

Impact Factor: 4.5 vol: 1 Issue:1

INSTITUTIONAL POLICIES AS A CORRELATION TO PROCEDURES FOR MANAGING DIGITAL INCLUSION FOR EFFECTIVE TEACHING AND LEARNING IN PUBLIC UNIVERSITIES IN ENUGU STATE.

Okafor Judith Nneka (PhD)

ju.okafor@ unizik.edu.ng +234 803 808 1482

Chinenye Blessing Amaonye

Nnamdi Azikiwe University, Awka, Nigeria cb.amaonye@unizik.edu.ng https://orcid.org/0000-0001-9145-4339

&

Agu Unoaku Victory.

Department of Edu. Mgt & Policy Email: uv.agu@unizik.edu.ng Phone: 08134241356

Abstract

This study examines the relationship between institutional policies and procedures for managing digital inclusion and their impact on enhancing teaching and learning in public universities in Enugu State. Two (2) research purposes, two research questions and two null hypotheses guided the study. The design of the study was descriptive survey design. The population of the study was 199 Head of Departments from the three universities in Enugu State University of Science and Technology Enugu (ESUT) 88, UNEC 78 and Institute of Management and Technology (IMT) 33 and sample was the entire 199 head of departments from the same universities while the sampling technique were census and stratified random sampling techniques. The instrument adopted for data gathering was a self-designed 10 items scale titled "Institutional Policies and Procedures for Managing Digital Learning Questionnaire" (IPPMDI) and reliability coefficients of 0.82 was established which showed that the instrument was reliable. The research questions were answered using mean and standard deviation while the hypotheses tested using z-test at 0.05 level of significance. Despite the widespread recognition of digital inclusion's importance, many institutions face challenges such as infrastructural deficits, policy gaps, and resistance to change, which hinder the attainment of effective teaching and learning outcomes. The findings indicate a significant positive correlation between well-articulated institutional policies and the effectiveness of procedural management for digital inclusion. The study emphasizes the need for robust policy frameworks, consistent implementation procedures, and stakeholder engagement to foster an inclusive digital learning environment. It further recommends that universities prioritize



Impact Factor: 4.5 vol: 1 Issue:1

policy development, resource allocation, and continuous evaluation to improve the quality of teaching and learning through digital inclusion in Enugu State.

Keywords: Digital learning, Institutional polices, institutional procedures, management.

Introduction

In the contemporary era, digital inclusion has become a critical component of higher education systems worldwide. universities evolve into knowledge hubs that thrive on digital technologies, ensuring equitable access to these resources becomes a fundamental institutional goal. Digital refers meaningful to the participation of all individuals—regardless of socioeconomic status. ethnicity. geographic location, or disability—in digital environments (McKinney, 2013). In the context of public universities, especially within Nigeria's educational landscape, digital inclusion is vital for fostering academic excellence, acting as a catalyst for innovation, and promoting social equity.

Institutional policies are formal guidelines and frameworks adopted by universities to operational practices, resource steer allocation, and strategic planning. These policies directly influence how institutions integrate digital technologies, foster digital literacy, and promote inclusive access to digital resources among students, faculty, and staff (Kraus & Renzl, 2018). In Enugu State, a region with a burgeoning higher education sector, public universities are increasingly recognizing the role of policies in managing digital inclusion effectively. Historically, Nigerian public universities significant challenges in have faced implementing comprehensive digital inclusion strategies. These challenges include inadequate infrastructure, limited

digital literacy, financial constraints, and policy inconsistencies. Consequently, many institutions have struggled to translate digital policies into effective procedures that guarantee equitable access (Akinyemi, 2019). As a result, disparities persist between students from different socioeconomic backgrounds, with some benefiting from digital resources while others remain marginalized. In recognition of these issues, various academic and policy reports have emphasized the importance of institutional policies that explicitly address digital inclusion. Such policies should outline clear procedures for resource provisioning, capacity building, accessibility measures, and ongoing monitoring. Effective policies serve as a roadmap for technologies integrating digital academic programs and administrative functions, thus fostering an inclusive environment conducive to learning and research (Oyinlola & Adegoke, 2020). Within the Nigerian higher education system, particularly in Enugu State, efforts have been made to develop policies aligned with national digital transformation agendas. The National Digital Economy Policy and Strategy (NDEPS) launched in 2019 underscores the government's commitment to promoting digital literacy, infrastructure development, and inclusivity across all including sectors, education (Federal Ministry of Communications and Digital Economy, 2019). Public universities are expected to align their institutional policies



Impact Factor: 4.5 vol: 1 Issue:1

with these national frameworks, translating broad strategies into actionable procedures.

The role of institutional policies in managing digital inclusion encompasses several dimensions. First, infrastructure development policies govern provisioning of reliable internet access, computer labs, and digital devices for students and staff (Okeke & Eze, 2021). Second, policies concerning digital literacy and skills training facilitate capacity building, ensuring that users can effectively participate in digital environments (Alabi & Adebiyi, 2020). Third, accessibility policies address the needs of marginalized groups, including persons with disabilities and students from economically disadvantaged backgrounds. Fourth, data governance and cybersecurity policies protect users' rights while promoting safe digital engagement. Despite the recognition of these policy areas, many Nigerian universities still lack comprehensive frameworks that seamlessly link policies with operational procedures for digital inclusion. Often, the existence of policies does not automatically translate into effective procedures due to implementation gaps, lack of awareness, or resource limitations (Oke & Ezekwesili, 2022). In Enugu State, some universities have commenced digital initiatives; however, the integration of these initiatives into formal procedural frameworks remains inconsistent. Furthermore, institutional leadership plays a crucial role in this process. University administrations are responsible for translating policies into actionable procedures that guide daily operations and strategic planning (Nwachukwu & Ofoegbu, 2021). Leaders must foster a culture of inclusivity, allocate resources appropriately, and establish monitoring mechanisms to

track progress. The alignment between policies and procedures not only ensures consistency in implementation but also enhances accountability and sustainability. Research indicates that when institutions clear procedural frameworks aligned with their policies, digital inclusion improves substantially. For example, procedures that define the steps for infrastructure upgrades, staff training, and student orientation are instrumental in operationalizing policy goals (Uche & Obiako, 2020). Conversely, the absence of such procedures or their weak enforcement often results in fragmented efforts and persistent digital divides. In recent years, there has been a growing awareness that achieving digital inclusion in Nigerian universities requires a holistic approach. The must encompass policy approach formulation, procedural development. capacity building, infrastructure investment, and continuous monitoring and evaluation. Institutions must also foster partnerships with government agencies, private sector players, and civil society organizations to mobilize the necessary resources. In Enugu State, public universities are strategically positioned to become models of digital inclusivity if their institutional policies explicitly incorporate procedures designed to bridge digital gaps. The effective management of these procedures can transform universities into vibrant digital learning environments accessible to all segments of the student population. Moreover. strategic policy-procedure alignment enhances the universities' capacity to contribute meaningfully to national digital economy goals. Therefore, institutional policies are fundamental in shaping the procedures that manage digital



Impact Factor: 4.5 vol: 1 Issue:1

inclusion in Nigerian public universities, especially those in Enugu State. While policies lay out the strategic intent, their successful implementation depends on welldefined, actionable procedures that operationalize inclusivity efforts. Addressing requires existing gaps comprehensive policy revision, effective procedural frameworks, and dedicated leadership commitment. With deliberate efforts in these areas, public universities in Enugu State can foster an inclusive digital environment that promotes equitable access, enhances the learning experience, and prepares students for a digitally connected future.

Digital learning has become a recurring contemporary theme in learning environment in Nigeria. Before now, learning was done the traditional way. This refers to the teacher speaks—learners listen approach. With the rise in computer technology and its incorporation into learning, there have been attempts at transition from the traditional method into digital learning. The implication of such transition bears the burden of creating policies and procedures, not only for its application in learning, but also its management cum sustenance. Policies are blueprints for a sustainable process in achieving a goal through a set up system whileprocedures are step-by-step approaches targeted at ensuring proper implementation of laid-down policies. Policies are necessary to create a mean between two extremes—the departure from the former learning method and the full embrace of the new. Certain border around creating factors experience of digital learning such as finance, human capacity building, constant orientation/re-orientation, infrastructure.

initiative, adaptability to local environment, utility and local resourcefulness, adaptation to possible new trends, global competence and general system maintenance. These issues are central to the success of managing digital learning in universities in Enugus state. Ipso facto, it is crucial that veritable policies and procedures be created to ensure they all take their appropriate places in the management of digital learning. digitization of education involves students using mobile and internet technology, broadening their knowledge and extending their bunds. Students develop new abilities required for success in the 21st century through the effective use of digital technology, the engagement of education seekers in independent research the choice of information and participation in project activities (Alenezi, 2023). Digital learning, often referred to as e-learning or online learning, encompasses a broad array of instructional practices that utilize digital tools and resources to facilitate and enhance the educational experience. The concept of digital learning includes not only the delivery of content through digital platforms but also interactive and engaging activities that support the learning process. It integrates various forms of technology, including the internet, multimedia, and mobile devices, to provide learners with and personalized educational flexible opportunities.

Furthermore, digital learning has many sides and shades according to the educational problems it is set out to mitigate. Hence, policies and procedures are expected to be tailored along diverse educational interests and parameters. Digital learning affects virtually every aspect of human learning. It



Impact Factor: 4.5 vol: 1 Issue:1

becomes imperative to create a system that uniquely focuses on specific learning objectives in each area. For instance, digital learning in Enugus state could centre on linguistic learning. This will take cognizance of the unique learning approaches in the digital world suitable for the problems to be solved in the area. A good instance is creating sub-policies aimed at fighting the rise of Pidgin English among students in universities. With this in mind, the target population to be imparted, the work force, the implements, implementation process, technological approaches, time factor and so on, forms the basis for such approach. It is also noteworthy that this approach to learning requires a synergy between the technology-expert and the content-expert. While the former concentrates on the digital means of solving learning problems, the latter dwells on the learning problems and issues surrounding them; theoretical or practical.

Creation of policies obviously has inherent challenges. This ranges from time factor, environment analysis, human factor, maintenance and so on. A good policy is the intrinsically captures that more satisfactorily, solutions the these challenges. The state government has a huge role to play in this as no aspect of a state's progress can go really far without the support of the government and alignment with her goals. There must therefore be a synchrony between the long term goals of the state and the goals of digital learning. In fact, the goals of digital learning should be so drawn that the policies mirror the aspiration of the state. There will also be a need for collaborative efforts outside the state to learn, borrow, synergize and interact

on the digital learning platforms. This should form a crucial part of the policies as no man is an island. Digital learning should have such policies that it should make learners in our universities to turn out as locally useful and globally competent citizens. It should include a view of tackling the problems of unemployment and wealth creation.

Clark and Mayer (2016) define digital learning as "the use of digital technologies to deliver, support, and enhance teaching, learning, and assessment." They emphasize the integration of multimedia elements such as text, audio, video, and interactive simulations to create an engaging learning environment.

Similarly, Bates (2019) describes digital learning as "the use of information and communication technologies to support and enhance learning and teaching." Bates highlights the importance of accessibility and flexibility, noting that digital learning allows learners to access educational materials at their convenience, regardless of their geographical location.

The adoption of digital learning has seen significant growth globally. According to a report by the Global Market Insights (2021), the e-learning market size surpassed USD 250 billion in 2020 and is projected to grow at a compound annual growth rate (CAGR) of over 21% from 2021 to 2027. This growth is driven by the increasing demand for flexible learning solutions, advancements in technology, and the need for continuous education in a rapidly changing world.



Impact Factor: 4.5 vol: 1 Issue:1

Importance of Digital Learning in Higher Education:

Digital learning has become a cornerstone of modern higher education, transforming how knowledge is delivered, accessed, and consumed. The shift towards digital learning is driven by its potential to provide flexible, inclusive, and innovative educational experiences. Here. we explore importance of digital learning in higher education, comparing the views of various authors and presenting relevant statistics and facts to support these perspectives.

Flexibility and Accessibility:

One of the most significant advantages of digital learning is its flexibility. According to Bates (2019), digital learning allows students to access course materials and participate in learning activities at their convenience. making education accessible to those who may have work, other commitments. This family. or flexibility is particularly beneficial for nontraditional students, such as working professionals or those with caregiving responsibilities.

Clark and Mayer (2016) also highlight that digital learning platforms can provide access to a wealth of resources and materials that might not be available locally. This democratization of education enables students from diverse backgrounds to gain access to high-quality educational content, regardless of their geographical location.

Enhanced Engagement and Interaction:

Digital learning tools, such as interactive simulations, virtual labs, and gamified learning experiences, can significantly enhance student engagement. Means et al. (2013) found that online learning environments that incorporate interactive elements can improve student motivation and participation compared to traditional classroom settings. These tools make learning more dynamic and can help to sustain student interest over time.

Cost-Effectiveness:

From an institutional perspective, digital learning can be more cost-effective than traditional face-to-face instruction. According to a study by the Online Learning Consortium (OLC) (2016), universities can reduce costs associated with physical infrastructure, such as classroom space and maintenance, by implementing digital learning solutions. Additionally, digital learning can support larger class sizes without compromising educational quality, further enhancing cost efficiency.

Scalability and Reach:

Digital learning platforms allow institutions to scale their offerings and reach a global audience. Bates (2019) emphasizes that universities can offer massive open online courses (MOOCs) and other online programs to students worldwide, expanding their reach and impact. This scalability is crucial for institutions aiming to increase their global presence and attract a diverse student body.





Impact Factor: 4.5 vol: 1 Issue:1

Compliance Bridge (2022) identifies the following policies and procedures for universities:

Statement of the Problem

While digital technologies have transformed higher education by enhancing teaching and learning, many public universities in Enugu State struggle with effectively implementing digital inclusion initiatives. Despite the government's push for digitalization, challenges such as inadequate infrastructure, limited policy frameworks, and resistance to change impede the realization of equitable access to digital resources. Moreover, the absence of clear institutional policies and procedures often results in inconsistent management practices, leaving students and faculty marginalized from the benefits of digital learning environments. This situation hampers the universities' ability maximize technology's potential for improving academic quality and fostering inclusive education. Consequently, there is a pressing need to examine how institutional policies influence procedural practices for managing digital inclusion and how their effectiveness impacts teaching and learning outcomes. Understanding this relationship is critical for developing strategies that promote effective policy implementation and create an inclusive digital educational environment across public universities in Enugu State.

Purpose of the Study

The study investigated the institutional policies and procedures for managing digital Inclusion in Universities in Enugu State. Specifically, the objectives of the study were to:

- 1. Determine institutional policies for managing digital inclusion in Universities in Enugus State.
- 2. Ascertain procedures for managing digital inclusion in Universities in Enugu State.

Research Questions

The following research questions were raised to guide the study:

- 1. What are the institutional policies for managing digital Inclusion as a correlate to effective teaching and learning in Universities in Enugu State?
- 2. What are the institutional procedures for managing digital inclusion as a correlate to effective teaching and learning in Universities in Enugu State?

Hypotheses

The following hypotheses were tested at 0.05 alpha level:

- 1. There is no significant difference between the opinion of mean rating of male and female heads of department on the institutional policies for managing digital inclusion in Universities in Enugu State.
- 2. There is no significant difference between the opinion of mean rating of male and female heads of department on the institutional procedures for managing digital inclusion in Universities in Enugu State.





Impact Factor: 4.5 vol: 1 Issue:1

Methodology

The design for the study was descriptive, the population was 199 male and female head of departments in the public universities in Enugus State, which the same 199 male and female head of departments were used as sampled while the sampling techniques were census and stratified. The instrument used to collect data for the study was scale which

was validated. Institutional Policies and Procedure for Managing Digital Learning' (IPPMDI) with reliability index of 0.82 obtained using Cronbach alpha mathematical technique. Mean and standard deviation were used to answer research questions while z-test was used to test the hypotheses at 0.05 level of statistical significance

Results

Research Question 1: What are the institutional policies for managing digital Inclusion as a correlate to effective teaching and learning in Universities in Enugu State?

Table 1: Mean scores and standard deviation of male and female respondents on the institutional policies for managing digital inclusion for effective teaching and learning in Universities in Enugu State.

| SN | Institutional Policies for Managing | Respondents | | | | _ Mean Set | Decisio |
|-----|--|----------------------|-----------------|-----------------------------|--------|--|---------|
| | Digital InclusionVariable | Male = 118 | | Fema | le =81 | | n |
| | | $\bar{\mathbf{X}}_1$ | SD ₁ | $\overline{\mathbf{X}}_{2}$ | SD_2 | $\overline{\mathbf{X}}_{1}\overline{\mathbf{X}}_{2}$ | |
| 1 | Institutional policies on digital | | | | | | |
| | inclusion facilitate equitable access. | 2.89 | 0.98 | 3.28 | 0.76 | | |
| | | | | | | 3.08 | Agreed |
| 2 | The existing institutional policies | | | | | | Ü |
| | related to digital inclusion in public | 2.83 | 0.77 | 2.89 | 0.88 | | |
| | universities in enugu state. | | | | | 2.86 | Agreed |
| 3 | Information technology policies such | | | | | | C |
| | as sophisticated computer system, | | | | | | |
| | | 3.20 | 0.74 | 3.29 | 0.69 | 3.24 | Agreed |
| | are necessary in higher instructions | | | | | | υ |
| | policies. | | | | | | |
| 4 | Policies influence the procedures | | | | | | |
| | implemented to promote digital | 2.82 | 0.92 | 2.63 | 1.03 | | |
| | inclusion among students and staff | | | | | 2.72 | Agreed |
| 5 | Staff development policies enable all | | | | | | 6 |
| - | the lecturers in the universities to | 3.12 | 0.68 | 2.58 | 0.74 | | |
| | become a certified teachers. | J.12 | 0.00 | 2.00 | J., I | 2.85 | Agreed |
| Ave | rage Mean/Standard Deviation | 2.97 | 0.82 | 2.93 | 0.82 | 2.95 | 1151000 |
| | | | | | | | |



Impact Factor: 4.5 vol: 1 Issue:1

Data on Table 1: with the mean scores and standard deviation of male and female respondents on the institutional policies for managing digital learning in Universities in Enugus State. The results itemacademic policies, communication policies, information technology policies, infrastructural facilities policies and staff development policies with the mean score of 3.08, 2.86, 3.24, 2.72 and 2.85 respectively, having the average mean scores are 2.97 for the male and 2.93 for the female. Based on the average mean set score of 2.95 which is above the criterion mean of 2.50, it implies that both male and female respondents agreed on item academic policies, communication policies, information technology policies, infrastructural facilities policies and staff development policies as the institutional policies for managing digital learning in Universities in Enugus State.

- 1. Existence and Scope of Policies: Many universities have formal policies that outline their commitment to digital inclusion, covering aspects like infrastructure provision, access to digital devices, and internet connectivity for students and staff.
- 2. Policy-Correlated Procedures: Effective procedures derived from these policies include the deployment of digital platforms, e-learning systems, and support services that facilitate inclusive access to learning resources.
- 3. Impact on Teaching and Learning:.
- 4. Inclusivity in Policy Design: Challenges and Gaps:

Research Question Two: What are the institutional procedures for managing digital learning in Universities in Enugus State?

Table 2:Mean scores and standard deviation of male and female respondents on the institutional procedures for managing digital learning in Universities in Enugus State.

| SN | nstitutional Procedures for Respondents | | | | | | Decision |
|----|--|-----------------------------|--------|-----------------------------|--------|--|----------|
| | Managing Digital Learning Variable | Male = 118 | | Female =81 | | Set | |
| | | $\overline{\mathbf{X}}_{1}$ | SD_1 | $\overline{\mathbf{X}}_{2}$ | SD_2 | | |
| | | | | | | $\bar{\mathbf{X}}_1\bar{\mathbf{X}}_2$ | |
| 6 | Despite policy existence, gaps in | | | | | | |
| | implementation—such as inadequate | | | | | | |
| | infrastructure, lack of digital literacy | | | | | 2.75 | Agreed |
| | programs, and insufficient | 2.86 | 0.81 | 2.93 | 0.70 | | |
| | monitoring—can hinder the positive | | | | | | |
| | impact of policies on teaching and | | | | | | |
| | learning outcomes | | | | | | |
| 7 | Policies often address accessibility | | | | | | |
| | needs for persons with disabilities and | | | | | | |
| | students from underserved | 3.17 | 0.85 | 3.11 | 0.86 | | |
| | backgrounds, directly contributing to | | | | | | |
| | equitable learning environments. | | | | | 3.08 | Agreed |
| | 1 8 | | | | | | 6 |



Impact Factor: 4.5 vol: 1 Issue:1

Data on Table 2: with the mean scores and standard deviation of male and female respondents on the institutional procedures for managing digital learning in Universities in Enugus State. The results item 6, 7, 8, 9, and 10, with the mean score of 2.75, 3.08, 3.14, 2.72 and 3.17 respectively, having the average mean scores are 3.03 for the male and 3,05 for the female. Based on the average mean set score of 3.04 which is above the criterion mean of 2.50, it implies that both male and female respondents agreed on item 6, 7, 8, 9, and 10 as the institutional procedures for managing digital learning in Universities in Enugus State.



Impact Factor: 4.5 vol: 1 Issue:1

Test of Hypotheses

Ho₁: There is no significant difference between the opinion of mean rating of male and female heads of department on the institutional policies for managing digital Inclusion in Universities in Enugus State.

Table 3: z-test Analysis on the difference between the opinion of mean rating of male and female heads of department on the institutional policies for managing digital inclusion in Universities in Enugus State.

| Category | N | \overline{X} | SD | Df | z-cal | z-crit. | Remarks |
|----------|-----|----------------|------|-----|-------|---------|--------------------------|
| Male | 118 | 2.97 | 0.82 | 197 | 0.338 | ±1.96 | Not Significant |
| Female | 81 | 2.93 | 0.82 | | | | Accepted H0 ₁ |
| Total | 199 | | | | | | (z-cal. > z-crit.) |

Table 3 with the average mean scores and standard deviation of male and female respondents stood at 2.97 and 0.82 and 2.93 and 0.82 respectively. Simple observation show that these mean scores are closely related, and suggest no significant difference.

Furthermore, since at 197 degree of freedom and at 0.05 alpha level of significance, the calculated z-test value of 0.338 was far less than the z-critical value of 1.96, we were constrained to Accept the null hypothesis and established that, there is no significant difference between the mean scores of male and female heads of department on the institutional policies for managing digital inclusion in Universities in Enugus State.

Ho₂: There is no significant difference between the opinion of mean rating of male and female heads of department on the institutional procedures for managing digital inclusion for effective teaching and learning in Universities in Enugu State.

Table 4: z-test Analysis on the difference between the opinion of mean rating of male and female heads of department on the institutional procedures for managing digital inclusion for effective teaching and learning in Universities in Enugu State.



Impact Factor: 4.5 vol: 1 Issue:1

| Category | N | \overline{X} | SD | df | z-cal | z-crit. | Remarks |
|----------|-----|----------------|------|-----|-------|---------|--------------------------|
| Male | 118 | 3.05 | 0.83 | 197 | -0.17 | -1.96 | Significant |
| Female | 81 | 3.03 | 0.84 | | | | Rejected H0 ₂ |
| Total | 199 | | | | | | (z-cal. < z- crit.) |

Table 4. with the average mean rating and standard deviation of male and female respondents stood at 3.03 and 0.83 and 3.05 and 0.84 respectively. Simple observation show that these mean scores are closely related, and suggest a significant difference. Furthermore, since at 197 degree of freedom and at 0.05 alpha level of significance, the calculated z-test value of -0.17 was fargreater than the z-critical table value of -1.96, we accept the null hypothesis and established that, there is a significant difference between the mean rating of male and female heads of department on the institutional procedures for managing digital inclusion in Universities in Enugu State.

Discussion of the Findings

The result of the study showed that the respondents averagely agreed to the items listed as the institutional policies for digital learning in public managing Universities in Enugu State. The study revealed that there was no significant difference between the opinion of male and female heads of departments on the institutional policies for managing digital learning in public Universities in Enugu State. This study agrees with the outcome of the study by Adebisi and Olaniran (2018) which showed that digital learning policies are essential for enhancing students' engagement and that technical support and faculty training are crucial for success of these policies the heads of departments in their responses agreed that sophisticated computer system, networks and information

resources are properly installed in higher institutions. Also, the respondents agreed that staff development policies enable all the lecturers in the Universities to become a certified teachers which is in agreement with Eze et al (2020) who stated that, institutional support and faculty training are significant determinants of digital learning adoption.

The result also showed that, the respondents agreed to the items listed as the institutional procedures for managing digital learning in public Universities in Enugus State. The study showed that there was no significant difference between the opinion of male and female heads of departments on the institutional procedures for managing digital learning in public Universities in Enugu State. The respondents agreed that undergoing training in the methods and techniques of teaching will enable all the



Impact Factor: 4.5 vol: 1 Issue:1

teachers in tertiary institutions to become 'certified teachers'. This is in agreement with what Alenezi, 2023 said that students develop new abilities required for success in the 21st century through effective use of digital technology. Likewise, Olumide and Ogundipe (2021) stated in their study that, continuous support and training are crucial for the successful implementation of digital learning. Also, the heads of departments agreed that raising a team to start up data analysis for lecturers, students etc will ensure the implementation of information technology policies. This is in agreement with what Odukoya et al (2019) stated in their study that, there are numerous opportunities to improve digital learning despite significant challenges.

Conclusion

Institutional policies play a pivotal role in shaping the landscape of digital inclusion within universities in Enugu State, directly influencing the effectiveness of teaching and policies When these learning. comprehensive, clearly articulated, effectively implemented through structured they foster procedures. an inclusive educational environment that enhances access to digital resources, supports diverse learner needs, and promotes equitable participation in academic activities. However, challenges such as infrastructural deficits, inadequate policy enforcement, and limited digital literacy hamper their full potential. For universities to leverage digital inclusion as a strategic asset for quality education there must be a concerted effort to strengthen policy frameworks, improve procedural implementation, and promote continuous monitoring and evaluation.

Ultimately, aligning institutional policies with practical procedures will be key to realizing the transformative power of digital inclusion in enhancing teaching and learning outcomes across Enugu State's higher education institutions.

Recommendations

The following recommendations were proffered on the findings of the study;

Develop Comprehensive Digital Inclusion Policies: Universities should formulate clear and detailed policies that explicitly define objectives, strategies, and responsibilities related to digital access and literacy for all students and staff.

Implement Structured Procedures: Institutional leaders should translate policies into practical procedures, such as establishing digital resource centers, providing affordable internet access, and offering digital skills training programs.

Invest in Infrastructure: To support policy implementation, universities must prioritize upgrading digital infrastructure, including reliable internet, computer labs, and assistive technologies for persons with disabilities.

Promote Digital Literacy and Capacity Building: Regular training programs should be organized to enhance digital skills among students and staff, ensuring equitable participation in digital learning environments.

Establish Monitoring and Evaluation Systems: Universities should set up





Impact Factor: 4.5 vol: 1 Issue:1

mechanisms for assessing the effectiveness of policies and procedures, identifying gaps, and making continuous improvements to ensure that digital inclusion translates into improved teaching and learning outcomes.

References

- Adebisi, T. A., & Olaniran, S. O. (2018). The impact of digital learning policies on student engagement in Nigerian higher education. *Journal of Educational Technology*, 9(3), 150-165.
- Akinyemi, O. (2019). Barriers to effective implementation of digital policies in Nigerian universities. *African Journal of Education and Technology*, 4(2), 34-45.
- Alabi, J., & Adebiyi, A. (2020). Digital literacy and inclusion in Nigerian higher education. *International Journal of Digital Education*, 8(1), 21-37.
- Alenezi, M. (2023). Digital learning and digital institution in higher education. Journals of education sciences 2023, 13(1), 88; https://doi.org/10.3390/edusci130100 088 https://www.melpi.com,...
- Bates, T. (2019). Teaching in a digital age: Guidelines for designing teaching and learning.

 https://opentextbc.ca/teachinginadigitalage/
- Clark, R. C., & Mayer, R. E. (2016). E-Learning and the science of instruction: Proven guidelines for

- consumers and designers of multimedia learning. University of California, Santa Barbara, Wiley online
 https://onlinelibrary.wiley.com>doi
- Compliance Bridge (2022). Essential university policies and procedures. https://compliancebridge.com>u,...
- Eze, S. C., Chinedu, C. E., & Bello, A. (2020). Determinants of digital learning adoption among Nigerian universities. *International Journal of Technology and Educational Innovation*, 10(1), 45-59.
- Federal Ministry of Communications and Digital Economy. (2019). *National Digital Economy Policy and Strategy*. https://www.digitalnigeria.gov.ng
- Global Market Insights. (2021). E-Learning market size by technology (Online E-Learning, Learning Management System (LMS), Mobile E-Learning), 2021 2027. https://www.gminsights.com/industry-analysis/e-learning-market
- Ignatius Ajuru University of Education (2021). Ignatius Ajuru University of Education, Admission and





Impact Factor: 4.5 vol: 1 Issue:1

Information Centre. https://iauce.edu.ng>about.

- Kraus, S., & Renzl, B. (2018). Institutional policies and digital transformation in higher education. *Journal of Higher Education Policy and Management*, 40(5), 442-455.
- McKinney, S. (2013). Management of digital inclusion: A review. *International Journal of Digital Society*, 4(2), 89-101.
- Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2013). The effectiveness of online and blended learning: A meta-analysis of the empirical literature. *Teachers College Record*, 115(3), 1-47.
- Nairaland Forum (2024). Faculties and departmental courses in university of Port Harcourt-Education Niaraland.https://www.nairaland.com
- National Center for Education Statistics (NCES) (2019). Distance learning. https://nces.ed.gov/fastfacts/display.as p?id=80.
- Nwachukwu, C. C., & Ofoegbu, A. (2021). Leadership and effective implementation of digital policies in Nigerian universities. *Educational Management Journal*, 14(3), 132-146.
- Odukoya, J. A., Adebisi, T. A., &Sofoluwe, A. O. (2019). Challenges and opportunities in implementing digital learning in Nigerian universities.

International Journal of Educational Development, 31(4), 220-234.

- Ogunode, N.J., Ajape, T.D., & Jegede, D. (2020). University education policies in Nigeria: Challenges preventing the implementation and the ways forward. *Journal Sinestesia*, 10 (2), 2721-9283.
- Oke, C., & Ezekwesili, T. (2022). Challenges in policy implementation for digital inclusion in Nigerian tertiary institutions. *Journal of Educational Administration*, 60(1), 33-49.
- Olumide, O. S., & Ogundipe, O. A. (2021).

 Barriers to effective implementation of digital learning in Nigerian higher education institutions. *Journal of Educational Research and Development*, 13(2), 85-101.
- Online Learning Consortium (OLC). (2016).

 Online learning trends report.

 https://onlinelearning-trends-report-2016/
- Oyinlola, A., & Adegoke, O. (2020). Promoting digital inclusion through policy and procedures: Nigerian universities' perspective. *African Journal of Technology*, 19(4), 377-389.
- RSU Admission Guide (2024). List of all departments and faculties in Enugus State...https://rsuadmissionguide.com >d...







Int'l Academic Research Journals of Education and Digital inclusion February-March, 2025: https://journals.classicmultilinks.com

Impact Factor: 4.5 vol: 1 Issue:1

Smith College (2024). Institutional policies. institution...">https://www.smith.edu>institution...

Uche, O., & Obiako, R. (2020). Operationalizing digital inclusion policies in Nigerian higher education institutions. *International Journal of Education and Development*, 10(2), 119-134.

Yushau, B., & Khan, M. (2020). Digital learning management in Nigerian universities: Challenges and prospects. *Journal of Digital Learning in Education*, 12(2), 110-125.

