

**CAUSES OF MASS FAILURE IN KEYBOARDING EXAMINATION IN DELTA  
STATE UNIVERSITY, OZORO**

**BY**

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**A PROJECT WORK SUBMITTED TO THE DEPARTMENT OF OFFICE  
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MANAGEMENT**

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CERTIFICATION**

We, the undersigned, certify that this project work was carried out by **ANETOR RITA**, with Matriculation Number: **2212050399**, in the Department of Office Technology and Management, Auchi Polytechnic, Auchi.

We also certify that the work is adequate in scope and quality in partial fulfillment of the requirements for the award of Higher National Diploma (HND) in Office Technology and Management.

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**Barr. (Mrs) R. Jimoh**  
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**Date**

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**Mr. G. C. Nwoko**  
**(Head, Dept. of Office Tech. & Mgt.)**

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**Date**

### **DEDICATION**

This project work is dedicated to God Almighty, who never ceases to watch over me. My life today is a testimony of His kindness.



## ACKNOWLEDGEMENTS

My gratitude goes to God Almighty in whose name all things are possible and for seeing me through in my educational pursuit and also for preserving my life and making this project work a huge success.

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## **ABSTRACT**

This study examined the Causes of Mass Failure in Keyboarding in Examination in Delta State University, Ozoro. In the course of carrying out the study, four research questions were raised to provide direction. A survey research design was used for the study. Data were gathered from both primary and secondary sources. The population of the study comprised of 703 students in the Department of Office Technology and Management. 120 was used as sample size for the study using the simple random sampling technique. The instrument used to elicit responses from the participants was the questionnaire. Based on the sample, a total number of 120 copies of the questionnaire were distributed to the respondents and all were successfully retrieved. Simple percentage was the statistical tool used to analyze the data for the study. Based on the analysis of data, the study found amongst others that some of the causes of students' failure in keyboarding in Office Technology Management are inadequate computer in the department, lack of knowledge on the use of the computer and unstable power supply. The study concluded that the focus and attention on keyboarding increase students' vocational skills in Office Technology and Management Department. It was recommended amongst others that management of institutions should increase the training process of students to have regular practice of keyboarding.

# **CHAPTER ONE**

## **INTRODUCTION**

### **Background of the Study**

Mass failure is student in touch-keyboarding is one major challenges faced by students in the institution of higher learning. Touch-keyboarding is one of the core course offered in the Department of office Technology and Management Institutions of Higher Learning. As a vital skill oriented course in the profession, it identifies every secretarial student from other related fields of human endeavor. Keyboarding plays an important role in the present world of business such as parliaments, law, hospitals, schools, banking industry, telecommunication industry, commerce and other sphere of human endeavor. It is a skill course where every secretary must acquire to be able to cope with the challenges of the profession.

Hornby (2005) defines touch-keyboarding as “to type without using the sense of sight to find the keys of the keyboard. Similarly, Adebayo (2018) states that keyboarding involves the manipulation of keys on a standard keyboard facility with the emphasis on touch-keyboarding, which is, typing without looking at the keyboard. He went further to explain the “keyboarding could be on a computer or other electronic data processing equipment.

Keyboarding is a vital learning tool for students of all ages and the use of computers at home and schools is rapidly increasing. Student in kindergarten, first, and second grades are using computers. As a result, an early keyboarding awareness is essential in setting the foundation for the formal introduction to touch keyboarding. Mastering of the keyboard, will make student to perform well in their keyboarding skill.

Students' attitude towards this course is highly questionable because they see the course as too technical because it involves devotion of time, use of signs and instructions. As a result Hoot and Anderson-Inman (2016), observe that keyboarding requires more practice and ability to pronounce words in such a way, that it will enhance speed and accuracy more effectively.

In the realization of this, Office Technology and Management Programme was designed in a way that all students offered all the core courses in the first two years of National Diploma (ND) and another two years for Higher National Diploma (HND) to have general knowledge of the content of programme. In order to achieve this objective, there are some skill and core courses that must be offered by OTM students. These include keyboarding, shorthand, computer appreciation and application, office management, small business, office practice and entrepreneurship education among others. The technological development in Information and Communication Technology (ICT) has increased the array of opportunities available for people who possess adequate mastery of the knowledge of keyboarding and other ICT skills. By this, keyboarding skills have become one of the important skills required in the world of work as the use of computer has tended to dominate today's business environments. It has been observed that most of the OTM lecturers were trained in the traditional learning environment, mostly with the use of manual typewriters, carbon papers, correcting fluid, typing erasers, stencils and all the likes, including the rigors of calculations and settings involved in tabulation works. The use of these obsolete technologies has paved ways to the new technologies which needed to be learnt by Office Technology and Management Students for improved knowledge and skills that will match today's business environments. Thus,

Nwosu and Ojo (2018), state the main goals of manpower training in keyboarding, includes the needs to increase the average skill level of the labour force and provide secretaries with the specialized skills necessary to meet future industrial needs. In line with this, Onwuachu (2018), Joshua and Nwabufo (2018), and Ugwuanyi (2020), observe that some computer/ICT skills that Office Technology and Management Programme need to groom students as global secretaries includes computer skills, skill in instant messaging, e-port folio, competency in the use of Microsoft words, Microsoft excel, power point, internet skills, word processing, among others.

In the same vein, perspective of Office Technology and Management (OTM) graduates are expected to teach all the components of business studies at the nation's junior and senior secondary school levels and as well teach some trades or entrepreneurship subjects like stenography and data processing. Thus, Aliyu (2020), observes that training of Office Technology and Management (OTM) Students need to be continuous and target oriented in view of the new development in the business world as a result of technological development. Also, the knowledge acquired in courses like keyboarding, office management, small scale business and entrepreneurship education are expected to prepare OTM graduates for self employment and as knowledge workers in public and private organisations. However, Nnaji and Bagudu in Ikegwani (2015), observe that most of the facilities required for the training of office manager are lacking and sometimes inadequate in most of the institutions in Nigeria. Office Technology and Management Programme is designed to prepare students who are interested in developing careers in keyboarding operation, stenography, office management, establishment of business training school, computer centres, data processing, small or medium business

enterprises and teaching through the acquisition of appropriate skills, knowledge abilities and attitude that will make them enter and progress in their economic endeavor. To effectively make a success of these opportunities, OTM students must be taught under a conducive and well-equipped environment that is a replica of where they are expected to perform after graduation. It was based on this background that the researcher examine the causes of mass failure in keyboarding in Delta State University of Science and Technology, Ozoro.

### **Statement of the Problem**

It has been observed that one of the greatest challenges of students in the Department of Office Technology and Management is mass failure in touch-keyboarding course, which would be as a result of either short duration of learning, inadequate equipment or poor study environment.

The duration of short semesters have negative effects on the learning of courses especially touch-keyboarding amongst the students. With short semesters, keyboarding lecturers would not be able to complete their course syllabus before examination which in most cases leads to poor performance. Students acquire more knowledge when the environment is conducive. Most often they find the environment uncomfortable when the expected facilities that ought to be put in place for them to require knowledge are not available. These students do not have what it takes to make the environment comfortable or make the facilities available or good teaching/learning to take place. To acquire those skills there are challenges facing the lecturers and students such as: constraints of time for preparation and participation in teaching process, whom to provides it the teaching for, whom will conduct the teaching programme, and who will establishes the teaching

products and environment, what will standardize the best teaching methods, objectives set by lecturers, rather than the students, little acceptance by students of the need to take responsibility for their own development, failure to follow through teaching process beyond a course, non identification of the specific needs of students and for students to own their own development needs, failing to achieve high value via transfer of the teaching, the time of teaching to be provided, global workforce with cultural distinctions of the teaching platform and material to dealt with issues of teaching process. This generation may be technologically proficient, but they also tend to lack important skills such as keyboarding, communication, diplomacy, and relationship building.

### **Purpose of the Study**

The purpose of this study is to examine the causes of mass failure in keyboarding.

Specifically, the study will:

- 1 Know the causes of students' failure in keyboarding in Office Technology and Management.
- 2 Know whether the focus and attention on keyboarding increase students' vocational skills in Office Technology and Management.
- 3 Find out if the benefits of knowing keyboarding can motivate students on their academic performance in Delta State University of Science and Technology, Ozoro.
- 4 Know the problems associated with poor teaching methods of keyboarding in Delta State University of Science and Technology, Ozoro.

### **Research Questions**

The following research questions guided the study:

1. What are the causes of students' failure in keyboarding in Office Technology and Management?
2. To what extent does focus and attention on keyboarding increase students' vocational skills in Office Technology and Management?
3. To what extent can the benefit of knowing keyboarding motivate students on their academic performance in Delta State University of Science and Technology, Ozoro?
4. What are the problems associated with poor teaching methods of keyboarding in Delta State University of Science and Technology, Ozoro?

### **Significance of the Study**

The study will be of great benefit to staff and students of Office Technology and Management Department, Delta State University of Science and Technology, Ozoro in particular and other tertiary institutions in Nigeria in general in alleviating their problems of failure in keyboarding. The study is aimed at enlightening students regarding the benefits of keyboarding and how it contributes to the performance of students in Office Technology and Management Department. It is also hoped that the study will help individuals and management of institutions to improve on their lecturers' training programme. In addition, future researcher will be able to use the work as reference materials.

### **Scope of the Study**

The study is delimited to the causes of mass failure in keyboarding in Delta State Polytechnic (now Delta State University of Science and Technology), Ozoro.

## **Operational Definition of Terms**

The following terms were used in the course of this study:

**Keyboarding:** Keyboarding is the process through which information is keyed into the computer or the typewriter by the use of various keys of the keyboard.

**Failure:** Failure is the state or condition of not meeting a desirable or intended objective, and may be viewed as the opposite of success.

**Causes:** A person or thing that gives rise to an action, phenomenon, or condition.

**Typewriting:** Typewriting is a mechanical (both manually and electrically) ways of transcribing shorthand and other manuscripts into readable and neater form, making use of the keyboard devices.

**ICT:** ICT is an umbrella term that includes any communication device, encompassing radio, television, cell phones, computer and network hardware, satellite systems.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

This chapter of the research work is designed to review related literatures on the survey of office layout and its effects on office administration. The chapter is reviewed under the following sub-headings:

- Concept of Keyboarding
- Importance of Touch Keyboarding
- Challenges Associated with Use of Keyboarding Training
- Capacity Building Challenges for the Use of Computer on Keyboarding
- Challenges Related to Financing the Cost of ICT used in the Laboratory
- Paucity of ICT Infrastructure and Lack of Access to Computer Laboratory
- Unsteady and Inadequate Electrical Power Supply to use Computer in Keyboarding Class
- Bandura's Theory of Self-Authorship in Touch Keyboarding
- Causes of Mass Failure in Keyboarding
- Summary of Literature Reviewed

#### **Concept of Touch Keyboarding**

Typing quickly and accurately involves touch-typing, the standard method of learning to type. Touch-typing involves placing the eight fingers on the keyboard home row and typing without looking at your hands. According to Hoot and Anderson (2016), touch-typists know where the keys are through finger muscle memory. It has been shown that typists who use this standard touch-type method type faster and more accurately than non-standard typists. Learn-to-type textbooks and software teach this standard method of typing.

Keyboarding is the process through which information is keyed into the computer or the typewriter by the use of various keys of the keyboard. It is also defined as the ability to utilize the complete set of keys of the keyboard, usually hand-operated to feed in data into the computer. Letters, reports and various documents produced in schools and offices are all done through keyboarding.

The keyboard is a very important aspect of computer and typewriter part as it is the basis for efficient computer or typewriter use. Without the knowledge of keyboarding, the learner cannot perform any meaningful task with the computer. Keyboards are classic input device. By manipulating a matrix of individual electrical switches, commands and instructions can be entered into the computer one character at a time. If you have used computers or typewriters to any extent, you already have an excellent grasp of Keyboard handling. However, Keyboards are not without their share of drawbacks and limitations. Although today's Keyboard switches are not mechanically complex, there are a number of important moving parts. When you multiply this number of moving parts times the 80 to 100+ keys on a typical Keyboard, you are faced with a substantial number of moving parts. A jam or failure in any one of these many mechanical parts results in a Keyboard problem. Most Keyboard failures are hardly catastrophic, but they can certainly be inconvenient (Mayor, 2018).

Clare (2015) stated that attending a keyboarding class would be worthwhile for learning to touch-type. Students attending a class may have better performance because effective typing techniques are taught and monitored in class. A typing technique, for example, could be using the correct fingering to press the keys. A typing class is also an

excellent opportunity for performance goals to be set and immediate feedback to be given when students are typing drills or timed writings.

Touch-keyboarding is the process of typing on keyboarding without using the sense of sight to find the keys of the keyboarding. Touch-keyboarding typically involves placing the eight fingers in a horizontal row along the middle of the keyboard (the home keys row) and having them reach for other keys. It has been regarded as a vital skill oriented course that involves the manipulation of keys on a standard keyboard facility with the emphasis on touch-keyboarding. This is a slight touch on keyboard without using the sense of sight to find the keys (David, 2018).

The process of representing spoken sound in readable form was first introduced by using the finger to write on sand. This developed to the use of feathers, slates and writing with pen and paper. Each of these styles had the problem of legibility and neatness. Therefore, the need for improvement gave great concern to many scholars.

In, 1837, Christopher Sholes developed the first typewriter which was used to bring out handwritten documents in printed form to make them more legible and decent. Though this typewriter could not function as well as expected, it gave birth to the whole idea of using machines to produce sign. This typewriter passed through successive developments and today, we have more advanced machines such as the personal computers.

Typewriting, can therefore be defined as the process of representing sound in printed form with the use of a typewriter in the way and manner in which the reader (decoder) could understand it. Keyboarding today, is not just the art of striking the

keyboard to see letters, words or figures in printed form, rather there are technicalities are learned and cannot be achieved through guesswork.

Osuala (2014) observed that the first six letters on the keyboard which are called a Qwerty keyboard. The typewriter has a raised dot or bar on the home keys for the index fingers to help touch typists maintain and rediscover the correct position on the keyboard quickly with the need to look at the keys.

More recently, the ability to touch type on touch screen phones has been made possible with the use of specialized virtual keyboard software for touch keyboarding. These computer keyboards are designed to send scan codes to the operating system, rather than directly sending characters. The series of scan codes is converted into a character stream by keyboard layout software.

In the view of Robinsons (2017), keyboarding is a means of inputting data into a computer with the use of a keyboard. He further defined keyboarding as the act of placing information into various types of equipment through the use of a keyboard. An early definition of keyboarding was the process of using the appropriate fingers on a computer keyboard without regard for formulating problems (Mclean, 2016).

In view of the above Liebowitzs and Stephen (2016), explained that the original layouts for the first few mechanical typewriters were in alphabetical order (ABCDE etc.) but the frequent jams suffered by experienced typists forced the manufacturers to change the layout of the letters, placing keys that are often pressed in a sequence as far as possible from each other. This allows engaging the second printing bar of the typewriter before the first falls down, increasing the speed of the mechanism. Equal distribution of

the load over most of fingers also increased the speed as the keys of the mechanical typewriter are more difficult to press.

The calculations for keyboard layout were based on the language being typed and this meant different keyboard layouts would be needed for each language. In English speaking countries for example, the first row is Qwerty, but in French speaking countries it is Azerty. We now live in the age of computer as a result of technological innovations which have lots of benefit such as time saving of service delivery, maximizing the available information, reduce coast of running an organization, improve on the quality of production etc. Therefore, when we talk about keyboarding we refer to the art of using the computer keyboard to type without looking at the keys. Despite the advances in technology, the touch keyboarding is the most common method used to interact with a computer.

However, just because students attend a keyboarding class does not mean that they are participating in deliberate practicing. Students can have different levels of motivation to practice diligently during class time.

### **Importance of Touch Keyboarding**

Olawole and Abuya (2016), identify the following as the importance of Touch Keyboarding:

**Accuracy:** One of the most important things to learn no matter how hard you type is to type accurately. Ask anyone who's ever played a multi player online game, and they will tell you how it important it is to be able to type quickly and accurately. No one is going to be able to ride to your rescue if your typing skills are so atrocious that no one can understand what you are saying.

**Time:** If you increase your typing speed from, say 30 words per minute to 60, you have effectively halved the time it would take you to do the same amount of work. An average two finger typist, typing at for example of 15 words per minute, will type a 250 word section in about 17 minutes. A touch typist, on the other hand, typing at an average 60 words per minutes can type the same section in around 4 minutes.

**Fatigue:** Typing is both mentally and physically exhausting to do for long periods of time. Learning to touch type properly reduces both mental and physical fatigue. Mentally, it keeps you from having to focus on two things at once. All you have to worry about is your output, not finding the individual keys. Physically, it keeps you from constantly having to bend your head over the keyboard to find your next couple of keystrokes.

**Health:** Overall, touch typing is better for you health. You are not hunched over looking at the keys, and using all of your fingers actually reduces the risk for repetitive stress injuries, or RSI. Many people who work on keyboards or with computers all day are at risk for these repetitive stress injuries.

**Job Prospects:** Typing is not an optional skill anymore. Many employers require computer skills and a certain typing speed to even be considered for some positions. Needless to say, they aren't looking for 20 — 30 word per minute hunt and peck typists. Learning to touch type, and to do so accurately, can be one of the most invaluable skills of your career. Want to find out your word per minutes typing speed.

**Focus:** When you are typing with two fingers, your focus is split between finding the keys on the keyboard and the work you are doing on the computer. Learning to touch type allows you to focus on one thing instead of two. This tends to increase productivity

and make it easier to pay attention to the details of your project rather than having to focus on your keys.

**Editing:** If you spend your time staring at your keyboard, you are not going to notice spelling or grammar mistakes until well after you have made them. Touch typing give you the option of editing as you go. You will be able to see errors as they appear and backspace to fix them. This is also good for grammar mistakes, as what you see in your head may not sound as good on paper. Touch typing may seem like it is not worth the time, especially if you are already confident in your hand and pick skills. It is, however, one of the most valuable skills you can learn. It may take a little more time than you would like, especially if you have a life time of bad habits to relearn, but in the end, a small investment of time will pay off in more ways than you can imagine. This is just a basic list of the benefits of touch typing.

**Easy Production of Work:** A good knowledge of touch system enable the operator to produce whatever work he does in computer or typewriter.

**Sense of Happiness and Encouragement:** The achievement of speed, accuracy, and efficiency give joy and encourages one to strive to greater height in the course of keyboarding.

**Career Opportunity:** It will make a job seeker more marketable as most jobs in society requires some degree of computer work.

**Personal Use:** Individuals own computer nowadays. A good knowledge of keyboarding will enable one work on One's Personal computers.

## **Challenges Associated with Use of Keyboarding Training**

There are so many factors that hinder the effective utilization of computer keyboard. These factors have been grouped into the following categories according to Robinson (2017):

- **Infrastructure Related Challenges on the Use of Keyboarding:** A country's educational technology infrastructure sits on top of the national telecommunications and information infrastructure. Before any ICT-based programme is launched, policy-makers and planners must carefully consider the following: In the first place, are there appropriate rooms or buildings available to house the technology? In countries where there are many old school buildings, extensive retrofitting to ensure proper electrical wiring, heating/cooling and ventilation, and safety and security would be needed.

Another basic requirement is the availability of electricity and telephony. In developing countries large areas are still without a reliable supply of electricity and the nearest telephones are miles away. Experience in some countries in Africa point to wireless technologies (such as VSAT or Very Small Aperture Terminal) as possible levers for leapfrogging (Mark, 2017). Although this is currently an extremely costly approach, other developing countries with very poor telecommunications infrastructure should study this option. Policy-makers should also look at the ubiquity of different types of ICT in the country in general, and in the educational system (at all levels) in particular. For instance, a basic requirement for computer-based or online learning is access to computers in schools, communities, and households, as well as affordable Internet service.

In general, ICT use in education should follow use in society, not lead it. Education programmes that use cutting-edge technologies rarely achieve long term success. It is cheaper, and easier, to introduce a form of technology into education, and keep it working, where education is riding on the back of large-scale developments by governments or the private sector. Television works for education when it follows rather than precedes television for entertainment; computers in schools can be maintained once commercial and private use has expanded to the point where there is an established service industry.

### **Capacity Building Challenges for the Use of Computer on Keyboarding**

There are various competencies that must be developed throughout the educational system for ICT integration to be successful.

- (a) **Teachers:** Teacher professional development should have five focuses.
- Skills with particular applications;
  - Integration into existing curricula;
  - Curricular changes related to the use of IT (including changes in instructional design);
  - Changes in teacher role; and
  - Underpinning educational theories.

Ideally, these should be addressed in pre-service teacher training and built on and enhanced in-service. In some countries, like Singapore, Malaysia, and the United Kingdom, teaching accreditation requirements include training in ICT use. ICTs are swiftly evolving technologies, however, and so even the most ICT fluent teachers need to continuously upgrade their skills and keep abreast of the latest developments and best

practices. While the first focus skill with particular applications is self-evident, the four other focuses are of equal, if not ultimately greater, importance. Research on the use of ICTs in different educational settings over the years invariably identify as a barrier to success shows the inability of teachers to understand why they should use ICTs and how exactly they can use ICTs to help them teach better. Unfortunately, most teacher professional development in ICTs is heavy on “teaching the tools” and light on “using the tools to teach.” Teacher anxiety over being replaced by technology or losing their authority in the classroom as the learning process becomes more learner-centered an acknowledged barrier to ICT adoption can be alleviated only if teachers have a keen understanding and appreciation of their changing role.

(b) **Education Administrators:** Leadership plays a key role in ICT integration in education. Many teacher- or student-initiated ICT projects have been undermined by lack of support from education administrators. For ICT integration programs to be effective and sustainable, administrators themselves must be competent in the use of the technology, and they must have a broad understanding of the technical, curricular, administrative, financial, and social dimensions of ICT use in education.

(c) **Technical Support Specialists:** Whether provided by in-school staff or external service providers, or both, technical support specialists are essential to the continued viability of ICT use in a given school. While the technical support requirements of an institution depend ultimately on what and how technology is deployed and used, general competencies that are required would be in the installation, operation, and maintenance of technical equipment (including

software), network administration, and network security. Without on-site technical support, much time and money may be lost due to technical breakdowns.

In the Philippines, for example, one of the major obstacles to optimizing computer use in high schools has been the lack of timely technical support. In some extreme cases involving schools in remote areas, disabled computers take months to be repaired since no technician is available in the immediate vicinity and so the computers have to be sent to the nearest city hundreds of kilometers away. Similarly, in Nigeria technicians are not within the country, and this pose as a threat in times of systems breakdown.

(d) **Content Developers:** Content development is a critical area that is too often overlooked. The bulk of existing ICT-based educational material is likely to be in English or of little relevance to education in developing countries (especially at the primary and secondary levels). There is a need to develop original educational content (e.g., radio programs, interactive multimedia learning materials on CDROM or DVD, Web-based courses, etc.), adapt existing content, and convert print based content to digital media. These are tasks for which content development specialists such as instructional designers, scriptwriters, audio and video production specialists, programmers, multimedia course authors, and web developers are needed. Like technical support specialists, content developers are highly skilled professionals and are not, with the exception of instructional designers, historically employed by primary and secondary schools. Many Universities with distance education programs, and those who otherwise make use of ICTs, have dedicated technical support and content development units.

## **Challenges Related to Financing the Cost of ICT used in the Laboratory**

One of the greatest challenges in ICT use in education is balancing educational goals with economic realities. ICTs in education programs require large capital investments and developing countries need to be prudent in making decisions about what models of ICT use will be introduced and to be conscious of maintaining economies of scale. Ultimately it is an issue of whether the value added of ICT use offsets the cost, relative to the cost of alternatives. Put another way, is ICT-based learning the most effective strategy for achieving the desired educational goals, and if so what is the modality and scale of implementation that can be supported given existing financial, human and other resources?

Whyte (2008) as cited by Cisler (2017), suggested the following potential sources of money and resources for ICT use programme:

- Grants
- Public subsidies
- Private donations, fund-raising events
- In-kind support (e.g., equipment, volunteers)
- Community support (e.g. rent-free building)
- Membership fees
- Revenues earned from core business:
- Connectivity (phone, fax, Internet, web pages)
- Direct computer access to user
- Office services (photocopying, scanning, audiovisual aids)
- Revenues earned from ancillary activities:

- Business services (word-processing, spreadsheets, budget preparation, printing, reception services)
- Educational services (distant education, training courses)
- Community services (meeting rooms, social events, local information, remittances from migrant workers)
- Tele-work and consulting
- Specialized activities (telemedicine)
- Sales (stationary, stamps, refreshments, etc.).

Ilaonisi and Osuagwu (2020), indicated that many factors limit the infusion of ICT in educational institutions in Nigeria. These include paucity of ICT infrastructure and lack of access; high enrolments, inadequate funding and absence of funding allocation to technology; high cost of ownership and cost to the consumer and policy implications of the mismatch between the advertised capabilities of ICT technology and the aims of individual educational institutions.

### **Paucity of ICT Infrastructure and Lack of Access to Computer Laboratory**

The underlying assumption for ICT in education is universal access to the network. Although some progress has been made in this front, there is urgent need to break the crippling access barrier confronting institutions of higher learning in Nigeria.

The profile is vastly different from campus to campus. Some have Campus Area Networks (CAN) backed by wireless narrowband or fibre-optic backbone; some have only Internet cafes with grossly insufficient computers for the user base with a 50:1 ratio being typical and others have departmental Local Area Network (LANs). The expected quality and performance will correspondingly be low. Web based education in the form

of online, mobile and distance education requires reliable computer networks, broadband connectivity, fibre-optic backbones for all the bandwidth hungry applications and to interconnect offices, departments and centres to the public Internet via the campus area network. High student enrolment, inadequate funding of universities and lack of technology budget exacerbate the problems of ICT infrastructure (Mark, 2017). The following are the paucity of ICT infrastructure and lack of access to computer laboratory according to Sam (2016):

- High Cost to the Computer Services
- High Cost of Ownership of Computers

**High Cost to the Computer Services:** The cost to the consumer of ICT services is quite expensive. Staff, students and researchers visit campus computer business centers to use the Internet, in these cafes, the average cost of browsing is 1.0USD (₦56.00) per hour, use of data on modem to access internet. As a result of the high cost, student and staff browse only when absolutely necessary. One could get a home internet subscription of 100 USD (₦15600.00) of slow and on and off internet connectivity to 350 USD (₦54600.00) of stable and fast access. A fortune could therefore be spent on Internet connectivity.

**High Cost of Ownership of Computers:** Partnership between government, industry and stakeholders appears to be the preferred option. In Nigeria a number of organizations for example, Education Trust Fund (ETF), Petroleum Technology Development Fund (PTDF), etc donate ICT laboratories equipped with 20-50 computers to some tertiary institutions. In addition they pay for one year or two years internet subscription and mandate the recipient institution to sustain the facility. Most of these

laudable efforts have failed because the recipients were unable to pay for the high cost of equipment renewal, maintenance and bandwidth. This is because network costs in Nigeria consist of not only capital cost but also high operating cost. Thus the cost of ownership is very high.

### **Unsteady and Inadequate Electrical Power Supply to use Computer in Keyboarding Class**

The irregular supply of electrical power has crippled the Nigerian economy and hindered the progress of research carried out by institutes, groups and individuals in the country. It is maddening for any establishment to start off new projects without addressing the almighty power supply problem. It is even worse to embark on extensive ICT project within an educational institution, without solving power problems first. The Federal government is however, working towards improving the generation of enough megawatts of power in the country. The average power supply in the year 2008 was about 4hrs/day. Alternate sources of power are standby generators, batteries and solar panels. The premier universities cannot foot the bill of maintaining several standby generators that gulp down 10-30 litres of diesel per hour at (₦ 165) per litre; nor can they purchase enough solar panels to go round the campus. Not all local ISPs can maintain their boosters for 24hrs due to high cost of gas; and many subscribers cannot use the Internet effectively as there is hardly electrical power to do as wished.

Sometimes, low voltages that do more harm than good is supplied. When power is rarely supplied, the admirable goals of transforming education with ICT and taking a paradigm shift in education is all a dream; having access to educational resources on demand, anytime, anyhow and anywhere is a story; e-learning would not be sustained either. Also, infrastructure availability as the bane of e-learning in Nigeria, especially

with the erratic power supply situation, compounded by lack of access to technology. That is why this committee is going to do basic work on infrastructure. It is not just enough to say we want bandwidth, broadband or the connectivity in isolation, for the foundation to be strong, power must be involved (Sam, 2016).

Brain-drain is another challenge facing the development of the full potential of ICT for education, research and development of any country. Brain drain has resulted in the lack of the critical mass of ICT-engineers and scientists relevant for undertaking ICT-related project professionally. Another major obstacle is the lack of an enabling environment and a sound ICT-roadmap and strategies by policy makers resulting in uncoordinated and unsustainable ICT-development activities. Other problems as noted by Instiful, Okyere and Osae (2018), include:

- High running and subscription costs;
- Lack of good publicity and incentives to attract potential users;
- Identification of information sources that meet the needs of users;
- Poor Quality of Service of the internet and telecommunication services;
- Effective management of network traffic and infrastructure

The solution strategy towards bridging the digital divide demands an aggressive human capacity building in ICT through training workshops, seminars and courses in collaboration with local and international institutions.

### **Bandura's Theory of Self-Authorship in Touch Keyboarding**

A psychologist, Albert Bandura, proposed a self-efficacy model that, when applied to reluctant touch-typists, sheds some light on students' reluctance to practice touch-typing. Self-efficacy is a person's perceived capabilities for learning or performing

tasks at certain levels of competency (Patton, 2016). The theory stresses that it is not the student's actual capability, but the student's perceived capability to perform a task that is important for motivation. A student's self-efficacy is affected by four things: Actual Performance, Vicarious Experiences, Some Types of Social Persuasion, and Physiological Levels (Austin, 2018).

- **Actual Performance:** If students practice typing and complete a timed writing that is at 35 nwpm or a few points below, these students may experience an increase in self-efficacy. Students could perceive that they can meet the keyboarding requirement and earn the keyboarding credit. Other students, though, may practice typing and produce terrible timed writings—ones with more than five errors which count for a speed of 0 nwpm. These students may experience a decrease in self-efficacy and perceive that they are incapable of passing the keyboarding course. Students actual performance on a timed writing can positively or negatively affect the students' self-efficacy about their ability to pass the keyboarding course.
- **Vicarious Experiences:** If a group of students has been practicing their touch-typing together and one of them does well on a scheduled timed writing, the other students may perceive that they too will do well when they try their timed writings. If a group of students has been practicing their keyboarding skills together and one of them does very poorly on a scheduled timed writing, the other students may perceive that they too will do poorly. Students' self-efficacy can be increased or decreased depending on the experiences of others around the students.

- **Some Types of Social Persuasion:** Some students may have done some practicing and have high self-efficacy about their ability to produce a good timed writing. However, if their friend then makes a negative comment like, “You guys are not going to get the 35, you know. You just don’t practice enough.” the self-efficacy for the students in the group could plummet. Conversely, a group of students who have done a lot of practicing and have been slowly improving may have a low self-efficacy about their chances for success at an upcoming timed writing session. The students’ instructor may make a comment like “You’ve been practicing so hard and improving so much, I’m sure you’ll do well on today’s timings.” and the students’ self-efficacy could soar. An increase or decrease in self-efficacy is possible depending on what is said in certain social situations.
- **Physiological Levels:** A timed writing is a typing test. If students have anxiety about tests in general, they may have a low self-efficacy about their ability to perform well on a timed writing and feel that no amount of typing practice will help. However, if students enjoy the challenge of taking tests, they may have high self-efficacy about their ability to produce a great timed writing and want to practice their touch-typing to ensure that they have timed writing success. Students physiological states could affect their level of self-efficacy about doing well on timed writings and the amount of practicing they will do to prepare for the tests.

It should be noted that a high level of self-efficacy cannot compensate for a lack of typing skills. Students may think they are capable of touch-typing, but if they have never mastered the ability to touch-type, they are still going to do poorly on the timed

writings. Students who have a high level of self-efficacy may feel that they do not need to practice touch-typing at all. That could be true—the student may have a high typing speed. Or students may be deceiving themselves because they do not have the skills to produce timings at 35 nwpm.

Bandura's work has shown that there is a relationship between high self-efficacy and achievement. If students produce one timed writing at 35 nwpm, the students' performance will increase their self-efficacy. "If I can do one timing," the student may think "I believe that I can complete the other two." Keyboarding data seems to confirm this point (Davis College, 2014). Rarely is there a student who achieves one 35 nwpm timed writing who does not go on to produce the remaining two timings.

Instructors can point out to students the typing successes of their peers who are like them in terms of cognitive skills, race, gender, or ethnicity. Instructors can encourage students to type and remind them of their previous typing successes. Instructors can also take steps to minimize text anxiety for students who get nervous doing timed writings. Bandura's theory helps to explain some reasons why some OA students are not doing their touch-typing practice, and it also gives instructors some strategies to help students improve their self-efficacy about keyboarding.

### **Causes of Mass Failure in Keyboarding**

Keyboarding as a subject is a problem to many office technology students widely known. Many candidates do fail keyboarding examination at various levels is also indisputable. But still it is realized that keyboarding is an indispensable course in the area of Office Technology. To become an efficient secretary and not unproductive typist, one must pass through the learning stages of keyboarding as a course. National; Diploma

(ND), Office Technology and management students. The relevant book available for learning keyboarding are sufficient for students to build their self, but the problem of keyboarding failure still in them and the teachers, student contributing in any way to this high rate of failure.

Hawkins (2017), sees the following as the causes of mass failure in Keyboarding:

1. **Poor Knowledge of English Language**

Students having poor knowledge of English language have constituted the large population of failure in keyboarding course. Also pronunciation of words in the wrong way has made it very difficult for students to perform well in most keyboarding tests and examinations. Most students write/type the way they speak. Students need general knowledge in English language in order to work quickly and intelligently.

2. **Ignorance of Keyboarding Principles**

Every course has its own principles guiding it, which will enable students to learn and understand it easily. In this case, the principles must first be applied. Most students who study the course ignore this principles such as placement of signs and positioning of fingers on keyboard. This is another major challenge faced by students.

3. **Lack of Speed and Accuracy**

This also contributes to the mass failure in keyboarding among students because most students see the course as a difficult one. For this reason, they are not able to type faster and spell correctly as a professional secretary who can type at least fifty (50) words per minute (WPM).

#### 4. **Inability to Interpret Instructions**

Most students fail keyboarding course as a result of their inability to interpret instructions given for a particular task before typing such as open punctuation, full punctuation, insert, inset, render all abbreviations in full, take 1 carbon copy (cc), mark the letter urgent etc. When all these are being neglected by students, it results to poor performance.

#### 5. **Inability to Recognize Correction Signs**

When a student fails to recognize keyboarding correction signs, the person is bound to fail woefully. Such correction signs are # (insert space), // (new paragraph), I-I (insert dash,) (insert letter words), (close up-les space), etc it leads t poor performance of students when the signs are being ignored. When there is high sense of recognition of signs, it enables students to facilitate spelling and punctuation.

#### 6. **Lack of Interest and Determination by Students**

Interest plays a very important motivational role in the leaning of keyboarding. It is another challenge faced by some students. If the students cannot get the course, they will have less interest and determination by showing unserious attitude towards the keyboarding course. Lack of interest on the part of students can be seen in failure to do assignments/homework, exercises, personal practice at home and even absenteeism from keyboarding classes.

#### 7. **Un-conducive Environment**

When the keyboarding laboratories are not well ventilated and equipped, the students will not be comfortable in the learning of keyboarding. Even the nature of the environment determines to a large extent the success of the learning process. When

learning atmosphere is not conducive for students, it becomes a problem. For example, a noisy environment is a barrier to learning. Similarly, dirty environment affects learning negatively in the sense that when environment is been polluted with offensive odor, the students will be uncomfortable in their learning.

#### **8. Epileptic Power Supply**

Power generation is a major problem associated with the learning of keyboarding. This is because without stable power supply, keyboarding equipment cannot function, and this affects the learning process of the students. Irregular power supply is a major challenge faced by students. When they are given a task to carry out in the keyboarding laboratory, you will discover that the power supply is not adequate. Thus, students are always disappointed.

#### **9. Inadequate Learning Facilities**

Inadequate learning facilities is also a problem affecting the learning of keyboarding among students. This range from lack of functional computers, printer, lack of capable technicians to maintain the facilities, inadequate furniture etc. Students are always disappointed for the non-availability of equipment and materials such as stationeries etc. The lack of important materials in the school library in learning of keyboarding is also a serious problem.

#### **10. Lack of Commitment by Some Teachers**

This has created a problem where teachers go to the class without much preparation. This leads to the inability of the teacher to impart the relevant skills in keyboarding on the targeted students. This consequently results in poor performance on the part of the students.

### 11. **Short Semester**

The duration of short semesters have negative effects on the learning of keyboarding among students. When keyboarding instructors are unable to complete their course syllabus before examination, it is often believed that students are left unequipped.

### 12. **Students' Social Life in the Campus**

Social life is the main problem that seriously affects the students' academic performance most especially on the learning of keyboarding. Keyboarding is a course that needs more attention by devoting more time to private practice. Social life cannot be over emphasized because of its wide nature and dimension.

According to Mohammed (2018), social life under normal circumstances happens to be advantageous because it deals with the creation of enlightenment, confidence, maturity, behaviourism and many others but most students have abused it at the expense of their studies and this has so much affected their learning capabilities.

### 13. **Students' Inability to do their Assignment**

Most students fail to carry out the assignments and homework given to them by their instructors and this is the basic reason for students to be unable to practicalized typing on their own. Some students are so lazy in the sense they cannot type. Rather, they choose to copy/print ready-made work done by others.

This is a situation where 10 - 20 students are having the same printed work. They will likely change the font size, forgetting that the errors on master "A" will still appear on master "B" job. This will result to poor performance of the students before the instructor/lecturer. Most students do not want to carry out the task assign to them by their instructor. Rather, they sublet their work to others to do as contracts.

## **Summary of Literature Reviewed**

The use of ICT in education is now seen worldwide as both a necessity and an opportunity. Issues and challenges of ICT in education deal with the use of ICTs within educational technology. The main issues and challenges of ICT in education mean implementation of ICT equipments and tools in teaching/learning process as a media and methodology. The issues and challenges of ICT in education is generally to familiarize students and teachers with the use and workings of computers and related technologies as well as the social, ethical, technological, costs, and electricity challenge to mention but few, of the use of ICT in education.

Some matured students have learned to touch-type at high school. Some students have learned to touch-type by using online keyboarding software. Some students do not know how to type at all. Still, others have learned to type by creating their style of typing. Touch-typists type faster and more accurately than those who use a different method. Office Technology and Management students purchase a keyboarding software package that allows them to learn online, on their own, how to touch-type to automaticity. Although students need to be motivated to complete the online work successfully, research has shown that motivation is multi-faceted, that diligent practice is required, and that students' language and verbal skills play a role in touch-typing success.

**CHAPTER THREE**  
**RESEARCH METHOD**

In this chapter, the researcher discussed the procedures used in gathering data for this study and how they were analyzed under the following subheadings. Research Design, Population of the Study, Sample/Sampling Technique, Instrument for Data Collection, Method of Data Collection and Method of Data Analysis.

**Research Design**

The design used for this study was the survey research design. This was used in order to obtain information from the study participants with the use of questionnaires. This enabled the respondents to express facts without any fear or favour.

**Population of the Study**

The population of this study was 703 comprised of the entire students of the Department of Office Technology and Management, Delta State University of Science and Technology, Ozoro. The Delta State University of Science and Technology, Ozoro operate with only 100 level as a University method and NDII and HNDII as a Polytechnic method. This was shown in the table below:

**Table 1**  
*Population of the Study*

<b>S/No</b>	<b>Class</b>	<b>Population</b>
1	100 L	263
2	ND II	200
3	HND II	240
	<b>Total</b>	<b>703</b>

**Source: Field Survey, 2022**

### **Sample/Sampling Technique**

A sample size of 120 was selected for this study using the simple random sampling technique. This represented 17% of the total population as presented on the table below:

**Table 2**  
*Population and Sample Size*

<b>S/No</b>	<b>Class</b>	<b>Population</b>	<b>Sample Size</b>
1	100 L	263	45
2	ND II	200	34
3	HND II	240	41
	<b>Total</b>	<b>703</b>	<b>120</b>

### **Instrument for Data Collection**

The instrument used to obtain data was the questionnaire. The questionnaire was divided into two sections. The first section sought information on the demographic characteristics of the respondents like, sex, marital status and class. The second section contained items from the research questions.

### **Method of Data Collection**

Data for this study were collected through the primary and secondary sources. The primary source of data was the questionnaire which was administered on the study participants. The researcher personally administered the questionnaire to the respondents in their school and also retrieved them through the same means. The secondary data was obtained from textbooks, past project and internet sources.

### **Method of Data Analysis**

The data gathered were tabulated and the simple percentage method was used to analyse the responses obtained from the respondents. The formula used in the calculation was given below:

$$\frac{\text{Number of Responses}}{\text{Total Number of Respondents}} \times \frac{100}{1}$$

## CHAPTER FOUR

### DATA ANALYSIS, FINDINGS AND DISCUSSION

This chapter deals with the data analysis, findings and discussion. The data is mainly a set of questionnaire which was distributed to students in Delta State University of Science and Technology, Ozoro. 120 copies of the questionnaire were distributed and the entire 120 were successfully retrieved which represents 100% return level of the entire questionnaire.

In treating the data obtained, simple percentage method of analysis was adopted in the table. The research questions were reviewed and carefully analyzed.

#### Data Analysis

##### Section A - Background Information of Respondents

**Table 3**  
*Sex of Respondents*

<b>Sex</b>	<b>No. of Respondents</b>	<b>Percentage</b>
Male	25	20.83%
Female	95	97.17%
<b>Total</b>	<b>120</b>	<b>100</b>

Table 3 above, shows the sex distribution of the respondents. 25 respondents (representing 20.83%) are males while the remaining 95 respondents (representing 97.17%) are females. This shows that the female respondents are more than the male respondents in the population.

**Table 4**  
*Marital Status of Respondents*

<b>Marital Status</b>	<b>No. of Respondents</b>	<b>Percentage</b>
Single	105	87.50%
Married	15	12.50%
<b>Total</b>	<b>120</b>	<b>100</b>

Table 4 above, shows the marital status of respondents. 105 respondents (representing 87.50%) are single, while the remaining 15 respondents (representing 12.50%) are married. This shows that single respondents are more than married in the population of study.

**Table 5**  
*Class of Students*

<b>Class of Students</b>	<b>No. of Respondents</b>	<b>Percentage</b>
100 L	45	37.50%
ND II	34	28.33%
HND II	41	34.67%
<b>Total</b>	<b>120</b>	<b>100</b>

Table 5 above shows the class of respondents. 45 respondents (representing 37.50%) are in 100 level, 34 respondents (representing 28.33%) are in ND II while the remaining 41 respondents (representing 34.67%) are in HND II. The findings shows that respondents in 100 level are more in the population of study.

## **Section B – Items Related to the Research Questions**

### **Research Question One**

**What are the causes of student’s failure in keyboarding in Office Technology and Management?**

Responses to items 1, 2, 3 and 4 of the research questionnaire were analyzed and used to answer research question one as shown below:

**Table 6**  
*Analysis of Responses to Research Question One*

S/No	Items	Variables	No. of Respondents	Percentage
1.	The number of inadequate computer in the department are responsible for students' failure on keyboarding.	Strongly agree	70	58.33%
		Agree	27	22.50%
		Disagree	13	10.84%
		Strongly disagree	10	8.33%
		<b>Total</b>	<b>120</b>	<b>100</b>
2.	Lack of knowledge on the use of computer by lecturers to teach students is responsible for their failure.	Strongly agree	69	57.50%
		Agree	31	25.83%
		Disagree	8	6.67%
		Strongly disagree	12	10.00%
		<b>Total</b>	<b>120</b>	<b>100</b>
3.	The absence of constant power supply to teaching keyboarding is a cause to students' failure.	Strongly agree	65	54.16%
		Agree	36	30.00%
		Disagree	11	9.17%
		Strongly disagree	8	6.67%
		<b>Total</b>	<b>120</b>	<b>100</b>
4.	The inability of students to learn and master keyboarding result to students' academic failure.	Strongly agree	59	49.16%
		Agree	46	38.34%
		Disagree	6	5.00%
		Strongly disagree	9	7.50%
		<b>Total</b>	<b>120</b>	<b>100</b>

Item 1 on the questionnaire: “The number of inadequate computer in the department are responsible for students’ failure on keyboarding” was provided with four variables. 70 respondents (representing 58.33%) strongly agreed that the number of inadequate computer in the department are responsible for students’ failure on keyboarding; 27 respondents (representing 22.50%) agreed; 13 respondents (representing 10.84%) disagreed, while 10 respondents (representing 8.33%) strongly disagreed. This shows that the number of inadequate computer in the department are responsible for students’ failure on keyboarding in the institution.

Item 2 on the questionnaire: “Lack of knowledge on the use of computer by lecturers to teach students responsible for their failure” was provided with four variables.

69 respondents (representing 57.50%) strongly agreed that lack of knowledge on the use of computer by lecturers to teach students responsible for their failure; 31 respondents (representing 25.83%) agreed; 8 respondents (representing 6.67%) disagreed, while 12 respondents (representing 10.00%) strongly disagreed. This shows that lack of knowledge on the use of computer by lecturers to teach students responsible for students' failure in the department.

Item 3 on the questionnaire: "The absence of constant power supply to teaching keyboarding is a cause to students' failure" was provided with four variables. 65 respondents (representing 54.16%) strongly agreed that the absence of constant power supply to teaching keyboarding is a cause to students' failure; 36 respondents (representing 30.00%) agreed; 11 respondents (representing 9.17%) disagreed, while 8 respondents (representing 6.67%) strongly disagreed. This shows that the absence of constant power supply to teaching keyboarding is a cause to students' failure in the department.

Item 4 on the questionnaire: "The inability of students to learn and master keyboarding result to students' academic failure" was provided with four variables. 59 respondents (representing 49.16%) strongly agreed that the inability of students to learn and master keyboarding result to students' academic failure; 46 respondents (representing 38.34%) agreed; 6 respondents (representing 5.00%) disagreed while 9 respondents (representing 7.50%) strongly disagreed. This shows that the inability of students to learn and master keyboarding result to students' academic failure.

From the analysis, it shows that some of the causes of students' failure in keyboarding in Office Technology and Management are inadequate computer in the department, lack of knowledge on the use of the computer and unstable power supply.

### **Research Question Two**

**To what extent does focus and attention on keyboarding increase students' vocational skills in Office Technology and Management?**

Responses to items 5, 6, 7 and 8 of the research questionnaire were analyzed and used to answer research question two as shown below:

**Table 7**  
*Analysis of Responses to Research Question Two*

S/No	Items	Variables	No. of Respondents	Percentage
5.	The interest students show in learning of keyboarding increase their vocational skills.	Strongly agree	64	53.34%
		Agree	38	31.66%
		Disagree	8	6.67%
		Strongly disagree	10	8.33%
		<b>Total</b>	<b>120</b>	<b>100</b>
6.	The seriousness of students during keyboarding class increase their academic performance in other courses.	Strongly agree	57	47.50%
		Agree	51	42.50%
		Disagree	4	3.33%
		Strongly disagree	8	6.67%
		<b>Total</b>	<b>120</b>	<b>100</b>
7.	The attention and focus students pay to lecturer during teaching and learning of keyboarding enable them to develop more skills in modern technological equipment.	Strongly agree	67	55.83%
		Agree	34	28.33%
		Disagree	11	9.17%
		Strongly disagree	8	6.67%
		<b>Total</b>	<b>120</b>	<b>100</b>
8.	Regular learning and practice of keyboarding increase students ability to master the keys on the computer.	Strongly agree	69	57.50%
		Agree	36	30.00%
		Disagree	6	5.00%
		Strongly disagree	9	7.50%
		<b>Total</b>	<b>120</b>	<b>100</b>

Item 5 on the questionnaire: “The interest students show in learning of keyboarding increase their vocational skills” was provided with four variables. 64 respondents (representing 53.34%) strongly agreed that the interest students show in learning of keyboarding increase their vocational skills; 38 respondents (representing 31.66%) agreed; 8 respondents (representing 6.67%) disagreed, while 10 respondents (representing 8.33%) strongly disagreed. This shows that the interest students show in learning of keyboarding increase their vocational skills.

Item 6 on the questionnaire: “The seriousness of students during keyboarding class increase their academic performance in other courses” was provided with four variables.

57 respondents (representing 47.50%) strongly agreed that the seriousness of students during keyboarding class increase their academic performance in other courses; 51 respondents (representing 42.50%) agreed; 4 respondents (representing 3.33%) disagreed, while 8 respondents (representing 6.67%) strongly disagreed. This shows that the seriousness of students during keyboarding class increase their academic performance in other courses.

Item 7 on the questionnaire: “The attention and focus students pay to lecturer during teaching and learning of keyboarding enable them to develop more skills in modern technological equipment” was provided with four variables. 67 respondents (representing 55.83%) strongly agreed that the attention and focus students pay to lecturer during teaching and learning of keyboarding enable them to develop more skills in modern technological equipment; 34 respondents (representing 28.33%) agreed; 11 respondents (representing 9.17%) disagreed, while 8 respondents (representing 6.67%) strongly disagreed. This shows that the attention and focus students pay to lecturer during teaching and learning of keyboarding enable them to develop more skills in modern technological equipment.

Item 8 on the questionnaire: “Regular learning and practice of keyboarding increase students ability to master of keys on computer” was provided with four variables. 69 respondents (representing 57.50%) strongly agreed that regular learning and practice of keyboarding increase students ability to master of keys on computer; 36 respondents (representing 30.00%) agreed; 6 respondents (representing 5.00%) disagreed, while 9 respondents (representing 7.50%) strongly disagreed. This shows that regular learning and practice of keyboarding increase students ability to master of keys on computer.

From the analysis, it was revealed that focus and attention on keyboarding increase students' vocational skills in Office Technology and Management to a very large extent.

### **Research Question Three**

**To what extents can the benefit of knowing keyboarding motivate students on their academic performance in Delta State University of Science and Technology, Ozoro?**

Responses to items 9, 10, 11 and 12 of the research questionnaire were analyzed and used to answer research question three as shown below:

**Table 8**  
*Analysis of Responses to Research Question Three*

<b>S/No</b>	<b>Items</b>	<b>Variables</b>	<b>No. of Respondents</b>	<b>Percentage</b>
9.	Long duration of learning and practice has enable students to acquire more skills on keyboarding.	Strongly agree	50	41.66%
		Agree	58	48.33%
		Disagree	3	2.50%
		Strongly disagree	9	7.50%
		<b>Total</b>	<b>120</b>	<b>100</b>
10.	Long semester encourages students to learn keyboarding in Delta State University of Science and Technology Ozoro.	Strongly agree	61	50.83%
		Agree	51	42.50%
		Disagree	5	4.17%
		Strongly disagree	3	2.50%
		<b>Total</b>	<b>120</b>	<b>100</b>
11.	The enough time students have to learn keyboarding during the semester motivates them to do better during examination.	Strongly agree	23	19.16%
		Agree	29	24.16%
		Disagree	37	30.84%
		Strongly disagree	31	25.84%
		<b>Total</b>	<b>120</b>	<b>100</b>
12.	The knowledge/skills acquired from teaching of keyboarding gives students greater achievement after graduating from Delta State University of Science and Technology Ozoro.	Strongly agree	69	57.50%
		Agree	36	30.00%
		Disagree	6	5.00%
		Strongly disagree	9	7.50%
		<b>Total</b>	<b>120</b>	<b>100</b>

Item 9 on the questionnaire: “Long duration of learning and practice has enable students to acquire more skills on keyboarding” was provided with four variables. 50 respondents (representing 41.66%) strongly agreed that long duration of learning and practice has enable students to acquire more skills on keyboarding; 58 respondents (representing 48.33%) agreed; 3 respondents (representing 2.50%) disagreed, while 9 respondents (representing 7.50%) strongly disagreed. This shows that long duration of learning and practice has enable students to acquire more skills on keyboarding.

Item 10 on the questionnaire: “Long semester encourages students to learn keyboarding in Delta State University of Science and Technology, Ozoro” was provided with four variables. 61 respondents (representing 50.83%) strongly agreed that long semester encourages students to learn keyboarding; 51 respondents (representing 42.50%) agreed; 5 respondents (representing 4.17%) disagreed, while 3 respondents (representing 2.50%) strongly disagreed. This shows that long semester encourages students to learn keyboarding in the department studied.

Item 11 on the questionnaire: “The enough time students have to learn keyboarding during the semester motivates them the do better during examination” was provided with four variables. 23 respondents (representing 19.16%) strongly agreed that the enough time students have to learn keyboarding during the semester motivates them the do better during examination; 29 respondents (representing 24.16%) agreed; 37 respondents (representing 30.84%) disagreed, while 31 respondents (representing 25.84%) strongly disagreed. This shows that the enough time students have to learn keyboarding during the semester motivates them the do better during examination.

Item 12 on the questionnaire: “The knowledge/skills acquired from teaching of keyboarding gives students greater achievement after graduating from Delta State University of Science and Technology, Ozoro” was provided with four variables. 69 respondents (representing 57.50%) strongly agreed that they can access the laboratory equipment in their department; 36 respondents (representing 30.00%) agreed; 6 respondents (representing 5.00%) disagreed, while 9 respondents (representing 7.50%) strongly disagreed. This shows that the knowledge/skills acquired from teaching of keyboarding gives students greater achievement after graduating from Delta State University of Science and Technology, Ozoro.

From the analysis above, it was revealed that the benefit of knowing keyboarding can greatly motivate students on their academic performance in Delta State University of Science and Technology, Ozoro.

#### **Research Question Four**

**What are the problems associated with poor teaching methods of keyboarding in Delta State University of Science and Technology, Ozoro?**

Responses to items 13, 14, 15 and 16 of the research questionnaire were analyzed and used to answer research question four as shown below:

**Table 9**  
*Analysis of Responses to Research Question Four*

S/No	Items	Variables	No. of Respondents	Percentage
13.	Lack of good academic qualification and experience of lecturers/instructors affects students' learning ability in Delta State University of Science and Technology, Ozoro.	Strongly agree	52	43.33%
		Agree	57	47.50%
		Disagree	7	5.84%
		Strongly disagree	4	3.33%
		<b>Total</b>	<b>120</b>	<b>100</b>
14.	Lack of training programmes for lecturers to teach keyboarding have negative effects on students' academic performance in Delta State University of Science and Technology, Ozoro.	Strongly agree	63	52.50%
		Agree	47	39.16%
		Disagree	3	2.50%
		Strongly disagree	7	5.84%
		<b>Total</b>	<b>120</b>	<b>100</b>
15.	Inadequate teaching facilities available in the laboratories is a cause of poor teaching of keyboarding in Delta State University of Science and Technology, Ozoro.	Strongly agree	37	30.84%
		Agree	33	27.50%
		Disagree	21	17.50%
		Strongly disagree	29	24.16%
		<b>Total</b>	<b>120</b>	<b>100</b>
16.	Laziness of students and lack of focus is a problem associated with teaching of keyboarding in Delta State University of Science and Technology, Ozoro.	Strongly agree	62	51.66%
		Agree	36	30.00%
		Disagree	9	7.50%
		Strongly disagree	13	10.84%
		<b>Total</b>	<b>120</b>	<b>100</b>

Item 13 on the questionnaire: “Lack of good academic qualification and experience of lecturers/instructors affects students learning ability in Delta State University of Science and Technology, Ozoro” was provided with four variables. 52 respondents (representing 43.33%) strongly agreed that lack of good academic qualification and experience of lecturers/instructors affects students learning ability in

Delta State University of Science and Technology, Ozoro; 57 respondents (representing 47.50%) agreed; 7 respondents (representing 5.84%) disagreed, while 4 respondents (representing 3.33%) strongly disagreed. This shows that lack of good academic qualification and experience of lecturers/instructors affects students learning ability in the department studied.

Item 14 on the questionnaire: “Lack of training programmes for lecturers to teach keyboarding have negative effects on students academic performance in Delta State University of Science and Technology, Ozoro” was provided with four variables. 63 respondents (representing 52.50%) strongly agreed that lack of training programmes for lecturers to teach keyboarding have negative effects on students academic performance; 47 respondents (representing 39.16%) agreed; 3 respondents (representing 2.50%) disagreed, while 7 respondents (representing 5.84%) strongly disagreed. This shows that lack of training programmes for lecturers to teach keyboarding have negative effects on students academic performance in Delta State University of Science and Technology, Ozoro.

Item 15 on the questionnaire: “Inadequate teaching facilities available in the laboratories is a cause of poor teaching of keyboarding in Delta State University of Science and Technology, Ozoro” was provided with four variables. 37 respondents (representing 30.84%) strongly agreed that inadequate teaching facilities available in the laboratories is a cause of poor teaching of keyboarding; 33 respondents (representing 27.50%) agreed; 21 respondent (representing 17.50%) disagreed, while 29 respondents (representing 24.16%) strongly disagreed. This shows that inadequate teaching facilities

available in the laboratories is a cause of poor teaching of keyboarding in Delta State University of Science and Technology, Ozoro.

Item 16 on the questionnaire: “Poor parental background, laziness of students and lack of focus is a problem associated with teaching of keyboarding in Delta State University of Science and Technology, Ozoro” was provided with four variables. 62 respondents (representing 51.66%) strongly agreed that poor parental background, laziness of students and lack of focus is a problem associated with teaching of keyboarding; 36 respondents (representing 30.00%) agreed; 9 respondents (representing 7.50%) disagreed, while 13 respondents (representing 10.84%) strongly disagreed. This shows that poor parental background, laziness of students and lack of focus is a problem associated with teaching of keyboarding in Delta State University of Science and Technology, Ozoro.

From the above analysis, it showed that some of the problems associated with poor teaching methods of keyboarding in Delta State University of Science and Technology, Ozoro are lack of good academic qualification and lack of training programmes for lecturers.

### **Findings**

Based on the data presented and analyzed, the following were the findings of the study:

1. That some of the causes of students’ failure in keyboarding in the department are inadequate computer, lack of knowledge on the use of the computer and unstable power supply.

2. That focus and attention on keyboarding increase students' vocational skills in Office Technology and Management to a very large extent.
3. That the benefit of knowing keyboarding can greatly motivate students on their academic performance in Delta State University of Science and Technology, Ozoro.
4. That some of the problems associated with poor teaching methods of keyboarding in Delta State University of Science and Technology, Ozoro are lack of good academic qualification and lack of training programmes for lecturers.

### **Discussion of Findings**

The study revealed that there are some cause for students' failure in keyboarding in Office Technology and Management. These causes range from inadequate computer in the department, lack of knowledge on the use of computers by lecturers and absence of constant power supply in the department.

The study shows that the focus and attention on keyboarding increase students' vocational skills in Office Technology and Management to a very large extent. The interest students show in learning of keyboarding as well as seriousness in class increase their zeal to study thereby having a positive impact on their academic performance.

The study indicated that the benefit of knowing keyboarding can greatly motivate students on their academic performance in Delta State University of Science and Technology, Ozoro. When a student knows a particular course very well, it has a great impact on the student's performance in that course as well as other courses.

It was also indicated that there are problems associated with poor teaching methods of keyboarding in Delta State University of Science and Technology, Ozoro.

These problems range from lack of training programmes for lecturers to teach keyboarding, inadequate teaching facilities, lack of good academic qualification and lack of focus on the part of the students due to their laziness.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### Summary

This study examined the Causes of Mass Failure in Keyboarding Examination in Delta State University of Science and Technology, Ozoro. In order to accomplish the objective of the study, a set of questionnaire was used to collect data for the study. The simple percentage method was used to analysis the data collected from respondents. The result of the research carried out revealed that there are some causes for students' failure in keyboarding in Office Technology and Management. These causes range from inadequate computer, lack of knowledge on the use of computers by lecturers and absence of constant power supply in the department. The result also shows that the focus and attention on keyboarding increase students' vocational skills in Office Technology and Management to a very large extent. Also, the interest students show in learning of keyboarding and seriousness on class increase students academic performance.

The benefit of knowing keyboarding can greatly motivate students on their academic performance in Delta State University of Science and Technology, Ozoro. Long semester duration and enough time for learning motivate them to learn more and do better during examination and there are problems associated with poor teaching methods of keyboarding in Delta State University of Science and Technology, Ozoro. These range from lack of training programmes for lecturers to teach keyboarding, inadequate teaching facilities and students' laziness.

## **Conclusion**

It was concluded that some of the causes of students' failure in keyboarding in the department are inadequate computer, lack of knowledge on the use of the computer and unstable power supply. It was also concluded that focus and attention on keyboarding increase students' vocational skills in Office Technology and Management to a very large extent and the benefit of knowing keyboarding can greatly motivate students on their academic performance in Delta State University of Science and Technology, Ozoro. The study also concluded that some of the problems associated with poor teaching methods of keyboarding in Delta State University of Science and Technology, Ozoro are lack of good academic qualification and lack of training programmes for lecturers.

## **Recommendations**

Based on the findings, the following recommendations were made:

1. Management of institutions should increase the training process of students to have regular practice of keyboarding.
2. Management should provide enough technological instrument for all its students to aid them in the performance of keyboarding skills.
3. Management of Delta State University of Science and Technology, Ozoro should provide alternative power supply to enable the students have access to power.
4. The management should provide solution to the problems associated with poor teaching methods of keyboarding by ensuring that lecturers and instructors teaching keyboarding have adequate academic qualification to enable them teach the course effectively.

### **Limitations of the Study**

In the course of carrying out this research, some problems were encountered by the researcher. The main problem was inadequate material resources in the process of sourcing for information related to the research topic.

Other problems ranged from the fact that it was not easy to get in touch with the respondents to administer questionnaire due to reluctance of the students in the institution under study to complete the research questionnaire. This was solved after giving them definite reason that the study was for academic purpose. Furthermore, finances played a major limitation as the researcher was limited financially especially in the area of travelling to get required information and materials.

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## APPENDICES

Department of Office Technology and Management,  
School of Information and Communication Technology,  
Auchi Polytechnic,  
Auchi.

28<sup>th</sup> September, 2022

Dear Respondent,

### **Letter of Introduction**

I am a final year (HND II) student of the above-named Department carrying out a research work on the “**Causes of Mass Failure in Keyboarding in Examination in Delta State University, Ozoro**”. This is in partial fulfillment of the requirements for the award of Higher National Diploma (HND) in Office Technology and Management.

Attached herewith is a questionnaire meant to elicit information for the research study. I wish to assure you that any information supplied by you will be treated with strict confidentiality and will be used solely for academic purpose .

Thank you for your co-operation.

Yours faithfully,

**ANETOR RITA**  
**(Researcher)**

## Questionnaire

**Instruction:** Please fill the blank spaces by marking (x) in the appropriate boxes provided.

### Section A: Background Information of Respondents

1. **Sex:** Male ( ) Female ( )
2. **Marital Status:** Single ( ) Married ( )
3. **Class of Students:** 100L ( ) ND II ( ) HND II ( )

### Section B: Items Related to the Research Questions

S/No	Items	SA	A	D	SD
1.	The number of inadequate computer in the department are responsible for students' failure on keyboarding.				
2.	Lack of knowledge on the use of computer by lecturers to teach students is responsible for their failure.				
3.	The absence of constant power supply to teaching keyboarding is a cause to students' failure.				
4.	The inability of students to learn and master keyboarding results to students' academic failure.				
5.	The interest students show in learning of keyboarding increase their vocational skills.				
6.	The seriousness of students during keyboarding class increase their academic performance in other courses.				
7.	The attention and focus students pay to lecturer during teaching and learning of keyboarding enable them to develop more skills in modern technological equipment.				
8.	Regular learning and practice of keyboarding increase students ability to master the keys on the computer.				
9	Long duration of learning and practice has enable students to acquire more skills on keyboarding.				
10	Long semester encourages students to learn keyboarding in Delta State University, Ozoro.				
11.	The enough time students have to learn keyboarding during the semester motivates them to do better during examination.				
12.	The knowledge/skills acquired from teaching of keyboarding gives students greater achievement after graduating from Delta State University, Ozoro.				
13.	Lack of good academic qualification and experience of lecturers/instructors affects students' learning ability in				

	Delta State University, Ozoro.				
14.	Lack of training programmes for lecturers to teach keyboarding have negative effects on students' academic performance in Delta State University, Ozoro.				
15.	Inadequate teaching facilities available in the laboratories is a cause of poor teaching of keyboarding in Delta State University, Ozoro.				
16.	Laziness of students and lack of focus is a problem associated with teaching of keyboarding in Delta State University, Ozoro.				