University press.

Senyucel, Z. (2013). Managing the human resources in the 21st century. Ankara: Zorlu Senyucel and ventures publishing ApS.

Shepherd, A. (2012). Training in Organizations: Needs assessment, Development and Evaluation (4th Edn.). Belmont: Wadsworth.

TechTerms. (2020). Projector definition. Retrieved on the 3rd of January, 2020 at:

<https://www.google.com/amp/s/techterms.com/amp/definition/projector>

The GreenBook. (2020). Types of Modern Telecommunication Equipment. Retrieved on the

13th January, 2020 at: [http://www.thegreenbook.com/types-of-modern-](http://www.thegreenbook.com/types-of-modern-telecommunication-equipment.htm)

[telecommunication-equipment.htm](http://www.thegreenbook.com/types-of-modern-telecommunication-equipment.htm)

Chapter Three

Research Methodology

3.1 Introduction

This chapter is the heartbeat of this research work. It is the chapter that is expected to reveal the understanding of the researcher in relation to problem understudy. Therefore, this chapter will cover the approaches of how the researcher will obtain data to solve the problem understudy, and most importantly indicate the justifications for adopting any approach or way of conducting the study.

Thus, this chapter will be arranged under the following sub-headings:

3.2 Research Method/Design

3.3 Population of the Study

3.4 Sample and Sampling Technique

3.5 Instrument for Data Collection

3.6 Administration of the Instrument

3.7 Data Analysis Procedure

3.2 Research Method/Design

Research method is to indicate the ways to be followed or patterns of how the study will be conducted. Kolawole and Ijebor (2018) succinctly put it that research design is the conceptual structure with which research is conducted; it constitutes the blueprint for the collection, measurement and analysis of data.

However, case study method will be adopted for this study. Kolawole and Ijebor (2018) explained that the case study method usually involved detailed study of a particular case to get rich

understanding of it. They further that the method will support the researcher in gathering detailed data and in-depth understanding of the phenomena under study.

3.3 Population of the Study

Population is the total area, environment, scope or aspect a study is expected to cover. According to Issa (2012), population of a study is referred to as all the members or elements of a particular group of people, animals, or things in a defined area. Hence, the population of this study will be the staff of Information and Communication Technology (ICT) unit of Federal Polytechnic, Offa, Kwara State, Nigeria.

3.4 Sample and Sampling Techniques

Sample is the unit, portion or element of the population, which will provide data that are relevant to the study. In this study, sample will be drawn from the available staff of the Information and Communication Technology (ICT) unit based on non probability approach. The reason for adopting non probability approach is to ensure that data provided in this study are from professionals, which will enrich the data and makes it reliable.

Accordingly, sampling technique is the skill that will be employed by the researcher in choosing the respondents that will provide data for the study. Therefore, this study will adopt purposive sampling technique in picking its sample. This sampling technique which is also known as judgemental sampling, according to Kolawole and Ijebor (2018), enable the researcher to deliberately select sample from one or more predefined groups based on how he assessed them to be the ones to provide answers that are appropriate for meeting the objectives of the study. Thus, the staff of ICT unit will be purposefully selected because of their expertise to the provisions of responses that are appropriate for meeting this study's objectives.

3.5 Instrument for Data Collection

This study will adopt questionnaire as its data collection instrument. This, according to Issa (2012) is a data collection instrument containing series of questions and other prompt responses for the purpose of gathering information from respondents. The questionnaire will be arranged into two major sections, where the first section will be meant for demographic data and the second section will be dedicated to obtain data on the contexts of the study.

3.6 Administration of the Instrument

The designed questionnaire will be administered to the respondents by the student researcher herself. During the questionnaire administration, the researcher will give the respondents like a week to fill the questionnaire. This will avail them the opportunities to provide useful and genuine data on the problem understudy.

3.7 Data Analysis Procedure

Data obtained will be presented and analysed by using simple percentage and frequency table. The reason for its choice is because it allows presentation, analysis and comparison of multiple attitude, opinion and ideas which can enhance easy comprehension of tables and the data they contained.

Reference

- Issa, A. O. (2012). Practical guides to project writing for students in Polytechnics, Colleges and Universities. Offa: Wunmi Commercial Press.
- Kolawole, A. A. &Ijebor, J. A. (2018). A guide for researchers and writers of term papers. Offa: Correctman Press Limited.

Chapter Four

Data Presentation, Analysis, Discussion and Interpretation

4.1 Introduction

This chapter presents the data obtained from the field through questionnaire administered to the respondents, analyzed, discussed and interpreted according to their importance to this study.

This chapter will be arranged in the following order:

4.2 Preamble

4.3 Data Presentation, Analysis, Discussion and Interpretation

4.2 Preamble

Questionnaire is the data collection instrument used for this study. Twenty (20) questionnaires were administered to respondents from the two ICT Departments at the Federal Polytechnic, Offa campuses.

From the 20 questionnaires administered to the respondents, only fifteen (15) were returned, which makes the return rate of the questionnaire to be 75%. Rubin and Babbie (2011) stressed that response rate is found to be appropriate for analysis, if it is up to 70% or more. This figure of return rate makes a unit of all questionnaires to be 6.66%.

The unit figure of the questionnaire is derived by using the simple calculation below:

N = 100/15 N = 6.66

Demographic data of the respondents

4.3.1 Gender of the respondents

S/N	Attributes	No of res.	Percentage
1.	Male	9	59.94
2.	Female	6	39.96
	Total	15	100

From the table 4.3.1 it can be deduced that 9 respondents, which represents 59.94% are males; while 6 respondents, which stands for 39.96% are females. The implication of the results of this table is that there is disparity of gender among ICT practitioners. This makes one to assume maybe ICT operations and services are not attractive to the female folks, or that the female folks are not given the opportunity to showcase their skills in ICT realms.

4.3.2 Age range of the respondents

S/N	Attributes	No of res.	Percentage
1	19-28 years	3	19.98
2	29-38 years	5	33.3
3	39 and above years	7	46.62
	Total	15	100

The table 4.3.2 shows that 7 respondents, which represent 46.62%, are 39 and above years, 33.3% are 29-38 years, while 19.98% are 19-28 years. What the table is indicating is that it can be assumed that majority of the respondents should have sufficient working experience, which will go a long way in answering the questions of this study, by providing answers that will help in proffering solutions to the problems raised in it.

4.3.3 Academic qualification of the respondents

S/N	Attributes	No of res.	Percentage
1	“O” Level	Nil	Nil
2	ND	1	6.66
3	HND	3	19.98
4	B.Sc	7	46.62
5	M.Sc	4	26.64
6	Ph.D	Nil	Nil
	Total	15	100

The table 4.3.3 reveals that 46.62% of the respondents are B.Sc holders, followed by 26.64% for M.Sc holders, HND holders have 19.98%, while 6.66% represents ND holder. The submission that can be made from this table is that a large number of the respondents have the required academic qualifications to maximise the benefits of ICT and to deploy it efficiently to achieve desired objectives.

However, one cannot rely on academic qualifications alone as an indicator to measure qualitative job performances, most especially in the realms of ICT, where someone's proficiency with it goes beyond certificate, but practically embedded. The impact of academic qualifications of the respondents will be revealed in the subsequent tables, which inquired on the use of ICT for staff training and development at the Federal Polytechnic, Offa, Kwara State.

4.3.4 Work experience of the respondents

S/N	Attributes	No of res.	Percentage
1	0-5 years	1	6.66
2	6-10 years	6	39.96
3	11-15 years	5	33.3

4	16-20 years	3	19.98
5	21 and above years	Nil	Nil
	Total	15	100

The table 4.3.4 indicates that 39.96% of the respondents have 6-10 years working experience, 33.3% has 11-15 years, 19.98% has 16-20 years, while 6.66% has 0-5 years.

The submission one can make from the table is that the combination of respondents with 6-15 years shows most of the respondents have worked for a number of years needed to acquire skills and experience needed in the use of ICT for staff training and development programmes, most especially as it pertains to the Federal Polytechnic, Offa, Kwara State.

4.3.5 Specialisation of the respondents

S/N	Attributes	No of res.	Percentage
1.	Yes	12	79.92
2.	No	3	19.98
	Total	15	100

The table 4.3.5 reveals that 79.92% of the respondents are specialists in ICT operations and services, while 19.98% are not ICT specialists.

What the table is pointing to is that there is correlation with academic qualifications of the respondents where 19.98% and 6.66% hold HND and ND respectively. Also, it indicates the relationship of the respondents' age range, where 19.98% are 19-28 years.

Although, it has not been established that age range of the respondents is the requirement for their specialisation, but in the context of this study, it can be assumed that age and academic qualifications played significant roles in the area of specialisation of the respondents.

4.3.6 Do the Federal Polytechnic, Offa, have ICT?

S/N	Attributes	No of res.	Percentage
1.	Yes	14	93.24
2.	No	1	6.66
	Total	15	100

From the table 4.3.6, it can be understood that 93.24% of the respondents selected yes for the question, if ICT is available at the Federal Polytechnic, Offa, Kwara State, while 6.66% says there is no ICT in the institution.

It is worrisome to note that a respondent can still select no for the question if the Federal Polytechnic, Offa, Kwara State, has ICT. This is because the definition of ICT and its components have shown that it is difficult these days to find a place without ICT. Therefore, it can be assumed that the respondent with ND qualification, as table 4.3.3 revealed with one respondent 6.66% may be the one who selected no for the question asked above.

4.3.7 Some of the ICT available at the Federal Polytechnic, Offa.

S/N	Attributes	Yes		No		Total no of res.	Total percentage
		No of res.	Perc.	No of res.	Perc.		
1	Telephones	13	86.58	2	13.32	15	100
2	Internet	14	93.24	1	6.66	15	100
3	Computer system	15	100	Nil	Nil	15	100
4	Televisions	10	66.6	5	33.3	15	100
5	Storage devices	12	79.92	3	19.98	15	100

6	Cables, modems, etc.	10	66.6	5	33.3	15	100
---	-------------------------	----	------	---	------	----	-----

It can be observed from the table 4.3.7 that 86.58% of the respondents agreed that telephones are available at the Federal Polytechnic, Offa; 93.24% concurred that Internet is available in the school, 100 percent says there is availability of computer system, 66.6% affirmed that televisions are available, 79.92% picked yes to the notion that storage devices are available in the school, while 66.6% agreed that cables, modems etc., are available at the Federal Polytechnic, Offa, Kwara State.

The indication of the data 4.3.7 is that computer system has been considered as the major ICT component, even if possibly, some people have not seen it as the whole of ICT. However, as majority of the respondents agreed that telephones, Internet, televisions, storage devices, cables, modems and others are available means that they are aware of what ICT entails and how its availability can aid in achieving the objectives of the school on staff training and development programmes.

4.3.8 Do the Federal Polytechnic, Offa used ICT for staff training and development?

S/N	Attributes	No of res.	Percentage
1.	Yes	10	66.6
2.	No	5	33.3
	Total	15	100

From the table 4.3.8, it can be reported that 66.6% of the respondents agreed that the Federal Polytechnic, Offa uses ICT for staff training and development programmes, while 33.3% of them have a contrasting view.

To be having this number of percentage, 33.3% going against the assertion that the Federal Polytechnic, Offa uses ICT for staff training and development programmes means that there is huge gap between the staff and the departmental/organisational processes. This is because, if the level of work experience of the respondents is to go by, then there shouldn't be any need for them

not to be aware of what their department have, what they are using what they have for and how they are using what they have.

4.3.9 Some of the ICT products and services the Federal Polytechnic, Offa, used for staff training and development

S/ N	Attributes	Yes		No		Total no of res.	Total percentage
		No of res.	Perc.	No of res.	Perc.		
1	Telephones	14	93.24	1	6.66	15	100
2	Internet	15	100	Nil	Nil	15	100
3	Computer system	12	79.92	3	19.98	15	100
4	Teleconferencing	15	100	Nil	Nil	15	100
5	Storage devices	13	86.58	2	13.32	15	100
6	Projectors	15	100	Nil	Nil	15	100
7	Micro/Megaphones	13	86.58	2	13.32	15	100
8	Transponders	10	66.6	5	33.3	15	100
9	Videoconferencing	14	93.24	1	6.66	15	100

The table 4.3.9 shows that 93.24% of the respondents agreed that telephones are one of the ICT products being used for staff training and development; 100% says Internet is also being used, 79.92% submitted that computer systems are also being used, 100% supported teleconferencing, 86.58 percent says storage devices are also being used, 100% confirms the use of projectors, 86.58% says megaphones/microphones are being used, 66.6% settled for transponders, while 93.24% affirms that videoconferencing is also an ICT services being used at the Federal Polytechnic, Offa.

Going by the implications of some of the data above, one can assume that the respondents provided data that are relevant to this study. The advancement in ICT have given rooms for people to virtually connect at various locations and be sharing what they have in common. That is why the likes of Internet, teleconferencing and projectors have maximum percentage, while videoconferencing, which has been boosted in the recent times with the aid of emerging technologies like Zoom, Zoho, WebEx and others, also had significant percentage of 93.24%

4.3.10 The ICT department oversee the usage of ICT for staff training and development at the Federal Polytechnic, Offa.

S/N	Attributes	No of res.	Percentage
1.	Yes	10	66.6
2.	No	1	6.66
3	Undecided	4	26.64
	Total	15	100

The table 4.3.10 reveals that 66.6% of the respondents agreed that the ICT department oversee the usage of ICT for staff training and development at the Federal Polytechnic, Offa; 26.64% are undecided, while only 6.66%b settled for no.

The data in this table can be relied on because there is correlation in what table 4.3.8 provided, where 66.6% of the respondents agreed that the Federal Polytechnic, Offa uses ICT for staff training and development, and 33.3% goes to the negative option. It is also the same here, because the percentage of undecided and no responses amount to 33.3% too.

4.3.11 ICT has assisted the Federal Polytechnic, Offa in achieving the objectives of staff training and development

S/N	Attributes	No of res.	Percentage
1	Strongly agree	3	19.98
2	Agree	8	53.28
3	Undecided	2	13.32
4	Disagree	2	13.32
5	Strongly disagree	Nil	Nil
	Total	15	100

The table above points out that 53.28% of the respondents agreed that ICT has assisted the Federal Polytechnic, Offa in achieving her objectives on staff training and development programmes; 19.98% strongly agree, while 13.32% are undecided and disagree respectively.

What this table reveals is that the percentage of strongly agree and agree has overtaken the negative options. Therefore, the respondents feel that ICT helps the Federal Polytechnic, Offa in achieving her objective on staff training and development programmes. But before their submission in this table can be relied on, one has to wait for the responses they are going to provide in the subsequent questions that are related to this table.

4.3.12 Do the Federal Polytechnic, Offa conduct assessment of staff training needs before using ICT for staff training and development?

S/N	Attributes	No of res.	Percentage
1.	Yes	3	19.98
2.	No	8	53.28
3	Undecided	4	26.64

	Total	15	100
--	--------------	-----------	------------

From the 4.3.12 table, it can be deduced that 53.28% of the respondents answered no to the question if the Federal Polytechnic, Offa conducts the assessment of staff training needs before using ICT; 26.64% of them are undecided, while 19.98% answered yes to the above question.

The data in the table largely reveals that the Federal Polytechnic, Offa don't conduct any assessment needs before adopting ICT for staff training. And this is not good enough, because by conducting assessment needs, the Institution will be able to identify the motivation, interest and fear of their staff before using ICT for training and development programmes. However, if some of the staff who have apprehension for ICT are not able to make adjustment, then the Institution should look for another means of training and developing them.

4.3.13 The methods of staff training and development the Federal Polytechnic, Offa used ICT for.

S/N	Attributes	No of res.	Percentage
1.	On-the-job training	12	79.92
2.	Off-the-job training	1	6.66
3	Undecided	2	13.32
	Total	15	100

The table 4.3.13 shows that 79.92% of the respondents agreed that On-the-job training is the major method of staff training and development the Federal Polytechnic, Offa uses ICT for; 13.32% are undecided, while 6.66 percent selected Off-the-job training.

The data in the table is clear from all indications. This is because the use of ICT for On-the-job training allows the Federal Polytechnic, Offa to quickly provide monitoring, mentorship, lectures, instructions, assessment and feedback, contrary to the context of Off-the-job training, where the staff are not present at the Institution for prompt monitoring and feedback. The data also substantiate the correlation of the respondents work experience, with what they provide here.

4.3.14 Forms of staff training and development programme.

S/N	Attributes	Yes		No		Total no of res.	Total percentage
		No of res.	Perc.	No of res.	Perc.		
1	Lectures	12	79.92	3	19.98	15	100
2	Vestibules	4	26.64	11	73.26	15	100
3	Mentorship	13	86.58	2	13.32	15	100
4	Role playing	6	39.96	9	59.94	15	100
5	Job rotation	10	66.6	5	33.3	15	100

The above table 4.3.14 indicates that 79.92% of the respondents agreed that the Federal Polytechnic, Offa uses ICT for lectures as a form of staff training; 73.26% says no to vestibules form of training, 86.58% selected mentorship form of training, 66.6 percent supported that ICT is being used for job rotation, while 59.94% says ICT is not being used for role playing as a form of training at the Federal Polytechnic, Offa.

The submissions of the respondents in this table is consistent with the methods they selected in table 4.3.13, where majority of them stated that On-the-job is the major method of training they are using ICT for. It is also possible to assume that the respondents selected yes for the options they are familiar with, because as it was observed during the course of administering the questionnaires, some of the respondents were asking the researcher what vestibules and role playing forms of training are.

4.3.15 ICT has been effective in conducting staff training and development programmes at the Federal Polytechnic, Offa.

S/N	Attributes	No of res.	Percentage
1	Strongly agree	2	13.32
2	Agree	7	46.62
3	Undecided	4	26.64
4	Disagree	2	13.32
5	Strongly disagree	Nil	Nil
	Total	15	100

The data in the table 4.3.15 reveals that 46.62% of the respondents agreed that ICT has been effective in conducting staff training and development programmes at the Federal Polytechnic, Offa; 26.64%, are undecided, 13.32% are strongly agree and disagree respectively.

The implications of the data in the table are that ICT has had major effect on staff training and development exercises in the Institution. This can be well proven with the combination of both agree 46.62% and strongly agree 13.32%, which totally represent 59.94% of the whole data provided.

4.3.16 Attitudes of the Federal Polytechnic, Offa staff towards staff training and development conducted with ICT.

S/N	Attributes	No of res.	Percentage
1	Excellent	4	26.64
2	Good	5	33.3

3	Fair	3	19.98
4	Bad	1	6.66
5	Worse	2	13.32
	Total	15	100

From the table 4.3.16 it can be understood that 33.3% of the respondents affirmed that the attitudes of the staff of the Federal Polytechnic, Offa, towards staff training and development programmes conducted with ICT are good; 26.64% says their attitudes are excellent, 19.98 agreed that it is fair, 13.32% settled for the options that the attitudes of staff are worse, while 6.66% agreed that the staff attitudes are bad.

Based on the various instances the respondents have experienced, it is easy to assume that they have deep knowledge about the behaviours and reactions of the staff. This is what makes it easy for majority of the respondents to settle for excellent and good with 59.94%.

It can be said that there is consistency in the data in this table with that of table 4.3.15, where 59.94% also collectively strongly agreed and agreed that ICT has been effective in conducting staff training and development programmes at the Federal Polytechnic, Offa. They indicated that once you exhibit positive attitudes towards something, definitely it is going to be effective for you.

4.3.17 ICT helps in managing the following principles of staff training and development at Federal Polytechnic Offa.

S/N	Attributes	Yes		No		Total no of res.	Total percentage
		No of res.	Perc.	No of res.	Perc.		
1	Motivation	7	46.62	8	53.28	15	100
2	Practice	10	66.6	5	33.3	15	100

3	Reinforcement	7	46.62	8	53.28	15	100
4	Feedback	6	39.96	9	59.94	15	100

The table 4.3.17 shows that 53.28% of the respondents says no that ICT has been helpful in managing motivation as staff training principles; 66.6% agreed that ICT helps in managing practice, 59.94% says no that ICT is helpful in managing feedback, while 53.28% supported that ICT plays no role in managing reinforcement as staff training principle.

From the table, it can be deduced that the only positive response is practice. This is because, obviously, the use of ICT for staff training allows for immediate practical demonstrations and knowledge acquired. However it is disturbing to note that the Federal Polytechnic, Offa has not exploited the benefits of other principles with the aid of ICT.

For example, the various applications, social media platforms and gadgets can be used for feedback, as well as reinforcement and motivation of staff on training and development programmes. Maybe of this is done, it will increase the level of attitudes of staff towards the use of ICT for training and the effectiveness of ICT on training programmes.

4.3.18 The following are the challenges of ICT to staff training and development at Federal Polytechnic Offa.

S/N	Attributes	Yes		No		Total no of res.	Total percentage
		No of res.	Perc.	No of res.	Perc.		
1	Poor ICT literacy among the staff	11	73.26	4	26.64	15	100
2	Inadequate funding of the	13	86.58	2	13.32	15	100

	polytechnic system						
3	Inadequate ICT infrastructure	12	79.92	3	19.98	15	100
4	Poor electricity supply	11	73.26	4	26.64	15	100
5	Unavailability of indigenous ICT gadgets	11	73.26	4	26.64	15	100
6	Lack of cooperation between ICT department and staff training committee	9	59.94	6	39.96	15	100
7	Cost of accessing the internet	10	66.6	5	33.3	15	100
8	Poor bandwidth	11	73.26	4	26.64	15	100
9	Poor attitudes of the staff towards using ICT for staff training	5	33.3	10	66.6	15	100

The table 4.3.18 reveals that inadequate funding of the polytechnic system is the major challenge the Federal Polytechnic, Offa is facing when it comes to using ICT for staff training and development programmes, with 86.58%, 79.92% says inadequate ICT infrastructure is a challenge, too; poor bandwidth, unavailability of indigenous ICT gadgets, poor electricity supply and poor

ICT literacy among the staff have 73.26% respectively, 66.6% says cost of accessing the internet is their challenge, 59.94% picked lack of cooperation between the ICT department and staff training committee is also a challenge to them, while 66.6% say poor attitudes of the staff towards the use of ICT for staff training and development programmes is never a problem to them.

As expected, some of the major problems the respondents stated are what most organisations are going through not only in using ICT for training, but also in integrating it to their operations and services. However, there is a take-home in the table, where it reveals that 66.6 percent of the respondents selected that the attitudes of staff is not a problem to them. This notion of the respondents is consistent with their position in table 4.3.16, where 59.94% collectively said the attitudes of the staff of the Institution are good and excellent.

4.3.19 The following are the solutions to the challenges of ICT for staff training and development at Federal Polytechnic Offa.

S/N	Attributes	Yes		No		Total no of res.	Total percentage
		No of res.	Perc.	No of res.	Perc.		
1	Promotion of ICT literacy among the staff	12	79.92	3	19.98	15	100
2	Adequate funding of the polytechnic system	11	73.26	4	26.64	15	100
3	Availability of adequate ICT infrastructure	11	73.2	4	26.64	15	100

4	Provision of stable electricity supply	14	93.24	1	6.66	15	100
5	Availability of indigenous ICT gadgets	10	66.6	5	33.3	15	100
6	Promote cooperation between ICT department and staff training committee	10	66.6	5	33.3	15	100
7	Affordable cost of accessing the internet	13	86.58	2	13.32	15	100
8	Provision of strong bandwidth	12	79.92	3	19.98	15	100
9	Motivating the staff towards using ICT for staff training	13	86.58	2	13.32	15	100

It can be understood from the table 4.3.19 that the provision of stable electricity supply is a major solution to the use of ICT for staff training and development programmes. This is affirmed by 93.24% of the respondents; 86.58% proceeded that motivating the the staff towards using ICT for staff training and affordable cost of accessing the internet are also solutions, 79.92% provisions of strong bandwidth and promotions of ICT literacy among the staff will help in overcoming the associated problems of using ICT for staff training; 73.26% suggested that adequate funding of the polytechnic system and availability of adequate infrastructures are solutions to the barriers

encountered in this context, while 66.6% revealed that the availability of indigenous ICT gadgets and promotion of cooperation between the ICT department and staff training committee are also solutions.

It is no doubt that the respondents have shown that they are well knowledgeable in this subject. This has been shown in some of the solutions they proffered, where all options selected have significant percentage to support their positions. But their calls for affordable cost of accessing the Internet and provision of strong bandwidth is questionable, because as at the last observation of the researcher, there is availability of WiFi in the campuses of the Federal Polytechnic, Offa; though, the strength of those networks are not ascertained.

Reference

Rubin, A. & Babbie, E. R. (2011). Research methods for social work. 7th ed. Belmont, CA: Cengage Learning

Chapter Five

Summary of the Findings, Conclusions and Recommendations

5.1 Introduction

This chapter presents the summary of the findings, conclusion will be drawn based on the summary it made; it further make recommendations on issues raised in the study and also suggested some other areas which future studies can focus on to expand the frontiers of knowledge.

5.2 Summary of the Findings

The study reveals that majority of the staff of the ICT department, Federal Polytechnic, Offa, are male; most of them are age 39 and above and most of them are B.Sc holders with majority of them having 6-15 years work experience. Also, majority of the ICT staff of the Federal Polytechnic, Offa are ICT specialists.

In this study, majority of the staff of ICT department affirmed that the Federal Polytechnic, Offa have ICT; with telephones, computer systems, Internet, televisions, storage devices, cables, modems, etc., as major ICT gadgets available in the institution. The study further revealed that the Federal Polytechnic, Offa, is using ICT for staff training and development programmes and majority of the staff submitted that telephones, Internet, computer systems, teleconferencing, storage devices, projectors, megaphones/microphones, transponders and videoconferencing are the most ICT products and services used for staff training and development programmes at the Federal Polytechnic, Offa.

The study further discloses that the ICT department of the Federal Polytechnic, Offa oversees staff training and development programmes conducted with ICT, and majority of the respondents agreed that ICT has assisted Federal Polytechnic, Offa in achieving staff training and development programmes' objectives. It further made it known to us that the Federal Polytechnic, Offa doesn't conduct assessment of staff training needs before using ICT for staff training and development programmes.

The study also made it known to us that On-the-job training is the most method of staff training and development programme the Federal Polytechnic, Offa used ICT for, while mentorship and lectures are the major forms of staff training and development programme ICT products and services are being used for and majority of the respondents agreed that ICT has been effective in conducting staff training and development programmes in their institution.

The study clearly shows that the staff of the Federal Polytechnic, Offa are exhibiting excellent and good attitudes towards the use of ICT for staff training and development programmes. Majority of the respondents agreed that ICT helps in managing the principles of motivation and practice in staff training and development programmes, while majority of them also disagree that ICT helps in managing the principles of reinforcement and feedback of staff training and development programmes at the institution.

Majority of the respondents submitted that inadequate funding of the polytechnic system, poor electricity supply, unavailability of indigenous ICT gadgets, inadequate ICT infrastructure, poor ICT literacy among the staff, poor bandwidth, cost of accessing the internet and lack of cooperation between ICT department and staff training committee are the major problems the Federal Polytechnic, Offa is facing when it comes to using ICT for staff training and development programmes at the institution.

However, majority of the respondents suggested that promotion of ICT literacy among the staff, adequate funding of the polytechnic system, availability of adequate ICT infrastructure, provisions of stable electricity supply, availability of indigenous ICT gadgets, promotion of cooperation between ICT department and staff training committee, affordable cost of accessing the Internet, provision of strong bandwidth and motivating the staff towards using ICT for staff training and development programmes are major solutions to the problems affecting the Federal Polytechnic, Offa from using ICT for staff training and development programmes.

5.2 Conclusions

Based on the results of this study, the following conclusions are hereby made:

- The male staff of the ICT department of the Federal Polytechnic, Offa are more than their female counterparts and most of them are specialists in ICT with B.Sc certificates with work experience from 6-15 years.

- ICT gadgets are available at the Federal Polytechnic, Offa and they are being used for staff training and development programmes, which are being coordinated by the ICT department.
- ICT has been effective on staff training and has assisted the Federal Polytechnic, Offa in achieving her objectives on staff training and development programmes.
- The Federal Polytechnic, Offa doesn't conduct assessment of staff training needs before using ICT for staff training and development.
- On-the-job training is the only staff training and development method ICT is being used for at the Federal Polytechnic, Offa, while lectures, mentorship and job rotation are the forms of staff training and development programmes the Federal Polytechnic, Offa is using ICT for.
- There are various challenges affecting the Federal Polytechnic, Offa from maximising the benefits of ICT for staff training and development programmes.

5.3 Recommendations

The following recommendations are hereby made:

- The Federal Polytechnic, Offa should be constantly conducting assessment of training needs with ICT before deciding to be using ICT for training of staff. This will help them in identifying some of the staff who have phobia for ICT and how to help them overcome their fears.
- Since the staff training committee is working to improve the skills, competence and abilities of the staff, it is imperative for them to cooperate with the ICT department, so that they can easily dialogue on the resources they have and work together on how to make those resources be of benefits to their staff.
- The underfunding of the polytechnic system should be addressed, if government is ready to take the system to a new level. This will help the polytechnic system with financial

robustness to invest and prepare their staff for the changing nature of their works and practices.

- The indigenous IT developers should also develop IT products, services and gadgets that are peculiar to our local needs. This will meet the needs of the local users, boosts their patronage and increases the potential of their products and services at both local and international markets.
- The gap of ICT literacy between the youth and the older ones is huge. Government, Institutions and stakeholders should continuously focus on empowering the older generation on how to leverage the benefits of ICT for emerging economies.

Bibliography

Agbaeze, E. K. (2014). "Empowering administrators for relevance and excellence: The case of training and development". Journal of Business and Management Technology, Abia State Polytechnic, Aba. Volume 6. Pp 51-52.

Albert, G. (2017). ICT Services and Tools. Monrovia: Steep Books Ltd.

Amujiri, B.A. (2012). "Corruption in Nigeria: A critical perspectives. A book of Reading". Journal of Public Administration, UNN. Pp 68.

.Armstrong, M. (2009). Armstrong's Handbook of Human Management Practice, 11th. Edition. England: Prentice Hall.

Armstrong, M. (2014). A hand book on Human Resources Management Practice. (10th Edition). London: Cogan Page

Bhaskar, C. (2011). Human Resources Management; A contemporary text. (3rd Edition). Delhi: Sterling publishers private limited.

Cantoni, S. L., Jereissati, T. & Leonardo, M. (2019). A2I for decent work and economic growth. In IFLA and TASCHA. Development and Access to Information 2019. The Hague: IFLA. Pp.29-35.

Chandler, G. & Daniel, U. (2012). Introduction to ICT. Britain: Standfordshire Press.

Cole, G.A. (2016). Management: Theory and Practice. (6th Edition). USA: Book power/ ELST.

ComputerHope. (2017). Teleconferencing. Retrieved on the 3rd of January, 2020 at:

<https://www.computerhope.com/jargon/t/teleconf.htm>

Dessler, G. (2011). Human resources management (12th Edition). Pearson: Florida International University.

Ejiofor, P.N.O. (2010). Management in Nigeria. Onitsha: Africana Publishers.

El-Hazzam, M. (2015). The Effect of ICT on Human Resources Management Practices: A Case Study of Number of Organizations in South West Algeria. In International Journal of Innovative Research in Engineering and Management (IJIREM). Vol.2, issue 3.

- Elozieuwa, F. O. (2012). Impact of Staff Training and Development on Work Attitudes in Imo State Public Service: A Case Study of Local Government in Orlu Senatorial Zone. University of Nigeria, Nsukka. M.Sc. in Public Administration and Local Government.
- George, S. A. & Scott, B. W. (2012). Managing Human Resource, 16th Edition. California: University Press.
- Igwe, K. N. (2011). Issues in the automation of libraries and information centers. In Jimoh, R.A and Igwe, K. N. (Eds). Information and Communication Technology (ICT) Systems for Library Services. Offa: Wunmi Commercial Press.
- International Telecommunications Union [ITU] (2015). Information and Communications Technology (ICT). United States: WSIS
- International Telecommunications Union. (2016). ICT Facts and Figures, 2016. Geneva: ITU. Retrieved February 17, 2019, from <https://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2016.pdf>
- iProject (2019). Impact of Information Communication Technology (ICT) on Staff Training and Development in John Harris Library in University of Benin, Edo State, Nigeria. Retrieved on 19th October, 2019 at: <https://iproject.com.ng/library-science/impact-of-information-communication-technology-ict-on-staff-training-and-development-in-john-harris-library-in-university-of-benin-edo-state-nigeria/index.html>
- Issa, A. O. (2012). Practical guides to project writing for students in Polytechnics, Colleges and Universities. Offa: Wunmi press
- Jimoh, R.A and Igwe, K. N. (Eds). (2011). Information and Communication Technology (ICT) Systems for Library Services. Offa: Wunmi Commercial Press.
- Johanian, R., Zayed, N. N. & Asadi, A. (2012). The Impact of Information Technology and Communication Training on the Performance of Human Resources in Educational Organizations. In World Applied Sciences Journal 16 (6): 850-855.

Kagan, J. (2019). Video Conferencing. Retrieved on the 3rd of January, 2020 at:

<https://www.investopedia.com/terms/v/video-conferencing.asp>

Khawaja, A. & Nadeem, J. (2013). Training and Development Program and its Benefits to Employee and Organization: A Conceptual Study. European Journal of Business and Management. Vol.5, No.2.

Kolawole, A.A. & Igwe, K.N. (2012). Online resources virtual libraries for information services in the digital era. Offa: Wunmi Commercial Press.

Kolawole, A. A. & Ijebor, J. A. (2018). A guide for researchers and writers of term papers. Offa: Correctman Press Limited.

Lynch, J. & Lee, K. (2012). Encyclopedia of E-Leadership, Counseling and Training. New Zealand: IGI Global.

Nda, M. M. & Fard, R. Y. (2013). The impact of employee training and development on employees' productivity. Global Journal of Commerce and Management Perspectives. Vol. 2(6): 91-93

Onah, F.O. (2010). Human resources management. (2nd Edition). Enugu: John Jacobs Books.

Rouse, M. (n.d.). IoT Agenda: Transponders. Berkeley: University press.

Rubin, A. & Babbie, E. R. (2011). Research methods for social work. 7th ed. Belmont, CA: Cengage Learning

Senyucel, Z. (2013). Managing the human resources in the 21st century. Ankara: Zorlu Senyucel and ventures publishing ApS.

Shepherd, A. (2012). Training in Organizations: Needs assessment, Development and Evaluation (4th Edn.). Belmont: Wadsworth.

TechTerms. (2020). Projector definition. Retrieved on the 3rd of January, 2020 at:

<https://www.google.com/amp/s/techterms.com/amp/definition/projector>

The Federal Polytechnic Offa (2019b). 10th Convocation Ceremony for the Award of National Diploma, Higher National Diploma and Prizes. Offa: The Federal Polytechnic Offa.

The Federal Polytechnic Offa. (2019a). History of Fedpoffa. Retrieved on the 23rd of November, 2019 at: <https://portal.fpo.edu.ng/Default.aspx?tabid=218>

The GreenBook. (2020). Types of Modern Telecommunication Equipment. Retrieved on the 13th January, 2020 at: <http://www.thegreenbook.com/types-of-modern-telecommunication-equipment.htm>

The Nation. (2017). FEDPOFFA gets new Rector. Retrieved on 26th November, 2019 at: <https://www.google.com/amp/s/thenationonlineng.net/fedpoffa-gets-new-rector/amp/>

Appendix One

**Department of Library and Information Science,
School of Communication and Information Technology,
Federal Polytechnic, Offa,
Kwara State.**

Dear Sir/Ma,

I, Otulana Sandra Boluwatife; an HND II student of the above named Institution, with matriculation number LI/HND/F18/1247, is conducting a research on Impact of ICT on Staff Training and Development in Federal Polytechnic, Offa, Kwara State.

I humbly request you to help me fill this questionnaire and assure you that all data to be provided are primarily collected for this study and will be solely used for such.

Thank you in anticipation.

Otulana Sandra Boluwatife

Researcher

Section One: Demographic Data of the Respondent

Kindly click the boxes provided to indicate option(s) of your choice.

1. What gender are you? a. Male (☐) b. Female (☐)
2. What is your age range? (a) 19 – 28 years (☐) (b) 29 – 38 years (☐)
(c) 39 and above years (☐)
3. What is your academic qualification? a. “O” level (☐) b. ND (☐) c. HND (☐)

d. B.Sc. () e. M.Sc.() f. Ph.D. () g. Others, please specify.....

4. What is your working experience? a. 0 – 5years () b. 6 – 10years ()

c. 11 – 15years () d. 16 – 20years () e. 21 and above years ()

5. Do you specialise in ICT operations and services? a. Yes () b. No ()

Section Two: Impact of ICT on Staff Training and Development

6. Do Federal Polytechnic Offa have ICT? a. Yes () b. No ()

7. The following are some of the ICT at Federal Polytechnic Offa.

(From the options below, you can pick more than one options of your choice).

S/N	Options	Yes	No
a.	Telephones		
b.	Internet		
c.	Computer system		
d.	Televisions		
e.	Storage devices		
f.	Cables, Modems, etc.		
g.	Others, please specify...		

8. Do Federal Polytechnic Offa use ICT for staff training and development?

a. Yes () b. No ()

9. Federal Polytechnic Offa uses some of the following ICT products and services for staff training and development.

(From the options below, you can pick more than one options of your choice).

S/N	Options	Yes	No
a.	Telephones		
b.	Internet		
c.	Computer system		
d.	Teleconferencing		
e.	Storage devices		
f.	Projectors		
g.	Microphones/Megaphones		
h.	Transponders		
i.	Video Conferencing		
j.	Others, please specify...		

10. The ICT oversee the usage of ICT for staff training and development at Federal Polytechnic Offa. a. Yes () b. No () c. Undecided ()

11. ICT has assisted Federal Polytechnic Offa in achieving the objectives of staff training and development. a. Strongly Agree () b. Agree () c. Undecided () d. Disagree () e. Strongly Disagree ()

12. Do Federal Polytechnic Offa conduct the assessment of staff training needs before using ICT for staff training and development? a. Yes () b. No () c. Undecided ()

13. Which of the following methods of staff training and development do Federal Polytechnic Offa uses ICT for? a. On-the-job training () b. Off-the-job training () c. Undecided ()

14. Federal Polytechnic Offa uses ICT for the following forms of staff training and development programme.

(From the options below, you can pick more than one options of your choice).

S/N	Options	Yes	No
a.	Lectures		
b.	Vestibules		
c.	Mentorship		
d.	Role playing		
e.	Job rotation		
f.	Others, please specify...		

15. ICT has been effective in conducting staff training and development programme at Federal Polytechnic Offa. a. Strongly Agree () b. Agree () c. Undecided () d. Disagree () e. Strongly Disagree ()

16. What is the attitude of staff of Federal Polytechnic Offa towards staff training and development conducted with ICT? a. Excellent () b. Good () c. Fair () d. Bad () e. Worse ()

17. ICT helps in managing the following principles of staff training and development at Federal Polytechnic Offa.

(From the options below, you can pick more than one options of your choice).

S/N	Options	Yes	No

a.	Motivation		
b.	Practice		
c.	Reinforcement		
d.	Feedback		

18. The following are the challenges of ICT to staff training and development at Federal Polytechnic Offa.

(From the options below, you can pick more than one options of your choice).

S/N	Options	Yes	No
a.	Poor ICT literacy among the staff		
b.	Inadequate funding of the polytechnic system		
c.	Inadequate ICT infrastructure		
d.	Poor electricity supply		
e.	Unavailability of indigenous ICT gadgets		
f.	Lack of cooperation between ICT and staff training committees		
g.	Cost of accessing the internet		
h.	Poor band-width		
i.	Poor attitudes of the staff towards using ICT for staff training		
J.	Others, please specify...		

19. The following are the solutions to the challenges of ICT for staff training and development at Federal Polytechnic Offa.

(From the options below, you can pick more than one options of your choice).

S/N	Option	Yes	No
a.	Promotion of ICT literacy among the staff		
b.	Adequate funding of the polytechnic system		
c.	Availability of adequate ICT infrastructure		
d.	Provision of stable electricity supply		
e.	Availability of indigenous ICT gadgets		
f.	Promote cooperation between ICT and staff training committees		
g.	Affordable cost of accessing the internet		
h.	Provision of strong band-width		
i.	Motivating the staff towards using ICT for staff training		
j.	Others, please specify...		