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The use of Information and Communication Technology (ICT) and its implications on academic excellence in Federal University Wukari, Taraba State

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Abstract: The use of ICT in undertaking major operations at Federal University Wukari is expected to change the ways public officials carry out their duties. Before the introduction of ICT, each departmental exam officer was expected to manually prepare and collate their students' results for adoption at the various levels of approval. The adoption of ICT in preparing students' results seems not to have gone down well with the exam officers. The study examines the perceptions of the exam officers towards the adoption of ICT in collating students' results at the University. It also examines its implications on academic excellence in the university. The study is survey research, as such, primary and secondary data were collated. The data collected via the questionnaires were analysed quantitatively, while the other qualitative data were analysed using content analysis. Findings revealed that the exam officers are not adequately informed and prepared for the change as it was forced on them suddenly by the school management. However, they all agreed that ICT has positively affected the preparation and collation of student results as it has greatly reduced errors and inconsistency, inaccuracy and stress associated with the former system. Although the use of ICT came with its problems, it has positively affected students' academic accomplishments at the University. ICT was found more reliable and efficient in accomplishing an effective evaluation of students in the University. The study, therefore, suggests more training for exam officers on the use of ICT, and the provision of the necessary equipment required for the use of ICT, among others.

Keywords: Academic excellence, Education, ICT, Students perceptions

1. Introduction

The world witnessed a revolution in knowledge and the adaptation to information in the 21st century with the conversion of an industrial society into an informational society. Today, most developed nations are those that have access to the greatest knowledge and information and have adopted it accordingly. Information and Communication Technology (ICT) has become an indispensable tool for changing the world into a better place. ICT has revolutionized the operations in every aspect of the economy of nations and even the ways of life of her citizens. Its contribution to the success achieved in the various fields of endeavours such as agriculture, medicine, tourism, travel, business, law, banking, transportation, communication, engineering, architecture and education cannot be overemphasised. Countries like China, India, Brazil, and South Korea, seen as developing countries, have achieved giant strides in every aspect of their economy through the development and adoption of ICT in their countries. The pervasive influence of ICT has brought about a rapid transformation in the political, social and economic sphere of developed

nations. Thus, the potential of every nation to achieve accelerated development today depends on the level of adoption of ICT in every sector of the economy. Most developing countries, including Nigeria, have keyed into this understanding and made efforts for the adoption of ICT in every segment of the nation, including the education sector. The effectiveness of the educational sector in Nigeria is very crucial to its realization of the national objectives as well as the SDGs. The adoption of ICT in the educational sector, especially in the process of teaching and learning in the University, will enhance the teaching and evaluation of students alongside achieving academic excellence in the citadel of learning. However, it seems the educational sector, particularly the university, is gradually yielding to the penetrating influence of information and communication technology. But, the level of acceptance and adaptability remains a major concern to scholars, practitioners and policymakers. The Federal University Wukari adopted the use of ICT in the preparation ad collation of results in 2016. Thus, the shift from manual to digital in the preparation and collation of students' results at the University. The aim is to reduce the delay, fraud and other administrative bottlenecks associated with the preparation and collation of student results at the University. But, it seems there is resentment among teaching staff, especially the exam officers in the adoption of this new technology. This is vivid considering the disagreements between exam officers and lecturers, and other controversies that trail the introduction of ICT in the University. It is on this premises that the study seeks to examine the perception of exam officers in the introduction of ICT in collating students' results and its implications on academic excellence at Federal University Wukari (FUW).

2.1. Research question

- What are the perceptions and attitudes of exams officers towards the use of ICT in preparing and collating students' results in FUW?
- What are the factors responsible for their perceptions and attitudes?
- What are the implications for Academic Excellence in the University?

2.2. Objective of the study

This study aims to examine the perceptions of exam officers on the use of ICT for the compilation of students' results and its implications on academic excellence in the federal university Wukari. The specific objectives are:

- to examine the perceptions and attitudes of exams officers towards the use of ICT in preparing and collating student's results in the university;
- to examine the factors responsible for their attitudes and perceptions, and;
- to assess the implication of their attitudes on academic excellence in the University

2. Literature review

2.1. Conceptual issues

Meaning and components of ICT

The meaning of Information and Communication Technology ICT like other concepts does not lend itself to a specific definition. Thus, various scholars tend to define it to suit their understanding and specifications. Some scholars see ICT as a synonym for Information Technology (IT). Some of these definitions will be discussed in this study. ICT can be seen as a broader term for IT that consists of all the communication technologies, which include the internet, wireless networks, cell phones, computers, software, middleware, video-conferencing, social networking, and other media applications and services that enable users to access, retrieve, store, transmit and manipulate information in a digital term. It refers to the convergence of media technology such as audio-visual and telephone networks with computer networks, utilizing a unified system of cabling (including signal distribution and management) or link system (FAO, nd). The definition above suggests that ICT is limited to analogue technology.

According to Pratt (2019), ICT comprises those infrastructure components that enable modern computing. It includes all the devices, networking components, applications and systems that enable people and organizations both in the government and private sectors to interact in the digital world. Here, ICT as a technological tool goes beyond the normal one-way garbage-in and garbage-out information technology to include a means for communication that could be regulated and moderated. To Pratt (2019), the ICT components include both the internet-enabled sphere and mobile phones powered by wireless networks. It

also includes antiquated technologies, such as landline telephones, radio and television broadcasts and the presence of digital inventions like artificial intelligence and robotics. Today, the ICT revolution in ICT has gone beyond components like computers and telephones and televisions, which are referred to as analogue to smartphones, digital television and robots refer to as digital ICT.

ICT is also defined as the convergence of computer, telecommunication and government policies for how information should be accessed, secured, processed, transmitted and stored (Rouge, 2022). Rouge (2022) further identified four components of ICT. They are hardware, software, electronics and services. The hardware gives support to ways information is created, transferred, stored and managed. The software components give support to all digital designs, personal productivity and workflow management. The electronic components give support to the exchange of digital information which includes a subscription service delivery mechanism, while the services component supports asset management, data lifecycle management, customers experience management, data employee experience management and data literacy. The definition above emphasizes the process involved in the operation and the usage of ICT.

2.2. The importance of ICT

The importance of ICT to the overall development of any nation cannot be overemphasized. ICT has brought about a revolutionary change in every facet of human endeavour. It has transformed the world from a communal space to a global world. The world is now relating like a global village making communication and interaction easier and more effective.The ICT revolution has positively impacted the economic, political and social spheres of most nations in the world, heralding an era termed the "digital world".On the economic front, ICT has brought about cost-effectiveness in the running of the economy. E-commerce allows businesses and customers to interact online, bridging the face-to-face hurdles. The exchanges of goods and services are made easier and at a relatively lower cost via e-commerce, no matter the distance between the seller and the buyer.

Today, robots are used to deliver goods to the doorstep of customers. Robots are also used to perform many other jobs that humans can perform. The advancement of ICT has provided more job opportunities. A lot of job opportunities are now created via the advent of ICT. Moreover, in the area of security, ICT has helped in the monitoring and curtailing of criminal activities and apprehension of criminals. The use of drones has made it easy to keep surveillance on the daily activities of people in any part of the world.

2.3. Information and Communication Technology (ICT) and education system

ICT is a technological medium that enables an efficient and effective information system. It involves the gathering, processing, storing and presentation of data. Its activities have in recent times increasingly involved collaboration and communication (Megha, 2000). The major components of ICT include computers, telephones, radio, television, the internet, and broadcasting technology. Rodríguez (2014) avers that the era of progress where a society furthers its progress through capital and labour has come to an end. A competitive that relies on the acquisition, transmission and application of knowledge has emerged. Some scholars have stressed the importance of using ICT to enhance the process of industrialization, recruitment of employees, social medial marketing, teaching and learning, online real estate management, achieving economic and monetary policies etc. (Obinna & Udo, 2022).

Aribamikan (2007) asserts that the use of the internet is still in its infancy in developing countries due to poor infrastructure and its attendant high cost of access. However, ICT has recently been used in most sectors of the Nigerian economy, including the educational sector. ICT is now used in the university for processing students' applications for admission, registration of students, student examinations, and payment of tuition fees, among others. Thus, to achieve meaningful development, most developing countries utilize the affordances of the digital space. China (2022) argues that many countries_ like China, the United Kingdom and the United States of America_ have achieved accelerated sustainable development by investing more in computer education. To achieve their educational objectives and advance their economy, many countries redesign their computer curriculum to incorporate coding at both primary and secondary levels, as well as train teachers in specialized computer areas, federal funding and monitoring new computer education policies, and the adoption of 'Yuanpei'_ a Programme aimed at accelerating skill-based teaching of computer science in core areas of beneficial disruptive technology.

According to León (2019), the integration of ICT in education must be accompanied by a series of guidelines defining a framework for decision-making regarding the actions to be taken during the process.

The author further identifies three dimensions of these guidelines. These are information related to accessing shaping and transforming new knowledge and digital environment information, communication connected with collaboration, teamwork with technological adaptability and ethics and social impact linked to the competencies needed to face the ethical challenges of globalization and the rise of ICTs. ICTs, as technological tools, have increased the degree of significance and educational conception, establishing new models of communication, besides generating spaces for training, information, debate, reflection, teaching, compilation and storage of students' results as well as breaking up the barriers of traditionalism in the classroom (Ayala, 2017).

ICT has been introduced into the major academic and administrative milieu of educational institutions in Nigeria. The university serves as a bedrock for teaching, research and community development, becoming an engine for opportunities, and allowing the potential for innovation in education. The use of ICT in the university has become an essential tool for teaching and learning as well as administrative activities. The use of ICT in the universities in Nigeria will help in creating a citadel of learning that is innovative, market-oriented, research-oriented, and can compete favourably in the global realm. But, the usage of ICT for the process of teaching and learning is still at a low pace.

2.4. ICT and academic excellence

Many scholars have tried to establish the relationship between ICT (information and communication technology) and academic excellence, especially in teaching and learning. This is because ICT enhances efficiency and effectiveness in the accomplishment of many academic tasks. Many universities have imbibed the use of ICT in virtually every task_ ranging from result computation, e-examination, e-learning, teaching and other educational-related functions. Laneways (2017) argues that ICT is used in an educational setting to support and uphold the delivery of information, serving as its springboard. Thus, this implies that students who are exposed to the use of ICT gadgets are prone to be highly skilled and will eventually demonstrate global relevance in the workspace.

Hence, the knowledge base economy is the nucleus of national development. Stressing the relationship between ICT and academic excellence, Goodwin (2012) avers that when teachers are digitally literate and trained to use ICT, their thinking skills as well as creativity are improved and individualized options for students to express their understanding and leave them better prepared to deal with ongoing technological change in the society and workplace. In this sense, ICT was used within the purview of this paper to mean the application of technological facilities in learning, researching and rendering community service by staff and students in educational settings and society. Stressing on the relationship between ICT and academic excellence. Olaniyi (2006) posits that the use of ICT can be transferred in real-time. He further observes that it is one of the educational challenges of the modern age about which progressive academic institutions must make bold efforts to excel and compete favourably in the global market where education is a commodity. Therefore, the place of ICT in academics cannot be ignored either by teachers or students.

Various scholars have undertaken studies on the relationship between ICT and academic excellence on the part of teachers and students. For instance, Ratheeswari (2018) posits that ICT improves teaching and learning, as it helps teachers in creating an educational environment. The study recommends that the results of using ICT for teacher professional development need to be explored. Olabera (2022) carries out a study on the use of ICT to improve learning through digital classrooms. The study observes that there is no relationship between students' love for technology and their ability to learn academic content. The study reveals that a lot is achieved in skill acquisition through e-learning. The study concludes that the inclusion of mobile device-based teaching into the present traditional mode, in the absence of equipped computer laboratories, constitutes the best acceptable learning method.

Agalo (2021) also stresses the importance of e-learning in contemporary societies where technological know-how is advancing. Hence, to ensure the integration of electronic learning (e-learning) in teacher education, the teacher requires some kind of skill and competence for adopting such media in pedagogical activities as well as the knowledge and understanding of the relevance of the use of technology in pedagogical practice. Some of the skills and competencies identified include; self-learning instructional materials (SLIMs), acquiring technical skills and knowledge of web resources and adapting the content, teaching styles and instructional methods delivery via technology.

Okiki (2011) examines the importance of information communication technology (ICT) support for an e-learning environment at the University of Lagos, Nigeria. The result of the study reveals that ICT connects

teachers and students to the knowledge they need. It recommends that ICT must be built on solid infrastructural background with highly effective internet connectivity. Ben Youseef, Dahmani & Ragni (2022) in their study on ICT use and students' academic performance found that poor investment in ICT affects students' academic performance and the nature of technological services rendered by universities has little impact on students' results. They further claim that due to innovation in ICT by universities, there is a noticeable improvement in students' academic performance and the acquisition of digital skills by the students improves their academic performance.

Olaore (2014) examines both the negative and positive impact of ICT on education in Nigeria and discovers that it has become a veritable tool for educational progress and further stresses that the advent of ICT usage in academics has become a major distraction to student's academic excellence, arguing that instead of searching good academic contents, students' resort to chatting on various social media sites.

3. Theoretical framework

The structural functionalism approach is used in the study. Structural functionalism theory has its origin in the writings of Aristotle and was later adopted and made popular by the works of Montesquieu. Montesquieu's doctrine of separation of powers, as developed in the l7th century, is based on the notion of structural functionalism theory. He postulates that functions are best undertaken separately from each other as a means of ensuring stability and security. However, the theory used in the behavioural sciences was adapted by Emile Durkheim.

The theory postulates that institutions, relationships, roles and norms that together constitute a society serve a purpose and each is indispensable for the continued existence of the others and of society as a whole. According to Durkheim, society is a structure in which the parts are interdependent and this interdependency imposes structure on the behaviour of institutions and the members. And, that, the interactions between the parts of society contributed to societal unity. Durkheim asserts that groups can be held together on two contrasting bases i.e. mechanical solidarity and organic solidarity. Mechanical solidarity is based on a sentimental attraction to social units or groups that perform the same or similar functions. Organic solidarity stipulates interdependence based on differentiated functions and specialization, as seen in a factory, the military, the government, or other complex organizations.

Here, the University is seen as a system that performs various functions aimed at achieving its objectives. One fundamental academic activity at the University is student evaluation. It is an avenue to assess the level of understanding of the students concerning the courses taught. It also determines the output of each student's performance at the point of exit from the University. Every other activity in the University is predicated on students' examination because it determines the quality of teaching and learning in the institution. It also determines the level of academic excellence in the institution. Thus, every university has to continue to initiate a strategy to improve the efficiency and effectiveness of the student evaluation process. Every university is changing the strategy of the evaluation process from manual to digital. It was in line with this understanding that the Federal University Wukari initiated the electronics mechanism for the preparation, collation and calculation of the examination. The understanding is that the use of electronic devices will improve the quality, efficiency and effectiveness of the conduct and outcome of students' examinations in the institutions. The belief was that it will not only reduce the stress inherent in compiling students' results, but also reduce errors, manipulations, and other deficiencies associated with the manual compilation of students' results. The adoption will also lead to a reliable and acceptable result outcome, improving the whole teaching and learning outcome.

4. Methodology

This study is empirical, as data are collected from a population. The research adopts a survey design; hence data are collected from a sample of the population. Both primary and secondary data were collected from the sample population. In selecting a sample from the population, 24 exam officers were selected from the three faculties and 24 departments in the university. Three officials of the central exams office were also included in the sample. The primary data was collated via questionnaires and interviews. The questionnaire contains questions directed at some selected exam officers. Some HODs and lecturers were also granted a face-to-face interview. The questions dwell on issues relating to the examination officer's perception of the use of electronic means for the collation of students' results, and how their perception affects the outcome of the process and outcome of students' evaluation. The questionnaire was developed based on 4- a point

Likert Scale. The instrument was pilot-tested on a convenience sample of 24 Exams officers Secondary data was also collated from official documents of the university, journals, books, newspapers and magazines. In analyzing the data collected, the data from questionnaires are presented in tables, frequency counts and percentages. The quantitative design measure the perception of exam officers on the use of ICT for the compilation of students' results and its implications on academic excellence at Federal University Wukari. The qualitative data from interviews and secondary sources were analysed using content analysis.

5. Result and discussion

5.1. Data presentation and analysis

The first section focuses on the respondents' demographic characteristics, while the second section dwells on the perceptions of exam officers. Descriptive statistics such as frequency, and percentages, were used to present and analyse the quantitative data. The qualitative and quantitative data were analysed simultaneously to answer the research questions and to test the postulated hypotheses.

Table 1: Bio.-Data of Respondents

Sex	Male 18 (75%)	Female 6(25%)
Age	31-40 18(75%)	41-50 6(25%)
Qualification	M.Sc 16(66.7%)	PhD 8(33.3%)
Position	Lecturers 1&11 24(100%)	Senior Lecturer- Professor.
Marital status	Single 5(20.8%)	Married 19(79.2%)

Source: Survey, 2019

The data in Table 1 above shows that 75% which represents the majority of the respondents are males, while 25% are female. The result of the finding above might not be far-fetched from the general belief that exam jobs are for men because of the stress involved. On the issue of the age group of the respondents, 75% which constitute the majority of the respondents are under the age bracket of 31-40. This implies that they are young and energetic to withstand the stress associated with the office. 66.7% which constitute the majority are M.Sc. holders. All the respondents are in the position of between lecturer 1&11. Those within the rank are energetic staff who are motivated to give their best to their institutions because they have fewer academic commitments. Finally, 79.2% which constitute the majority of the respondents are married.

The next issue has to do with the perception of the respondents on the use of ICT in the evaluation of students. Their responses are contained in Table 1.2 below

Table 2: The Perception and Disposition of Exams Officers towards the use of ICT in collating and calculating students' results

s/n	Variables	SA	A	SD	D	Remark
1	The exam officers were adequately informed of the change from manual to ICT.	9 (37%)	11 (46%)		4 (17%)	83% AGREED
2	The exams officer were adequately trained before the introduction of ICT for the computation of students' results.	4 (17%)	11 (46%)		9(37%)	63% AGREED
3	The exam officers were given adequate time to re-adjust to the new method of exam results computation.	5 (21%)	5 (21%)	8 (33%)	6 (25%)	58% DISAGREED
4	The exams officer were given the necessary equipment that will enable them to adjust to the new method.	4 (17%)	5 (21%)	4 (17%)	11 (46%)	62% DISAGREED
5	The equipment is difficult to operate in carrying out your newly assigned role.	8 (33%)	9 (37%)	6 (25%)	1 (4%)	71% AGREED
6	The environment is not conducive to the use of ICT in the computation of students.	6 (25%)	12 (50%)		6 (25%)	75% AGREED
7	The use of ICT is more accurate than the manual in the evaluation of students.	7 (29%)	12 (50%)		5 (21%)	79% AGREED

Source: Survey, 2019

From the table above, the respondents gave expressed their views as exams officer towards the use of ICT in collating and calculating students' results. Question 1: 83% of the respondent agreed that the exam officers

were adequately informed of the change from manual to ICT and that the university management informed the exam officers before implementing ICT for the compiling of students' results. 17% disagreed that they were adequately informed of the transition from manual to electronic mode of preparing students' results. Thus, it can be adduced that the majority of the exam officers are aware of the change.

Question 2: the response shows that 63% which constitutes the majority of the respondents agreed that the exams officer were adequately trained before the introduction of ICT for the computation of students' results, while 37% of the respondents disapproved of this. This implies that the institution was ready to sweep from a manual to a computerized method of computing students' results.

Question 3: On the issue of readjusting to the new method, 58% of the respondents disagreed that the exam officers were not given adequate time to re-adjust to the new method of exam results computation. 32% of the respondents were of the view that they were given adequate time to readjust. This implies that the exam officers were rushed, and not given adequate time to adjust to adopting the new method.

Question 4: The response shows that 62 % of the respondents disagreed that the exams officer were given the necessary equipment that will enable them to adjust to the new method, while 37% of the respondents were of the contrary opinion. This implies that the exam officers were not given the necessary equipment needed to enable them to adopt the new method.

Question 5: The respondents' opinions were sought on the suitability of the equipment given to carry out their task. 71% agreed that the equipment supplied was not suitable as it was difficult to operate in carrying out their newly assigned role. 39% of them were of the view that the equipment is suitable and easy to operate. This implies the majority of the exam officers are not disposed to the kind of equipment given to compute their exam results using ICT.

Question 6: on whether the environment is conducive for the use of ICT in the computation of students' results, the majority representing 75% of the respondents agreed that the environment is not conducive, while 25% of them assert that the environment is conducive for the use of ICT in the computation of students. The rate of response implies that the environment to operate the new system is not conducive. On the reasons for the above, some of the respondents via interview agreed that epileptic power supply and inadequate access to internet facilities are the major constraints militating against the usage of ICT for the compilation of students' results.

Question 7: on the level of accuracy of the new method, 79% agreed that the use of ICT is more accurate than the manual in the evaluation of students. 21% of the respondents are of the contrary view. This implies that despite the shortcomings associated with the new method, most of the respondents still believed that results compiled using ICT are far more reliable and accurate than the ones prepared manually.

Table 3: The implications of the usage of ICT on the outcome of students' results.

s/n	Variables	SA	A	SD	D	
8	The use of ICT is more reliable than the manual in calculating and storage of students' results.	6 (25%)	9 (37%)	4 (17%)	5 (21%)	62% AGREED
9	The use of ICT has improved the timely calculation of students' results.	7 (30%)	9 (37%)		8 (33%)	67% AGREED
10	The use of ICT is less error-free than the manual computation of students' results	6 (25%)	11 (46%)		7 (29%)	71% AGREED
11	The use of ICT ensures timely dictation of errors.	9 (37%)	5 (21%)	4 (17%)	6 (25%)	58% AGREED
12	The use of ICT has enhanced the timely solving of students' problems.	6 (21%)	7 (29%)	1 (4%)	10 (42%)	54% AGREED
13	The use of ICT reduced manipulation on part of course lecturers.	7 (29%)	11 (46%)		6 (25%)	75% AGREED
14	The uses of ICT reduce manipulation on the part of Exams officers, academic staff and the head of the department.	6 (25%)	12 (50%)		6 (25%)	75% AGREED

Source: Survey, 2019

The respondents' opinions were sought on the efficacy of using ICT to collate students' results. Their responses indicated a positive disposition toward the benefits of using the ICT as indicated in table 1.2 above.

Question 8: On the reliability of the ICT in compiling students' results, the majority of the respondents representing 62% agreed that the use of ICT is more reliable than the manual in calculating and storing students' results. 38% of the respondents were of the contrary view. One can deduce from the responses as indicated in item 1 in table 2.1 above, that the use of ICT in preparing and storing students' results is better than the manual method.

Question 9: on the time effectiveness of the use of ICT in the preparation and storing of students' results, 67% of the respondents believed that the use of ICT has improved the timely calculation of students' results. 23% of the respondents were of the contrary view. The response output implies that the use of ICT has hastened the work of the exam officers in the preparation of students' results.

Question 10: The respondents' opinion on the level of errors inherent in the computation of students' results indicates that 71% of them agreed that the use of ICT is less error-free compared with the manual computation of student results. 29% of the respondents were of the contrary opinion.

Question 11: Also related to the above, 58% of the respondents which constitute the majority agreed that the use of ICT ensures timely dictation of errors. 32% of the respondent were of the contrary view. This further confirmed the extent of accuracy and reliability of ICT in computing students' results.

Question 12: The respondents' opinion also shows that 54% of them agreed that the use of ICT also makes it easy to find solutions to errors identified in the compilation of students' results. 46% of the respondent were of the contrary view.

Question 13: on whether the use of ICT allows for the manipulations of students' results, 75% of the respondents agreed that the use of ICT has reduced manipulations inherent in the manual preparation and calculation of students' results. Lectures are expected to mark and upload their results to the exam portal. Once, the result is uploaded, the lecture is expected to download such result. After the download, any alteration can be easily identified. When the portal is closed, only the HOD has access to the portal to effect any correction. When the result is approved by the Senate, only the VC can affect any change to the result. The results are also more in the portal. This process does not give room for easy manipulation of results.

Question 14: The researcher also sought the opinion of the respondent on the likely manipulation of students' results by exam officers, class advisers and HOD. 75% of the respondents agreed that the use of ICT has reduced the manipulation of students' results by exam officers, academic advisers and heads of departments. The processes involved in the preparation and calculation of result makes it difficult for them to manipulate students' results.

6. Recommendations

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

1. There is a need for consistent sensitization of lecturers, course advisers and heads of departments on the importance of ICT the teaching and learning, as well as in the process of students' evaluation. They should be trained to acquit themselves with new modalities in ICT, especially the ones that are relevant to their jobs.
2. The necessary equipment required should be made available at no cost to the major stakeholders involved in the student evaluation process. Internet services should be made available and accessible within the university to students and staff at no cost in a consistent manner. All classrooms, laboratories, libraries and staff offices should cover by the internet network.
3. The use of ICT should be extended to the teaching and learning process. The necessary facilities and equipment required for lecturers and students to engage in teaching and learning should be provided. Lecturers should be able to teach or supervise students via the internet. The students should be able to receive lectures online via their phones.
4. There is a need for a consistent electricity supply within the university environs. The school can connect electricity directly from the nearest generating substation to the university. This will go a long way in ensuring a consistent power supply within the university and its environs where students lived.
5. Finally, the university management should ensure that other ICT facilities or equipment (i.e satellites, computers, projectors among others) are made available in the university. Schools should acquire up-to-date ICT infrastructure that enhances teaching and learning and research development within the university.

7. Conclusion

Based on the above analysis of data, it is deduced that the use of ICT has improved the process of student evaluation at Federal University Wukari despite the low acceptance of the tool by some exam officers. Findings show that ICT was introduced by the university management in 2016 in reaction to the numerous problems inherent in the compilation of results manually by exam officers. The exam officers were informed of the change and trained and the equipment required was also provided by the university management to allow for the smooth take-off of the change. However, they were not given enough time to readjust to the new system, and the equipment provided was not suitable because of the epileptic electricity supply and internet network. On a final note, the exams officers were of the view that the use of ICT has improved the reliability of the exam process, is less error-free, is quick to identify and tackle errors, and has eradicated likely manipulations of student results by the lecturers, course advisers, exams officer and head of departments. Thus the study concludes that the introduction of ICT for the preparation, computation and storage of students' results has improved the process of student evaluation with positive implications for academic excellence at the Federal University Wukari. Although the use of ICT was initially resented by exam officers, it was later accepted as more reliable, accurate efficient and effective for the collation and storage of students' exam results.

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