

## The Role of Information and Communication Technology (ICT) in Academic Planning Unit in Federal Universities in South-East Nigeria

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**Key words:** ICT, academic planning, federal universities, management, administration

**Abstract:** This study investigated the role of information and communication technology in academic planning unit in federal universities in South-East Nigeria. The study adopted a descriptive survey design with a sample of 582 respondents drawn from the selected federal universities in South-East, Nigeria. Four research questions were used to guide the study. The study adopted a structured questionnaire. The instrument was face validated by three experts from the selected federal universities. Cronbach alpha reliability co-efficient was used to determine the instruments which yielded reliability coefficients of 0.87. Data collected were analyzed using mean scores and standard deviation. The findings of this study revealed that the challenges of ICT in academic planning in the federal universities such as inadequate familiarity of appointed directors of the unit with ICT facilities and lack of orientation/training programme on computer literacy or low rate of academic participation. The findings of the study revealed economic and social benefits of ICT which are likely to have impact in academic planning in federal Universities. Based on the findings, it was recommended among others that management of federal universities should ensure adequate training of staff of Academics Planning Unit with the use of ICT facilities to enhance their administrative efficiency.

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## INTRODUCTION

Globally, Information and Communication Technology (ICT) are widely deployed in many

Universities mainly for the purpose of provision and accessing information, computer based databank of students and staff statistics for use in planning, budgeting, management requirements and automation of

administrative purposes. The concepts Information and Communication Technologies (ICT) is defined as a diverse set of technological tools and resources used to communicate and create, disseminate, store and manage information. ICT encompass a range of rapidly evolving technologies which include telecommunication technologies as well as digital technologies and software applications (Maki, 2008). Research by Yacob (2011) sees Information and Communication Technology as a diverse set of technological tools and resources used to communicate, transfer learning, create, disseminate, store and manage information. These technologies include computers, the internet, broadcasting technologies and telephony (Nweke *et al.*, 2013). Furthermore, Rana (2009) opines that ICT holds the key to the success of modernizing information services but mainly used in converting the existing paper-print records in the entire process of storage, retrieval and dissemination of information. Meanwhile, Oshionebo and Ashang (2011) maintained that ICT is the mean to communicate information through various means including audio-video recordings, digital data storage devices and internet etcetera.

Information and Communication Technology (ICT) is applied to serve as a means of improving efficiency in the educational process (Roblyer and Knezek, 2003). Furthermore, it has been shown that the use of ICT in education can help improve memory retention, increase motivation and generally deepens understanding and as well used to promote collaborative learning, academic planning, academic problem solving activities and articulated projects. Generally, Information and Communication Technology (ICT) is use to promote new techniques in working and planning and new ways of interacting among staff in their place of work (Martin, 2003). In other words, ICT utilization is one of the most concerns of educational administration and planning globally and for a number of years there has been evidence in the training and development area (Edwards and Bruce, 2004). It is essential that the pedagogy of ICT becomes the main focus of academic planning development and this will go a long way to build upon in a constructive manner in order to allow system analyst, data entry operators, computer programmers and web developers to achieve the full benefits of using ICT in their daily tasks in academic planning and administration (McCarney, 2004). Research by Salerno (2009) revealed the need for ICT integration into administrative activities of higher institutions such as: sending group and individual e-Mail notices and agendas to staff, rather than printing and distributing them; distribution of academic session lecture and Examinational time-table plans through e-mail; foster technology growth by asking students to submit their Continuous Assessment (CA) through their lecturers

e-mail addresses; insist that all lecturers create a class web page for their students; attend technology conferences to see what other institutions are doing what other academic lecturers are doing to integrate ICT and what heads of departments, deans of faculty and directors are doing to encourage the use of ICT in their various offices to quicken the information delivery; admissions through web-enabled services and all day-to-day activities of the institution (Krishnaveni and Meenakumari, 2010).

In spite of the nearly universal introduction of ICT in the higher institution, many academics continue to resist or reject its use as a result, ICT has not been uniformly adopted beyond the first level of a supplementary technology (Bell *et al.*, 2002) and the development of web-based teaching and learning initiatives has not been systematic but is often the result of the activities of risk takers in the institution who have an interest in the technology (Taylor, 2001). Moreso, information and communication technology have revolutionized the concept of academic planning and administration to the level of converting the world into a global village. Institutions of the higher learning in Nigeria are also changing to meet the demand put on them with the challenges of ICT in academic planning and administration. The world of ICT has today reverse the academic planning processes to the level of either fully computerized or partially computerized in order to increase administrative efficiency.

However, Information and Communication Technology (ICT) plays a vital role in supporting powerful, efficient management and administration in academic institutions. It is specified that information and communication technology can also be used right from student administration to various resource administration in an education institution of higher learning (Maki, 2008). Regardless of the way that Nigeria and in actuality most African nations arrived behind schedule into the ICT world, the appropriation of the Nigerian approach for data innovation in 2001 is the correct advance in ICT application in each area of the country's life and specifically in training. Specifically, Ishiyal (2019) indicated the following as some of the functions of academic planning unit which include to provide guidance to all the departments and faculties in all planning matters such as: project development, implementation monitoring and evaluation, academic programmes planning, especially, the assessment of economic recurrent implications of all new programmes as well as existing programmes, thereby appraising them for determining their viability, determination of optimal establishments for effective teaching and guiding the process of market analysis among others. The researcher further indicated that academic planning also involves initiation of mechanisms for enhancing internal and external efficiencies of the university.

Other functions as highlighted by Thomas (2019) from the ICT directorate, Njala University Sierra Leone include the followings: to manage consolidated data center services as well as Implement and manage shared services to develop, implement and manage a new consolidated Internet protocol network to provide a more robust, efficient and secure institution wide infrastructure to provide, enhanced and expanded ICT services to meet the growing needs of departments, faculties, centres and units in the institutions to assist departments and units in providing secure, reliable, institution wide IT operations to promote cyber-and network security through the development of a Institutions wide network and security operations center to negotiate and manage institution wide agreements for quality IT products and services to reduce the cost and increase the value of institutions computer hardware, software and services to provide baseline audit, mapping and selective bench marking efforts that are guided by a clear vision and goals to make policymaking more focused, effective and user driven to promote innovative use of information technology that adds value to the academic planning environment and to protect technology and information assets of the institutions.

Research by Oduns (2016) further indicated some of the functions of academic planning unit in federal universities such as: to advise and assist the vice-chancellor on matters relating to the academic thrusts of the University such as staffing and academic development programmes to advise on quality control of the university guiding each unit on operation of the university academic brief to seek clarification from NUC on academic matters and providing such to appropriate sections of the University through the vice-chancellor to maintain a computer based data bank on student and staff statistics for use in planning, budgeting and other management requirements to coordinate the preparation of academic brief and periodic strategic plans for the university to coordinate and collation of information to NUC for national planning purposes and promotion of the quality of teaching, learning and research in the university through periodic evaluation of academic activities in the University. Other functions of the directors of academic planning unit in the federal universities as cited by Adeleke (2019) include: coordination and collation of information to National Universities Commission (NUC) for national planning purposes; promotion of the quality of teaching, learning and research in the university through periodic evaluation of academic activities in the university; monitoring and advising on the growth of department and establishment of positions in various units of the university and advise the vice-chancellor on the creation of new positions; guide academic and related units of the university on the operations of the academic brief and participate in the review of the academic brief

and general curriculum development as at when due coordinate and ensure compliance of academic and other units of the university with NUC guidelines on academic and other matters; process proposals for the creation of new departments and introduction of new programmes; coordinate and guide academic units/departments for purposes of programme accreditation and continuous quality assurance; coordinate and ensure the provision of conducive teaching, learning and research environment in the university; monitor the efficient and effective utilization of academic resources; participate in the review of academic programme curricular of the university and evaluation of proposal for new academic programmes; generate and periodically update the university databank/statistics on academic and other matters and make necessary projections for the attention of the vice-chancellor; generate policies for and identify priorities in the academic development of the university for the consideration of senate through the development committee; recommend desirable changes in the academic and administrative structures of the university to the development committee and participate in the preparation of the university annual budget.

At present, most of the federal universities are using ICT in managing student's admission, staff employment, promotions, retirement, exams and records, E-examinations, E-results, E-payment and E-transcripts, managing human, financial resources and management of various assets. The highest impact of ICT in academic planning in Nigerian higher institutions according to Oloke *et al.* (2002) can be felt in this area of administration when institutions commences using more ICT components for better planning, setting standards, effecting change and monitoring results of core functions of the institution. Consultations and accountability can easily be facilitated by online discussion forums and mailing/SMS lists with staff and students. Also, extensive use of the intranet enhance the collegiality feeling by giving access to minutes/records of decision making organs to all staff affected by those decisions and at the same time allowing academic and non-academic senior staff to have access to background information and the thinking behind issues they are requested to make a decision on (Daramola and Odunsi, 2017). The researcher further highlighted some basic areas whereby an ICT can be useful for effective academic planning and administration of any higher institutions. There are as follows: for general administration purposes; pay roll and financial accounting; administration of student and staff based databank; inventory management and evaluation; personnel and human resources management; students E-examination, E-results, E-transact, E-payment, I-transcript and E-administration and records maintenance.

Some of the challenges that affect the uses of ICT in Academic Planning Unit in Federal Universities as indicated by Ashang (2018) are as follows: Inadequate familiarity of appointed directors of the unit with computers hardware and the supplementary equipments needed; lack of orientation/training program on computer literacy or low rate of academic participation; the faculty dean's increasing average of age and their reluctance to use computers in educational administration; unfamiliarity of academics with world wide web (www) environment and the way of using it; inadequate access of directors of units/centres, deans of faculties to personal computers in their homes or offices; this common beliefs of academic that new ICT possibilities have no effect towards improving quality of education; lack of budget in faculties and academic planning unit/centres to equip the classes and preparing equipments of hardware and the absence of moods, cooperative motivations and enough coordination in denaturants, centres, units and facultie's staff for entering to new atmosphere with the use ICT.

The benefits of Academic Planning and Administration of Federal Universities as cited by some scholars Anie (2011), Ifidon (2002), Arugu and Chigozie, 2016 and Hanna (2000) are classified into two categories such as economic benefits and social benefits.

The economic benefit of ICT is enormous both as a growing industry in its own right and in terms of its influence on economic development of higher institutions of the higher learning. ICT is making the world a smaller place and creating new information highways of high speed electronic data exchange. The economic implication of ICT are far-reaching; mobile telephones, satellite television and automatic teller machines are just a few examples of the way in which ICT is changing how people communicate, become informed or carry out administrative process. The relation between ICT, economic development and benefit has been a topic of numerous studies. And all agree that there is a close relation. In a landmark research by Ifidon (2002), Arugu and Chigozie (2016) on rural economic development: implications of ICT in Nigeria found out an interdependent relationship between economic activity and ICT infrastructure investment at the state and country levels. With the advent of Global System for Mobile Communications (GSM) as introduced by the Fourth Republic and a democratic government in power, the problems of inefficiency in ICT are now to some extent solved.

The researcher findings on the various studies are in line with this study which supports the idea that ICT investments affect economic activity and investments. And there is a serious reduction in Nigeria federal universities costs resulting from ICT. Moreover, ICT brings about important technological change: openness, connectivity, decentralization and accessibility. It brings higher institutions together, links like minded groups,

saves cost of transports to distance learners, institutions affiliation take place without crossing the border, promotes self employment and E-administration such as email, social networks and academic planning of institutions to mention but few (Anie, 2011). Information technology is vital to the effective development and easy control of any institutions administration and planning. Academic planning is essentially on information processing activity; effective planning and implementation (Arugu and Chigozie, 2016).

The social benefit of ICT is completely invaluable and cannot easily be listed. Not with standing, a good number of the social benefits can still be discussed but cannot be over emphases. And these benefits as cited by Hanna (2000) include social interactions. Keeping in touch with friends and relations is one of the major social benefits of ICT. Research by Arugu and Chigozie (2016) also declared the same view that ICT has changed the way academic planning and administration of higher institutions are executed and the way in which individuals are educated or inform within educational environment. Moreso, ICT has also reduced inequalities of opportunity between students with the use of online course registration, payment of school fees, online e-Transact etc. However, with the introduction of internet services which delivers educational programmes and activities with their counterpart around the world, educational institutions are becoming more dependent on ICT to access super computers and programming instructions. Above all, this has paved way for the introduction of distance learning which has also improve and enhance educational achievement even in the rural areas (Arugu and Chigozie, 2016).

**Purpose of the study:** The main purpose of the study was to investigate the role of Information and Communication Technology (ICT) in academic planning unit in Federal Universities in South-East Nigeria. Specifically, the study sought to:

- Ascertain the role of academic planning unit in the federal universities in South-East Nigeria
- Ascertain the role of ICT in academic planning in the federal universities in South-East Nigeria
- Ascertain the challenges of ICT in academic planning in the federal universities in South-East Nigeria
- Establish benefits of ICT in academic planning in the federal universities in South-East Nigeria

**Research questions:** The following research questions guided the study:

- What are the roles of academic planning unit in the federal universities in South-East Nigeria?
- What are the roles of ICT in academic planning in the federal universities in South-East Nigeria?

- What are the challenges of ICT in academic planning in the federal universities in South-East Nigeria?
- What are the benefits of ICT in academic planning in the federal universities in South-East Nigeria?

## MATERIALS AND METHODS

The study adopted a descriptive survey design. The study was carried out in the selected federal universities in South-East Nigeria. The sample of the study was 582 drawn from the selected federal universities in South-East, Nigeria (University of Nigeria, Nsukka; Nnamdi Azikiwe University, Awka; Michael Okpara University of Agricultural Umudike; Federal University, Ndifu-Alike, Ebonyi State and Federal University of Technology, Owerri). The instrument use for data collection was structure questionnaire. The instrument was face validated by three experts, one from the faculty of education, one from the faculty of engineering and one from the faculty of physical sciences, all from the selected federal universities in South-East, Nigeria. The validators re-structured and organized the instrument to meet the objectives and content of the study. Their comments were used to draft the final copy of the questionnaire. Cronbach alpha reliability Co-efficient was used to determine the instruments which yielded reliability coefficients of 0.87. Data collected were analyzed using mean scores and standard deviation. The questionnaire items were drawn and coded on a 4-point scale as follows: Strongly Agree (SA) 4 points, Agree (A) 3 points, Disagree (D) 2 points, and Strongly Disagree (SD) 1 point. These responses were based on positively worded items while the reverse was for the negatively worded items. The average score from the coded data ( $4+3+2+1 = 10/4$ ) was 2.50. This was taken as cut-off point for answering the research question.

## RESULTS AND DISCUSSION

**Research question one:** What are the roles of academic planning in the federal universities in South-East Nigeria?

Result in Table 1 revealed that items 01-29 had their mean values ranged from 2.30-3.72. These values were up to 2.50 mean bench mark for decision making. This therefore, implies that the respondents agreed that all the items were the roles of academic planning unit in the federal universities. The result in Table 1 also revealed that the standard deviation of the 29 items ranged from 3.14-3.99 indicating that the respondents were homogenous in their responses.

**Research question two:** What are the roles of ICT in academic planning in the federal universities in South-East Nigeria?

Result in Table 2 revealed that items 31-34 had their mean values ranged from 2.51-2.65. These values were up to 2.50 mean bench mark for decision making. This therefore, implies that the respondents agreed that all the items were the roles of ICT in academic planning in federal universities. The result in Table 2 also revealed that the standard deviation of the 30-34 items ranged from 3.28-3.37 indicating that the respondents were homogenous in their responses.

**Research question three:** What are the challenges of ICT in academic planning in the federal universities in South-East Nigeria?

Result in Table 3 revealed that items 35-39 had their mean values ranged from 2.54-2.68. These values were up to 2.50 mean bench mark for decision making. This therefore, implies that the respondents agreed that all the items were the challenges of ICT in Academic Planning in the Federal Universities. The result in Table 3 also revealed that the standard deviation of the 35-39 items ranged from 3.30-3.39 indicating that the respondents were homogenous in their responses.

**Research question three:** What are the benefits of ICT in academic planning in the federal universities in South-East Nigeria?

Result in Table 4 revealed that items 40-45 had their mean values ranged from 2.53-2.98. These values were up to 2.50 mean bench mark for decision making. This

Table 1: Mean and standard deviation of respondents on the roles of academic planning in the federal universities in South-East Nigeria

| Item statements  | X    | SD   | Decision |
|--|------|------|----------|
| To provide guidance to all the departments and faculties in all planning matters such as project development, implementation, monitoring and evaluation of academic programmes | 3.10 | 3.65 | A        |
| To help in initiation of mechanisms to enhance internal and external efficiencies of the university academic programme   | 2.30 | 3.14 | A        |
| To manage consolidated data center services as well as implement and manage shared services  | 3.00 | 3.59 | A        |
| To develop, implement and manage a new consolidated Internet protocol network to provide a more robust, efficient and secure Institution wide infrastructure                   | 3.20 | 3.71 | SA       |
| To provide, enhanced and expanded ICT services to meet the growing needs of departments faculties, centres and units in the institutions                                       | 3.36 | 3.80 | SA       |
| To assist departments and units in providing secure, reliable, institution wide IT operations  | 3.72 | 4.00 | SA       |
| To promote cyber-and network security through the development of a institutions wide network and security operations center  | 3.11 | 3.66 | A        |

Table 1: Continue

| Item statements  | X    | SD   | Decision |
|--|------|------|----------|
| To negotiate and manage Institution wide agreements for quality IT products and services to reduce the cost and increase the value of institutions computer hardware, software and services      | 3.23 | 3.72 | SA       |
| To provide baseline audit, mapping and selective bench marking efforts that are guided by a clear vision and goals to make policymaking more focused, effective and user driven                  | 3.22 | 3.72 | SA       |
| To promote innovative use of information technology that adds value to the academic planning environment   | 3.40 | 3.82 | SA       |
| To protect technology and information assets of the institutions   | 3.03 | 3.61 | A        |
| To advise and assist the vice-chancellor on matters relating to the academic thrusts of the University such as staffing and academic development programmes                                      | 3.71 | 3.99 | SA       |
| To advise on quality control of the university guiding each unit on operation of the university academic brief   | 3.76 | 4.02 | SA       |
| To seek clarification from NUC on academic matters and providing such to appropriate sections of the university through the vice-chancellor  | 3.58 | 3.92 | SA       |
| To maintain a computer based databank on student and staff statistics for use in planning, budgeting and other management requirements   | 3.70 | 3.99 | SA       |
| To coordinate the preparation of academic brief and periodic strategic Plans for the university to coordinate and collation of information to NUC for national planning purposes                 | 2.95 | 3.56 | A        |
| Promotion of the quality of teaching, learning and research in the university through periodic evaluation of academic activities in the university   | 3.68 | 3.98 | SA       |
| Guide academic and related units of the university on the operations of the academic Brief and participate in the review of the academic brief and general curriculum development as at when due | 3.10 | 3.65 | A        |
| Recommend desirable changes in the academic and administrative structure of the university to the development committee  | 3.42 | 3.83 | SA       |
| Generate policies for and identify priorities in the academic development of the University for the consideration of senate through the development committee                                    | 3.66 | 3.97 | SA       |
| Generate and periodically update the university databank/statistics on academic and other matters and make necessary projections for the attention of the vice-chancellor                        | 3.10 | 3.65 | A        |
| Participate in the review of academic programme curricular of the university and evaluation of proposal for new academic programmes  | 2.65 | 3.37 | A        |
| Promotion of the quality of teaching, learning and research in the university through periodic evaluation of academic activities in the university   | 3.05 | 3.62 | A        |
| Monitoring and advising on the growth of department and establishment of positions in various units of the university and advise the vice-chancellor on the creation of new positions            | 3.70 | 3.99 | SA       |
| Coordinate and ensure compliance of academic and other units of the university with NUC guidelines on academic and other matters   | 3.25 | 3.74 | A        |
| Coordinate and ensure the provision of conducive teaching, learning and research environment in the university   | 3.72 | 4.00 | SA       |
| Coordinate and guide academic units/departments for purposes of programme accreditation and continuous quality assurance   | 3.36 | 3.80 | SA       |
| Process proposals for the creation of new departments and introduction of new programmes   | 3.10 | 3.65 | A        |
| Monitor the efficient and effective utilization of academic resources  | 3.45 | 3.85 | A        |
| Cluster mean   | 3.30 | 3.76 | SA       |

Table 2: Mean and standard deviation of respondents on the roles of ICT in academic planning in federal universities in South-East Nigeria

| Item statement   | X    | SD   | Decision |
|--|------|------|----------|
| ICT is used to manage student's admission, staff employment, promotions, retirement, exams and records, E-examinations, E-results, E-payment and E-transcripts | 2.51 | 3.28 | A        |
| ICT components is use for better planning, setting standards, effecting change and monitoring results of core functions of institutions                        | 2.65 | 3.37 | A        |
| ICT is use to enhance the collegiality feeling by giving access to minutes/records of decision making organs to all staff affected by those decisions          | 2.54 | 3.30 | A        |
| ICT is use for effective academic planning and administration of higher institutions such as pay-roll, administration of students and staff based databank     | 2.61 | 3.35 | A        |
| ICT can be use for students E-examination, E-results, E-transact, E-payment, I-transcript, E-administration and records maintenance                            | 2.65 | 3.37 | A        |
| Cluster mean   | 2.59 | 3.34 | A        |

therefore, implies that the respondents agreed that all the items were the benefits of ICT in academic planning in federal universities. The result in Table 4 also revealed that the standard deviation of the 40-45 items ranged from 3.32-3.58 indicating that the respondents were homogenous in their responses.

With reference to research question one which dealt with the roles of academic planning in the federal universities, the evidence from the study in table one, revealed that the role of academic unit to a high extent play a vital roles in the management of federal universities above all, promoting the quality of teaching,

Table 3: Mean and standard deviation of respondents on the challenges of ICT in academic planning in the federal universities in South-East Nigeria

| Item statement  | X    | SD   | Decision |
|---|------|------|----------|
| Inadequate familiarity of appointed directors of academic planning unit with useful computers hardware and supplementary equipments needed  | 2.54 | 3.30 | A        |
| Lack of orientation/training program on computer literacy or low rate of academic participation   | 2.55 | 3.31 | A        |
| Unfamiliarity of academics planning staff with world wide web environment and the way of using it   | 2.55 | 3.31 | A        |
| Inadequate access of directors of academic planning units   | 2.68 | 3.39 | A        |
| Lack of budget in academic planning unit to equip the classes and preparing equipments of hardware and the absence of moods, cooperative motivations and enough coordination in units | 2.54 | 3.30 | A        |
| Cluster mean  | 2.57 | 3.32 | A        |

Table 4: Mean and standard deviation of respondents on benefits of ICT in academic planning in federal universities in South-East Nigeria

| Item statement  | X    | SD   | Decision |
|---|------|------|----------|
| ICT helps to bring about important technological change: openness, connectivity, decentralization and accessibility                     | 2.58 | 3.33 | A        |
| ICT helps to brings higher institutions together  | 2.67 | 3.39 | A        |
| ICT helps to promote self-employment and E-administration such as email, social networks and academic planning of institutions          | 2.89 | 3.52 | SA       |
| ICT helps to reduce inequalities of opportunity between students with the use of online registration, payment and online E-transact etc | 2.56 | 3.32 | A        |
| ICT helps to improve and enhance educational achievement  | 2.53 | 3.30 | A        |
| ICT helps to pave way for distance learning in higher institutions  | 2.98 | 3.58 | SA       |
| Cluster mean  |      |      | SA       |

learning and research in the university through periodic evaluation of academic activities in the university and as well to provide guidance to all the departments and faculties in all planning matters such as project development, implementation, monitoring and evaluation of academic programmes. These findings are in line with Ishiya (2019) who states that the management techniques of cannot be executed without the following functions which include: to provide guidance to all the departments and faculties in all planning matters such as: project development, implementation monitoring and evaluation, academic programmes planning, especially, the assessment of economic recurrent implications of all new programmes as well as existing programmes, thereby appraising them for determining their viability, determination of optimal establishments for effective teaching and guiding the process of market analysis among others.

The findings of this study with regard to research question two that revealed the roles of ICT in academic planning in the federal universities to a great extent serve to enhance the collegiality feeling by giving access to minutes/records of decision making organs to all staff affected by those decisions and to manage student's admission, staff employment, promotions, retirement, exams and records, E-examinations, E-results, E-payment and e-transcripts. These findings agreed with the findings by Daramola and Odunsi who highlighted some basic areas whereby an ICT can be useful for effective academic planning and administration of higher institutions. There are as follows: for general administration purposes; pay roll and financial accounting; administration of student and staff based databank; inventory management and evaluation; personnel and human resources management;

students E-examination, E-results, E-transact, E-payment, I-transcript and E-administration and records maintenance.

The findings of this study with regard to research question three revealed the challenges of ICT in academic planning in the federal universities. These findings agreed with the findings by Ashang (2018) who carried out some of the challenges that affect the uses of ICT in academic planning in federal universities as follows: Inadequate familiarity of appointed directors of the unit with computers hardware and the supplementary equipments needed; lack of orientation/training program on computer literacy or low rate of academic participation; the faculty deans` increasing average of age and their reluctance to use computers in educational administration; unfamiliarity of academics with world wide web (www) environment and the way of using it; inadequate access of directors of units/centres, deans of faculties to personal computers in their homes or offices; this common beliefs of academic that new ICT possibilities have no effect towards improving quality of education and lack of budget in faculties and academic planning unit/centres to equip the classes and preparing equipments of hardware and the absence of moods, cooperative motivations and enough coordination in denaturants, centres, units and facultie's staff for entering to new atmosphere with the use ICT.

The data in Table 4 above shows the mean scores and standard deviation of respondents on benefits of ICT in academic planning in federal universities. From the result, the respondents acknowledged that all the items in the table are the benefits of ICT in academic planning in federal universities. These finding are in line with the earlier work by Sylvester (2011), Ifidon (2002), Arugu and Chigozie (2016) and Hanna (2000) who highlighted

the benefits of academic planning that it brings higher institutions together, links like minded groups, saves cost of transports to distance learners, institutions affiliation take place without crossing the border, promotes self employment and E-administration such as email, social networks and academic planning of institutions to mention but few. The findings of the study is also in line with the findings by Arugu and Chigozie (2016) who postulated that information technology is vital to the effective development and easy control of any institutions administration, information processing activities, effective planning and implementation.

### CONCLUSION

From the review of this study, the researchers drawn a sound conclusion that the role of ICT benefit, its economic and social impacts is just channel meant to help national and global development of federal universities. The study reveals social and economic benefits of ICT in academic planning and administration in federal universities in Nigeria. This study has also identified a comprehensive set of fundamental areas of ICT in academic planning and administration of federal universities. Moreover, the study also revealed that enhancing the usage of ICT components on these functional areas and especially, for general administration will enhance of overall academic planning and administration of federal universities planning in the area of global competitive. As a result, if innovative use of ICT components continues to be regarded as important in academic planning in federal universities, then barriers to its adoption, consistent and successful use must be addressed and supportive practically. Additionally, to accomplish an effective scholastic unit plan in government colleges, the utilization of ICT parts can be utilized to help the managerial part of scholarly proficiency including organizations alliance and inquisitive.

### RECOMMENDATIONS

Based on the discussion in this study and conclusion drawn, the following recommendations were made: Government ought to guarantee that ICT strategy articulations are converted into the real world. An ICT arrangement usage commission ought to be made. This commission ought to be supported and enabled to give ICT offices to college instruction and screen their utilization. Federal universities should provide web-based presentation of curriculum before and during the semester for the students.

The use of email should recommend speeding the distribution of information and other day-to-day activities of the institutions. University authority should produce

digital unlimited leaning materials such as e-Books, E-resources, E-journals to enhance the students and researchers needs assessment through online. Since, ICT has come to stay, academic planning unit in federal universities should take positive steps to remedy their deficiencies, so as to flow along with other counterparts Universities. University authority should be organized short computer training and retraining programmes from time-to-time to assist academic planning unit staffs who does not have knowledge and computer skills. This will also aid awareness of computer potentials and capabilities in higher institutions. ICT capacity development among academic planning unit of federal universities should be prioritized.

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