

**CONTRIBUTIONS OF INTERNET RESOURCES UTILISATION TO ACADEMIC
PERFORMANCE OF STUDENTS OF KWARA STATE POLYTECHNIC, ILORIN,
NIGERIA**

By

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CERTIFICATION

This is to certify that this project titled “*Contributions of Internet Resources Utilisation to Academic Performance of Students of Kwara State Polytechnic, Ilorin, Nigeria*” by Jamiu Mistura Titilope meet the regulations guiding the award in National Diploma in Kwara State Polytechnic Ilorin and is approved.

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DEDICATION

This project is dedicated to God for being my ultimate source of strength and inspiration. In Him, I derived all powers needed to live, weather the storms and become an embodiment of hope to myself and the people around me.

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All praise is to God, the most beneficent, the most merciful. My sincere appreciation goes to my parents for their concern, prayers and words of encouragements towards the completion of this programme. My utmost gratitude also goes to my supervisors Mr. Sulyman, A. S. for his moral and intellectual guidance and contribution towards the possibility of this project and all other lectures of the department.

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Abstract

This study investigates the contributions of internet resources utilisation to academic performance of students of Kwara State Polytechnic, Ilorin, Nigeria. Descriptive survey design was adopted in this study. The population of this study are 412 of students of Library and Information Science schools of Kwara State Polytechnic, Ilorin. The sample size of this study is 148. Multi-stage sampling was used to select the respondents. Questionnaire was used to collect data from the respondents. Data obtained was then presented and analysed using simple percentage and frequency table. Furthermore, result of findings revealed that online journals, online books, social media and emails are the Internet resources used most for academic activities by the respondents. More so, findings point that Internet provides access to information resources that aid academic performance, provides updated search engines used to search for e-journals for projects, provides access to OPACs to search for information materials and provides opportunities to access up-to-date reading materials are the most perceived effects of Internet resources on academic activities of the students. However, findings of this study indicated that high cost of data subscription, lack of computer skills, poor information searching skills and poor Internet connectivity are challenges affecting the use of Internet resources for academic activities by most students in the study area. Finally, this study recommended that management of Kwara State polytechnic should collaborate with relevant agencies, corporations and bodies to improve the computer skills of their students. This will equip them with the skills of harnessing computers for academic activities.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Academic performance is the knowledge gained which is assessed by marks by a teacher. It can also be seen as educational goals set by students and teachers to be achieved by a student over a specific period of time. It is a set of goals measured by using continuous assessment or examinations results (Narad & Abdullah, 2016). Tentama and Abdullah (2019) posited that academic performance/achievement is the extent to which a student, teacher, or institution has attained their short or long-term educational goals and is measured either by continuous assessment or cumulative grade point average (CGPA).

Abaidoo (2018) opined that academic performance of students is a key feature in every educational system. It is considered to be the centre around which the whole education system revolves. Narad and Abdullah (2016) opined that the academic performance of students determines the success or failure of any academic institution. Singh, Malik and Singh (2016) also argued that academic performance of students have a direct impact on the socio-economic development of a country. Academic performance of students serves as a bedrock for knowledge acquisition and the development of skills. This makes academic performance of students to be prioritised by all educators.

Factors impacting academic performance of students have received much attention from educators and researchers. Singh, Malik and Singh (2016) found that several factors impact academic performance of students. Narad and Abdullah (2016) found daily study hours, social economic status of parents/guardians and age as factors that significantly affects academic performance. They also found that economic status of parents, their academic background and encouragement as factors that influence academic performance. Proper guidance from parents and teachers, communication skills, and learning facilities have also been found as a significant determinant to academic performance (Singh, Malik & Singh, 2016).

The findings from Narad and Abdullah (2016), Singh, Malik and Singh (2016) revealed that home, school, students, teacher, environmental, personal, social, psychological and

economic factors have impact on academic performance of students. Other authors have also found that age, gender and parents' level of education affects academic performance (Khan, Iqbal & Tasneem, 2015; Abaidoo, 2018). It should be noted that these findings differ among countries, different academic levels, the subjects involved. Above all did not consider the use of Internet resource and its perceived effects on academic performance of students, despite its enormous advantages to academic activities.

Law Insider (2022) defined Internet resources as all domain names, electronic addresses, uniform resource locators, databases, Internet blogs, social media sites (e.g., Facebook, YouTube, Twitter) and similar online resources that are interconnected through global networking. The internet has been described as a system consisting of interlinked computer networks and data superhighway which has developed into an essential tool in the modern information-based society. Internet resources such as e-mails, social media and search engines are today being utilized for educational and academic functions (Fasae & Adegbihero-Iwari, 2015).

Today, the number of resources available on the Internet is immense. Companies, organizations, educational institutions, communities, and individual people all serve as information providers for the electronic Internet community. This sharing of resources and information is an example of societal cooperation on a grand scale and has fostered professional and personal communications throughout the world (Begum, 2017). Bankole (2013) argued that the evolution of the Internet resources has resulted in the shaping of academic activities, communication of academic programmes, and research. Ceyhan (2011) corroborated this view by stressing that Internet resources offer a range of prospects that enable, expand, improve and influence the academic performances of students.

Apuke and Jibril (2018) asserted that Internet resources allow unlimited distribution of information and provides a means for collaboration and communication amongst students regardless of the geographical areas. Aminu (2014) posited that there is evidence to show that the antiquity of the Internet has long been associated with the academic achievement which tertiary institutions are set up to help students attain. This is because the incorporation of Internet resources in the educational settings has been proven to increase the access to information and

educational materials through the provision of e-publications. This might not be surprising, as substantial researches have likewise confirmed that the advancements and growth of the Internet have influenced students' approaches to research and learning in this present-day education that is rapidly developing.

Studies by Ogaji, Okoyeukwu, Wanjiku, Osiro, and Ogutu (2017) and Steyer (2015) have shown that the Internet resources are now a noteworthy tool for modifying students' academic achievement. They stressed that the Internet resources have now advanced into a platform for students' interactions and learning. Intrinsically, computer and the Internet, to a large extent, have been proven to impact students' research and educational growth (Roudbaraki and Esfidvajani, 2011). This implies that the use of Internet resources and technologies for academic purposes can never be overemphasized (Manasijević, Živković, Arsić and Milošević, 2016).

Ivwhighrehweta and Igere (2014) investigated the impact of the Internet on academic performances in selected tertiary institutions in Nigeria and found that most of the students were computer literate and merely access relevant academic materials through the cyber cafés. Ahmed and Bukar (2016) conducted a survey on a similar study and found that the majority of the students in the Adamawa State of Nigeria who utilize the internet for educational and entertainment purposes depended on their mobile devices for internet access. Noting that the use of internet resources for academic activities can be contextualized serves as the premise for this study to be structured towards investigating the contributions of internet resources utilisation to academic performance of students of Kwara State Polytechnic, Ilorin, Nigeria.

1.2 Statement of the problem

The use of Internet resources and its perceived effect on academic performance of students cannot be over emphasized. The lack of funds for effective running of the polytechnic and especially their libraries has adversely affected adequate provision of modern books, updated materials and journals (Manasijević et al., 2016; Ahmed & Bukar, 2016). Apuke and Jibril (2018) lamented that most students of Polytechnic in Nigeria spend their major time using internet resources but not for academic purposes such as studying, conducting research and obtaining general information.

So, with more attention given to the use of Internet resources as a result of its numerous benefits, students who have access to the Internet resources may lose some level of significant interest in using the library. Also, the use of Internet resources can distract students from their studies, can cause addiction among students and this can lead to great drop in their academic performance. This study therefore, seeks to examine the contributions of internet resources utilisation to academic performance of students of Kwara State Polytechnic, Ilorin, Nigeria.

1.3 Objectives of the study

The main objective of this study is to investigate the contributions of internet resources utilisation to academic performance of students of Kwara State Polytechnic, Ilorin, Nigeria.

The specific objectives of this study are to:

1. identify the Internet resources used for academic activities by students in Kwara State Polytechnic, Ilorin;
2. identify the academic activities students in Kwara State Polytechnic, Ilorin used Internet resources for;
3. determine the extent of use of Internet resources for academic activities by students in Kwara State Polytechnic, Ilorin;
4. ascertain the perceived effects of Internet resources on academic activities of in polytechnic in Kwara State;
5. examine the benefits of using Internet resources for academic activities by students in Kwara State Polytechnic, Ilorin; and
6. examine the challenges associated with use of the Internet resources for academic activities by students in Kwara State Polytechnic, Ilorin.

1.4 Research Questions

The following questions are formulated based on the specific objectives:

1. What are the Internet resources used for academic activities by students in Kwara State Polytechnic, Ilorin?

2. What are the academic activities students in Kwara State Polytechnic, Ilorin used Internet resources for?
3. What is the extent of use of Internet resources for academic activities by students in the polytechnic in Kwara State?
4. What are the perceived effects of Internet resources on academic activities of in polytechnic in Kwara State?
5. What are the benefits of using Internet resources for academic activities by students in Kwara State Polytechnic, Ilorin?
6. What are the challenges associated with use of the Internet resources for academic activities by students in Kwara State Polytechnic, Ilorin?

1.5 Significance of the study

Generally, this study will be of immense values to management of polytechnic in Kwara State; library and information science educators, librarians, parents, students, educational policy and decision makers and other stakeholders of educational programmes in Nigeria by revealing the strategies and methods that can be adopted to support students in using Internet resources for academic activities and ultimately boost the students' academic performance.

Specifically, the management of polytechnic in Kwara State and LIS Educators would benefit from this study by recommending approaches to help students use of Internet resources to positively impact their academic performance. This study will also of value to librarians by revealing some Internet resources they can be using to simplify their teachings, which will result in improving students' academic performance. More so, parents would benefit from this study by knowing different Internet resources their children are using, which they can be encouraging and supporting them to be using to impact their academic performance.

Furthermore, educational policy and decision makers will also derive values from this study by knowing some academic activities students can perform with Internet resources and also know the challenges limiting students from using Internet resources. This will enable them to formulate policies that would improve the use of internet resources for academic purposes by the students. Going forward, other stakeholders of educational programmes would learn from this study, how continuous use of Internet resources can impact students' academic performance.

Above all, students themselves would benefit from this study by being exposed to various Internet resources and academic activities they can use it for, in order to enhance or facilitate the attainment of their academic goals.

1.6 Scope of the study

The study is focused on investigating the contributions of Internet resources utilisation to academic performance of students of Kwara State Polytechnic, Ilorin, Nigeria. This study covers the HND students of Computer Science, Kwara State Polytechnic, Ilorin, Nigeria. This study will survey the opinions of the respondents on use of Internet resources and its perceived effects on their academic performance. The respondents' opinions will be used to describe their perceptions on the effects of Internet resources on their academic performance.

1.7 Operational definition of terms

The following terms are defined in the context in which they are used in this study:

Academic Performance: This is the end goal of academic activities of students of University of Ilorin, which is expected to be impacted by Internet resources.

Internet Resources: These are information resources that are expected to be created, organised, located and accessed with the use of the Internet. These resources are expected to be used for academic activities based on the perceptions they have on how it can influence their academic performance.

Contributions: These are the impressions, views or opinions students of University of Ilorin have about Internet resources, which made them to use it to enhance their academic performance.

Students: These are individuals acquiring knowledge to be qualified for being awarded their Bachelor's degree, who are expected to be using Internet resources and form a perception of it on their academic performance.

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 (2012), 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 ones area of investigation.

The literature will be reviewed under the following sub-headings:

2.2 Concept of academic activities

2.3 Concept of Internet resources

2.4 Some Internet resources students can use for academic activities

2.5 Academic activities and the use of Internet resources by students

2.6 Level of use of Internet resources

2.7 Benefits of using Internet resources for academic activities by students

2.8 Challenges associated with the use of the Internet resources for academic activities by students

2.9 Appraisal of literature reviewed

2.2 Concept of Academic Performance

Academic performance can be defined as the knowledge gained by the student which is assessed by marks by a teacher and/or educational goals set by students and teachers to be achieved over a specific period of time. The attainment of academic excellence of students through making them portray better academic performance is the foremost motive of academic

institutions (Kumar, Agarwal & Agarwal, 2021). It is the key feature (Rono, Onderi&Owino, 2014) and one of the important goals (Narad and Abdullah, 2016) of education.

Academic performance is immensely significant for anyone who has a concern with education. In fact, academic performance can be understood as the nucleus, around which a whole lot of significant components of education system revolve, which is why the academic performance of students, specifically belonging to Higher Education Institutions (HEIs), has been the area of interest among researchers, parents, policy framers and planners.

Narad and Abdullah (2016) opined that since a sound academic performance is considered as a pre-requisite for securing good jobs, a better career and subsequently a quality life, significance of the students' academic performance is immense. Although it may seem to be a simple outcome of education, but the impact of academic performance of students in any nation is multi-faceted. Narad and Abdullah (2016) mentioned in their research noted that at the basic level, the success or failure of any academic institution depends largely upon the academic performance of its students. They also reiterated the general belief that good academic performance signals better career prospects and thus a secure future.

The academic performance of students is immensely significant as the economic as well as the social development of any country are both attributable to the academic performance of the students. The better the students perform academically, the better are the prospects of the development of a quality manpower, who will contribute to the economic and social development of the nation (Kumar, Agarwal & Agarwal, 2021). Students performing better than the expectations and norms set by the society are mostly expected to contribute to the growth, development and sustainability of the society (Akinleke, 2017).

Singh, Malik and Singh (2016) presented a straight and significant connect between academic performance of students and the socio-economic development of a country, because acquisition of relevant knowledge as well as skill development become evident through students' academic performance. This accords a great reason to educators granting the highest priority to the academic performance of their students.

2.3 Concept of Internet Resources

Internet was derived from the word “internetworking,” which means the universal interconnection of computers and other ICT gadgets to share data, files, etc. The Internet is a global system of interconnected computers, provides many benefits to its users, including access to information from distant documents and databases that can be read and studied to improve knowledge. Historically, the Internet first came into being in the United State of America in 1969 with the launching of a national computer network known as Advanced Research Project Agency Network (ARPANET). Today, the vast network that interconnects millions of computers worldwide provides availability and accessibility to a variety of resources and services. The Internet is one of the defining technologies of the digital age. The Internet combines and presents data and information through the same medium the virtues of print and multimedia resources (Ogbunbeni, Adekanye, Bamigbose&Sualiman, 2016).

Great (2019) posited that the Internet is a worldwide system of interconnected computer networks. Computers and computer networks exchange information using TCP/IP (Transmission Control Protocol/Internet Protocol) to communicate with each other. The Internet consists of a large number of linked computer networks forming a global network. The Internet is also described as global connections of computers of various sizes, capacity and functionality. These networks are often referred to as “information superhighway”, where computers are

interconnected with the sole purpose of providing resources, services, and information across the globe, thus reducing the entire universe into a “global village” (Suleiman & Joshua, 2019).

The Internet is regarded as the largest global connections of computer network, making it the network of networks. The Internet is also known to be an important and major source of information and a medium through which communication, dissemination, and storage of information is facilitated. The Internet is largely open and free, allowing users to communicate with each other for work and recreational purposes, as well as for corporate and personal reasons. Because the internet is so vast and is without regulation or hierarchy, the network is an accumulation of information from many sources. Resources are available in all subjects, mailing is possible for all the participants, documents can be forwarded and delivered across the world and directories and journals abound (Great, 2019).

Internet World Stats (2015) defines Internet resources (e-resources) as information carrying resources which are made available and accessible to users through the use of computer and similar devices in a networked environment, they include e-books, e-journal, and online databases. Internet services refer to all the Internet facilities that assist in communication and collaboration, they include e-mail, File Transfer Protocol (FTP), Bulletin board, Discussion group, chat rooms Newsgroup, Telnet, and Usenet.

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services are capable of providing Nigerian researchers and scholars, the enabling environment to overcome the barriers of communication and collaboration and also provide scholars, researchers, individuals and their organization the advantage of presenting their research findings and ideas.

2.4 Some Internet Resources Students Can Use for Academic Activities

Internet resources are available in a wide variety for use by students and the entire humanity. The Internet resources form an essential part of creation, access, retrieval and utilisation of information in the contemporary world (Mukhtar&Maidabino, 2021). Kazaure (2014) complained on the use of Internet-related resources by asserting that utilisation is only part of the equation; Internet resources must be utilised by staff and students at undergraduate and postgraduate levels if they are to be of any added value. Jonathan and Udo (2015) identified some categories of EIRs as follows:

1. **Electronic mail (E-mail):** Electronic mail was invented in 1971 by Ray Tomlinson. E-mail is a paperless method of sending messages, notes, or letters from one person to another, or even many people at the same time via the Internet. E-mail is very fast compared to normal mail; electronic mail messages usually take a few seconds to arrive at their destination. One can send messages anytime of the day or night and it will get delivered immediately. You do need to wait for the post office to open, and you don't have to worry about holidays. It works 24 hours a day and seven days a week. Electronic mail is information stored on a computer that is exchanged between two users over telecommunication. More plainly, e-mail is a message that may contain text, files, images or other attachments sent through a network to a specified individual or group of individuals (Great, 2015).

2. **Online Journals:** Electronic journals are the counterparts of the print journals. They are periodical publications published in electronic format, usually on the Internet or whose contents can be accessed through computers or other electronic means. Electronic journals have several advantages over traditional printed journals. Users can search the contents pages and/or the full text of journals to find articles on a certain subject, users can read journal articles on their desktops, users don't have to be in the library physically, users can e-mail articles to themselves or download them for printing, articles users want to read will always be available, even when the library is closed, hypertext links allow users to move to different sections within individual journals or articles and can link users to related resources on the Internet, journals can include more images and audio-visual material, reading e-journals can be interactive because users can e-mail the author or editor with their comments (SOAS Library, 2022).
3. **Social Networking Sites/Social Media:** Social networking sites are the use or establishment of social networks or connections; the use of Websites which enable users to interact with one another, find and contact people with common interests, etc. Social networking sites is information content created by people using highly accessible and scalable publishing technologies. At its most basic sense, social networking sites provide a shift in how people discover, read and share news, information and content (Mingle, Lamptey& Hassan, 2015). Onuoha and Enyia (2021) described social networking sites as a range of web-enabled/IT enabled software programs that allow users to interact and work collaboratively with other users. It is an interactive computer-mediated technology that facilitates the creation, sharing and/or exchange of information, ideas, career interests

and other forms of expression in virtual communities and networks. It is also web-based applications designed to allow people share contents quickly, efficiently and in real-time.

4. **Websites:** The World Wide Web is a collection of related web pages, including multi-media content, typically identified by a common domain name and published on at least one web server. The World Wide Web (www) is an information system where documents and other web resources are identified by Uniform Resource Locators (URLs), which may be interlinked by hyperlinks and are accessible over the internet (Great, 2015). The World Wide Web contains hyperlinks of related web information resources by educational institutions, cooperate individuals, government, company, organisations, professional bodies and others available online. Website can be accessed with the aid of Internet, Uniform Resource Locators (URLs) or intranet (Ikenwe &Udem, 2022). The World Wide Web is used for various activities like web searching, finding resources, and e-mailing.
5. **Online Books:** E-books are the electronic version of the print books we read. As we have physical books on fiction and non-fictional works, we also have e-books containing fictional and non-fictional information. The fictional e-books contain works of imaginations of their authors, while the non-fictional e-books focus on real life issues written on a particular subject. Publishers have found the publication of e-books cost-effective and most of them are now publishing e-book version to expand the readability and user access to their publications (Adenariwo& Sulyman, 2022).
6. **Online Newspapers:** These are information resources containing news, articles, commentaries, editorials, advertorials, etc., that are disseminated to the public. The evolution of ICT has facilitated the publishing of newspapers in electronic format. Some

newspapers use URLs to make their newspapers available where readers can visit their website and be surfing through their webpages to read the news that interests readers. On the other hand, some newspapers also use word format, pdf format or FTP to report news to their readers (Nwokedi&Emeghara, 2015).

7. **Institutional Repositories (IRs):** Institutional repositories are digital collections used for capturing and preserving the intellectual output of a single or multi-university community (Nwokedi&Emeghara, 2015). Institutional Repositories are a set of services that a university offers to the members of its community for the management and dissemination of digital materials created by the institution and its community members. Some scholarly publications that can be uploaded into repositories include preprints and post-prints of journal articles, technical reports, theses and dissertations, work in progress, conference proceedings, teaching and learning materials. There are a number of open source software for running IRs such as Dspace, Eprints, Fedora and Greenstone.
8. **Databases:** Databases are large, regularly updated file of digitized information related to a specific subject or field, consisting of records of uniform format, organized for ease and speed of search, retrieval and managed with the aid of database management system. It is an organized collection of structured information, or data, typically stored electronically in a computer system. A database is usually controlled by a database management system (DBMS). Databases can contain texts, graphics and audio information grouped by what they have in common. Databases can be general, full-text, bibliographic or meta (Library Learning Center, 2022).

9. **Online Reference Books:** These are Internet versions of information resources that are meant for consultations and not meant to be read from page to pages. These resources include e-directories, e-dictionaries, e-abstracts, e-indexes, e-bibliographies, etc. (Amadi& Igwe, 2015; Peterson, 2022).
10. **Open Educational Resources:** These are web-based educational resources that are freely available on the Internet for use by all in the society. The OER, typically refers to as online resources, including those in multimedia formats are information materials generally released under a creative commons or similar license that supports open use of the contents in online, e-learning or hybrid environments. They can originate from colleges and polytechnic, libraries, archival organizations, government agencies, commercial organizations such as publishers, or faculty or other individuals who develop educational resources and are willing to share with the public (Amadi& Igwe, 2015).
11. **E-Theses, Projects and Dissertations:** These are electronic versions of academic publications required by tertiary institutions of learning to be published by students as a requirement in partial fulfillment of a particular course of study and thereby justifying their qualification for earning a degree certificate in the taken course. Dissertations are meant to be written by MSc students, while theses are meant to be written by doctoral students.
12. **Databases:** Databases are a systematic collection of data that support electronic storage and manipulation of data. Databases make data management easy. There are many types of databases. Among them are: distributed, network, hierarchical, object-oriented,

relational, centralised, open-source, cloud, data warehouse, graph, personal, multi-modal, etc. (Peterson, 2022).

13. **Virtual Libraries:** Virtual library refers to an information service or collection of electronic resources whose collections are entirely in virtual or digital form and information is accessed over a network. Such a library provides access to virtual indexes, catalogues, and books (Mukhtar&Maidabino, 2021).
14. **Open Access Repositories:** Open access is interested in the free availability of scholarly outputs on the Internet granting the user to make legal and non-commercial use of the document and at the same time acknowledging the intellectual ownership of the author of the document (Jonathan &Udo, 2015).
15. **Federated Search:** This is a technology that came into existence as a result of the desire by database and electronic resource subscribers to search and retrieve resources from multiple and disparate sources on a single interface (Breeding, 2017).
16. **Virtual Reference:** Virtual reference service refers to the remote delivery of reference sources and resources to users who are not inside the library physically. These services include: Knowledge base, online chats, text messaging, and co-browsing.
17. **Online Public Access Catalogues (OPACs):** OPACs are electronic versions of library catalogues that contain bibliographic details of information materials housed by different libraries(Ikenwe &Udem, 2022).

2.5 Academic Activities and the Use of Internet Resources by Students

Academic activities are not only regarded as fundamental in promoting students' learning and facilitating the achievement of their academic goals, they are also regarded as efficacious in leading to upgrading the overall system of education (Kapur, 2021). The activities are carried out in a verbal manner as well as in writing. When the students are communicating with others in a verbal manner or are working on assignments, projects or other written activities, they need to make use of decent words (Chakraborty, 2018). Formation of sociable terms and relationships with others and reinforcement of the traits of efficiency, honesty and truthfulness are the keys to carry out academic activities successfully.

One of the important aspects that needs to be taken into account in academic activities is that the students need to possess constructive viewpoints in terms of various aspects of academics and overall educational situations (Kapur, 2021). When students experience any setbacks, they need to pay attention towards development of skills and abilities to overcome setbacks. The academic activities can be complicated as well as manageable. Kapur (2021) and Davis (2021) posited that the types of academic activities that are prevalent in educational institutions of all levels are stated as follows:

- 1. Class Assignments:** After the teachers have imparted information among students in terms of academic subjects and lesson plans, they give class assignments to the students. The main objective of these assignments is to facilitate adequate understanding and clear all the doubts. The class assignments, which the students normally work on through making use of textbooks and other reading materials are also regarded as academic activities. The class assignments are carried out on an individual basis as well as in groups. In textbooks, at the end of lesson plans, there are exercises given. The students

are required to work on those exercises within classrooms and they are given for homework as well. One of the main benefits of class assignments is, students are able to generate information in terms of solutions to various types of academic problems (Chakraborty, 2018). When the students are working in a team, they are able to exchange ideas and viewpoints and alleviate work pressure. The research studies have indicated that students normally feel pleasurable, when they are working on class assignments in a group. Therefore, in educational institutions of all levels, class assignments are regarded as indispensable academic activities.

2. **Homework Assignments:** The main objective of homework assignments is to facilitate adequate understanding in terms of academic subjects and lesson plans. When students experience any problems, they make note of them and discuss them with their teachers or classmates. As the name implies, homework assignments are the ones, which the students normally work on within their homes. The teachers work hard to impart understanding among students in terms of academic subjects. They form the viewpoint that within homes, the students should devote time towards their studies. Hence, they are given homework assignments. These assignments are brief and lengthy. The teachers give reasonable amount of time in completing these assignments. The students are making use of technologies and various types of reading materials in the implementation of these assignments. These assignments are normally carried out on an individual basis (Davis, 2021). When students experience any types of problems and challenges, the family members and friends are usually approached for help. Furthermore, the students also discuss their doubts and problems with their teachers and classmates. Therefore, homework assignments are regarded as vital academic activities. These would render an

important contribution in acquiring an efficient understanding of the academic concepts on a comprehensive basis.

3. Projects and Reports: In educational institutions of all levels, the students are encouraged to work on projects and reports. The different topics are selected to work on them. The main objective of projects and reports is to facilitate adequate understanding of the academic subjects and achieve educational goals. These are carried out on an individual basis as well as in groups. The teachers give reasonable amount of time in completing these assignments. The students are making use of technologies and various types of reading materials in the implementation of various types of projects and reports (Davis, 2021). When students experience any types of problems and challenges, the teachers and classmates are usually approached for help. Furthermore, the students make use of technologies and internet to a major extent. In projects and reports, the students are required to make use of innovative methods. These are, pictures, images, charts, graphs, models, maps, designs and so forth. The internet is made use of to obtain these. Working on projects and reports would render an important contribution in leading to up-gradation of competencies and abilities among students. Therefore, it is well-understood, projects and reports are regarded as crucial academic activities.

4. Teamwork: The teamwork is encouraged among students by the teachers within the course of implementation of various assignments and projects. The students may carry them out on an individual basis and in teams. The team is formed of two or more individuals. When the individuals are working in a team, they are able to benefit to a major extent. The various benefits are, generating information in terms of various methods and approaches; exchanging ideas and viewpoints; alleviating work pressure;

developing motivation towards the implementation of job duties; curbing the feelings of apprehensiveness and vulnerability; augmenting information regarding modern, technical and pioneering methods; providing solutions to various problems in an appropriate manner; forming sociable terms and relationships with others; carrying out job duties successfully and achieving educational goals in a well-ordered manner (Kapur, 2021).

5. Debates: In educational institutions of all levels, the students are encouraged to participate in debates. Debates augment knowledge and abilities among students as well as hone their communication skills and interactive abilities. Within the classroom settings, the teachers give a topic to the students in which they are required to carry out a debate. In the debate, the students are given the opportunities to express their ideas and viewpoints. In some cases, the students may have same viewpoints, whereas, in other cases, they may have opposing viewpoints. The classmates need to form cordial and sociable terms and relationships with each other to achieve academic goals (Chakraborty, 2018). When they do not agree with each other regarding some concepts, they need to ensure, arguments and disagreements do not assume a major form. One of the important aspects that needs to be taken into account is, the communication processes need to take place in a polite and courteous manner.

6. Role Playing: Role playing is the academic activity, which is usually carried out in the subjects of English, Hindi and history. This academic activity is pleasurable and enjoyable to a major extent. In this academic activity, the students are required to assume the roles of characters. They are required to learn and memorise the dialogue and act out the play (Kapur, 2021). Within classroom settings, when the teachers have completed the lesson plans, they encourage role playing. In this case, the students may use their books

and speak the dialogue through reading from the books. There are organization of competitions as well. In the competitions, the students have to be well-prepared. They are required to put on costumes and be well-dressed as the characters. The students, who carry out the job duties to their best abilities are rewarded. The students feel vulnerable and apprehensive as well in role playing. When they are well-prepared and have mastered the dialogues, they are able to overcome apprehensiveness and vulnerability. Therefore, role playing is the academic activity, which renders an important contribution in leading to up-gradation of the confidence levels among students.

7. **Group Discussions:** In educational institutions of all levels, the students are encouraged to participate in group discussions. These contribute in augmenting knowledge among students and hone their communication skills and interactive abilities. Within the classroom settings, the teachers give a topic to the students in terms of which they carry out group discussions. The students are given the opportunities to express their ideas and viewpoints (Davis, 2021). In some cases, the students may have same viewpoints, whereas, in other cases, they may disagree with others. The classmates need to form pleasant and sociable terms and relationships with each other to do well in their studies. When they do not agree with each other regarding some concepts, they need to ensure, disagreements do not assume a major form. One of the important aspects that needs to be taken into account is, the interaction needs to take place in a well-mannered way (Kapur, 2021).
8. **Presentations:** In educational institutions of all levels, the students need to pay attention towards honing of presentation skills. The presentations are made through making use of reading materials or Power Point slides. These are normally encouraged by the teachers

to assess the academic performance of the students. The various factors that need to be taken into account to hone presentation skills are, being informative in terms of subjects and concepts; overcoming apprehensiveness and vulnerability; making use of language understandable to the audience; speaking clearly and fluently; honing technical skills, when Power Points are to be prepared; providing factual information; providing accurate answers to the questions put forward by audience; making use of polite language and decent words; maintaining eye contact with the audience; carrying out presentations within the required time and dressing neatly (Davis, 2021). The educators are vested with the responsibility of providing information to the students regarding these factors. Furthermore, they generate information in terms of them on their own as well. These factors need to be reinforced in leading to up-gradation of presentation skills. Therefore, presentations is regarded as an academic activity, which have proven to be meaningful and significant in achieving educational goals (Chakraborty, 2018).

9. **Quizzes:** Quizzes are regarded as the academic activities that are organized by the teachers in educational institutions of all levels. These are put into practice to assess the academic performance of the students. The students are given time by the teachers to prepare themselves to participate in quizzes. The students normally feel apprehensive, when they are participating in quizzes. But when they devote sufficient amount of time towards their preparation, they are able to overcome apprehensiveness and vulnerability (Kapur, 2021). The educators are required to provide information to the students regarding the subjects and concepts in terms of which quizzes are to be put into operation. In some cases, the students are provided with the opportunities to make decisions regarding participation in quizzes. Whereas, in other cases, it is compulsory for

the students to participate in them. The internet and some social networking sites have proven to be indispensable in augmenting skills and in clearing the doubts.

10. Tests and Exams: Tests and exams are regarded as the academic activities that are organized by the teachers in educational institutions of all levels. These are put into practice to assess the academic performance of the students. The students are given time by the teachers to prepare themselves to participate in these academic activities. The students normally feel apprehensive, when they are to take a test or at the time of exams. But when they devote sufficient amount of time towards their preparation, they are able to overcome apprehensiveness and vulnerability. In other words, they need to be well-prepared (Davis, 2021). The educators are required to provide information to the students regarding the subjects and concepts in an adequate manner. When the teaching methods are implemented well, the student learning will be promoted in a well-ordered manner. The participation of the students in tests and exams is mandatory. Therefore, tests and exams are regarded as the academic activities which have contributed in an effective manner in identifying the learning abilities among students (Kapur, 2021).

2.6 Level of Use of Internet Resources

Great (2019) noted that there it has been found that there is a positive relationship between the frequency of use of technology and publication. There is a growing trend in the use of Internet resources for academic purposes. Students who use the web (an example Internet resources) at home for academic purposes report a greater use of the internet for a variety of tasks, rather than those who use electronic sources and/or the internet achieve the greater scholarly productivity.

Several studies have been conducted on the utilization of Internet by students. For example, Apuke and Jibril (2018) relied on the works of Ani (2010) and Ogedebe (2012) and deduced that students extensively use internet resources for their research work and this has progressively improved students' academic performance. Sahin, Balta and Ercan (2015) appraised the efficiency of Internet resources among the students. They opined that the use Internet should be evaluated with use of proportion of the desired results in students' achievement of desired academic performances. Sahin, Balta and Ercan (2015) claimed that university students have preferred to use Internet resources for their studies anytime they have the opportunity to do so.

Ivwighrehweta and Igere (2014) investigated the impact of the internet on academic performance in selected tertiary institutions in Nigeria and found that most of the students were computer literate and merely access relevant academic materials through the Cyber Cafés. Most of the students disclosed that the Internet usage improves their examination preparation. E-journals and e-books were among the resources often used. However, power outage, slow internet speed, lack of computer terminals, too many hits or information overload and insufficient computer were some of the problems impeding effective internet access or usage.

Fasae and Adegbilero-Iwari (2015) reported that Science students in Adamawa State, Nigeria, regularly access the internet facilities on their smartphones, such as e-mails, social media and search engines, utilize it for educational and communication functions. Ramson, Katkukah and Ajayi (2018) assessed students' utilization of internet facilities for academic purpose in the Federal Colleges s of Education in North central Nigeria. They found that there is a significant difference in the internet literacy/exposure level; amount of time students spent on the internet for academic purpose; and extent of utilization of internet facilities for academic

purpose among the NCE and B.Ed undergraduate students of the Federal Colleges of Education in North central Nigeria.

Suleiman and Dauda (2018) investigated the awareness and utilization of the Internet resources and services for academic activities by the academic staff of tertiary institutions in Adamawa State. They found that respondents were aware of all the Internet resources, (e-books, e-journals, and online databases), but regarding the Internet services, they were mostly aware of only the e-mail. The study further found that online database and e-mail were the most Internet resources and services utilized by the respondents. There are inverse and weak relationship between awareness and utilization of the Internet resources and services by the academic staff of tertiary institutions in Adamawa State.

On the other hand, Parkes, Stein and Reading (2015) reported that the level of preparedness of students and staff towards e-learning through a learning management system was very minimal. It was established that the students and staff were not fully prepared to incorporate these technologies, such as reading and writing, imbibing clarity and conciseness in responses, synthesizing ideas, planning strategies, making arguments and working with others.

2.7 Benefits of Using Internet Resources for Academic Activities by Students

The Internet is perceived as a very powerful mechanism for effective communication having the largest single source of information on a global scale (Suleiman & Joshua, 2019); the Internet resources is essential to students in many ways which among them is to help to improve the quality of academic research as well increase students' level of intellectualism. It is clear that the Internet has become a very important part of the learning process, scientific research, publishing results and others. Apart from that, the Internet enable independent access to

information and help overcoming different limitations, such as geographic restrictions or restrictions that people with special needs might have (Petrovic, 2016).

Jackson (2011) remarked that the Internet is leveling the educational playing field due to its availability to everyone, everywhere and any time, irrespective of gender, race/ethnicity, income or other socio-demographic characteristics. Thus, the Internet is considered a vital tool that will propel university education to greater heights as the world moves further into the knowledge-based economy. Nyeche (2016) corroborated this by noting that the employment of Internet to academic activities among the students has enhanced their learning skills and capacity.

A research has reported that most of the students in a selected Nigerian institution disclosed that the internet usage ameliorates their examination preparation (Ivwithreghweta and Igere, 2014). Consistent with this notion, a considerable amount of documented research evidence has also confirmed that internet utilization has a profound impact on teaching, learning and research activities (Fasae and Adegbilero-Iwari, 2015). Staff of most of academic libraries and students found the use of email and web worthwhile for research and information retrieval. Similar empirical evidence suggested that the use of e-mail for academic-related actions should be promoted among students in order to harness its full potency in improving academic performance (Nketiah-Amponsah, Asamoah, Allassani, and Aziale, 2017).

Additionally, Sampath Kumar and Manjunath (2013) noted that there was an enormous utilization of the Internet by teachers and researchers to support their study and teaching, thereby enhancing their academic performance, research skills and learning. Apuke and Jibril (2018) corroborated some existing studies and noted that study has proven that the internet resources enable students to access relevant and up-to-date materials for their research work without

travelling to other places to source for research materials. Additionally, the Internet has a great impact on the research outcomes of students, as this enables them to have fast communication with their schoolmates, as well as offer a platform for accessing and publishing papers online.

Other studies reported that the Internet has contributed significantly to the easiness of research through downloading of materials as well as enhance the cognitive operation of data dissemination. The use of internet resources improves students' research and learning, enables them to carry out assignments within a given deadline, permits the comparing and contrasting of different forms of literature, encourages self-learning, promotes peer learning and enables them to prepare better for examinations. These were realized through sourcing materials from search engines such as Google and Google Scholar as well as scientific electronic databases such as Web of Science, Science Direct and Scopus (Great, 2019).

Sahin, Balta and Ercan (2015) claimed that the use of the Internet resources in the educational environment has enabled easy access to many resources, and information sharing has, therefore, significantly increased. Moreover, the prevalence of this sharing has brought additional benefits in that these resources can be used in any location and any time. Bankole and Oludayo (2012) maintain that polytechnic globally have made a lot of investment on the provision of Internet access because it saves time in the production and utilization of knowledge. It also promotes multi-disciplinary research, fosters cooperation, and facilitates information sharing and exchange of ideas among researchers from various institutions, nations or regions. Imhonopi and Urim (2012) observe that academics from tertiary institutions in developed nations depended on Internet resources and services for teaching and research activities, which makes their research output visible and accessible globally.

2.8 Challenges Associated with the Use of Internet Resources for Academic Activities by Students

Various studies have affirmed that there are several factors limiting students from using Internet resources for academic activities. Among those challenges are:

1. **Poor Internet connectivity:** This problem arises when the bandwidth of the Internet is slow. This usually affects the connection to websites and loading of pages intended to be viewed by the users. Poor Internet connectivity always results to time wasting and frustration of Internet users (Apuke&Jibril, 2018).
2. **Lack of computer skills:** This problem is related to a user's inability to efficiently and effectively use the computer to achieve desired purposes. Most Internet users are facing this problem because they don't have adequate skills of using the computer. Skills such as connecting to the Internet on a computer, knowing the right Internet resources, etc., required to use the Internet on the computers are lacking in many Internet users (Emeka & Nyeche, 2016).
3. **Poor information searching skills on the Internet:** Some Internet users lack adequate skills of searching for information on the Internet. This makes it difficult for them to search and locate Internet resources relevant to the students' academic needs.
4. **High cost of data subscription:** Cost of subscribing for data is hampering students from using Internet resources. Internet users in developing and underdeveloped countries pay exorbitant rate to subscribe for data.
5. **Limited accessible internet resources:** This arises from privacy problems associated with some Internet resources such as websites, uniform resources locators, blogs and others. The privacy problems always restrict access to the Internet facilities aforementioned and

affect access to them from users' end. This problem can also occur to e-mail when users are trying to share information to other e-mails and the information is considered as spam and affects its prompt delivery (Sahin, Balta & Ercan, 2015).

6. Overload of information on the Internet: The Internet, sometimes contains series of irrelevant information that require a sound information literacy skill. People always use the Internet to share and disseminate information that users may find difficult to interpret or comprehend.
7. Unrelated internet resources on university students' out-of-class works and projects: Some information resources on the Internet may not be related to the academic activities of students. This makes it difficult for students to use the contents of Internet resources for academic purposes.
8. Difficulty in finding relevant information: Internet users with inadequate information searching skills always find it difficult to access information relevant to their needs. This makes it difficult for most Internet users to use Internet resources for academic purposes.
9. It takes too long to view/download pages: This is another problem of Internet resources which arises from slow Internet server. Oftentimes, Internet users encounter difficulties in accessing Internet resources because some pages don't load on time or takes too long to be viewed (Ramson, Katkukah & Ajayi, 2018).

2.9 Appraisal of Literature Reviewed

Internet resources have been investigated in different contexts. However, there are different studies on Internet resources and its implications on academic performance of students. Ramson, Katkukah and Ajayi (2018) assessed students' utilization of Internet facilities for academic purpose in the Federal Colleges of Education in North central Nigeria. They employed

a cross-section survey research design approach in which both descriptive statistics and the Pearson-chi-square statistical tools were used in analyzing the research questions and hypotheses raised. The study also used a questionnaire titled (QIU) for Internet users as tool for data collection from the sample of NCE and B.Ed students of F.C.E. in North central Nigeria to which the stratified random sampling technique was employed in selection of respondents. Results showed that there is a significant difference in the Internet literacy/exposure level; amount of time spent on the Internet for academic purposes and extent of utilization of Internet facilities for academic purposes.

Suleiman and Joshua (2019) investigated the awareness and utilization of the Internet resources and services for academic activities by the academic staff of tertiary institutions in Adamawa State. They adopted a quantitative research method using cross-sectional survey design to collect data from the respondents. Multi-stage sampling techniques were used. Three hundred and thirty-three (333) copies of the questionnaire were administered to the respondents in the eight (8) sampled institutions and two hundred and ninety-two (292) questionnaire representing (87.6%) were returned and found useful. Findings revealed that respondents were aware of all the Internet resources, (e-books, e-journals, and online databases). But regarding the Internet services, they were mostly aware of only the e-mail. The study further found that online databases and e-mail as the most Internet resources and services utilized by the respondents. There are inverse and weak relationship between awareness and utilization of the Internet resources and services by the academic staff of tertiary institutions in Adamawa State.

Ogungbeni, Adekanye, Bamigbose and Sulaiman (2016) investigated appropriate and inappropriate use of Internet among students in Nigeria. They claimed that there is a growing concern that the amount of time spent on Internet by students does not translate to effective use.

They noted that the instrumentality of policy could be used to ensure that students make the best use of Internet. Two polytechnic, Lagos State University and Babcock University were chosen as case study. A total of one hundred and twenty (120) questionnaires were administered to final year students in four faculties common to both polytechnic. Ninety-seven (97) questionnaires were completed and returned. The Study showed that there are many advantages brought by the advent of Internet into learning and research by undergraduate students in Nigeria. They recommended a need for a comprehensive national information policy to address the abuse of Internet by students.

Also, Apuke and Jibril (2018) investigated the use of Internet resources for research and learning among international students (Nigerians) studying in Turkish Republic of Northern Cyprus (TRNC). The study inquired if the students had access to the internet; their internet access points; the internet search engine mostly consulted by the students and the perceived benefits of using internet resources for learning and research. A qualitative study employing a focus group discussion was conducted among 25 conveniently selected students, which reveals that majority of the students use the Internet daily for learning and research. Additionally, the study discovers that the students access and use the internet in their school library via their laptops and computers provided in the library. This signifies that there are adequate Internet facilities on their campus. The students held the notion that the use of internet resources improves their research and learning, enables them to carry out assignments within a given deadline, permits the comparing and contrasting of different forms of literature, encourages self-learning, promotes peer learning and enables them to prepare better for examinations. These were realized through sourcing materials from search engines such as Google and Google

Scholar as well as scientific electronic databases such as Web of Science, Science Direct and Scopus.

It is obvious that none of the studies reviewed focus on polytechnic in Kwara State. Even the ones that focused on students' use of Internet were designed for different purposes. The gaps observed in the reviewed studies make this study designed to identify the Internet resources used for academic activities by students in the polytechnic in Kwara State; determine the extent of use of Internet resources used for academic activities by students in the Polytechnic in Kwara State; identify the academic activities students in Kwara State Polytechnic, Ilorin used Internet resources for; examine the benefits of using Internet resources for academic activities by students in the polytechnic in Kwara State and examine the challenges associated with use of the Internet resources for academic activities by students in the polytechnic in Kwara State.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter will cover the methods the researcher will adopt to obtain data needed for solving the problems understudying. Most importantly, this chapter will indicate the justifications for adopting the methods used in conducting this study.

Hence, this chapter will be organised under the following sub-headings:

3.2 Research design

3.3 Population of the study

3.4 Sample size and sampling technique

3.5 Instrument for data collection

3.6 Validity and reliability of the instrument

3.7 Procedure for Administration of the instrument

3.8 Method of Data Analysis

3.9 Ethical Considerations

3.2 Research Design

Research design indicates the patterns of how this study will be conducted. Kolawole and Ijebor (2018) clearly asserted that research design is the conceptual outlook with which research is conducted, which constitutes the blueprint for the collection, measurement and analysis of data. Therefore, descriptive-survey design will be adopted for this study. Descriptive survey design is suitable for this study because it gives the researcher the opportunities of questioning respondents' use of Internet resources for their academic performance (Dudovskiy, 2019).

3.3 Population of the Study

Population is the total area, environment, location or group of people a study intends to cover. Issa (2012) described population as all the members or elements of a particular group of people, animals, or things in a defined area. Therefore, the population of this study is 412 students of Computer Science, Kwara State Polytechnic, Ilorin, Nigeria.

3.4 Sample Size and Sampling Technique

Sample is the unit, portion or element of the population, which will provide data that are relevant to the study. In this study, sample size will be determined with Calculator.net (calculator.net), which was calculated in the order below

Population: 412

Confidence level: 90%

Margin error: 0.05

Population proportion: 70

Sample size = 148 respondents.

Simple random sampling will be used because it allows the researcher to give equal chance of being chosen and included in the sample to every student of Computer Science.

3.5 Instrument for Data Collection

This study will adopt questionnaire to collect data from respondents. Issa (2012) explains questionnaire as a data collection instrument containing series of questions and other prompt responses for the purpose of gathering information from library users. The questionnaire will be titled *“Questionnaire on Contributions of Internet Resources Utilisation to Academic Performance of Students of Kwara State Polytechnic, Ilorin, Nigeria.”*

The questionnaire contains Yes or No questions. It also has lickert scale using Strongly Agree, Agree, Disagree and Strongly Disagree. To provide options for the respondents to pick their opinions with regards to the objectives of this study, the questionnaire is arranged into six major sections, with Section One focusing on Demographic data of respondents; Section Two, Internet resources used for academic activities by students in Kwara State Polytechnic, Ilorin; Section Three, Academic activities students in Kwara State Polytechnic, Ilorin used Internet resources for; Section Four, Extent of use of Internet resources used for academic activities by students in the polytechnic in Kwara State; Section Five: Contributions of Internet resources on academic performance of students in Kwara State Polytechnic, Ilorin; Section Six, Benefits of using Internet resources for academic activities by students in the polytechnic in Kwara State and Section Seven for Challenges associated with use of the Internet resources for academic activities by students in the polytechnic in Kwara State.

3.6 Validity and Reliability of the Instrument

Validity refers to the level at which an instrument accurately measures what it intends to measure (Li, 2016). The questionnaire will be given to two subject experts for assessment of the quality of presentation of the contents of the variables the researcher wishes to measure. Their expert opinions will be effected before the questionnaire is presented to the supervisor for assessment and corrections, before its onward administration to the respondents.

However, reliability refers to the levels at which an instrument yields consistent results. Internal consistency will be used to assess the extent of differences within the test items by exploring the same construct that produce similar results (Thomas, 2022).

3.7 Procedure for Data Collection

The designed questionnaire will be administered to the respondents by the student researcher. The respondents will be given some days to fill the questionnaire and return it to the researcher who is their classmates.

3.8 Method of Data Analysis

Data collected will be presented in simple percentage and frequency tables and analysed by using the IBM SPSS Statistics version 25.0. The reason for the choice of simple percentage and frequency tables is because it allows presentation, analysis and comparison of multiple attitude, opinion and ideas which can enhance easy understanding of tables and the data they contained.

CHAPTER FOUR

PRESENTATION OF RESULTS, ANALYSIS, DISCUSSION AND INTERPRETATIONS

4.1 Introduction

This chapter present, analyse, discuss, and interpret the data obtained from field with the aid of questionnaire. For the sake of clarity, this chapter is further arranged in the following order:

4.2 Questionnaire Distribution and Response Rate

4.3 Demographic Characteristics of Respondents

4.4 Analysis of data

4.5 Discussion of Findings

4.2 Questionnaire Distribution and Response Rate

From the 148 questionnaires administered, only 114 were returned and out of the questionnaires returned, 106 were fully filled and adequate for analysis. Hence, the data of this study was valid for analysis with questionnaire response rate of 72.08%. According to Ramshaw (2021), questionnaire is suitable for analysis if the response rate is more than average for physically administered questionnaires and can be used to represent majority of the characteristics intended to describe by the researcher.

4.3 Demographic Characteristics of the Respondents

Table 2: Respondents' Demographic Information

Options		F	%
Gender	Male	46	43.4
	Female	60	56.6
	Total	106	100
Age range	15 – 19 years	54	50.9
	20 – 24 years	41	38.7
	25 – 29 years	8	7.5
	30 – 34 years	3	2.8
	35 years and above	0	0.0
	Total	106	100
Marital status	Single	98	92.5
	Married	8	7.5
	Divorced	0	0.0
	Widow	0	0.0
	Total	106	100

Source: Researcher's Field Survey, 2025

Table 2 shows that 60 (56.6%) of respondents are female, while 46 (43.4%) are males. 54 (50.9%) are within the age range of 15 – 19 years, followed by 20 – 24 years with 41 (38.7%), 25 – 29 years 8 (7.5%), while 30 – 34 years constitute 2.8%. Finally, 98 respondents (92.5%) are single and followed by only 8 (7.5%) who are married.

4.4 Analysis of Data

Data analysis was done based on this study's questions.

4.4.1 Research Question One: What are the Internet resources used for academic activities by students of Kwara State Polytechnic, Ilorin, Nigeria?

Table 3: Internet resources used for academic activities by students of Kwara State Polytechnic, Ilorin, Nigeria

Options	Yes		No		M	SD
	F	%	F	%		
Electronic mail (E-mail)	88	83.0	18	17.0	1.17	0.38
Online journals	92	86.8	14	13.2	1.13	0.34
Social media	90	84.9	16	15.1	1.15	0.36
Websites	77	72.6	29	27.4	1.27	0.45
Online books	91	85.8	15	14.2	1.14	0.35
Online newspapers	71	67.0	35	33.0	1.33	0.47
Institutional Repositories (IRs)	77	72.6	29	27.4	1.27	0.45
Databases	86	81.1	20	18.9	1.19	0.39
Open education resources	73	68.9	33	31.1	1.31	0.47
Virtual libraries	70	66.0	36	34.0	1.34	0.48
Open access repositories	71	67.0	35	33.0	1.33	0.47
Online/Web public access catalogues	71	67.0	35	33.0	1.33	0.47

Source: Researcher's Field Survey, 2025

Table 3 reveals that 86.8% of respondents used online journals, followed by 85.8% for online books, 84.9% used social media, while 83.0% used e-mails. However, only 66% used virtual library. This implies that online journals, online books, social media and emails are the major Internet resources used by the respondents.

4.4.2 Research Question Two: What are the academic activities Internet resources are used for by students of Kwara State Polytechnic, Ilorin, Nigeria?

Table 4: Academic activities Internet resources are used for by students of Kwara State Polytechnic, Ilorin, Nigeria

Options	Yes		No		M	SD
	F	%	F	%		
Class assignments	74	69.8	32	30.2	1.30	0.46
Homework assignments	90	84.9	16	15.1	1.15	0.36
Projects and reports	89	84.0	17	16.0	1.16	0.37
Teamwork	77	72.6	29	27.4	1.27	0.45
Debates	69	65.1	37	34.9	1.35	0.48
Role playing	74	69.8	32	30.2	1.30	0.46
Group discussions	93	87.7	13	12.3	1.12	0.33
Presentations	79	74.5	27	25.5	1.25	0.44
Quizzes	73	68.9	33	31.1	1.31	0.47
Texts	71	67.0	35	33.0	1.33	0.47
Examinations	58	54.7	48	45.3	1.45	0.50

Source: Researcher's Field Survey, 2025

Table 4 shows that 87.7% of respondents used Internet resources for group discussions, followed by 84.9% for homework assignments, 84.0% for projects and reports, while 74.5% for presentations. However, only 54.7% used Internet resources for examination. This means that group discussions, homework assignments, projects and reports and presentations are the major academic activities the respondents used Internet resources for.

4.4.4 Research Question Three: What is the extent of use of Internet resources for academic activities by students of Kwara State Polytechnic, Ilorin, Nigeria?

Table 5: Extent of use of Internet resources for academic activities by students of Kwara State Polytechnic, Ilorin, Nigeria

Options	VHU		HU		MU		LU		M	SD
	F	%	F	%	F	%	F	%		
Electronic mail (E-mail)	52	49.1	27	25.5	16	15.1	11	10.4	3.13	1.02
Online journals	50	47.2	34	32.1	9	8.5	13	12.3	3.14	1.02
Social media	49	46.2	25	23.6	18	17.0	14	13.2	3.03	1.08
Websites	42	39.6	23	21.7	22	20.8	19	17.9	2.83	1.14
Online books	49	46.2	37	34.9	11	10.4	9	8.5	3.19	0.94
Online newspapers	35	33.0	27	25.5	33	31.1	11	10.4	2.81	1.02
Institutional repositories (IRs)	26	24.5	23	21.7	27	25.5	30	28.3	2.42	1.15
Databases	49	46.2	32	30.2	14	13.2	11	10.4	3.12	1.00
Open education resources	26	24.5	26	24.5	32	30.2	22	20.8	2.53	1.08
Virtual libraries	35	33.0	20	18.9	28	26.4	23	21.7	2.63	1.16
Open access repositories	34	32.1	13	12.3	37	34.9	22	20.8	2.56	1.15
Online/web public access catalogues	27	25.5	26	24.5	33	31.1	20	18.9	2.57	1.07

Source: Researcher's Field Survey, 2023

Table 5 indicates that online books are ranked highest on the extent of use of Internet resources by the respondents with (3.19 ± 1.00) , followed by e-journals (3.14 ± 1.02) , email has (3.13 ± 1.02) and databases which has (3.12 ± 0.50) . On the other hand, institutional repositories is ranked lowest with (2.42 ± 1.15) . This shows that the most highly used Internet resources for academic activities among the respondents are online books, online journals, emails and databases.

4.4.5 Research Question Four: What are the perceived effects of Internet resources on academic activities of students of Kwara State Polytechnic, Ilorin, Nigeria?

Table 6: Perceived effects of Internet resources on academic activities of students of Kwara State Polytechnic, Ilorin, Nigeria

Options	SA		A		D		SD		M	SD
	F	%	F	%	F	%	F	%		
Internet provides access to information resources that aid my academic performance	51	48.1	30	28.3	20	18.9	5	4.7	3.20	0.91
Internet provides access to OPACs to search for information materials	52	49.1	27	25.5	16	15.1	11	10.4	3.13	1.02
Internet provides updated search engines used to search for e-journals for my project	58	54.7	21	19.8	13	12.3	14	13.2	3.16	1.09
Internet enables me to engage in online reference services	47	44.3	16	15.1	21	19.8	22	20.8	2.83	1.21
Internet provides opportunities to access up-to-date reading materials	46	43.4	35	33.0	11	10.4	14	13.2	3.07	1.04

Source: Researcher's Field Survey, 2023

Table 6 indicates that Internet provides access to information resources that aid my academic performance is ranked highest out of the perceived effects of Internet resources with (3.20 ± 0.91), followed by Internet provides updated search engines used to search for e-journals for my project (3.16 ± 1.09), Internet provides access to OPACs to search for information materials has (3.13 ± 1.02) and Internet provides opportunities to access up-to-date reading materials which has (3.07 ± 1.04). However, Internet enables me to engage in online reference services is ranked lowest with (2.83 ± 1.21).

This implies that Internet provides access to information resources that aid my academic performance, provides updated search engines used to search for e-journals for my project, provides access to OPACs to search for information materials and provides opportunities to access up-to-date reading materials are the major perceived effects of Internet resources on academic activities of the respondents.

4.4.6 Research Question Five: What are the benefits of using Internet resources for academic activities of students of Kwara State Polytechnic, Ilorin, Nigeria?

Table 7: Benefits of using Internet resources for academic activities of students of Kwara State Polytechnic, Ilorin, Nigeria

Options	SA		A		D		SD		M	SD
	F	%	F	%	F	%	F	%		
Helps to improve the quality of my academic research	50	47.2	31	29.2	18	17.0	7	6.6	3.17	0.94
Helps to increase my level of intellectualism	38	35.8	27	25.5	25	23.6	16	15.1	2.82	1.09
Enables independent access to information without restrictions	40	37.7	25	23.6	18	17.0	23	21.7	2.77	1.17
Helps me contribute to the knowledge-based economy	32	30.2	41	38.7	19	17.9	14	13.2	2.86	1.00
Enhances my learning skills and capacity	33	31.1	30	28.3	23	21.7	20	18.9	2.72	1.10
Helps me harness the potency of my academic activities	35	33.0	29	27.4	27	25.5	15	14.2	2.79	1.06
Helps me access relevant and up-to-date information materials	52	49.1	27	25.5	16	15.1	11	10.4	3.13	1.02
Enables you to have fast communication with your schoolmates	37	34.9	31	29.2	23	21.7	15	14.2	2.85	1.06
Offers me a platform for accessing and publishing papers online	34	32.1	35	33.0	21	19.8	16	15.1	2.82	1.05
Enables me to carry out assignments within a given deadline	44	41.5	31	29.2	18	17.0	13	12.3	3.00	1.04
Permits the comparing and contrasting of different forms of literature	32	30.2	27	25.5	24	22.6	23	21.7	2.64	1.13
Encourages self-learning	56	52.8	19	17.9	18	17.0	13	12.3	3.11	1.09
Promotes peer learning	29	27.4	34	32.1	25	23.6	18	17.0	2.70	1.05
Enables me to prepare better for examinations	32	30.2	38	35.8	20	18.9	16	15.1	2.81	1.03

Source: Researcher's Field Survey, 2023

Table 7 shows that helps to improve the quality of my academic research is ranked highest out of the benefits of Internet resources to the respondents' academic activities with (3.17 ± 0.94) , followed by helps me access relevant and up-to-date information materials (3.13 ± 1.02) , encourages self-learning has (3.11 ± 1.09) and enables me to carry out assignments within a

given deadline which has (3.00 ± 1.04) . On the other hand, enhances my learning skills and capacity is ranked lowest with (2.72 ± 1.10) .

This means that Internet helps to improve the quality of my academic research, helps me access relevant and up-to-date information materials, encourages self-learning and enables me to carry out assignments within a given deadline are the major benefits of Internet resources to the academic activities of the respondents.

4.4.7 Research Question Six: What are the challenges associated with use of the Internet resources for academic activities by students of Kwara State Polytechnic, Ilorin, Nigeria?

Table 8: Challenges associated with use of the Internet resources for academic activities by students of Kwara State Polytechnic, Ilorin, Nigeria

Options	SA		A		D		SD		M	SD
	F	%	F	%	F	%	F	%		
Poor Internet connectivity	58	54.7	14	13.2	20	18.9	14	13.2	3.09	1.13
Lack of computer skills	51	48.1	42	39.6	2	1.9	11	10.4	3.25	0.93
Poor information searching skills on the Internet	54	50.9	30	28.3	13	12.3	9	8.5	3.22	0.97
High cost of data subscription	56	52.8	31	29.2	11	10.4	8	7.5	3.27	0.93
Limited accessible Internet resources	43	40.6	30	28.3	19	17.9	14	13.2	2.96	1.06
Overload of information on the Internet	50	47.2	31	29.2	12	11.3	13	12.3	3.11	1.04
Unrelated internet resources on university students' out-of-class works and projects	36	34.0	33	31.1	23	21.7	14	13.2	2.86	1.04
Difficulty in finding relevant information	32	30.2	36	34.0	25	23.6	13	12.3	2.82	1.00
It takes too long to view/download pages	29	27.4	39	36.8	22	20.8	16	15.1	2.76	1.01

Source: Researcher's Field Survey, 2023

Table 8 reveals that high cost of data subscription is ranked highest out of the challenges associated with the use of Internet resources for academic activities with (3.27 ± 0.93) , followed by lack of computer skills (3.25 ± 0.93) , poor information searching skills has (3.22 ± 0.97) and poor Internet connectivity which has (3.09 ± 1.13) . However, it takes too long to view/download pages is ranked lowest with (2.76 ± 1.01) .

This implies that high cost of data subscription, lack of computer skills, poor information searching skills and poor Internet connectivity are the major challenges associated with the use of Internet resources for academic activities by the respondents.

4.5 Discussion of Findings

4.5.1: Internet resources used for academic activities by students of Kwara State Polytechnic, Ilorin, Nigeria

Findings have revealed that online journals, online books, social media and emails are the major Internet resources used by the respondents. This result correlates with the notion of Amadi and Igwe (2015) that social media, emails, e-journals, e-books, e-newspaper and e-magazines are the major Internet resources used among Nigerian undergraduates. The use of online journals by the respondents shows that the respondents prioritized familiarizing themselves with the latest development and trends in their areas of interest in their field of study.

This further implies that the respondents search the contents pages and/or the full text of journals to find articles on their subject of interest, read journal articles on their desktops, don't have to be in the library physically, e-mail articles to their classmates or download them for printing, allow them to read information available to them, even when the library is closed, access hypertext links to move to different sections within individual journals or articles and link themselves to related resources on the Internet. Above all, some online journals are interactive which allows students to e-mail the author or editor with their comments or opinions (Kazaure, 2014; Jonathan & Udo, 2015).

Furthermore, it is interesting to discover from this study that the respondents used online books for their academic activities. The use of e-books by the respondents is a welcome development in Nigeria because most of the respondents spend a sufficient amount of time on their phones. The e-books are cost-effective and help publishers expand their readability by allowing users access their publications through electronic media. It is, thus, impressive to know that the respondents are harnessing e-books to enrich their academic activities.

Discovering that most of the students don't used virtual libraries for their academic activities is disturbing. This is because the respondents themselves are librarians. They ought to be advocate of contemporary practices of Librarianship. But how would they encourage others to use virtual libraries when they also don't use it? Virtual libraries can be very pivotal to students' academic success by providing access to information materials in various locations on the digital space,

which students may not have access to in their physical libraries. Thus, the use of those information resources will sharpen students' intellectual capacity.

4.5.2: Academic activities Internet resources are used for by students of Kwara State Polytechnic, Ilorin, Nigeria

This study showed that group discussions, homework assignments, projects and reports and presentations are the major academic activities students used Internet resources for. Research showed a dearth of literature on the academic activities students used Internet resources. However, this study affirms the notion of Kapur (2021) that academic activities that be performed in various media and avenues.

The respondents claimed to be using Internet resources for group discussion. This is consistent with the respondents' positions in Table 3 where majority of them claimed to be using social media and emails. Engaging in group discussing in platforms such as WhatsApp, Telegram, Google Meet and Google Forum have become a new method for students to discuss academic-related information and ideas. This gives students the flexibility of initiating discussions at any location and their own convenient time.

Homework assignments are also being performed on the Internet resources by the students. Davis (2021) argued that the main objective of homework assignments is to facilitate adequate understanding among the students in terms of academic subjects and lesson plans, which when students experience any problems, they make note of them and discuss them with their teachers or classmates. Discovering that the students used e-journals and e-books validate their opinion here. When students are given homework assignments, they are expected to consult information resources that will enlighten them on solving the problems they were asked to solve by their lecturers.

It is interesting to note that the respondents also used Internet resources for projects and reports. This indicates consistency in the respondents' opinions on the problem understudy. The respondents are 400 level students who are already carrying out research in partial fulfillment of their degree. It is therefore not surprising to find out that they used Internet resources such as e-

journals, e-books and social media for projects and reports. The email is not also left out in this regard because some lecturers do accept students' submissions through emails.

4.5.3: Extent of use of Internet resources for academic activities by students of Kwara State Polytechnic, Ilorin, Nigeria

This study revealed that online books, online journals, emails and databases are the Internet resources highly used for academic activities by the respondents. This is similar to the findings of Apuke and Jibril (2018) where they reported a high use of e-journals, databases, open educational resources, e-newspapers and e-magazines among the postgraduates in some selected states in Nigeria. Whichever Internet resources being used by respondents in different studies, it has to be known that Internet resources have become inevitable in the pursuit of academic excellence.

The high use of online books and online journal by the respondents is justifiable since it has been reported in Table 4 that the major academic activities the respondents used Internet resources for included homework assignments, projects and reports and group discussion. This is also in alignment with the respondents' claims in Table 3 that they are using e-books, e-journals and e-mails.

Also, databases are among the Internet resources used by the respondents. Peterson (2022) posited that databases are a systematic collection of related data which are organised for easy identification, location and retrieval. The databases contain related e-books, e-journals, files and other data the respondents can use for their academic activities. By using databases, the respondents always have the opportunity of accessing a collection of information materials related to their projects, reports and assignments.

This study revealed a lowly used use of institutional repositories among the respondents. Institutional repositories are digital collections used for capturing and preserving the intellectual output of a single or multi-university community (Nwokedi & Emeghara, 2015). The implication of low usage of institutional repositories among the respondents is that they deprived themselves of access to information materials emanated from their universities. Most of those information

materials contain indigenous results on phenomena closely related to their projects or needed information.

4.5.4: Perceived effects of Internet resources on academic activities of students of Kwara State Polytechnic, Ilorin, Nigeria

Findings revealed that the effects of Internet resources as perceived by the students are: Internet provides access to information resources that aid my academic performance, provides updated search engines used to search for e-journals for my project, provides access to OPACs to search for information materials and provides opportunities to access up-to-date reading materials. This corroborates the claims of Amadi and Igwe (2015); Ramson, Katkukah and Ajayi (2018) that Internet resources provide access to up-to-date information materials, access to updated search engines and access to catalogues stored on the websites of libraries.

One of the major opportunities offered to everyone by Internet resources is access to up-to-date information materials. As peculiar to students, Internet resources provide opportunities for the respondents to access up-to-date journals, books, databases, newspapers and magazines the respondents can use for their academic activities. The social media is also another Internet resources that provides access to breaking news to students.

Furthermore, the Internet is the means to accessing the online public access catalogues (OPACs) of libraries. It allows students to search for information resources in possession of a library or libraries without necessarily visiting that library or those libraries. The OPAC provide different parameters such as authors, titles, subjects, ISBN, and others for students to search for information materials of their choice.

Above all, the students perceived that Internet resources provide access to information resources that aid their academic performance. Studies by Ogaji, Okoyeukwu, Wanjiku, Osiro, and Ogutu (2017) and Steyer (2015) have shown that the Internet resources are now a noteworthy tool for modifying students' academic achievement. They stressed that the Internet resources have now advanced into a platform for students' interactions and learning. Students who expediently used Internet resources will be exposed to varieties information materials that can enhance their preparations and engagement in academic activities.

4.5.5: Benefits of using Internet resources for academic activities of students of Kwara State Polytechnic, Ilorin, Nigeria

The Internet resources is essential to students in many ways which among them is to help to improve the quality of academic research as well increase students' level of intellectualism. It is clear that the Internet has become a very important part of the learning process, scientific research, publishing results and others (Petrovic, 2016; Suleiman & Joshua, 2019). This study indicated that Internet helps to improve the quality of students' academic research, helps students access relevant and up-to-date information materials, encourages self-learning and enables students to carry out assignments within a given deadline as the major benefits of using Internet for academic activities by the respondents.

Obviously, Internet helps to improve the quality of students' academic research because it helps the respondents access information materials in diverse formats which they can use for their reports and projects for example. This affirms the claim of Apuke and Jubril (2018) that the Internet has a great impact on the research outcomes of students, as this enables them to have fast communication with their schoolmates, as well as offer a platform for accessing and publishing papers online.

On the other hand, it is not encouraging to discover that Internet resources enhance students' learning skills and capacities is the least considered benefits of Internet resources on academic activities by the respondents. This contradicts the point of Sahin, Balta and Ercan (2015); Apuke and Jibril (2018) that Internet resources enhance students' learning skills and capacities by allowing them to learn at their own pace and channel.

4.5.6: Challenges associated with use of the Internet resources for academic activities by students of Kwara State Polytechnic, Ilorin, Nigeria

Many factors have affected people from using Internet resources for academic activities. This study revealed high cost of data subscription, lack of computer skills, poor information searching skills and poor Internet connectivity as the major challenges associated with the use of Internet resources for academic activities. This corroborates the point of Emeka and Nyeche (2016); Apuke and Jibril (2018) that inadequate computer literacy, inadequate information and ICT

literacy, high cost of data subscription, poor Internet bandwidth and inadequate power supply as some challenges to the use of Internet resources.

Another factor affecting the respondents from harnessing Internet resources for academic activities is lack of computer skills. This aligns with the views of Emeka and Nyeche (2016) that inability to efficiently and effectively use the computer to connect to the Internet on a computer and know the right Internet resources to achieve desired purposes are lacking in many Internet users. Even in instances where the respondents used phones, tablets or phablets, it has been observed that some of them are not aware of how they can manipulate their gadgets to access the Internet resources they need for academic activities.

Robustness of network makes using the Internet interesting and reliable. This study has revealed that poor Internet connectivity discourages people from using the Internet for academic activities. This problem goes with the point of Apuke and Jubril (2018) where they submitted that there is a problem when the bandwidth of the Internet is slow. This usually affects the connection to websites and loading of pages intended to be viewed by the users. Poor Internet connectivity always results to time wasting and frustration of the respondents.

Since Apuke and Jubril (2018) have argued that poor Internet connectivity affects the connection to websites and loading of pages intended to be viewed, the finding that it takes too long to view/download pages is not among the major problems to using Internet resources for academic activities contradicts their claim. It also contradicts the position of Ramson, Katkukah and Ajayi (2018) that slow Internet server often leads to users encountering difficulties in accessing Internet resources because some pages won't load on time or takes too long to be viewed.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter will summarise the findings made in this study, draw conclusion from those findings and make appropriate recommendations. This chapter will be arranged in the following order:

5.2 Summary of findings

5.3 Conclusion

5.4 Recommendations

5.2 Summary of Findings

Results of this study showed that:

1. Female students of Kwara State Polytechnic, Ilorin, Nigeria, are more than their male counterparts; most of the students are within the age ranges of 15 – 24 years, who are single.
2. Online journals, online books, social media and emails are the Internet resources used most for academic activities by students of Kwara State Polytechnic, Ilorin, Nigeria.
3. Group discussions, homework assignments, projects and reports and presentations are the most academic activities students of Kwara State Polytechnic, Ilorin, Nigeria, used Internet resources for.
4. Online books, online journals, emails and databases are highly used for academic activities by students of Kwara State Polytechnic, Ilorin, Nigeria.
5. Internet provides access to information resources that aid academic performance, provides updated search engines used to search for e-journals for projects, provides access to OPACs to search for information materials and provides opportunities to access up-to-date reading materials are the most perceived effects of Internet resources on academic activities of students of Kwara State Polytechnic, Ilorin, Nigeria.

6. Internet helps to improve the quality of academic research, helps access relevant and up-to-date information materials, encourages self-learning and enables carrying out assignments within a given deadline are the most benefits of using Internet resources for academic activities by students of Kwara State Polytechnic, Ilorin, Nigeria.
7. High cost of data subscription, lack of computer skills, poor information searching skills and poor Internet connectivity are challenges affecting the use of Internet resources for academic activities by most students of Kwara State Polytechnic, Ilorin, Nigeria.

5.3 Conclusion

Internet resources are veritable tools to knowledge acquisition in the 21st century. This study validates that students of Kwara State Polytechnic, Ilorin, Nigeria, perceived that Internet resources have effects on their academic performance because it allows them to use the likes of e-books, e-journals, databases, e-mails and social media for group discussion, homework assignments, presentations, projects and reports in a timely and relevant manner.

By providing opportunities to access up-to-date reading materials and enabling students carry out assignments within a given deadline, the qualities of students' academic research have been improved their self-learning abilities have been enhanced. However, the students perceived that the benefits of Internet resources on their academic performance is being hampered because of high cost of data subscription, lack of computer skills, poor information searching skills and poor Internet connectivity.

5.4 Recommendations

Based on the findings of this study, the following recommendations are hereby made:

1. Management of polytechnics in Kwara State and other bodies related to Computer Science practices should endeavour to sensitize and encourage the students on the use of virtual libraries for their academic activities. Using the virtual libraries will increase the students' reliability on the information resources they are using for their academic activities.
2. Polytechnics in Kwara State should create awareness to their students on the institutional repositories and advocate its usage for academic activities by the students. This will make

the students aware of the research output of their lecturers and minimise the use of foreign literature for their research and academic activities.

3. Management of polytechnics in Kwara State should collaborate with relevant agencies, corporations and bodies to improve the computer skills of their undergraduates. This will equip the undergraduates with the skills of harnessing computers for academic activities.
4. Management of polytechnics in Kwara State should and other relevant bodies should orientate undergraduates on information literacy. This will equip the undergraduates with the skills to know when they need information, search for it, locate and access it, evaluate it and utilise for their academic activities.
5. Internet service providers in Nigeria should look into their charges on data subscription and ensure that students have access to affordable subscriptions. This will make the students have access to data subscriptions sufficient enough for them to use Internet resources for academic activities.
6. Internet service providers in Nigeria should be providing adequate and reliable infrastructure for internet connectivity. This will help in overcoming the problem of poor bandwidth frustrating undergraduates from using Internet resources for their academic activities.

REFERENCES

- Abaidoo, A. (2018). Factors contributing to academic performance of students in a Junior High School. Munich: GRIN Verlag. <https://www.grin.com/document/450284>
- Adenariwo, F.K. & Sulyman, A.S. (2022). Availability and accessibility of electronic information resources in academic libraries as predictors of academic performance of students. *Library Philosophy and Practice (e-journal)*. 7205. <https://digitalcommons.unl.edu/libphilprac/7205>
- Ahmed, A., & Bukar, M. (2016). Appraisal of internet usage for educational purposes by social and management science students in public polytechnic and polytechnics in Adamawa State. *International Journal of Social Sciences and Humanities Review*, 6(3), 65-79.
- Akinleke, W. O. (2017). Impact of family structure on the academic performance of secondary school students in Yewa local government area of Ogun State, Nigeria. *International Journal of Sociology and Anthropology Research*, 3(1), 1-10.
- Amadi, U.P.N. & Igwe, M.C. (2015). Open educational resources and the teaching and learning process in higher education institutions in Nigeria. *Ebonyi Journal of Library and Information Science*, 2(1), 81-90.
- Ani, O. E (2010). Internet access and use: a study of undergraduate students in three Nigeria polytechnic. *The Electronic Library*, 28(4), 555-567
- Apuke, O.D. & Jibril, A. (2018). The Use of Internet Resources for Learning and Research among Nigerians Studying in European University of Lefke, Northern Cyprus. *TSU Journal of Communication and Media Studies*, 1(1), 173-193.
- Bankole, O. M. (2013). The use of internet services and resources by scientists at Olabisi Onabanjo University, Ago Iwoye, Nigeria. *The Program*, 47(1), 15-33.
- Bankole, O. M., & Oludayo, B. S. (2012). Internet use among undergraduate students of Olabisi Onabanjo University, Ago Iwoye, Nigeria. *Library Philosophy and Practice*, 812. Retrieved from <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1550&context=libphilprac>.
- Begum, S. S. (2017). A study on the usage of internet resources among engineering students in Madurai district. Retrieved from: <http://hdl.handle.net/10603/140954>
- Breeding, M. (2017). The Many Facets of Managing Electronic Resources. The Library Innovation Conference 17 & 18 October 2017. London, England. Retrieved from www.infotoday.com 25-10-2017.

- Briz-Ponce, L., Pereira, A., Carvalho, L., Juanes-Méndez, J. A., & García-Peñalvo, F. J. (2017). Learning with mobile technologies–Students’ behaviour. *Computers in Human Behavior*, 72, 612-620.
- Ceyhan, A. A. (2011). University students' problematic Internet use and communication skills according to the Internet use purposes. *Educational Sciences: Theory and Practice*, 11(1), 69-77.
- Chakraborty, A. (2018). Importance of academic writing. Retrieved November 18, 2021 from isessay.com.
- Davis, B. (2021). What is the meaning of academic text? *Procedia Computer Science* 109C, 1005–1009.
- Dudovskiy, J. (2019). The ultimate guide to writing a dissertation in business studies: A step-by-step assistance. United States of America: Butterworth-Heinemann
- Emeka, U.J. & Nyeche, O.S. (2016). Impact of internet usage on the academic performance of students’ students: a case study of the University of Abuja, Nigeria. *Int. J. Sci. Eng. Res.*, 7 (10), 1018e1029. <https://bit.ly/2L9aslU>
- Fasae, J. K., & Adegbilero-Iwari, I. (2015). Mobile devices for academic practices by students of the college of sciences in selected Nigerian private polytechnic. *The Electronic Library*, 33(4), 749-759.
- Great, P.D. (2019). Internet Resources and Effective Library Services. *GASPRO International Journal of Eminent Scholars*, 7(2), 15-28.
- Ikenwe, I.J. & Udem, O.K. (2022). Beyond library’s beginning: Understanding digital libraries. Adomi, E.E. (Ed.). *ICT and libraries: A basic text*. Effurum, Delta State: Credence Press Limited. Pp.163-179.
- Imhonopi, D., & Urin, U. M. (2011). The Impact of Internet Services on the Research Output of Academic Staff of Selected State Polytechnic in South-Western Nigeria. *Information Technologist (The)*, 8(1), 9-20.
- Internet World Stats. (2015). Retrieved from www.internetworldstats.com/starts.
- Issa, A. O. (2012). Practical guides to project writing for students in Polytechnics, Colleges and Polytechnic. Offa: Wunmi Commercial Press.

- Ivewhrehweta, O., & Igere, M. A. (2014). Impact of the internet on the academic performance of students in tertiary institutions in Nigeria. *Information Impact: Journal of Information and Knowledge Management*, 5(2), 47–56.
- Jackson, L. A. (2011). A longitudinal Study of the effects of Internet use and videogame playing on academic performance. <https://digitalCommon/ui.edu.ng/comp/ict>
- Jonathan, O. & Udo, N. (2015). Categories, Availability and Awareness of Electronic Resources by Postgraduate Library Users in South East Nigerian Federal Polytechnic: *International Journal of Library Science*. pp-7- 12. <http://article.sapub.org/10.5923.j.library.20150401.02.html>.
- Kapur, R. (2021). Understanding the significance of academic activities and fieldwork in the acquisition of education.
- Khan, A., Iqbal, M. & Tasneem, N. (2015). Influence of age of students on their academic performance: A review. *Journal of Education, Technology and Science*, 3(5), 112–124.
- Kolawole, A. A. & Ijebor, J. A. (2018). A guide for researchers and writers of term papers. Offa: Correctman Press Limited.
- Kumar, S., Agarwal, M. & Agarwal, N. (2021). Defining and measuring academic performance of HEIs Students: A Critical Review. *Turkish Journal of Computer and Mathematics Education*, Vol.12 No.6, 3091-3105.
- Law Insider (2022). Internet resources definition. <https://www.lawinsider.com/dictionary/internet-resources#>
- Library Learning Center (2022). Types of databases. https://www.usg.edu/galileo/skills/unit04/primer04_02.phtml
- Manasijević, D., Živković, D., Arsić, S., & Milošević, I. (2016). Exploring students' purposes of usage and educational usage of Facebook. *Computers in Human Behavior*, 60, 441-450.
- Mingle, J.W., Lamptey, R.B. & Hassan, A. (2014). The use of social networks and web 2.0 for information service delivery in academic libraries in Ghana. In Asamoah-Hassan, H.R. & Antwi, I.K. (eds.). *Proceedings of the 1st international conference of the consortium of academic and research libraries in Ghana (Carligh)*. Ghana: Consortium of Academic and Research Libraries in Ghana.
- Narad, A. & Abdullah, M. (2016). Psychological factors limiting academic achievement of students in tertiary institutions. *Int J Eval Res Educ.*, 8(2), 285–297.

- Narad, A., & Abdullah, B. (2016). Academic performance of senior secondary school students: Influence of parental encouragement and school environment. *Rupkatha Journal on Interdisciplinary Studies in Humanities Special Issue*, 3(2), 12-19.
- Nketiah-Amponsah, E., Asamoah, M. K., Allassani, W., & Aziale, L. K. (2017). Examining students' experience with the use of some selected ICT devices and applications for learning and their effect on academic performance. *Journal of Computers in Education*, 4(4), 441-460.
- Nwezeh, C. M. (2010). The impact of Internet use on teaching, learning and research activities in Nigerian polytechnic: A case study of Obafemi Awolowo University. *The Electronic Library*, 28(5), 688-701.
- Nwokedi, G.I. & Emeghara, E.N. (2015). Awareness and utilisation of institutional repositories by lecturers in two federal polytechnic in Nigeria. *Ebonyi Journal of Library and Information Science*, 2(1), 19-39.
- Ogaji, I. J., Okoyeukwu, P. C., Wanjiku, I. W., Osiro, E. A., & Ogutu, D. A. (2017). The pattern of use of social media networking by Pharmacy students of Kenyatta University, Nairobi, Kenya. *Computers in Human Behaviour*, 66, 211-216.
- Ogedebe, P. M. (2012). Internet usage and students' academic performance in Nigeria tertiary institutions: A case study of the University of Maiduguri. *Academic Research International*, 2(3), 334.
- Onuoha, C. & Enyia, C. (2021). Adoption and use of social networks for service delivery in academic libraries in Nigeria. In Tiemo, P.E., Etebu, A.T. & Sawyer-George, E.O. (eds.). *Management of academic libraries: Nigerian perspective*. Bayelsa: Department of Library and Information Science, Niger Delta University.
- Peterson, R. (2022). What is a Database? Definition, Meaning, Types with Example. <https://www.guru99.com/introduction-to-database-sql.html>
- Petrovic, D. (2016). Use of internet resources and its tools and characteristics of higher education institutions in Serbia. *Megatrend Review*, 293-304.
- Ramson, E.N., Katkukah, D.G. & Ajayi, D.O. (2018). Internet facilities utilisation and undergraduate students academic performance of Federal Colleges of Education in North Central Nigeria. *The Online Journal of Quality in Higher Education*, 5(1), 15-22.
- Rono, K., Onderi, H., & Owino, J. (2014). Perceptions of causes of poor academic performance amongst selected secondary schools in Kericho Sub-County: Implications for school management.

- Roudbaraki, M. Z., & Esfidvajani, A. M. (2011). Dual role of the computer in human life. In *International conference on humanities, society and culture IPEDR*, 20, 134-155.
- Sahin, Y.G., Balta, S. & Ercan, T. (2015). Reliable internet resources use by university students in course projects. *IETC - April 26-28, 2015 Istanbul*, 1268-1272.
- Sampath Kumar, B. T., & Manjunath, G. (2013). Internet use and its impact on the academic performance of university teachers and researchers: A comparative study. *Higher Education, Skills and Work-based Learning*, 3(3), 219-238.
- Singh, M., Malik, H. & Singh, U. (2016). Assessment of factors influencing academic performance of students in Pakistan. *Education Management Technology*, 4(6), 234–244.
- Singh, S. P., Malik, S., & Singh, P. (2016). Research paper factors affecting academic performance of students. *Indian Journal of Research*, 5(4), 176-178.
- SOAS Library (2022). What is an electronic journal? <https://www.soas.ac.uk/library/resources/ejournals/about>
- Steyer, J. (2015). Common sense media. Retrieve from <https://goo.gl/RtR3Jd>
- Tentama, F. & Abdillah, M.H. (2019). Student employability examined from academic achievement and self-concept. *Int J Eval Res Educ.*, 8(2), 243–248.
- Thomas, L. (2022). Simple random sampling | definition, steps & examples. <https://www.scribbr.com/methodology/simple-random-sampling/>

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

Questionnaire on *“Contributions of Internet resources utilisation to academic performance of students of Kwara State Polytechnic, Ilorin, Nigeria”*

Dear Respondent,

I am a student of the above named institution, carrying out research on the above mentioned topic. My research is in partial fulfillment of the requirements for the award of National Diploma certificate in Library and Information Science (ND).

Your assistance is hereby requested for timely completion of this questionnaire. I am assuring you that all data provided will be treated with utmost confidentiality and used for academic purpose only.

Thank you for your anticipated cooperation.

Researcher

Section A: Demographic Characteristics of Respondents

Kindly select the option of your choice by ticking (✓) from the answers below

1. Gender: Male () Female ()
2. Age range: 15 – 19 years () 20 – 24 years () 25 – 29 years ()
30 – 34 years () 35 years and above ()
3. Marital Status: Single () Married () Divorced () Widow ()

Section B: Internet resources used for academic activities by students

What are the Internet resources you used for academic activities?

Kindly tick(✓) “yes” if you agree with the question and “no” if you disagree and tick as many statements as applicable

S/No	Options	Yes	No
1.	Electronic mail (E-mail)		
2.	Online Journals		
3.	Social Networking Sites/Social Media		
4.	Websites		
5.	Online Books		
6.	Online newspapers		
7.	Institutional Repositories (IRs)		
8.	Databases		
9.	Open education resources		
10.	Virtual libraries		
11.	Open access repositories		
12.	Online/Web public access catalogues		

	Others, please specify.....		
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Section C: Academic activities used Internet resources for by students

What are the academic activities you used Internet resources for?

Kindly tick (✓)“yes” if you agree with the question and “no” if you disagree and tick as many statements as applicable

S/No	Strategies for knowledge sharing	Yes	No
1.	Class assignments		
2.	Homework assignments		
3.	Projects and reports		
4.	Teamwork		
5.	Debates		
6.	Role playing		
7.	Group discussions		
8.	Presentations		
9.	Quizzes		
10.	Texts		
11.	Examinations		
	Others, please specify.....		

Section D: Extent of use of Internet resources used for academic activities by students

What is the extent of use of Internet resources used for academic activities by you?

Kindly tick (✓)VHU for “Very Highly Used,” H for “Highly Used,” ” MU for “Moderately Used” and LU for “Lowly Used”

S/No	Options	VHU	HU	MU	LU
1.	Electronic mail (E-mail)				
2.	Online journals				
3.	Social networking sites/social media				
4.	Websites				
5.	Online books				
6.	Online newspapers				
7.	Institutional repositories (IRs)				
8.	Databases				
9.	Open education resources				
10.	Virtual libraries				
11.	Open access repositories				
12.	Online/web public access catalogues				
	Others, please specify.....				

Section E: Perceived effects of Internet resources on academic activities of students**What are the perceived effects of Internet resources on your academic activities?**

Kindly tick (✓) SA for “Strongly Agree,” A for “Agree,” D for “Disagree” and SD for “Strongly Disagree.”

S/No	Options	SA	A	D	SD
1.	Internet provides access to information resources that aid my academic performance				
2.	Internet provides access to OPACs to search for information materials				
3.	Internet provides updated search engines used to search for e-journals for my project				
4.	Internet enables me to engage in online reference services				
5.	Internet provides opportunities to access up-to-date reading materials				
	Others, please specify.....				

Section F: Benefits of using Internet resources for academic activities by students**What are the benefits of using Internet resources for academic activities by you?**

Kindly tick (✓)SA for “Strongly Agree,” A for “Agree,”” D for “Disagree” and SD for “Strongly Disagree.”

S/No	Options	SA	A	D	SD
1.	Helps to improve the quality of my academic research				
2.	Helps to increase my level of intellectualism				
3.	Enables independent access to information without restrictions				
4.	Helps me contribute to the knowledge-based economy				
5.	Enhances my learning skills and capacity				
6.	Helps me harness the potency of my academic activities				
7.	Helps you access relevant and up-to-date information materials				
8.	Enables you to have fast communication with your schoolmates				
9.	Offers me a platform for accessing and publishing papers online				
10.	Enables me to carry out assignments within a given deadline				
11.	Permits the comparing and contrasting of different forms of literature				
12.	Encourages self-learning				
13.	Promotes peer learning				

14.	Enables me to prepare better for examinations				
	Others, please specify.....				

Section G: Challenges associated with use of the Internet resources for academic activities by students

What are the challenges associated with use of the Internet resources for academic activities by you?

Kindly tick (✓) SA for “Strongly Agree,” A for “Agree,” D for “Disagree” and SD for “Strongly Disagree.”

S/No	Options	SA	A	D	SD
1.	Poor Internet connectivity				
2.	Lack of computer skills				
3.	Poor information searching skills on the Internet				
4.	High cost of data subscription				
5.	Limited accessible Internet resources				
6.	Overload of information on the Internet				
7.	Unrelated internet resources on university students’ out-of-class works and projects				
8.	Difficulty in finding relevant information				
9.	It takes too long to view/download pages				
	Others, please specify.....				