

Integrated Personnel Payroll and Information Systems and Educational Development in Nigeria

Graham Nsiegbe, Ph.D & Cheta, U. Azuma

Department of Political Science

Rivers State University

Nkpolu-Oroworukwo

Port Harcourt

graham.nsiegbe@ust.edu.ng

DOI: 10.56201/ijssmr.vol.11no4.2025.pg.366.388

Abstract

The issues of effective use of complex electronic platforms such as Integrated personnel payroll and Information System (IPPIS) within the tertiary education sector in a growing educational system like that of Nigeria is worthy of scholarly attention. This study examined IPPIS and educational development in Nigeria. The study adopted the mixed-scanning theory as its analytical framework. The survey design research method was employed. Sample size of the study was 372 respondents drawn from a combined population of 5,244 using the Taro Yamane formula. Data was generated mainly by the use of the 4-point modified Likert scale questionnaire which was distributed and retrieved from the respondents. Additional information was gotten from published books, articles and other textual materials as well as form interviews. Collected data were analyzed using statistical packages for social sciences, while hypothesis was tested using Chi-square. The study revealed that there is a relationship between IPPIS and educational development in Nigeria. Accordingly, the study recommends amongst others that; federal government should work towards synchronizing the IPPIS and the UTAs payment platform as developed by the ASUU as a strategy to both encourage harmonious working relationship and achieving accountability and transparency towards educational development.

Keywords: *Transparency, Educational Development and Accountability.*

INTRODUCTION

The issue of effective use of complex electronic platforms such as the integrated personnel payroll and information systems (IPPIS) in a fast-growing educational system in developing society, such as Nigeria in the payment of wages, allowances and salaries to university workers has been the subject of a great number of intellectual discourses, debates and write-ups among scholars and the academia.

Aberu and Lawal (2022), posit that a good education system, no matter where on the globe it is found, is a knowledge fountain. It can help to attract energetic students and enhance many of them from being idle. More than anyone can possibly understand, education may contribute to the building of civilization. A well-coordinated, knowledge-driven educational system is the source of the roads, bridges, technologies, interpersonal relationships, scientific research, and techniques for reaching intended objectives. They advance that education becomes a fundamental objective of sustainable development and a prominence source of sustainable development indeed an input

and output of development. Education is fundamental to the wider belief to expand human competences which is the pivot of development (UNDP, 2017). At the same time, according to the UNDP, education plays a key role in the ability of a developing country to absorb modern technology and to develop the capacity for self-sustaining growth and development (Todaro and Smith, 2009). There is also a consensus opinion that if the Nigeria educational system is made functional, positive changes would accelerate national development. In other words, education holds the master key that unlocks a country's potentials towards national transformation, and sustainable human national development (Asaju, 2013).

The Academic Staff Union of Universities (ASUU) argues that the introduction of the IPPIS software is not robust enough to cater for the peculiarities of lecturers (ASUU Bulletin September, 2019). Outside universities, the Petroleum and Natural Gas Senior Staff Association of Nigeria (PENGASSAN) had embarked on an industrial action earlier in November, 2020 over disagreements with the federal government on IPPIS. In their series of resolutions ASUU highlighted reasons for refusal to enroll on IPPIS to include:

- 1) IPPIS violates university autonomy as enshrined in section 2AA of the University (Miscellaneous) provisions Amendment Act 2003 which states that the powers of Council shall be exercised as in the law and statutes of each University and to that extent establishment circulars that are inconsistent with the laws and statutes of the university shall not apply to the universities;
- 2) The peculiar nature of the appointment of the university academics;
- 3) It also violates the 2009 Agreement which was negotiated, agreed and signed by ASUU and FGN;
- 4) The IPPIS template is designed to phase out staff who are above (60) years, which contradicts the new policy of Professors retiring at (70) years;
- 5) IPPIS does not recognize payment of promotion arrears, rent allowances as it is now consolidated in their salaries;
- 6) IPPIS does not capture the technicalities and peculiarities associated with the flexibility and mobility of academics in the university system; and
- 7) The IPPIS template adopts a tax payment system known as ptax2 which is inimical to ASUU members on consolidated salary (ASUU, 2019).

In the light of the above argument, Asaju (2013) asserts that education which is the bedrock of development in any society including Nigeria could be hindered in the face of unpalatable electronic platforms such as the IPPIS.

IPPIS has generated industrial conflict between the government and ASUU. The policy has been rejected outrightly by ASUU since its introduction. There has been the question of transparency and the issue of stability in the academic calendar of universities in Nigeria. For instance, ASUU declared an indefinite and comprehensive strike on March 9, 2020, when the salaries of university lecturers were stopped for their refusal to register on the IPPIS platform. The strike, which lasted for nine months, was called off in December 2020. The strike led to a total disruption of the academic calendar for the entire year. Some of the students who were expected to spend three or four years in the university spent at least five years or more due to the disruption of the academic calendar in the university system in Nigeria as a result of the incessant strikes by ASUU. The inability of the government to honour agreements arising from collective bargaining with the

university union has been some of the major issues that account for the industrial unrest in the academic system in Nigeria. For example, after a series of negotiations between the government and the university union, it was agreed that ASUU would opt for an alternative payment system known as the University Transparency and Accountability Solution (UTAS), a system developed by ASUU, as a replacement for the IPPIS. But the government has refused to honour this. The overall situation seems to be impact on the entire tertiary educational system. Accordingly, the objective of this study is to examine the relationship between the IPPIS and educational development in Nigeria. To achieve this; the study raised the question; what is the relationship between IPPIS and educational development in Nigeria? As a guide; the null H_0 hypothesis; There is no relationship between IPPIS and educational development in Nigeria.

The study is approached in five interrelated parts. Part one is the introduction, part two consist of the theoretical framework and definition of relevant concepts, part three covers a brief explanation of the method adopted by the study, part four entails the presentation of data and analysis of data while the final part is the conclusion and recommendations.

Theoretical Framework

Mixed-Scanning

The mixed scanning theory was propounded by Amitai Etzioni in 1967. Etzioni, developed the mixed scanning model as a way to bridge the gap between purely rational and incremental decision-making approaches, allowing for a more practical and flexible decision-making process. In other words, he incorporated the ideas of both the rationality and incremental model in public policy making and analysis. He considered the model to be superior to both the rational comprehensive and incremental models. In fact, like the incrementalist, he rejected rationalistic models because they were unrealistic practically and undesirable normatively. He did not also see incrementalism as an alternative to rationalism. He argued that normatively, the incremental approach which presumes that public choices arise out of the interplay of partisanship is deficient to the extent that not all community interests are represented in the process of decision. According to Blair (2015), the mixed scanning approach to decision making is derived from a combination of rationalistic and incrementalist approaches. The rationalistic approach is often inappropriate for utilization in some cases due to the time and energy it takes to evaluate the problem, all alternatives and to come up with the data and resources to derive a rational conclusion. Conversely, the incrementalistic approach moves too quickly to draw conclusions when there could be some pertinent data that can be collected in a short amount of time. The mixed scanning approach is the best of both worlds. The decision maker is able to take a problem and analyse a few solutions that are within the overall goal or policy being addressed. That data is then incrementally acted upon and adaptive strategies can be implemented when necessary.

Basically, mixed-scanning seeks to avoid the problem of rationalistic and incremental model: Its purpose is to permit the simultaneous utilization of the rational comprehensive and incremental models in different situations. While in some cases incrementalism will be adequate, in others, the rational comprehensive will be needed. Therefore, descriptively, mixed scanning can incorporate when they occur, both incremental and fundamental policy decision. Mixed scanning recognizes the limited human capacity to secure purely rational decisions (Olaniyi, 2001). In the exploration of mixed-scanning, it is essential to differentiate fundamental decisions from incremental ones. Fundamental decisions are made by exploring the main alternatives the actor sees in view of his conception of his goals, but unlike what rationalism would indicate details and specification are

omitted so that an overview is feasible. Incremental decisions are made but within the contexts set by fundamental decisions (and fundamental reviews) (Aregbesola, 2019). Thus, each of the two elements in mixed-scanning helps to reduce the effects of the particular shortcomings of the other; incrementalism reduces the unrealistic aspects of rationalism by limiting the details required in fundamental decisions, and contextualizing rationalism helps to overcome the conservative slant of incrementalism by exploring longer-run alternatives. Together, empirical tests and comparative study of decision-makers would show that these elements make for a third approach which is at once more realistic and more effective than its components.

The application of the mixed scanning model of decision making as a formwork of analysis became necessary since it combines incorporates the assumptions of both the rational and incremental models before coming up with a result-oriented approach to decision making. The Integrated Payroll and Personnel Information System (IPPIS) was a process of detailed rationalistic examination of all Ministry, Department and Agency of government. The examination revealed a sharp practice in the payroll system of the MDAs. Hence, the need for mechanism to checkmate payroll fraud and ghost worker's syndrome became necessary in 2006 when it was introduced. Political actors both from the state and federal engaged in critical thinking and arrived at a centrally controlled and digitalized payroll system that made fraud impossible and payment of salary of public servants seamless. Apart from reducing payroll fraud, the IPPIS has been immensely beneficial to the federal government because it has helped the government to save billions of Naira which hitherto was embezzled by few corrupt elements in the public service. According to mixed scanning model that emphasis is place on specific and details to arrive at informed decision making with affordable cost-effective time saving decision. IPPIS was piloted in 2007 with seven federal ministries which can be described as specific ministries, the review of these ministries over time showed significant level of successful implementation of IPPIS which resulted in an encompassing decision to extend it to all federal government MDAs. The study situates IPPIS policy from the perspective of decision making taken by political actors out of series of bargaining and tradeoffs with the aim to propel development in the educational sector.

Conceptual Definitions

Concept of Integrated Payroll and Personnel Information System (IPPIS)

IPPIS has been conceptualized by scholars from diverse background. While accounting and financial professionals view it as a payment platform adopted by the government to enhance and monitor the flow of funds for civil service institutions, academic scholars see it as deliberate attempt to hoax academic institutions; water down the academic values and productivity of academic staff in educational development, and thus demand that academic institutions should as a matter of technical grounds be excluded from using the IPPIS. The viewpoints of these scholars and professionals have generated controversies in the management of civil service institutions. Academic scholars argue that tertiary institutions are dynamic entities with constantly changing approaches centred on research where the IPPIS cannot align with its nature. It will rather compound the primordial issues already faced by tertiary institutions. The controversies arising from the federal government payment system technology, otherwise known as IPPIS, and the subsequent opposition to the platform by many civil servants, especially the academic staff union of universities has been an issue of concern in the development of university education in Nigeria. According to Mbotor (2019), government revenue and expenditure is everyone's concern. Contrary to a popular saying that "Government property, is no one's property" which has induced less concern to the welfare of government sponsored projects. Revenue projections and the reports

of its spending annually has become a thing of concern to the ordinary Nigerian on the streets. As the awareness of the importance of the inputs and criticism of the average Nigerian and the contribution of the market woman in checkmating government activities, several strategies have been put in place to curb corrupt practices and abuse offices in the public sector. The introduction of Integrated Payroll Personnel Information System is a computerized mechanism adopted by the Nigerian government in 2006 and made public in 2007 to monitor and control federal government payroll system and personal information in order to restore sanity. Owing to the countless discoveries of ghost workers, poor tax and other levies assessment in both federal and state MDAs, the implementation of IPPIS has uncovered and saved the government billions of dollars.

Adi and Cletus (2022) revealed that Integrated Personnel and Payroll Information System (IPPIS) is an integral part of Government Integrated Financial Management Information System (GIFMIS), which is a component of Nigerian Government Economic Reform and Governance Project (ERGP). IPPIS provides an integrated computerized financial package that enhances the effectiveness and transparency of public resource management by computerizing the payroll management and accounting system for the government (Oyedele, 2015). The IPPIS is an Information Technology (IT) enabled facility being put in place to establish a reliable and comprehensive database for the public service to facilitate manpower planning, eliminate record and payroll fraud, facilitate easy storage, update and retrieval of personnel records for administrative and pension processes and staff remuneration payment with minimal wastages and leakages (Okonjo-Iwela, 2015). Since the inception of the project, IPPIS has saved the Federal Government of Nigeria billions of Naira by eliminating thousands of ghost workers via personnel verification exercise and salary payment process (Enakirerhi and Temile, 2017). The reality and quality of government payroll administration has vastly improved and it also increases number of Ministry Department and Agencies (MDAs) that are moving away from manual payroll administration, and the MDAs have the necessary information for planning their personnel costs (Bello, 2015). This, according to the authors has greatly improved payroll administration. However, Osodeko argued that the issues of transparency and accountability lie on the core civil service and the government, not academic staff members. He contended that the government is only using the IPPIS to divert the real issues confronting academic institutions in Nigeria.

According to Chima and Folorunsho (2020), IPPIS serves as software that stores information regarding government employees, which are kept electronically and it is to ensure accurate and timely payment of salaries. Under IPPIS, personnel records such as name, date of birth, date of appointment, years of service, salary account, promotion and other information are kept and it encourages and facilitates electronic transfer and payment of salaries and entitlement to workers which is also known as E-payment (Office of The Accountant-General of the Federation (n.d). Mede (2016) stated that IPPIS was meant to provide identity to public servants. Unique identity that ensures that duplicity of payments is impossible due to synchronized, centralized database and pay point. According to Olaopa (2008), IPPIS is a centralized computer-based payroll and management system aimed at ascertaining the actual number of personnel and the total cost of salaries at a glance. It is also aimed at ensuring data integrity so that personnel information is correct and intact. Omolelinwa and Neiyeju (2015), agreed that IPPIS was designed to achieve the following objectives:

1. Facilitates human resource planning by providing information for decision making
2. Provide a platform for accurate budgeting and annual recurrent expenditure on staff emoluments

3. Monitor monthly payments of staff emoluments against FGN's annual budget to ensure minimal wastages and leakages
4. Eliminates payroll fraud such as multiple payments of emoluments to single employees or payment of monthly salary to a non-existing employee
5. Facilitates easy storage, updating and retrieval of personnel records
6. Ensure data base integrity so that once entered cannot be manipulated by unauthorized users
7. Enhance confidence in the process of determining staff emolument cost
8. Prompt deduction and remittances to accounts of all third parties payments. IPPIS Department (2015).

E-payment which means electronic payment is a system where the settlements of transactions are made to the payee through the payee's bank account without involving the issuance of cheques or cash. It is known with different nomenclature from country to country. In Kenya and Ghana, it is called Integrated Personnel Payroll Database. While, in Uganda, Rwanda and Tanzania, it is called Integrated Payroll and Personnel System (IPPS) and known as Employee Biometric Identification & Records System (EBIRS) in Liberia (Folorunsho, 2017). According to Kenya Department of Public Management (2015), the IPPS programme initiative catalyzes electronic human resource (e-HR) programme efforts by making accessible staff information to employees at their desktops. IPPIS is an integrated personnel record, pay capabilities and a comprehensive human resource record for all personnel in an organisation (Integrated Personnel Management System Report, 2008). For Nelson (2017), IPPIS involves a payroll system and a personnel system. A payroll system focuses on the salary or wages of the employees at one point in time, not in continuum like the personnel system. It calculates employees' net pay and taxes for a specific period of time and makes deductions for payroll activities like donations to charities and healthcare. Katuka, Hussaini and Shehu (2019) opined those personnel systems, unlike payroll deals with personnel matters in a continuum. It focuses on personnel matters from recruitment to retirement. It keeps records of annual performance evaluation, variation in salary, manpower planning, performance management, leave management, comparative analysis of pay rate of employees on similar grade level, and whether they are taking advantage of organisation savings and retirement programmes.

Concept of Educational Development

This term does not have a universally acceptable definition. However, the concept would be used interchangeably with educational management. Obiozor and Obidiegwu (2016) defines educational development as 'an executive function for carrying out agreed policy'. He differentiates development from educational leadership, mainly responsible for policy formulation and, where appropriate, organizational transformation. Educational development is the theory and practice of the organisation and administration of existing educational establishments and system (Sen, 2010). It is a comprehensive effort dealing with the educational practice (Paul Munroe, in Sen, 2010). It is a dynamic side which deals with educational institutions – right from the schools and colleges to the Universities.

The development of education borders on both human and material resources. The human components include the child (pupils/students), the parents, the administrative staff as well as the development board, the community and the Board of Education at the Local, State and National levels of government. The material components constitute finances, infrastructures (buildings and other facilities), equipment and media/instructional supplies. Besides, the human and material components, there are ideas, laws and regulations among other organisational elements influencing the entire education process (Sen, 2010). The effective coordination and utilization of these

resources and elements to achieve educational goals and objectives is educational development. Educational development is aimed at bringing pupils and teachers under such conditions that will successfully promote the end of education. The purpose of educational development is to enable the right pupils to receive the right education from the right teachers, at a cost within the means of the state, which will enable pupils to profit by their learning (Balfour quoted in Sen, 2010).

However, the absence of quality teaching and learning, appropriate educational development practices and technology application in the sphere of things in developing nations create problems within the human development process; resulting in the production of unskilled workforce, unemployment, crimes, ignorance and other national problems. In many developing countries, access to localized resources in educational sector is limited, text books are often outdated and expensive, and funds for developing new materials are in short supply (Cisco, 2013). Additionally, access to learning beyond basic education is often limited by economic status. In Nigeria, as in many developing countries, out of the population of about 140 million people about 60 million people are illiterates (Obiozor and Obidiegwu, 2013), and so combating illiteracy has been among the major objectives of the National Policy on Education. This is contrary to what is obtained in most developed nations (like United States of America, Australia, Canada, United Kingdom, France, Germany, etc.) where there is industrial growth, as a result of proper educational development and technology application in their daily lives. This process results in the successful training of individuals in technical and vocational skills, employment, acquisition of life coping skills, leisure and recreation; including getting individuals adapt to the technological and/or socio-economic changes that may affect their societies. All these structures had education and technology (especially the internet) in the forefront which supports the sustainable development of such societies. In Nigeria, a few years ago, the use of internet in the educational sector was unthinkable; now it is a reality and it has expanded beyond imagination of every individual within the country. The internet technology has allowed us to learn and grow with people from around the world; it has given access to new opportunities in work, learning, socialization, as well as for sustainable development of the nation. Every institution requires the provision of series of learning experiences to students in order to impart knowledge, values, attitudes and skills with the ultimate aim of making them productive members of society.

Educational development is both a field of academic study and a collective group of professionals that includes principals, teachers and other education professionals, who apply the internet technology in daily work routines. The process flourishes in any given society when information communication and technologies (ICT) are embedded purposefully to ease the challenges of the teaching-learning transaction, administration and overall institutional growth. The utilization of internet facilities and related services in managing educational programmes could be viewed as a global revolution in this era of sustainable development. The art of education development and the internet technology have been among the vital aspects of human development in this 21st century. Both sectors facilitate the effective development and development of people committed to the success of a well-rounded society where knowledge, information and communication technology aid societal growth. As development involves the planning, organising, directing, controlling and evaluation process to accomplish predetermined objectives of an institution through coordinated use of human and material resources; the advancement of internet technology in recent times has contributed to higher learning in Nigeria and the world as a whole.

Method

The study adopted the survey research design. According to Creswell (2012), survey designs are procedures in quantitative research in which investigators administer a survey to a sample or to the entire population of people to describe the attitudes, opinions, behaviours, or characteristics of the population.

Three purposively selected federal government owned tertiary institutions with a combined population strength of 5244 (Federal Ministry of Education, 2017), as presented in the table below:

Table 1: Staff Strength of Federal Tertiary Institutions in Rivers State

S/N	Name of federal tertiary institutions in Rivers State	Academic Staff	Non-Academic Staff	Total Population
1.	University of Port Harcourt, Choba	408	1892	2300
2.	Federal Polytechnic of Oil and Gas, Bonny	170	1044	1214
3.	Federal College of (Technical) Education, Omoku	270	1460	1730

Source: Federal Ministry of Education, 2024

Based on the population figure above, the Taro Yamane's formula is adopted to determine the sample size below.

$$n = \frac{N}{1 + N(e)^2}$$

Where n = Sample size
e = Level of Significance (0.05)
N = Population size

Adopting substitution method

$$n = \frac{5244}{1 + 5244(0.05)^2} = \frac{5244}{1 + 5244 \times 0.0025} = \frac{5244}{1 + 13.11} = \frac{5244}{14.11} = 371.7$$

Sample size (n) = 372

Table 2: Distributed questionnaire to respondents

S/N	Federal Government Tertiary Institutions in Rivers State	Staff Strength	Allocation based on purposive sampling
1.	University of Port Harcourt, Choba	1800	124
2.	Federal Polytechnic of Oil and Gas, Bonny	964	124
3.	Federal College of Education (Technical), Omoku	1480	124

Source: Field Work, 2024

Further to the above, each tertiary institution is divided into management, academic and non-academic staff. This implies that each category of staff will be allocated 41 questionnaires, and their responses are presented and analyzed accordingly.

Key Persons Interviews: The study also used interviews to collect additional primary data from respondents. This was basically because it allows the study to obtain information that cannot be observed directly.

Data collected were arranged, grouped, tabulated and analysed using the Statistical Package for the Social Sciences (SPSS 23.0). Hypothesis was tested using Chi-square. The formula for Chi-Square

$$X^2 = \frac{(O - E)^2}{E}$$

Where:

O = Observed frequencies

E = Theoretical or expected frequencies

The degree of freedom for Chi-Square is calculated using $df = (R-1)(C-1)$ at 0.05 level of significance.

Data Presentation

Table 3 Socio-demographic Analysis of Response Rate

Administration of Questionnaires	Frequency (f)	Percentage (%)
Number of questionnaires administered	372	100
Number of questionnaires not returned	22	6
Number of questionnaires retrieved	350	94
Number of questionnaires valid for the study	350	94

Source: Field Work, 2024

The table above revealed that out of the 372 questionnaire that were administered to respondents, 22 respondents making 6% of the questionnaire were not returned, 350 respondents representing 94% were successfully completed, retrieved and valid for proper analysis. The response rate is 94% which is a mark of excellent for the study.

Table 4 Socio-demographic Analysis of Returned/Valid Questionnaire

Administration of Questionnaires	Frequency of Questionnaire Distributed	Frequency of Returned Questionnaire	Percentage (%) of Returned Questionnaire
University of Port Harcourt, Choba	152	150	99
Federal Polytechnic of Oil and Gas, Bonny	98	80	82
Federal College of Education (Technical), Omoku	122	120	98
Total	372	350	94

Source: Field Work, 2024

Data in table 4 above reveal that out of the 372 questionnaires, 150 questionnaires returned out of 152 that were administered to respondents. Also, 80 questionnaires were returned out of 98 that were administered while 120 returned out of 122 questionnaires that were administered to

respondents making 99%, 82% and 98%. The response rate of total questionnaires returned is 94% which is a mark of excellent for the study.

Table 5 Socio-demographic Analysis of Gender

Gender of Respondents	Frequency (f)	Percentage (%)
Male	200	57
Female	150	43
Total	350	100

Source: Field Work, 2024

Table 5 above showed that 200 respondents representing 57% are male while 150 respondents representing 43% are female. This indicates that union members of these universities were mainly male. Irrespective of their genders, their responses do not in any way interfere with the outcomes of the study as they are not bias in their views.

Table 6: Socio-demographic Analysis of Academic Background

Educational Qualifications	Frequency (f)	Percentage (%)
HND/BSc/PGD	200	57
MSc/MPA/MBA/PhD	150	43
Total	350	100

Source: Field Work, 2024

The table above depicted the educational qualifications of respondents and thus revealed that 200 respondents making 57 possess the Higher National Diploma (HND)/Bachelor of Science (BSc) and Postgraduate Diploma (PGD) while 150 respondents representing 43% are holders of Master of Business Administration (MBA)/Master of Public Administration (MPA)/Master of Science (M.Sc) and Doctor of Philosophy (Ph.D). This shows that the staff and union members of the universities are dominated by different levels of graduates with various degree of certificates. This suggests that the respondents have good knowledge about IPPIS and its effect on educational development in Nigeria.

Table 7: Socio-demographic Analysis of Length of Service in the University

Number of Years	Frequency (f)	Percentage (%)
01 – 09	40	11
10 – 20	100	29
21 – 30	200	57
31 – above	10	3
Total	350	100

Source: Field Work, 2024

The table above shows that 40 (11%) of the respondents have been engaged or stayed in the service for a period between 0 to 19 years while 100 (29%) of the respondents have spent between 10 – 20 years. 200 respondents representing 57% fall between 21 – 30 years. 10 respondents

representing 3% have spent between 31 years and above. By this presentation, it implies that most of the staff and union members have spent reasonable number of years in the service. Be that as it may, they have all experience both the gains and pains of the implementation of the IPPIS as payment platform in their various universities. Thus, their responses have very serious implication to this study.

Data Analysis

Research Question: What is the relationship between Integrated personnel payroll and information systems (IPPIS) and educational development in Nigeria?

Table 8: shows Item 1 of Research Question: IPPIS reduces educational friction and engender stability in educational development.

Options	University of Port Harcourt, Choba	Federal Polytechnic of Oil and Gas, Bonny	Federal College of Education (Technical), Omoku	Response Rate	
Strongly Agreed (SA)	70	50	60	180	51.4
Agreed (A)	60	20	40	120	34.3
Disagreed (D)	15	5	10	30	8.57
Strongly Disagreed (SD)	5	5	10	20	5.71
Total	150	80	120	350	100

Source: Survey Data, 2024

Table 8 showed the views of respondents on the relationship between IPPIS and educational development in Nigeria. In their views on whether IPPIS reduces educational friction and engender stability in educational development, the table shows that 180 respondents of the 350 respondents strongly agreed that IPPIS reduces educational friction and engender stability in educational development with 120 respondents agreed that IPPIS reduces educational friction and engender stability in educational development. However, 30 respondents disagreed that IPPIS reduces educational friction and engender stability in educational development with 20 respondents strongly disagreed that IPPIS reduces educational friction and engender stability in educational development. With a simple percentage score of 85.7, the respondents agreed that IPPIS reduces educational friction and engender stability in educational development in Nigeria.

Table 8: shows Item 2 of Research Question: IPPIS reduces industrial conflict and enhance educational development

Options	University of Port Harcourt, Choba	Federal Polytechnic of Oil and Gas, Bonny	Federal College of Education (Technical), Omoku	Response Rate	
Strongly Agreed (SA)	60	20	30	110	31.4
Agreed (A)	70	50	60	180	51.4
Disagreed (D)	15	5	20	40	11.4
Strongly Disagreed (SD)	5	5	10	20	5.71
Total	150	80	120	350	100

Source: Survey Data, 2024

Table 9 also revealed that 110 respondents of the 350 strongly agreed that IPPIS reduces industrial conflict and enhance educational development with 180 respondents agreed that IPPIS reduces industrial conflict and enhance educational development. Also, 40 respondents disagreed that IPPIS reduces industrial conflict and enhance educational development with 20 respondents strongly disagreed with the claim that IPPIS reduces industrial conflict and enhance educational development. Based on the percentage value of 82.8, the study agreed that IPPIS reduces industrial conflict and enhance educational development.

Table 10: shows Item 3 of Research Question: IPPIS is a stable platform that enhances organizational improvement and encourages capacity development in educational management

Options	University of Port Harcourt, Choba	Federal Polytechnic of Oil and Gas, Bonny	Federal College of Education (Technical), Omoku	Response	Rate
Strongly Agreed (SA)	5	0	0	5	1.4
Agreed (A)	5	0	0	5	1.4
Disagreed (D)	80	20	30	130	37.1
Strongly Disagreed (SD)	60	60	90	210	60.0
Total	150	80	120	350	100

Source: Survey Data, 2024

On whether IPPIS is a stable platform that enhances organizational improvement and encourages capacity development in educational management, 5 respondents strongly agreed, with 5 respondents agreed that IPPIS is a stable platform that enhances organizational improvement and encourages capacity development in educational management. While 130 respondents disagreed IPPIS is a stable platform that enhances organizational improvement and encourages capacity development in educational management with 210 respondents strongly disagreed that IPPIS is a stable platform that enhances organizational improvement and encourages capacity development in educational management. By simple percentage score of 97.1, the study disagreed that IPPIS is a stable platform that enhances organizational improvement and encourages capacity development in educational management.

Table 11: shows Item 4 of Research Question: IPPIS addresses issues of payment delay and illegal deduction of payment

Options	University of Port Harcourt, Choba	Federal Polytechnic of Oil and Gas, Bonny	Federal College of Education (Technical), Omoku	Total	% of Response
Strongly Agreed (SA)	0	0	10	10	2.9
Agreed (A)	0	5	0	5	1.4
Disagreed (D)	70	25	40	135	38.6
Strongly Disagreed (SD)	80	50	70	200	57.1
Total	150	80	120	350	100

Source: Survey Data, 2024

On whether IPPIS addresses issues of payment delay and illegal deduction of payment, the table above shows that 10 respondents strongly agreed and 5 agreed that IPPIS addresses issues of payment delay and illegal deduction of payment. Meanwhile, 135 respondents disagreed that IPPIS addresses issues of payment delay and illegal deduction of payment with 200 respondents strongly disagreed that IPPIS addresses issues of payment delay and illegal deduction of payment. By simple percentage score of 95.7, the study disagreed that IPPIS addresses issues of payment delay and illegal deduction of payment.

Table 12 shows Item 5 of Research Question: Educational development is enhanced by IPPIS in developing staff capacity and enhancing students' orientation in the Universities

Options	University of Port Harcourt, Choba	Federal Polytechnic of Oil and Gas, Bonny	Federal College of Education (Technical), Omoku	Total	% of Response
Strongly Agreed (SA)	0	0	5	5	1.4
Agreed (A)	0	5	10	15	4.3
Disagreed (D)	95	45	35	175	50.0
Strongly Disagreed (SD)	55	30	70	155	44.3
Total	150	80	120	350	100

Source: Survey Data, 2024

The question of whether educational development is enhanced by IPPIS in developing staff capacity and enhancing students' orientation in the Universities, the table above also displays 5 respondents strongly agreed with 15 respondents agreed that educational development is enhanced by IPPIS in developing staff capacity and enhancing students' orientation in the Universities. 175 respondents strongly disagreed with 155 respondents disagreed that educational development is enhanced by IPPIS in developing staff capacity and enhancing students' orientation in the Universities. With a simple percentage of 94.3 indicates that majority of the respondents disagreed that educational development is enhanced by IPPIS in developing staff capacity and enhancing students' orientation in the Universities.

Hypothesis: There is no relationship between integrated personnel payroll and information systems (IPPIS) and educational development in Nigeria. Item 3 of research question 1 which states that “*IPPIS is a stable platform that enhances organizational improvement and encourages capacity development in educational management*” was employed with chi-square (X^2) thus: $X^2 = \sum \frac{(fo-fe)^2}{fe}$

Table 13: Shows responses for calculating frequency expected (fe)

Options	University of Port Harcourt, Choba	Federal Polytechnic of Oil and Gas, Bonny	Federal College Education, Omoku	Total of Response
Strongly Agreed	70	50	60	180
Agreed	60	20	40	120
Disagreed	15	5	10	30
Strongly Disagreed	5	5	10	20
Total	150	80	120	350

Source: Survey Data, 2024

$$fe = \frac{\text{Column total} \times \text{Roll total}}{\text{Grand total}}$$

Table 14: Computation of Chi-Square Test Statistics 1

Fo	Fe	fo – fe	(fo – fe) ²	(fo – fe) ² /fe
70	150(180)/350 = 77	-7	49	0.6
50	150(120)/350 = 51	-1	1	0
60	150(30)/350 = 13	47	2209	170
60	150(20)/350 = 9	51	2601	289
20	80(180)/350 = 41	-21	441	10.8
40	80(120)/350 = 27	13	169	6.3
15	80(30)/350 = 7	8	64	9.1
5	80(20)/350 = 5	0	0	0
10	120(180)/350 = 62	-52	2704	43.6
5	120(120)/350 = 41	-36	1296	31.6
5	120(30)/350 = 10	-5	25	2.5
10	120(20)/350 = 7	3	9	1.3
350	350			564.8

X² Cal = 564.8

Source: Survey Data, 2024

Tabulated at 0.05 level of significance

Hence, df = (R – 1) (C – 1)

Where:

R – number of rolls,

C = number of columns

$$= (4 - 1) (3 - 1)$$

$$= (3) (2) = 6$$

From the above analysis,

df = 6

level of significance = 0.05% while

Chi-Square (X²) = 564.8

Table Value = 12.59

Decision Rule: The null hypothesis is rejected if chi-square (X^2) value is higher than the table value. Here, the chi-square value = 564.8 and the table value = 12.59. It therefore signifies that the null hypothesis which states that there is no relationship between integrated personnel payroll and information systems (IPPIS) and educational development in Nigeria is rejected. This, in other words, means that, there is a relationship between integrated personnel payroll and information systems (IPPIS) and educational development in federal government owned tertiary institutions in Nigeria.

Discussion of Findings

Integrated personnel payroll and information systems (IPPIS) and educational development in Nigeria: Data analysis revealed with a simple percentage score of 85.7 that IPPIS reduces educational friction and engender stability in educational development in Nigeria. Also, the percentage value of 82.8 agreed that IPPIS reduces industrial conflict and enhance educational development. Meanwhile, the highest percentage score of 97.1 disagreed that IPPIS is a stable platform that enhances organizational improvement and encourages capacity development in educational management. This was also confirmed by a percentage score of 95.7 that IPPIS addresses issues of payment delay and illegal deduction of payment. The majority of the respondents with highest percentage score of 94.3 indicates that educational development is not enhanced by IPPIS in developing staff capacity and enhancing students' orientation in the Universities.

In line with the above, secondary data corroborated the claims and further noted by Azcona (2021) that education is not a mere training, but a solid construction of a particular concept of humanity. Noted further, Farswan revealed that education is one of the most important means to improve personal social skills. He stressed that education, directly and indirectly, gives learners and young people the opportunity to develop their social skills at school. According to Azcona (2021), learners interact with other learners and people, building their relationships with friends, teachers, and other students of different ages and cultures, and improving their skills in different environmental settings. Asaju (n.d) opined that education includes possessing good communication skills, developing deeper friendships, and creating a network of support from family and friends, and all of these are developed and enriched by the education system. The scholars averred that education is the most powerful instrument of social change.

In consonance with the above, a participant in the interview revealed that:

Education plays a very important role in the lives of every Nigerian. It is through education that society can bring desirable changes and modernize itself. Education can transform society by providing opportunities and experiences through which the individual can cultivate himself for adjustment to the emerging needs and philosophy of the changing society. However, the issue of integrated personnel payroll and information systems (IPPIS) has become a bane in the wheel of progress of federal government owned educational institutions since the adoption and implementation of the policy in payment of wages and salaries (P. Olaka, personal communication, August 5, 2024)

The view of the respondent above underscores the importance of education in modern society. It is cleared that a vibrant educational system breeds a vibrant nation with corresponding socioeconomic improvement in the welfare of the people. The pathway for a better society is hampered when educational institutions are snuff by unnecessary policies, rules and regulation

particularly as it concerns the welfare of both academic and administrative staff. Another participant/interviewee responded that:

The introduction of IPPIS has further deteriorate our educational system where the welfare of academic staff is not properly managed and this has adverse effect on students' skills and the general development of education. The management of the institutions have been left in the hands of ineffective bureaucrats who initiate unfriendly policies through poor understanding of the educational institutions. In fact, IPPIS should be scrapped immediately (F. Eyeudie, personnel communication, August 5, 2024)

On the issues above, Mela (2019), was of the view that Integrated Personnel and Payroll Information System (IPPIS) was first initiated by the Federal Government in the year 2006. He opined that the intention was to improve the effectiveness and efficiency in the storage of personnel records and administration of monthly payroll in such a way to enhance confidence in staff emolument costs and budgeting. IPPIS is a child of the Federal Government Reform Programme which was conceptualized at the Bureau of Public Service Reform (BPSR) for the purpose of centralized payment of all civil servants in the employment of the Federal Government. He stressed that the IPPIS project started in April 2007 with the enrolment of the seven pilot Ministries, Departments and agencies (MDAs). It was financed through a World Bank facility of about USD 4.9 million. It was finally transferred to the Office of the Accountant General of the Federation in 2008. The seven pilot Ministries were: Federal Ministry of Education, Federal Ministry of Works, Federal Ministry of Finance, Budget Office of the Federation, Federal Ministry of Information and Communication, Ministry of Foreign Affairs, and National Planning Commission.

Conclusion/Recommendations

The study examined integrated personnel payroll and information systems and educational development with focus on selected federal government owned tertiary institutions in Nigeria thus revealed that there is a relationship between IPPIS and educational development in Nigeria.

Based on the findings, the study recommends the following:

- i. The federal government should synchronize the IPPIS with University Transparency and Accountability Solution (UTAS) payment platforms with the aim of capturing areas of concerns as raised by the ASUU. This will in addition to achieving the targeted accountability and transparency, enhance harmonious working relationship between the government and the ASUU. Thus, erasing suspicions on both sides and foster educational development.
- ii. Also, the Federal Government should prioritize the welfare of academic and administrative staff of these tertiary institutions to enhance students' educational psychology. A vibrant educational institution is the bedrock of development. Staff performance and student's length of stay would be affected when the issues of strikes arising from disagreement in conflicting policies arise. Finally, the federal government should ensure that the items discussed in the 2009 FG-ASUU agreement is honoured to pave way for a conducive learning environment.

References

- Aberu, F., & Lawal, Y.O. (2022). The relationship between education and sustainable development in Nigeria. *Journal of Public Administration, Finance and Law*. <https://doi.org/10.47743/jopaf1-2022-24-01>
- Abubakar, A. B. (2013). Education and sustainable national development in Nigeria: Challenges and way forward. *International Letters of Social and Humanistic Sciences*, 14, 65-72.
- Adeniran, A. (2019). Anti-corruption strategies for balanced development. *Advanced Journal of Social Science*, 5(1), 52-64.
- Adi, D., & Cletus, E. (2022). Impact of integrated personnel payroll and information system (ippis) on the job performance of non-academic staff in Federal University Wukari, Taraba State, Nigeria. *International Journal of Research and Innovation in Social Science (IJRISS)*, 6(7), 2454-6186
- Aganga, O.A. (2011). The project implementation commenced at the bureau of public service reforms. *A Paper Delivered at Workshop for ministries in Abuja*, 2 (5). 1-10.
- Agboola, T. O. (2018). Effectiveness of Integrated Personnel and Payroll Information System in addressing ghost worker syndrome in Nigerian Public Sector. Retrieved from <https://www.semanticscholar.org/>
- Agwu, P. U. (2016). Language, a vehicle for sustainable development in the 21st century. *Humanity and Social Sciences Journal*, 11 (1), 08-12.
- Ahaotu, G.N., & Ogunode, N.J. (2021). Challenges facing administrators of public higher institutions in Nigeria and the ways forward. *Central Asian Journal of Literature, Philosophy and Culture*, 2 (2).
- Ahenkan, A., & Osei-Kojo, A. (2014). Achieving sustainable development in Africa: progress, challenges and prospects. *International Journal of Development and Sustainability*. 3(1), 162-174.
- Akintoye, V. A., & Opeyemi, O. A. (2014). Prospects for achieving sustainable development through the millennium development goals in Nigeria. *European Journal of Sustainable Development*, 3(1), 33-46.
- Alanamu, A. (2009). The role of religion in combating corruption in Nigeria: Anti-corruption reforms in Nigeria since 1999, issues, challenges and the way forward. *IFRA special Resources*, 3(1).
- Aldag, R. J., & Stearns, T. M. (1991). *Management (2nd edition)*. Cincinnati: South-Western.
- Anaodozie F. (2017). A Critical analysis of grand corruption with reference to international human rights and international criminal law: The case of Nigeria (Doctoral thesis). School of Languages, Law and Social Sciences College of Arts and Tourism, Dublin Institute of Technology.
- Anukaenyi, O.B., Onwuka, L. & Obiozor, E.W. (2016). Education management and internet development for sustainable development of Nigeria. *The World Commission on Environment and Development's (the Brundtland Commission) Report*.
- Aondowase, T., & Celestina, O. (2023). The impact of the integrated payroll and personnel information system (IPPIS) on the development of university education in Nigeria. *Technology Audit and Production Reserves*, 14 (69), 20 – 24. <https://doi.org/10.15587/2706-5448.2023.273342>
- Aransi, I.O. (2008), Bureaucratic corruption in the Public Service: A Case Study of the Nigerian Local Government in Adeyemo D.O. and Olojede, I. (eds) *Reading on governance and Accountability in Nigeria*. Germany: Cuvillier Verlag International Scientific Publisher

- Aregbesola, M. A. (2019). Impact of urban transportation policy on the development of Federal Capital Territory (FCT). Ph.D. Thesis, Department of Political Science, Nasarawa State University.
- Asaju, K. (2013). Assessment of students' perspectives of dress code in tertiary institutions in Nigeria: A study of Federal College of Education, Zaria. *Journal of Research & Method in Education (IOSR)*, 1(6), 1-8.
- Asaju, K. (n.d). Effective educational management: A trend in the Nigerian educational system ASUU (2019). Re-2009 agreement: ASUU and Federal Government.
- Ayoola, E. (2003). *Indices of corruption in Nigeria*. Abuja: Eclat Publishers.
- Bartol, K. M., & Martin, D. C. (1998). *Management (3rd edition)*. UK: McGraw-Hill.
- Bedeian, A. (2013). *Management (3rd edition)*. Orlando: The Dryden Press.
- Blair, F. (2015). The essence of mixed scanning and organisational process models. *A Review of the application and adoption*.
- Bovée, C.L., Thill, J.V., Wood, M.B., & Dovel, G.P. (1993). *Management (1th edition)*. McGraw-Hill.
- Boyi, A. A. (2014). Education and sustainable national development in Nigeria: Challenges and way forward. *International Letters of Social and Humanistic Sciences*, 14 (2014), 65-72
- Catherine, W. (2011). Development as BeunVivir: Institutional arrangements and (de) Colonial entanglements. *Development. A Journal of the Society for International Development (SID)*, 53(1).18-27.
- Chima P., Jumai, A., & Folorunsho, G.O. (2019), Implementation of digital Integrated Personnel and Payroll Information System: Lesson from Kenya, Ghana and Nigeria. *Governance and Management Review (GMR), Institute of Administrative Sciences, University of the Punjab, Lahore, Pakistan*, 4 (2), 1-17.
- Chima, P., & Folorunsho, G.O. (2020). Electronic governance and corruption in Nigeria: Combing insights from Integrated Payroll and Personnel Information System (IPPIS) implementation. *International Journal of Intellectual Discourse (IJID)*, 3 (1), 2636-4832
- Cisco (2013). *Education and the internet of everything*. USA: Cisco Systems, Inc.
- Cole, G.A., & Kelly, P. (2015). *Management – Theory and practice (8th edition)*. Andover: Cengage Learning EMEA.
- Dlakwa, H. (2008). *Concepts and models in public policy formulation and analysis*. Maiduguri: Pyla-Mark Services Ltd.
- Dunham, R. B., & Pierce, J. L. (1989). *Management (6th edition)*. US: Jon Lepley.
- Ebong, E. (1996). *Fundamentals of technology and vocational education*. Enugu: Cheston Press.
- Effiong, S. A, Oro, B. L., Ogar, G. U., Raphael, I. N., Etop, G. J., & Iroushu, B. R (2017) Treasury Single Account (TSA), Integrated Payroll and Personnel Information System (IPPIS), and Integrated Financial Management Information System (IFMIS): application and implementation effects on fraud management in the public sector in Nigeria. *IOSR Journal of Business and Management*, 19 (8), 22–30.
- Egobueze, A. (2021). *Perspective on African politics*. Port Harcourt: Pear Publishers International Ltd.
- Ejikeme O.M (2016). Political corruption and poverty in Nigerian democratic state: Any grounds for justification? (Master's Thesis). *Centre for Applied Ethics Linköpings Universitet*. Retrieved from <http://liu.diva.portal.org>.
- Ekwueme, C. O., Ekon, E. E., & Ezenwa-Nebife, D. C. (2016). Education for sustainability through academic freedom. *Global Journal of Educational Research*. 15, 23-30.

- Emeka-Nwobia, N.U. (2015). The place of indigenous languages in National Development. *Research on Humanities and Social Sciences*, 5(12), 202 - 215.
- Enakirerhi, L.I., & Temile, S.O. (2017). IPPIS in Nigeria: Challenges, benefits and prospects. *International Journal of Social Science & Economic Research*, 2 (5) 3490-497
- Erhunse, C. (2013). Education as an effective instrument for grassroots development (A case study of Ika South Local Government Areas of Delta State. *Unpublished B.Ed Project*. Delta State University, Abraka.
- Etzioni, A. (1967). Mixed-Scanning: A Third Approach to Decision-Making. *Public Administration Review*, 27, 385-392. <https://doi.org/10.2307/973394>
- Fafunwa, A. B. (1974). *History of education in Nigeria*. London: George Allen and Unwin.
- Farajimakin, A. S., & Anichebe, A. S. (2017). Effect of Integrated Personal Payroll Information System on Employee Welfare: Evidence from Federal Ministries in Nigeria. *Australian Journal of Arts and Scientific Research*, 22, 1-143.
- Farswan, D.S. (n.d). Role of education and culture in social development.
- Federal Republic of Nigeria (2013). *National policy on education*. Abuja: Federal Government Press.
- Federal Government of Nigeria, (2004). *National Policy on Education*. 4th Edition. Lagos, Nigeria NERCD.
- Folorunsho, O. O. (2022). Integrated Payroll and Personnel Information Systems (IPPIS) and public service wages and salary payment in Nigeria. *Quest Journals: Journal of Research in Humanities and Social Science*, 10 (1), 62-71.
- Folorunso, O.O., & Simeon, A.O. (2021). The gains and the pains of Integrated Payroll and Personnel Information Systems (IPPIS) policy implementation in Nigeria. *Journal of Human Resource and Sustainability Studies*, 2021 (9), 551-569
- Gbadegesin, S. (2010). *Reclaiming the 1955 vision. A legacy of educational excellence. Essays commemorating the 50th anniversary of universal primary education in Western Nigeria, 1955-2005*. Mitchellville, MD: Pinnacle Publications.
- Gbogbo, E.B. (2011). Nigeria's Oil Revenue Rose 46% to \$59 Billion in 2010 on improved security bloomberg.
- Griffin R.W. (2013). *Management – Principles and practices (11th international edition)*. Cengage Learning South-Western.
- Gulati, R., Mayo, A. J., & Nohrian, N. (2017). *Management – An integrated approach*. Boston: Cengage Learning.
- Haruna, I., Joseph, A., & Samson, A.J. (2015). Integrated Personnel Payroll and Information System (IPPIS): Panacea for ghost workers syndrome in Nigerian Public Service. *International Journal of Public Administration and Management Research (IJPAMR)*, 2(5), 55 – 64.
- Hitt, M.A., Black, J. S., & Porter, L.W. (2012). *Management (3rd edition)*. New Jersey: Pearson. http://learn.org/articles/What_is_Educational_Management.html
<http://www.unesco.org/new/en/education/themes/planning-and-managing-education/policy-and-planning/emis/>
<http://www.worldbank.org/depweb/english/sd.html>
<http://www.esdtoolkit.org/discussion/default.htm>
- Idakwoji, S.P., & Stephen, M.R. (2003). *Element of public administration*. Abuja: Eclat Publishers.

- Idris, A., Adaja, J., & Audu, J. S. (2015). Integrated personnel payroll and information system, panacea for ghost workers syndrome in Nigerian Public Service. *International Journal of Public Administration and Management Research (IJPAMR)*, 2, 55-64.
- Ifesinachi, K. (2004). Africa's wind of corruption: Whither anti-corruption policies. *Nigerian Journal of Public Administration and Local Government*, 12 (1), 75-86.
- Ijewereme, O. (2015). Anatomy of corruption in the Nigerian Public Sector: Theoretical perspectives and some empirical explanations. Doi: 10.1177/2158244015581188
- Ikejiani-Clark, M. (2001). Corruption in Nigeria in Ozioko, J. O. C., & Onuoha J. I. (eds) *Contemporary issues in Social Sciences*, 25(70), 108 - 125.
- Ikelegbe, A. O. (2006). *Public policy analysis: Concepts, issues and cases*. Benin: Imprint Services.
- International Development Association (2017). Programme approval on a proposed credit in the sum of SDR 65.5million to the republic of Rwanda for public sector governance programme. Retrieved from <http://www.siteresources.worldbank.org/extpoverty/resources/goals-final.pdf>
- International Record Management Report, (2008). Fostering trust and transparency in governance: Ghana case study. Retrieved from www.irmt.org.
- Itari, P.E., & Ugbe, T.U. (2018). Education for sustainable development in Nigeria and developing nations. *British Journal of Education*, 6(5), 41-51.
- Iyanda D.O (2012). Corruption: Definitions, theories and concepts. *Arabian Journal of Business and Management Review*, 2(4), 37-45.
- Kaoje, A. N., Nabila, K., Idris, S., Gambarawa, J. A., & Ubandawaki, L. I. (2020). Integrated Personnel and Payroll Information System (IPPIS) and Transparency in Government Payroll Administration in Nigerian Civil Service: A Unique Approach. *Asian Journal of Economics, Business and Accounting*, 2(19), 1-8.
- Katuka, Y., Hussaini, T.H. and Shehu, Y.I. (2019). Integrated payroll and personnel information system (IPPIS) and corruption in Nigeria public service. *Lapai International Journal of Administration*, 7(2), 210 - 219.
- Kenya Department of Public Management (2015). IPPS embraces processes and procedures aimed at gathering, storing and processing information for effective and efficient decision making. Khosrow-Pour (Ed.), *Encyclopedia of e-commerce, e-government and mobile commerce*. Hershey, PA: Idea Group Inc.
- Kickert, W.J.M (1979). *Organization of decision making: A system theoretical approach*. *Administrative Science Quarterly*. Amsterdam: North-Holland Publishing Company. Mintzberg.
- Leyira, C.M., & Temple, M. (2021). IPPIS and the ghost workers' syndrome in Nigeria's Public Sector. *Scholars Journal of Economics, Business and Management*, 2 (10), 11 – 17.
- Leonard, C. I., Collins, C. N., & Felix, O. U. (2014). Education and development disconnect in Nigeria: education for sustainable development (esd) as the 21st century imperative for Nigeria's national transformation, sustainable development and global competitiveness. *Journal of Economics and Sustainable Development*, 5(23), 44-52.
- Malik F. (2000). *Managing performing living: Effective management for a New Era (English edition 2006)*. Frankfurt: Campus First Published in German.
- Mauro, P. (1995). *The effects of corruption on growth, investment, and government expenditure*. *IMF working Paper 96/98*. Washington: International Monetary Fund.

- Mbotor, E.D. (2019). Integrated Payroll and Personnel Information System (IPPIS): The Journey So Far. *The International Journal of Business & Management*, 7(7), 2321–8916. Doi: 10.24940/theijbm/2019/v7/i7/BM1907-034
- Mela, K. (2019). The implementation of IPPIS policy in the Nigerian Universities: Benefits and challenges. *Global Journal of Applied, Management and Social Sciences (GOJAMSS)*, 17. <http://www.gojamss.net/journal/index.php/gojamss/article/view/504>
- Micah, L. C & Moses, T (2018) IPPIS and the ghost workers' syndrome in Nigeria's Public Sector. *Scholars Journal of Economics, Business and Management*, 4 (13), 773-778. Retrieved from <http://saspjournals.com/sjebm>
- Mintzberg, H. (2009). *Managing*. San Francisco: Berret-Koehler Publishers
- Montana, P.J., & Charnov, B.H. (2008). *Management (4th edition)*. New York: Barron's Educational Series.
- Morris, S.D. (1991). *Corruption and politics in contemporary Mexico*. Tuscaloosa: University of Alabama Press.
- Muhammed, A. (2003). *Corruption in Nigeria*. Idah: Odoma Press.
- Mustapha, M. A. (2008). Combating corruption in Nigeria: The role of the legislature examined. *The University of Ilorin Law Journal*, 3(4), 57-79.
- Naylor, J. (2004). *Management (2nd edition)*. Essex: Pearson Education/Prentice Hall.
- Nelson, L. (2017). Personnel and payroll integrated system. Hearst newspaper. Retrieved from bitrix24.com/free-HR-system.
- Nnabuo, P.O.M., & Asodike, J. D. (2012). Exploring education as a tool for sustainable development in Nigeria. *European Scientific Journal*, 8(10), 1-11.
- Nsiegebe, G. (2020). Politics, economy and anti-corruption policies in Nigeria. *Social Science Review*, 1, 249-261.
- Nwachukwu C.C. (1992). *Management: Theory and practice*. Ibadan: African FEP Publication.
- Nwankwo, O.D. (2015). *Politicization of appointments in Nigeria*. Enugu: University of Nigeria Press.
- Nwaodu, N, Adam, D., & Okereke, O (2014). A review of anti-corruption wars in Nigeria. *Africa's Public Service Delivery & Performance Review*, 2(3).153-174 retrieved from <https://apsdpr.org/index.php/apsdpr/article/view>
- Nyerere, J (1999). Governance in Africa. *African Association of Political Science News Letter*, 4(2) 1-3.
- Office of the Accountant-General of the Federation (n:d). Integrated personnel and payroll system. Retrieved from <https://www.ippis.gov.ng/what-is-4>.
- Obiozor, W.E., & Obidiegwu, U.J. (2013). *Globalisation of adult education: Theories and strategies for instructors*. Awka: Onestreet Books
- Office of The Secretary to the Government of the Federation (2014). Integrated Payroll and Personnel Information Systems. Retrieved from <http://www.bpsr.gov.ng/index.php/publications/bpsr>.
- Ogbewere B. I. (2015). Anatomy of corruption in the Nigerian public sector. *Journal of Social and Administrative Sciences*, 5(2), 1-16. Retrieved from <https://www.researchgate.net>.
- Oghator, E., & Okoobo, R. (2015). Towards sustainable development in less developed countries: Foreign assistance revisited. *The Nigerian Journal of Administrative Science*, 5 (10), 201-208.

- Ogunode, N.J. (2020). Administration of public universities in Nigeria: Problems and solutions. *Journal Sinesthesia*, 10 (2), 86-94 Retrieved from <https://sinesthesia.pustaka.my.id/journal/article/view/55>
- Ogunode, N. J., & Musa, A. L. (2020). Public universities administration in Nigeria: Challenges and the ways forward. *International Journal of Multidisciplinary Sciences and Advanced Technology*, 1(12), 25–35
- Oguntimehin, Y.A. & Nwosu, J.C. (2014). Building a sustainable development through entrepreneurship education in Nigeria. *Arabian Journal of Business and Management*, 3(7), 278-285.
- Ojiaku, C.P. (2014). *Corruption in the Nigerian Public Service: A study of Imo State Civil Service (1999-2012)*. Enugu: University of Nigeria Publishers.
- Okafor, C.N. (2001). University education in developing countries: The changing roles and future problems. *Journal of education development*, 3(2), 54 – 60.
- Okoh, J.D. (1998). *Philosophy of education*. Owerri: Corporate Impression.
- Okoli, N.J., Ogbondah, L., & Ewor, R.N (2016). The history and development of public universities in Nigeria since 1914. *International Journal of Education and Evaluation*. 2 (1), 322-323.
- Okolo, M.M., & Gregory, D.M. (2021). Higher education in Nigeria: Challenges and suggestions. *Middle European Scientific Bulletin*, 2(4), 16 – 18.
- Okonjo-Iweala, N. (2015). *Nigeria's economic reforms: Progress and challenges*. Washington DC: The Brookings Institution.
- Olaniyi, J. O. (2001). *Foundation of public policy analysis*. Ibadan: Sunad Publishers Ltd
- Olaopa, T. (2008). *Theory and Practice of Public Administration and Civil Service reforms in Nigeria*. Ibadan: Bookcraft.
- Olopoenia, A (1998). *A political economy of corruption and underdevelopment. Faculty Lecture Series*. Ibadan: Faculty of Social Sciences, University of Ibadan.
- Olumuyiwa, A.T. (2018). Effectiveness of integrated personnel payroll information system in addressing ghost worker's syndrome in Nigerian public sector. *Global Journal of Human Social Science*, 18 (2), 20-30
- Okafor, O.J., & Egenti, P.U. (2020). Education for sustainable development in Nigeria. *Unizik Journal of Educational Research and Policy Studies*, 8(15), 20 – 30.
- Onwuka, C. C, Okoh. C. I., & Eme, O. I. (2009). Corruption in Nigeria: Nature, forms and challenges before anti-corruption agencies. *Interdisciplinary Journal of Contemporary Research in Business*, 1(8), 114-132.
- Osisoma B.C, Akembor C., & Okaro (2016). Effect of integrated personnel and payroll information system (IPPIIS) on federal government recurrent expenditure in Nigeria. Awka: SCOA Heritage Nig. Ltd
- Otite, O. (1986). On the sociological study of corruption in Femi Odekunle (ed) *Corruption in development*. Ibadan: University Press.
- Owusu-Ansah S. (2013). Application of information and communication technology (ICT): A comparative analysis of male and female academics in Africa, 66(1): 23-33. Retrieved from https://digitalcommons.unl.edu/cg_i/viewcontent.cgi?
- Oyeneye, I.; Onyenwenu, M., & Olosunde, B. (2005). *Round up government for senior school certificate: A complete guide*. Lagos: Longman Nigeria PLC.
- Punch. (2020). Ending FG/ASUU perennial face-off. Retrieved from <https://punchng.com/ending-fg-asuuperennial-face-of>

- Robbins, S.P. and Coulter, M. (2016). *Management (13th global edition)*. Essex: Pearson Education.
- Schermerhorn, J. R. (2005). *Management (8th edition)*. Hoboken: John Wiley & Sons.
- Seers, D. (2017). *The Meaning of Development: Four critical studies*. New York: Routledge.
- Sen, A. (2013). The ends and means of sustainability. *Journal of Human Development and Capabilities*, 14(1), 6 - 20. <https://doi.org/10.1080/19452829.2012.747492>
- Simon, H. (1957). *Administrative behaviour*. Onitsha: The Macmillan Co.
- Sims, L. & Falkenberg, D. (2013). Developing competences for education for sustainable development: a case study of Canadian faculties of education. *International Journal of Higher Education*, 2 (4), 1-14.
- Smith, D. J. (2007). *A culture of corruption: Everyday deception and popular discontent in Nigeria*. Princeton, New Jersey: Princeton University Press.
- Transparency International (2015). Nigeria's corruption challenge. Retrieved from https://www.transparency.org/news/feature/nigerias_corruption_challenge.
- Transparency International (2017). What is corruption? Retrieved from <https://www.transparency.org/whatis-corruption>
- Todaro, M. P., & Smith, S. C. (2009). *Economic development, (Tenth Edition)* Essex: Pearson Education Limited.
- Ubogu, R. (2020). The role of teacher education in improving quality education for a functional society. *Journal of Educational and Social Research*, 10(2), 85-93.
- Udejinta, M.O. (2022). E-salary and opinion on integrated personnel and payroll information system of Nigerian government among employees of federal tertiary institutions in Oyo metropolis. *ACU Journal of Social and Management Sciences*, 3(1), 202 - 212.
- Ugben, O.G.E., & Egobueze, A. (2021). Bureaucracy and service delivery in the Nigerian Public service. *Quest Journal of Research in Humanities and Social Science*. Vol. 9(8), 14-24.
- UKaid (2017). Why corruption matters: Understanding causes, effects and how to address them: Evidence paper on corruption. Retrieved from <https://assets.publishing.service.gov.uk/government/uploads/system/>.
- UNDP (2017). *The UNDP's strategy for inclusive and sustainable growth*. New York: UNDP
- Varma, S. P. (2001). *Modern political theory*. Lagos: Vikas Publishing House, PVT Ltd
- Weder, B. (2001). Bureaucratic corruption and the rate of temptation: Do wages in the civil service affect corruption, and by how much? *Journal of Development Economics*, 65, 307-331.