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RESEARCH CONFERENCE FOR
HUMANITIES, EDUCATION, SCIENCES,
SOCIAL SCIENCES & MANAGEMENT

GOMBE STATE UNIVERSITY - NIGERIA

ABSTRACTS & PROCEEDINGS

Theme **Africa's Development Crisis:**
Addressing Emerging Issues

8TH - 9TH MAY, 2024



10TH INTERNATIONAL RESEARCH CONFERENCE FOR HUMANITIES, EDUCATION, SCIENCES, SOCIAL SCIENCES & MANAGEMENT

GOMBE STATE UNIVERSITY, BIRNIN KEBBI

THEME

Africa's Development Crisis: Addressing Emerging Issues

DATE: Wednesday 8th - Thursday 9th May, 2024

TIME: 09:00 am (GMT+1)

CONFERENCE LOC

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Gombe State University

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DAY ONE: Wednesday 8th May, 2024

Conference Briefing via Google Meet - 9:00am - 9:30am

Online Visual Presentation via Google Meet - 9:30am - 1:00pm

WhatsApp Video Presentations - 3:00pm - 4:00pm

DAY TWO: Thursday 9th May, 2024

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Conference Abstracts

Public Expenditure, Economic Growth and Fiscal Multipliers in Nigeria

¹Malachy Ashywel Ugbaka & ²Rimamtanungg Ishaku Nyiputen

¹*Department of Economics, University of Calabar, Nigeria.*

²*Department of Economics, Federal University Wukari, Taraba State, Nigeria.*

Abstract

This study develops several complementary methods to ascertain how public spending affects Nigeria's economic growth. The study examines the evolution of Nigeria's fiscal performance, verifies the strong correlation between public spending and economic growth, identifies the long-term relationship between current and capital expenditure with GDP growth, and demonstrates the persistent nature of public spending over time with a significant multiplier effect in both the short and long terms. Five key conclusions are suggested by the empirical data. i) During the study period, public spending made a substantial contribution to GDP growth, while investment made a less substantial contribution; The study's cointegration tests for economic growth and public expenditure (current and capital) indicate a long-term relationship; ii) the correlation coefficients demonstrate a positive and strong relationship between economic growth and current spending in Nigeria, but a weak relationship exists between capital spending and economic growth; iii) regarding the multipliers, the long-term sum of the multiplier effects reaches values of 2.9, 2.6. The impulse-response function analysis verifies that capital investment has a little, if any, impact on GDP growth in the nation, but current spending has a large cumulative effect on economic growth. Furthermore, since public spending has a long-lasting impact on economic growth, budget reengineering can be supported in order to make the best long-term use of limited public resources.

Keywords: *Public expenditure, Economic growth and Fiscal policy*

Heavy Metals Concentration in Tilapia Species in Tungan Kawo Dam of Kontagora, Niger State

Abdullah, Musa Sabo, PhD

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Federal College of Education, Kontagora, Niger State, Nigeria

Abstract

The well-known long-term toxic effects of heavy metals lead (Pb), nickel (Ni), manganese (Mn), cadmium (Cd) and chromium (Cr) to man are of both scientific and environmental concerns. The presence of these heavy metals in water create a societal health risk in dams that are otherwise useful for drinking water and fisheries as is of the case in Tungan Kawo dam. Fish play an important role in human nutrition and therefore need to be carefully and routinely screened to ensure that there are no high levels of heavy metals being transferred to man through their consumption. One of such commendations it is important to monitor changes in sediment composition because the contaminants within the sediments can act as a source of pollutants long after the original source of pollutants has been abated. Once metals and nutrients have settled into the sediments they can again become processes in natural situations.

Keywords: *Heavy metals, Fish, Tilapia, Tungan kawo dam, Kontagora*

Effect of Incorporation of Cassava Peel Ash (CPA) in Cement Paste and Concrete

Sagir A. Yusuf

*Department of Civil Engineering,
Abubakar Tatari Ali Polytechnic Bauchi*

Abstract

In this research study Cassava peel Ash (CPA) which is an agricultural/ industrial waste was incorporated in the concrete mixture as a supplementary cementitious material (SCM) thereby encouraging recycling and reuse of solid waste derivatives in construction works to achieve sustainable engineered infrastructural development and eco- efficient environment. The cementitious portion of the concrete mix were partially replaced by varying proportion of CPA ranging from .40% while test was carried out on the concrete samples at fresh and harden state to derive its workability, setting time, compressive and flexural strength behavior. The concrete's mechanical strength was determined at hydration period of 3,7, 28, 60 and 90 days respectively to produce a concrete mixture of coarse and fine aggregate, water cement and CPA. The physiochemical properties of CPA were obtained so as to characterize the elemental chemical composition the admixture and the result indicated a good pozzolanic behavior with $Al_2O_3 + SiO_2 + Fe_2O_3$ summing to 81.83% the mechanical strength test result indicate rice in percentage difference as CPA replacement ration increased from 5 – 40% with a score of 7.2 – 46.2% and 18.18 – 86.19% for the compressive and flexural strength property respectively. Similarly, the workability and setting time test result showed increase in percentage difference as CPA replacement ration increased from 5 – 40% with a score of 17.08- 54.2%, 5.6 – 81.14%, and 0.84 – 28.57% for slump, initial and final setting time properties respectively. Furthermore, the concrete's mechanical properties were observed to increase generally with relative increases in the concrete hydration period. The pozzolanic activity- index (PAI) of CPA is 75.% which is an indication that it has pozzolanic properties. From the result, the optimum combination level of 5- 10% replacement of the cement by CAP can be used to produce a better and more desirable concrete. Correlation analysis were deployed to statically asses the mechanical properties response with the controls; the analysis result showed a consistent decrease in the correlation value from 0.9988 – 0.97594 for 5 – 40% replacement of the cement by CPA for the compressive and flexural strength respectively.

Keywords: *Cassava Peel Ash, Cement past, Concrete*

Effects of Ill-Equipped Laboratory in the Conduct of Biology Practical in Secondary Schools in Kagarko Local Government Area of Kaduna State

Amina Isyaku

Integrated Science Department

Federal College of Education, Kontagora

Abstract

This research work examined the effect of ill-equipped laboratory on the conduct of Biology practical in secondary schools in Kagarko local government area of Kaduna State. A survey research design was used, simple random sampling technique was used for selection of the schools, one hundred and fifty (150) students and eighteen (18) teachers were the sample population. The questionnaire titled Conduct of Biology Practical in Secondary School (CBPSS) was the instrument used for this study. Data collected were analyzed using simple percentage and Chi-square statistical tools. The results shows that poor laboratory and insufficient practical materials and equipment have a great effect on the conduct of Biology practical and those teachers need to improvise instructional materials for effective delivery of their lessons or practical work. For Chi-square, the result indicated that there is no significant difference between ill-equipped laboratory and student failure. This implies that ill-equipped laboratory has an effect on students' failure and there is no significant difference between out-dated equipment and teacher's improvisation of instructional materials. It is recommended amongst others that non-governmental organization should take interest and bold steps in enhancing the quality of school science laboratories in our various institution of learning; teachers should be encouraged to attend regular workshops and seminars on improvisation and laboratory techniques so as to improve their laboratory skills.

Keywords: *Effects, Ill- equip, Laboratory, Biology Practical & School*

Development of a Multi-Purpose Rechargeable Machine

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Abstract

The National Electricity Power Authority (NEPA) and Power Holding Company of Nigeria (PHCN) are two examples of modern electrical appliances that obtain their power directly from the utility grid, Development of a multipurpose rechargeable machine system for charging electronic devices is a study based on the development of a new machine system that can reduce the usage of electricity and is eco-friendly, the aim of this study is to develop and evaluate the performance of a multi-purpose electric charger for rechargeable devices, the most unique feature is that it is capable of supplying power to the devices while simultaneously charging its internal battery. There are different types of efficiency but calculations were only done for three efficiencies which are motor efficiency, energy efficiency and power efficiency, Power Efficiency was calculated and 82.96% was achieved with voltage of 230 and 278 volts as output and input. Current as 1.805 and 1.8 amps, Energy Efficiency was calculated and 82.96% was also achieved, Motor Efficiency was calculated and based on the RPM of the driving shaft speed of 1440, The efficiency at 1440 is 33.49% for Direct current and 29.77% for alternate current Overall, the multipurpose rechargeable machine system offers an efficient method of device charging in a mobile package.

Keywords: *Development, Multi-Purpose, Rechargeable Machine*

Communication in Science and Science Communication in Nigerian Institutions of Learning - The Trend This Far

¹Arowolo, Jacob Gbemiga, PhD & ²Ojoko, Augusta Ndidi

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Federal College of Education, Kontagora Niger State

Abstract

Throughout the globe, there is a general trend hitherto that every nation is becoming fervent in and adopting the tenets of science and its relational output (ie, technology) to navigate their cultural, political, economic, security and creativity prowess. Effective public communication of science topics is needed for various reasons that may include a means to improve scientific literacy, overcome public mistrust and enable citizens to play informed roles in democratic societies. This paper examined the category of communications in science, inaccuracy for science communication as well as outlined a variety of mechanisms through which it can occur. Comparative studies within international cycle that show best science communication practices were explored and author's personal 'top tips' for ensuring success in science communication by science educators in Nigeria especially at the secondary school level were as well juxtaposed.

Keywords: *Communication, Communicator, Literacy, Science.*

Experimental and Numerical Simulation of Attic Ventilation in Minna

¹G. O. Okpuye & ²S. A. Ayo

^{1&2}*Department of Mechanical Engineering,
Federal University of Technology, PMB. 65 Minna, Niger State, Nigeria*

Abstract

The study is aimed at designing an appropriate ventilation strategy that will reduce the heat buildup in the attic of a model in Minna, North Central Nigeria. A model of ratio 1:3 of standard size was constructed with sandcrete blocks, fascia boards, roofing sheets and ceiling materials. The orientation of the model was such that the walls with the windows openings (which also have the soffit vents) were perpendicular to the North-East or windward directions. The model was sited around coordinate 9.53417°N, 6.4493°E within the Mechanical Engineering Department of Federal University of Technology, Minna Nigeria. Temperature measurements were taken at some designated areas within the attic space, ambient air temperature and relative humidity were also measured to inform the boundary conditions for the ANSYS simulation. Temperature data was collected when the inlet & outlet vents were Open, Half closed and fully closed. Simulations were also conducted to validate the results obtained from the experiment. The results show that the introduction of soffit and outlet vents reduced the attic temperature of the attic by 5°C in the last quarter of April 2024. In conclusion, the introduction of soffit and outlet vents reduced the heat buildup and has the capacity to reduce the attic temperature by 20°C, depending on the time of the year and the prevailing weather condition.

Keywords: *Experimental and Numerical Temperature measurement and Equipment*

Design and Implementation of a Smart Greenhouse

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Abubakar Tatari Ali Polytechnic Bauchi, Bauchi State.

Abstract

A smart greenhouse is a structure that allows the creation of an indoor microclimate for crop development and protection from adverse outdoor conditions. The techniques for climate control are to tune the crop needs and avoid unnecessary energy consumption. The use of fuzzy logic controller (FLC) represents a powerful way to minimize and facilitate management of climate conditions of the smart greenhouse. This microclimate is controlled by actuator components, which are the fans, heater and humidifier, as heating and cooling elements to provide the best environmental conditions for the crop and the design of fuzzy logic controller for the regulation of climate parameters in the greenhouse system to ensure that the temperature and humidity values of the greenhouse did not exceed 27°C and 60% respectively. The main components of the fuzzy logic controller include the fuzzification interface, knowledge-based, decision making logic and defuzzification interface. The controller senses the changes in the temperature and humidity through input sensors and processes to take control action. The circuit was designed and drawn using Proteus software and the controller has been designed using Matlab/Simulink software. The model of the system was developed using Matlab/Simulink software. The developed controller controlled the microclimate parameters of the sensors. The relay outputs for the fans, heaters and humidifier can be activated in normal scheduled operating mode. An integrated Liquid Crystal Display (LCD) is used for real-time display of the data acquired from the various sensors. The system works smartly and hence reduces human intervention. The implementation of the fuzzy logic based control system for the regulation of climatic parameters under greenhouse through heating and cooling to ensure an optimum temperature and humidity values of 27°C and 60% respectively. The obtained results show a good management performance to the greenhouse environment. It is recommended that more sensors should be added so as to monitor more parameters.

Keywords: *Greenhouse, Microclimate control, FLC, Automation.*

Combating The Impediments to Effective English Language Teaching in the UBE Scheme: The Role of Educational Managers in Nigeria

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Abstract

The quality of tuition in the UBE schools has fallen drastically in recent years. Stakeholders have been showing a great deal of concern in order to ameliorate the unfortunate situation. More often than not, the class teacher is perceived as the most important factor determining the implementation of the UBE English curriculum including the entire principles of the Nigerian Policy on Education. The deterioration of the quality of education at basic education level is attributed to some factors: dilapidated classroom infrastructures, low pay of basic education teachers, lack of facilities and resources, inability to make teaching a profession in Nigeria, parental and students' negative attitude to education and many others. This paper attempts to look at the situation from the perspective of educational managers/administrators and their impact on English language teaching in the Universal Basic Education (UBE) scheme in Nigeria. The paper believes that no matter the beauty of curricula and availability of teaching and learning facilities, the way school managers/administrators handle educational management and control is another determining factor for the success of English language teaching and of course, the successful implementation of the UBE scheme in Nigeria. The paper examines the traits of educational administrators and justifies the fact that they are part of the foundation stones of the English language teaching and learning process. The paper explores how administrators' personal and professional qualities influence greatly the entire process of English language education at basic level of education. It proffers recommendations on how administrators can use their positions to organise programmes that can improve the competence of English language educators for achieving both the immediate and remote objectives in English language teaching in the UBE programme in Nigeria.

Keywords: *School Administrators, English Language Teaching and UBE scheme*

Parallel Market Exchange Rate Premium and Growth Performance in Nigeria: Any Lessons for Building Economic Resilience?

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Abstract

This paper examined the effects of parallel exchange rate premium on Nigeria's economic performance. It utilized quarterly frequency data spanning from 2010Q1 to 2021Q4 as well as employed Structural VAR model with a recursively orthogonalized identifying restriction that is guided by underlying economic assumptions. The findings show that GDP growth rate responds negatively and significantly to a positive shock to exchange rate premium up to the second quarter. On the other hand, credit to private sector does not significantly respond to a positive innovation in exchange rate premium in Nigeria. It was equally found that positive shock in exchange rate premium causes base money to fall significantly up to the second quarter, while exchange rate premium significantly impacts domestic interest rate but in the long term. On the basis of the findings, the study recommends, among others, the need to conduct monetary policy reforms that will aim at closing the widening gap between the CBN approved exchange rate and the parallel rate. This will in turn minimize opportunities for rent seeking as well as eliminate the unwarranted pressure on dollar and its associated economic consequences on Nigeria's economy.

Keywords: *Parallel Market, Exchange Rate Premium, Growth Performance, Structural VAR, Impulse Response.*

Assessment of Attitude and Locus Control on Entrepreneurial Intentions of Senior Secondary School Students in Zaria Local Government Area of Kaduna State

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Abstract

This study aims to study the impact of attitude and locus control on entrepreneurial intention among secondary school students in Zaria local Government. The population of the study was made up of both male and female students of senior secondary school (SS 1) in Zaria local Government. A sample of 160 students both male and female was selected to make up the sample size for the study using random sampling technique. Two objectives, research questions and Hypothesis were developing to guide the study. The researcher developed the instrument for data collection titled "Attitude Locus Control and Entrepreneurship intention Questionnaires (ALCIQ). The Instrument is a 20 item questionnaire with four point scale responses of strongly Agree, Agree, Strongly and Disagree. Two experts from the department of Educational Psychology FCE, Zaria helps in the validation of the instrument. The reliability of the instrument was 0.81. The research questions were answer answered using the statistics of mean and standard deviation and the hypotheses were tested answered using the Pearson product moment correlation with the significant level of 0.0 using the IBM SPSS version 23. The results revealed that there is a significant impact of locus control on entrepreneurship interest among senior secondary school students in Zaria LGA of Kaduna State.

Keywords: *Assessment, Attitude, Locus Control, Entrepreneurial Intentions, Senior Secondary School Students*

Assessment of Skills Needs for Successful Operation of Small and Medium Scale Enterprises in Bade Local Government Area, Yobe State, Nigeria

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Abstract

The study will assess skills needs for successful operations of small and medium scale enterprises in Bade local government area Yobe State, Nigeria. The main aim of this study is to assess skills needs for successful operations of entrepreneurship among entrepreneurs in Bade Local Government Area, Yobe State. The study will have three specific objectives and three research questions. Survey design will be adopted in the study. The populations of the study will be 2,241. The sample size for the study will be 220 and was determine using GPower which is statistical software for power analysis and sample size calculation. Simple random technique will be used in this study. The instrument for data collection will be adapted questionnaire. The instrument will be validated by three experts and pilot study will be conduct. The reliability coefficient will be determined using Cronbach's alpha. The data will be collected by researcher and two (2) research assistants. The study will adopt descriptive statistics in analysing the responds that will be obtain from the respondents. The data that will be collect will be coded into Statistical Package for Social Science (SPSS). Mean scores and standard deviation will be used to answer the research questions that will be raised for the study. Finally, the study will make conclusions as well as recommendations.

Keywords: *Skills, Needs, Successful, Operations, Small and Medium Scale Enterprises*

Parametric Study on Natural Ventilation: A Case Study of Engineering Central Workshop, Federal University of Technology Minna

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Abstract

This study investigates the effectiveness of natural ventilation design in the Central Engineering Workshop of the Federal University of Technology Minna. The study begins with a comprehensive literature review on natural ventilation principles, factors influencing airflow, thermal comfort, and the application of Computational Fluid Dynamics (CFD) in building design. Subsequently a detailed 3D model of the workshop and simulation were conducted using the DesignBuilder-EnergyPlus software suite. Simulations for thermal comfort were done on the baseline model with a WWR of 30 % to attain the baseline model comfort data based on Simple ASHRAE 55-2004 throughout the year. The results obtained from the study regarding the predicted thermal comfort experienced by occupants indicated that the baseline thermal comfort sensation votes ranged between "hot" and "slightly warm," with occupants experiencing 30.74% discomfort hours and 69.26% comfort hours throughout the year. By implementing lighting control, the thermal comfort sensation improved and fell within the range of hot to neutral, resulting in a 1.37% improvement in the number of hour occupants' experienced thermal comfort. The introduction of mechanical ventilation without cooling had a minimal impact of 1.17% on occupancy thermal comfort. However, significant improvement was achieved with mechanical ventilation and scheduled cooling, which placed the predicted thermal sensation between "slightly warm" and "slightly cool," with the majority of occupants experiencing "neutral" conditions. This strategy increased comfort hours by 14.62% compared to the baseline.

Keywords: *Natural ventilation, Computational Fluid Dynamics (CFD), Thermal comfort, Sensational vote, Simulation*

Experimental Modelling and Simulation of Stand - Alone Experimental Photovoltaic Array for Different Climatic Conditions in Bauchi Metropolis

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Abstract

Stand-alone renewable energy based on photovoltaic systems accompanied with battery storage system are beginning to play an important role over the world to supply power to remote areas. The current state and the future potentials of renewable energy have increased globally to minimize the usage of other resources such as fossil fuel, which affect the environment. Abubakar Tatari Ali Polytechnic, Bauchi (ATAP) is a case where renewable energy will count for 75% of its energy consumption. Solar energy is abundantly available, so we have to extract and utilize it in a very efficient way. The central aim of this research is to develop an improved yet simple model that can simulate and accurately predict the output power of an installed photovoltaic array in school of Engineering of the Abubakar Tatari Ali Polytechnic, Bauchi and for different climatic conditions. The systems modelled consist of an array of PV modules, a lead-acid battery, and a number of direct current appliances.

Keywords: *Stand-alone, Photovoltaic, Renewable energy, PV system, Solar energy*

Emotional Intelligence and Socio-Economic Background as Determinant of Academic Achievement Among Students of Ahmadu Bello University Zaria, Kaduna State-Nigeria

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Abstract

This paper investigated the relationship of Emotional Intelligence, Socio-Economic Background and Academic Achievement among Students of Ahmadu Bello University Zaria, Kaduna State-Nigeria. Correlation designed was used for the study. Sample size of two hundred and seventy (270) students was drawn from five faculties in Ahmadu Bello University, Zaria, Kaduna State, Nigeria. Hypotheses formulated for the study were tested with Pearson Product-Moment Correlation (PPMC) and it was revealed from the study that all the hypotheses were rejected. The results showed that significant relationship exists between emotional intelligent and academic achievement ($r = 0.761$, $p = 0.001$). Also, significant relationship exists between socio-economic background and academic achievement ($r = 0.711$, $p = 0.000$). It was therefore recommended that, among others, The University counseling psychologists and lecturers should focus on teaching emotional intelligence as a strategy to develop academic behaviours and attitudes of students at the university. When students are educated to be emotionally intelligent, their general performance can be improved; and parents should give their children the adequate support needed, so as to enhance their academic achievement.

Keywords: *Emotional intelligence, Socio-economic background and students' academic achievement*

Analyzing the Core Diameter and Insulation Thickness of Electrical Wires within Designated Zones in Nigeria

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Abstract

The focus of this study was to examine the measurements of metal conductors and insulation thickness in copper cables sourced from both Nigerian and international brands. The primary aim was to gain insight into the causes of fire outbreaks resulting from overheating of electrical wires in residential and workplace environments. Cables of different cross-sectional areas (1.5mm², 2.5mm², 4mm², and 6mm²) were gathered from major markets and evaluated against established standards. The findings showed that certain commonly used sizes (1.5mm² and 2.5mm²) failed to meet the core diameter requirements specified by the Nigerian Industrial Standard, whereas 4mm² and 6mm² cables generally complied with these standards. Notably, all sampled cables exceeded the expected insulation thickness. To address deficiencies in core diameter, manufacturers compensated by adding extra insulation to meet the total cable diameter standards. As a result, reduced core diameters contribute to cable overheating and the frequent occurrence of fire outbreaks in Nigeria. Recommendations include intensified efforts by regulatory agencies and cable producers to combat piracy and mitigate these fire hazards.

Keywords: *Copper cables, Overheating of electric wire, Core diameter, Fire outbreaks, House wiring*

Development of a Self-Sustained Generator from a Detach 1KVA Generator

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Abstract

Self-sustained generator from a detach 1KVA Generator is an alternative source of power that is safe and efficient, the design and development is top notch. The system does not have an engine like the fuel generator which consumes fuel. Instead, it has a DC motor which is powered by a 12volts, 100Amps or above motor battery and recharges self while working. The materials for construction are; Capacitor, DC motor, speed controller; speed up gear, Ac to Dc charger, Battery, Ac alternator, Shafts and Gear. The alternator armature shaft was coupled directly with DC motor powered by a rechargeable battery. The DC motor rotates the armature of the alternator in the field coil at high speed when activated from the starting switch, which results in alternating current output voltages of 220V. The generator generates 1KVA of power with which you can use in home and offices to power some devices. The system is designed such that a built-in battery charger recharges the batteries at the same rate as the DC discharges the battery when drawing battery current. The System could be designed to any limit, depending on the capacity of the planned load. Result revealed an overall efficiency of 80% on a load of 500W and 700W respectively. The outcomes revealed that the generator can operate at higher efficiency if permanent magnet alternator is used and also if a higher charging system is incorporated to charge the battery.

Keywords: *Alternator, Dc Motor, Gear, Battery and Charger*

Ethics and Politics: Clarifying the Conceptual Linkages

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Abstract

The domain of ethics and that of politics presents two fundamental human inquiry that intersect and influence each other in profound ways. The study seeks to examine the conceptual linkages and 'epistemic overlap' existing between the two domains. The paper identifies "values" on the one hand and "rights" on the other as representative on central ideals in both ethics and politics respectively and explores the nuanced interconnectedness between moral principles and political practices in human society today. The paper draws on existing theoretical frameworks in political theory to illuminate and clarify the ethical foundations of political decision-making and governance. Using the expository, analytic and evaluative methods, the paper aims to enhance the integration of ethics and politics to foster a deeper understanding of the ethical dimensions of political discourse and action, ultimately contributing to a more ethical and just political society. In conclusion, this research reaffirms the assertion that politics and ethics helps to contribute to the values of morality and good governance especially in the contemporary political system.

Keywords: *Ethics, Politics, Conceptual Linkages, Moral Principles, Political Decision-Making, and Governance*

Effect of Reinforcement Technique on Withdrawal Behaviour Among Junior Secondary School Students in Gwale Kano State, Nigeria

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Abstract

This study investigated the Effect of Reinforcement Technique on Withdrawal Behaviour among Junior Secondary School Students in Gwale Kano State, Nigeria. A Quasi-experimental design involving pre-test and post-test was employed for the study. Purposive sampling technique was used in selecting the samples for this study. The total sample of the study was made up of 40 students with higher level of withdrawal behaviour identified by their pre-test score on the withdrawal personality scale (WPS). All the two groups were pre-tested and post-tested using withdrawal personality scale (WPS) designed for the study. Two null hypotheses guided this study and the hypotheses were tested at 0.05 level of significance. The finding revealed that reinforcement technique on reducing withdrawal behaviour ($t=-3.127, P=.007$), reinforcement technique has no relative difference on reducing withdrawal behaviour among male and female student, ($t=.763, P=.438$) P-value is therefore greater than the level of significance. Base on the findings of the study, it was recommended among others that Psychologists, Counselors and Teachers should be exposed to training on reinforcement techniques in addressing withdrawal behaviour among secondary school students.

Keywords: *Reinforcement technique, Withdrawal behaviour, Junior secondary school students*

Exploring the Contributions of Women to Agricultural Sector for Sustainable Rural Development in Yobe State, Nigeria

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Abstract

The present study has revealed that women in Nigeria play a crucial role in the development of agriculture, contributing about 70% of the farm labour. However, these contributions often go unnoticed by development partners and the communities themselves. Despite their hard work, these women are often limited to being day labourers, earning meagre wages for their efforts. Furthermore, access to land and decision-making processes are restricted, and they face challenges in accessing credit facilities from financial institutions. To address this issue, this research paper proposes a paradigm shift that recognizes women as agents of sustainable development. The researcher believe that empowering these women through adult literacy training programs would enable them to acquire essential skills, such as reading, writing, and basic arithmetic. By so doing, they can actively participate in farmer groups, gaining closer proximity to extension services and credit facilities. It is the researcher's firm belief that valuing and supporting the contributions of women in agriculture can unlock their potential as significant contributors to nation-building and sustainable development.

Keywords: *Exploring contributions, Agricultural Sector, and Sustainable rural development*

Language Education as a Panacea for Addressing the Emerging Issues in the 21st Century Nigeria

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Abstract

There is no gainsaying that Language Education is the key to managing, preventing and eradicating the emerging teaching and learning issues in a society. Thus, it is used to identify, explore and explain the teaching and learning the communicative issues in a multilingual setting like Nigeria where socio-cultural, socio-economic and political are abound. Attempts have been made to solve those issues vide Trans-language theory, Cen Williams (1980). "Trans-language is an approach in language education that encourages the use of multiple languages, including the students' native language, to support learning" The theory had been found to be useful in overcoming the challenges in other societies. Hence, attempt had been made, it has been advocated that the use of the trans-language approach is effective and efficient in the teaching and learning in our schools as it facilitate easy understanding the socio-cultural, socio-economic and political issues of our society. The paper concludes that, the use of trans-language should be adopted by language educators in our schools for the betterment of the multilingual setting such as Nigeria

Keywords: *Language, Language Education, Trans-language, Trans-language Theory and Emerging Issues.*

The Role of History and Heritage Studies in Addressing Africa's Development Crisis Amid Emerging Issues in the 21st Century

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Abstract

Africa, a continent with enormous potential and incredible human resources, is facing various challenges that are changing its development trajectory. The pervasive effects of colonialism combined with the emerging problems of the 21st Century like uneven technological advancement and climate change, constitute the forces of decline with which the continent is grappling. In furtherance of the above, it is crucial to note that the despicable status of African tourism and tradition is part of the underlying challenges bedeviling Africa's developmental programmes. In this respect, the usefulness of historical and heritage research in grasping and addressing these challenges becomes undeniable. Based on the above issues, this research explores the origin and trends of the development crisis in Africa; examines the relevance of historical and heritage research to address retrospective and prospective issues hindering Africa's development; highlights the challenges that disrupt the roots of African history and heritage as the most viable solutions to Africa's challenges and highlights through case studies and examples, innovative successful initiatives that integrate history and heritage studies into development projects. Using historical research methods which entail primary and secondary sources, the information needed for this research was extracted through interviews with various stakeholders. In addition, books, magazines and articles were also used as complement to the primary source earlier stated. The research concludes by providing recommendations for policymakers, researchers and practitioners to advance history and heritage studies for sustainable development in Africa.

Keywords: *Africa, Trajectory, Heritage, Ripple, Trend, Retrogression, Colonialism, Tourism*

Human Resource Outsourcing and Innovativeness of Manufacturing Firms in North Central, Nigeria

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Abstract

Organizations have embarked on human resource outsourcing strategies over the years but many still suffer in terms of their goal achievement; some have experienced low productivity both in terms of quality and quantity, their profitability has not been stable, and their capacities are grossly underutilized. This research work determined the effect of outsourcing human resource activities including recruiting process, training and development, also, payroll management on the innovativeness of manufacturing firms in north central Nigeria. Survey research design was adopted with a population of 1151 staff of 10 selected manufacturing firms and a sample of 289 selected using Taro Yamane's formula and distributed among the 10 firms. The variables were statistically analyzed using ordinal logistic regression (OLR) statistic. The study found that; outsourced recruitment process, outsourced training and development, and outsourced payroll management has a significant positive effect on manufacturing firm's innovativeness. The study therefore recommends that; manufacturing firms should embark more on outsourcing of recruitment process, training and development and payroll management to reap innovativeness. Also, follow up steps through effective communication and monitoring should be employed. In addition, manufacturing firms should ensure that, the cost of managing the outsourcing process is lesser than the benefits generated by the outsourcing program.

Keywords: *Human Resource Outsourcing; outsourced recruitment; outsourced training and development; outsourced payroll management; Innovativeness; Manufacturing firms*

Challenges in Financing Technical and Vocational Education and Training (TVET) in Post Primary School System in Ondo State

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Abstract

The study was designed to examine the extent of funding TVET in Post Primary School in Ondo State. The objectives of the study include to identify the present sources of financing TVET programme, determine the roles played by the Government and different bodies in encouraging the activities of TVET. Three research questions guided the study. And three hypotheses were tested. A survey research design was adopted. The population for the study consists of 7 Principals of technical and vocational education schools in Ondo State and three officials from the ministry of technical education in Ondo state which were studied without sampling as a result of sizeable population. A four-point rating scale questionnaire was used for data collection. The instrument was face validated by three expert in the field. The reliability of the instrument was determined using cronbach coefficient alpha and an overall reliability coefficient of 0.78 was obtained. The questionnaire was personally administered by the researcher. The data collected were analysed using percentage to answer the research questions. The findings revealed that the three arms of government are the present source of funding TVET, the problems associated with TVET programme and the strategies to be adopted TVET. The paper recommends that government and co-operate bodies concerned should support TVET, the control of finance for this programme should have a separate body to be managed by vocational administrator.

Keywords: *Vocational Education, Financing Technical and Training*

Impact of Creative Self-Efficacy and Psychological Well-Being on African Economies – Sustaining Growth and Poverty Reduction

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Abstract

This study explores the interplay between creative self-efficacy, psychological well-being, and their combined impact on economic dynamics in African nations. Investigating how individuals' belief in their creative capabilities influences innovation and entrepreneurial endeavors, the research delves into the broader implications for economic growth. Additionally, it examines the role of psychological well-being in enhancing workforce productivity and resilience to economic challenges. The findings underscore the potential of fostering creative self-efficacy and psychological well-being to sustain economic growth and contribute to poverty reduction in the context of African economies.

Keywords: *Creative, Self-efficacy, Psychological and African economies*

Youth Participation and Informal Sector Employment in Emerging Economy: Empirical Evidence from Nigeria

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Abstract

This study assessed the impact of youth participation in Nigeria's informal sector on employment generation in terms of livelihood improvement of the owner and staff through self-employment and/or job creation. Survey research design was adopted with a sample of 400 youths. The responses were analyzed using descriptive statistics and hypotheses tested using regression technique. The study found among others that; youth participation in informal economy has led to employment generation in Nigeria. However, Nigerian youth prefer jobs in formalized settings regardless of the nature of their earnings. Most do not consider their present occupations/business operation as employment and so, look forward to having a formal job. The study therefore recommends that, Nigerian youths should participate fully in the informal sector and take their businesses seriously as this is a form of employment that could get formalized; also, pay better than most formal jobs.

Keywords: *Youth participation, Employment generation, Livelihood improvement, Job creation, Informal sector*

Language Education and the Future

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Abstract

What will the language Education of the Future be like?. This is the million-dollar question which this paper is set to answer. While forced to stay at home because of COVOD 19, people all over the world have had all schools, market and formal gathering come to a standstill. According to UNESCO data, school closure in March 2020 affecting about 80% of the student population in the world as during the pandemic, the only tool to allow the continuation of education has been online teaching, both in formal and informal education. The pandemic has no doubt accelerated deep transformation in teaching and learning. The paper argues the online teaching and learning will not only replace education institution as we have come to know them, but it is destined to increasingly shape the future of the language Education industry.

Keywords: *Language, Education and Future*

Policy and Practices of Political Leadership and Implementation of Educational Reforms in Nigeria: Challenges and Way Forward

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Abstract

The study examined policy and practice of politics, leadership and the implementation of educational reforms in Nigeria: Challenges and way forward. The study specifically, described the nature and positions of policy implementations in educational reform policies and how slow implementation of the policies is damaging the education sector in Nigeria. The study identified and analyzed the basic objectives of National Policy on Education (NPE) and how the policy affects the Nigerian tertiary institutions. The methodological structure of the study was basically, conceptual, studied consulted secondary information regarding educational reforms and policy implementation in the Nigeria's educational sector. The study highlighted challenges facing the Nigerian tertiary institutions that led to backwardness in the sector which directly hinders socio-economic and political development of the nation. The study proffered number of recommendations that could be injected for sustainable educational development in the country.

Keywords: *Politics, Leadership, Policy implementation, Education and Challenges*

Development of a Portable Machine for Drying Vegetable Leaves for Preservation

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Abstract

Vegetables are edible products of a plant and its leaves (edible and inedible) serve as vegetable nutrients when eaten raw or cooked (as the case may be). The importance of vegetables and their leaves cannot be over-emphasized, as they are rich in vitamins and minerals but low in calories thus, resistance to heart attack and high blood pressure. But because they (vegetable leaves) are prone to rot, they need to be well preserved in order to minimize pathogenic bacteria; kept at their best quality and to avoid excess wastage when they are out of season. Here comes in the idea/ thought of developing a portable machine to preserve them through the process of drying. The machine was designed to be portable, containing two equal rectangular shaped cabinets, each having three equal squared tray plates. This study develops a portable machine for developing vegetable leaves for preservation; to work electrically, using a circuit box containing a switch, a contactor and a temperature controller. The source of heat was through a heating filament of capacity 1,800 W. The developed machine also contained a 12 V, 25 W D.C motor and a propeller shaft which works to extract moisture from the drying materials being: fluted pumpkin leaf (*Telfaria accidentalis*), water leaf (*Talinum triangulare*) and bitter leaf (*Vernonia amygdalina*). The result of this study shows the mass of water removed during drying for the aforementioned three varieties of vegetable leaves as 3,500g, 4,387.5g and 3,850g respectively; amount of moisture extracted as: 72.9%, 75%, and 73.3% in that order; total heat energy required to extract moisture as: 2,858.4 kJ and the efficiency of the developed machine which was evaluated to be 70.6%. This implies that the developed machine is capable of drying the three varieties of vegetable leaves used for this study thereby avoiding wastage, high price when out of season among other benefits.

Keywords: Portability, Drying, Vegetable Leaves, Preservation

Emotional Intelligence and Socio-Economic Background as Determinant of Academic Achievement Among Students of Ahmadu Bello University Zaria, Kaduna State - Nigeria

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Abstract

This paper investigated the relationship of Mental Health, Socio-Economic Background and Academic Adjustment among Students of Ahmadu Bello University Zaria, Kaduna State-Nigeria. The objectives of the study are to: ascertain the relationship between mental health and academic adjustment among students of Ahmadu Bello University Zaria, Kaduna State-Nigeria; and ascertain the relationship between socio-economic background and academic adjustment among students of Ahmadu Bello University Zaria, Kaduna State-Nigeria. Research questions and hypotheses were formulated in line with the study objectives. The design adopted in conducting this study is correlation design. The population of this study was made up of eight hundred and eighty-seven (887) students. The sample of this study is 270 drawn from 300L students. Three instruments were used for this study. The instruments are Mental Health Inventory (MHI), Socio-Economic background Inventory (SEI) and students' Academic Adjustment (AAI). Pearson Product Moment Correlation PPMC(r) was used to test the study hypotheses. The hypotheses were tested at a 0.05 alpha level of significance. SPSS version 25.0 was used for the analysis. The finding of the study revealed that a significant relationship exists between mental health and academic achievement ($r = 0.7612$, $p = 0.001$). The finding also revealed that a significant relationship exists between socio-economic background and academic adjustment ($r = 0.7113$, $p = 0.000$). It was therefore recommended that: college psychologists should be able to address students with mental health problems for better academic adjustment and subsequently enhance academic performance; and parents should give their children the adequate support needed, so as to enhance their academic performance.

Keywords: *Mental health, Socio-economic background and students' Academic adjustment*

Effect of Firms Attributes on Earnings Management of Listed Industrial Goods Companies in Nigeria

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Abstract

The purpose of this study is to examine the effect of corporate attributes on earning management of listed industrial goods companies in Nigeria for the period of five (5) year, from 2016 to 2020. The population of the study is all the seventeen (17) listed industrial goods companies from where the twelve (12) constitute the working population of the study. Secondary data was extracted from the sampled institution's published annual audit report and CBN's annual reports for the five years under review. This study used descriptive statistics, correlation and multiple regressions to analyze the data. Earning management was measured using discretionary accruals (DAC) while corporate attributes was measured by firm size, leverage and liquidity. The results revealed that firm size and liquidity have significant effect on discretionary accruals (DAC). However, leverage has insignificant effect on discretionary accruals (DAC). This shows that corporate attributes significantly affects earning management of listed industrial goods companies in Nigeria. The study concluded that bigger firms tend to maintain their reputation in the market, thereby involving more discretionary accruals. Evidence from the study further reveals that a significant positive relationship exists between firm attributes and discretionary accruals (earnings management). This result appear to corroborate the suggestion that firm attributes is a variable that tends to influence a firm's tendency to manage earnings and might affect the magnitude of earnings. Recommendations made include: that firm should control their debt level in order to reduce the manipulation in accrual management. As companies capitalized on the size of the firm enhances the manipulation of financial statement by management for the purpose of increasing the company's profitability position.

Keywords: *Firm Size, Leverage, Liquidity and Discretionary Accruals*

Marketing and Artificial Intelligence: A Paradigm Shift

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Abstract

A paradigm shift is a fundamental changes and artificial intelligence in marketing is a rapidly emerging field that is changing the way businesses approach their marketing tasks and strategies. It signifies a fundamental shift in the way marketers view, interact and target customers. Better consumer interaction, targeting customers and making efficient decision are all made possible with artificial intelligence ability to provide data-driven insights, personalized experiences, predictive analytics and automation in marketing efforts. With the explosion of data and increasing complexity of customer behavior, businesses need to leverage these tools to stay competitive. This study examines the effect of artificial intelligence in marketing, how artificial intelligence has caused remarkable growth and differences in marketing. This study also focuses on the future of artificial intelligence in marketing and it's potential impact on the marketing landscape.

Keywords: *Marketing, Artificial Intelligence, Paradigm Shift*

Problems and Prospects of Point-of-Sale Service Delivery in Nigerian University

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Abstract

This study examined the problems and prospects of point-of-sale service (POS) delivering Nigerian University with particular focus on Federal University Otuoke. The study discussed the level of customer's satisfaction with point of sales (POS) usage and service delivery. The research questions seek to examine the nature of service delivery by POS operators and its manifestations on the level of satisfaction derived by students of Federal University Otuoke. The study adopted diffusion and innovation (DOI) theory developed by Rogers (1962). The mixed method research design guided the study and Data were sourced through primary and secondary means. The Taro Yamane formula was used to deduce the sample size of a total of 388 students across six faculties, after which a structured questionnaire was used to elicit the needed information. The content analysis and thematic approach were used to explain the In-depth interviews (IDI) conducted among six POS merchants while descriptive statistics was used for the questionnaire. Findings indicated that customers welcomed the services of POS operators but were displeased with hike in service charge, incessant network glitches arising from epileptic internet services and paucity of funds by operators. Recommendations include the reduction in service charge, social relations between banks and POS operators and provision of strong internet services to foster smoothing service delivery.

Keywords: *Point of Sales (POS), Satisfaction, Service Delivery, Students, Federal University Otuoke, Customer*

Preferred Prefab: Examining the Cultural Acceptance of Assembly-Line Homes for Sustainable Housing Delivery in Nigeria

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Abstract

This study takes an exploratory look at the extent to which culture could be integrated with building innovation for the delivery of prefabricated housing solutions in Nigeria. The study utilised a content analysis model of case studying to review developments in prefabricated housing with the specific objective of proffering sustainable off-site housing models that will not only be climate responsive and affordable, but will also draw inspiration from the cultural and ancestral patterns users can relate to. The study findings show significant ongoing dialogue between design/building innovation and social architecture which imbibe cultural values in a few of case studies. The study also uncovered potential for improved affordability of prefabricated housing using 3D printing techniques and modular installation of housing units crafted from locally sourced or recycled eco-waste. The study recommends widespread experimental testing of alternative building materials and products to further drive prefab housing costs downwards, as well as future collaborations between vernacular architects and building innovators towards practical realisation of sustainable development housing goals. The study also encourages wider empirical studies on the degree of acceptance of prefab housing solutions in countries like Nigeria in a bid to sensitise target users on the potentials of off-site construction.

Keywords: *Prefabrication, Sustainable housing delivery, Vernacular architecture*

The Effect of Engineered Polymer Based Coatings on Corrosion Control of Metal Protection in Harsh Service Environment

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Abstract

Corrosion is the main factor that hinders the effective utilization of metals and alloys in harsh service environment. The effect of corrosion has led to a huge loss of economic and human resources globally. Corrosion of metals in harsh service environment such as marine environment is inevitable. Organic coating has been observed to be one of the most effective and less expensive methods of corrosion control for metals and alloys such as steel, in corrosion prone environment. The aggressive nature of corrosion in harsh service environment has led to an extensive research work of developing coatings from engineered polymers that can protect structures employed in harsh service environment. Despite, the numerous advantages of these advanced engineered coatings; it's not without its limitations. The aim of this review is to examine the effect of self-healing, super hydrophobic and sol-gel engineered polymer based coatings on corrosion control of metal protection in harsh service environment.

Keywords: *Corrosion, Metals and alloys, Super hydrophobic, Sol-gel and Engineered polymer*

The Use of Politeness Principles by Nigerian Politicians in their Political Campaigns to Preclude Political Crisis

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Abstract

This paper examined the use or nonuse of politeness strategies by politicians in their political campaigns. The study employed a combination of two analytical approaches – the Close Text Analysis (CTA) and the Narrative Paradigm - to interpret and analyse the selected texts and contexts (sourced from You Tube platform) of utterances of two gubernatorial candidates in Kaduna State during their campaigns for governorship election in 2015. The paper used the Leech's framework of politeness maxims in the analysis of the sampled texts of political campaign utterances by politicians from the two prominent political parties in the country, to determine their conformity or otherwise with the politeness principles. The paper found out that politicians do not make use of politeness principles in their campaigns; consequently, they divide the Nigerian populace along the various interests of the different political actors, and have therefore brought about conflicts within the society; the state that, usually, threatens the survival of democracy in the country and brings about chaos and disaster. It concluded that true change is achievable only when politicians adjust their conduct by adhering to maxims of politeness. It therefore recommended that politicians should be sensitized to develop the skill of display of socio-political expertise and competence, personal ethics and integrity, control of emotions, and development of professional image in order to produce nationalistic followership and create a balanced political atmosphere in the country.

Keywords: *Politeness principles, Nigerian politicians and Political campaigns*

Effect of Community Policing Strategy in Combating Banditry in Takum Local Government Area of Taraba State, Nigeria

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Abstract

The study assessed the effect of Community Policing in combating Banditry in Takum Local Government Area of Taraba State, Nigeria. The work adopted a documentary and survey research method. The main instrument for data collection was the secondary data which was completed by primary sources. The method of data analysis was the adoption of simple frequency conversion to percentages. After data collection, presentation and analysis, the study finds out that community engagement has helped reduce banditry activities, address root causes of banditry, empower local communities, and improve security and safety in Takum Local Government Area and joint patrols have increased police visibility, improved community-police relations, and contributed to the apprehension of criminals and reduction of banditry activities in Takum Local Government Area. Based on the followings, the study suggest that the local authorities and law enforcement agencies should establish or strengthen existing community-led security forums. These forums can serve as platforms for residents to actively participate in identifying security challenges, brainstorming solutions, and working collaboratively with law enforcement agencies to implement these solutions. Also, it was further recommended that law enforcement agencies and community stakeholders should collaborate to plan and execute regular, targeted joint patrol operations in areas identified as hot spots for banditry activities. This approach not only enhances police visibility and deterrence but also strengthens community-police relations by involving community members in the planning process.

Keywords: *Community Policing, Banditry, Combating, Community engagement, Joint patrols, Community intelligence gathering, Crime Prevention*

