INTEGRATING DIGITAL PEDAGOGY POLICY IN TEACHING AND LEARNING TECHNICAL EDUCATION
PROGRAM IN HIGHER EDUCATION INSTITUTION

Habibat Lawal[1], Sule Hassan Jido[2], Udo Sunday Uchenna[3], Nurudeen Lawal[4]

[1] Department of Electrical Electronic Technology Education, School of Secondary Education (Technical), Federal College of Education (Tech) Bichi, Kano state Nigeria meetomoawulodo@gmail.com 08051660818

[2]Nigerian Building and Road Research Institute, North West office, Kano-Nigeria

[3]Department of Metal work Technology Education, School of Secondary Education (Technical),

[4] Department of Electrical Engineering, Faculty of Engineering, Aliko Dangote University of Science and Technology Wudil. Kano State

Abstract

Many institutions of higher education all over the country have habitually focused their attention to teaching, research, innovation, and service to the community. They are tasked with the responsibility of fostering intellectual and societal development. However, the aspect of integrating digital pedagogy policy in teaching and learning has remained distant to the other core functions despite the availability of digital pedagogy facilities in the higher institutions.

With the development of internet technology, we have observed a significant shift on how we communicate and collaborate among academics. The digital revolution encouraged unrestricted access to information on a global scale. Today's classrooms are equipped with a wealth of digital pedagogy tools, and almost all instructors have made significant progress in integrating digital technology to improve students' access to information and cooperative learning opportunities. The higher education system must seek to utilize the power of Digital Pedagogy Policy to be competitive and provide high-quality education as a consequence of digital transformation, disruptive technological innovations, and accelerated change. This article attempts to offer insightful thoughts on Concept of Digital Pedagogy, Implementation of Digital Pedagogy, Assessment of Digital Pedagogy, Facilitating Teaching and Learning Processes through Digital Pedagogy, Fostering Research and Development through Digital Pedagogy and Promoting Problem Solving, Critical Thinking and Innovative Skills through Digital Pedagogy.

Keywords: Higher Education; Digital Pedagogy, Teaching and Learning, Assessment, Integration.

Introduction

Tertiary education simply means the post-secondary school education, Tertiary institutions are all institutions offering post-secondary school certificates, diploma and degree programs. Teaching, learning, research and community services are the major activities weaved inside these institutions. The Federal Republic of Nigeria (FRN: 2017) advocates that tertiary education are contributing to national development through high level relevant manpower training; developing and inculcating proper values for the survival of individuals and society; developing the

intellectual capability of individuals to understand and appreciate their local and external environment. Other services include acquiring both physical and intellectual skills which will enable individuals to be self-reliant and useful members of the society; promoting and encouraging scholarship and community service vis-à-vis forging and cementing national unity cum promoting national along with international understanding and interaction.

Higher education systems are contributing to development of technical education programs, as well as how they have been reacting to present disputes in the 21st century. To grasp this laudable ambition, the tertiary institutions should implement the digital pedagogy policies in activities such as teaching, generation and dissemination of knowledge, research and development, running full-time, part-time, block releases, day releases, sandwich amongst other programs, training through SIWES, and other activities expected at improving cordiality between the institutions and their host communities (Olo, Correia & Rego, 2021) . Attaining these could only take place when teachers of the institutions as well as policy makers deliberately set out functional plans for implementing the digital pedagogy policies in teaching and learning of technical education programs the-09ir of the institutions.

Concept of Digital Pedagogy

In the early 20th century, digital pedagogy was first introduced in distance learning, in which course materials were delivered through the mail. Later, it was believed that radio and television would bring a rapid change in the course of education. University of Louisville, with the cooperation of The National Broadcasting Company (NBC) in the United States, creates many Educational programs through television and radio broadcasts. During 1980s and 1990s, the Association for Computers and the Humanities (ACH) has offered events like workshops and conferences on teaching computers and the humanities (NEH) was established in 1965 and organized International Conference on Digital pedagogies in a different country every year (Nanjundaswamy, Baskaran, & Leela, 2021). Digital pedagogy is the systematic incorporation of technology into teaching and learning so as to build effective learning practices. Digitization of education plays significant role in educational settings which helps to enhance and develop teachers' digital pedagogical competence that leads to improving students understanding of the subject matter (Rawat, Tiwari, Sharma & Chatterjee, 2024). Digital pedagogy is often used synonymous with education technology. This method limits the concept of digital pedagogy to our use of technology, and it runs the risk of permitting technologies to limit pedagogical creativity. The term Digital pedagogy is also referred to as a means of teaching using digital resources and technologies, as a method to alter or enhance the education practice and address the learning process, collaboration and play and as a method for learning and working with technologies, creating new, soft, rich, excellence learning practices (Howell & MacMaster, 2023). Digital pedagogy is considered a learning prototype for assisting students' knowledge attainment through active learning, made up of an affluent set of digital tools that make interaction possible and personalized learning (Sonia Santoveña-Casal, & Regina, 2024). The skills and knowledge of digital pedagogy are also helpful to the teachers and school administrators for enhancing instructional practices.

Digital pedagogy plays important roles in advancing technology education. The digital pedagogy has the positive impact on various aspects of teaching, right from the evolution of instructional approaches to the improvement of necessary skills and knowledge among students and teacher. Digital pedagogy tools were recognized as effective mean of promoting teaching and learning technical trade when compared with olden instructional tools of teaching. Digital pedagogy tools ascertain deeper connections between teachers, students and subject matter (Akujieze, 2024). Furthermore, the use of digital pedagogy in teaching and learning offer various benefits which comprises improving learning experiences, access to a riches of information, enhanced collaboration, and cost-effectiveness. According to Rawat, Tiwari, Sharma, and Chatterjee, (2024) principle of personalization is one of the key benefits of digital tools. This permits teachers to mold the learning experience to individual student needs, favorites, and learning speeds, encouraging a more comprehensive and effective educational atmosphere. This promotes independent learning, critical thinking, and self-motivation. Furthermore, studentcentre teaching methods such as cooperative and collaborative learning are significantly improved by digital tools. These tools facilitate more dynamic interface between teachers and learners and among learners themselves, developing a more participation and engagement in learning atmosphere.

According to digital pedagogy policy (2019), the objectives pedagogy policies in Education are: to facilitate the teaching and learning processes; to promote problem-solving, critical thinking and innovative skills; to promote life-long learning and advance knowledge; to enhance the various teaching/learning strategies required to meet the needs of the population; to foster research and development; to support effective and efficient education administration; to enhance universal access to information; to widen access to education and the range of instructional options and opportunities for any-where, any-time, any-pace and any path learning; to promote commercialization of

ICT in Education; and to develop and support technical infrastructure that maximizes digital creativity, sharing and innovation.

Implementation of Digital Pedagogy

One of the objectives of the teacher education is to prepare techno-pedagogues, develop and implement digital pedagogy. According to digital pedagogy policy, teachers must be able to integrate technology into teaching and learning process. The teachers must be aware of their responsibility in technologically oriented classrooms and develop skills to make use of Internet technology, exploring it, perform information processing and manage them and to use them in teaching and learning, etc. (Froehlich, 2023).

In today's global economy and competitive upbringing, digital pedagogy is becoming an extensively accepted means for versatile advancement in all educational fields. In view of the flexible services it offers, the digital pedagogy offers potential to revolutionize the traditional education system (Isa, Bala, Musa, & Salisu, 2020). The advancement of technology and its implication in teaching and learning leads to the integration and implementation of digital pedagogy policy into classroom practice. The policy is designed to offer the teachers with the necessary knowledge, attitudes, and skills to overcome potential barriers in schools technologically. The policy is also established to offer students with new opportunities for personalized, flexible, and interactive learning experiences. The implementation of digital policy in education is not just about providing access to digital resources; it's about reshaping the educational environment to make it more interactive and goal directive (Isa, Bala, Musa, & Salisu, 2020).

Qualified lecturers are knowledgeable, capable, and skilled in teaching using digital technology. The new learning model can disseminate and manage digital information and has basic digital literacy competencies to be effective, and academic institution graduates can be accepted in the world labor market in a digital situation (Mardiana, 2021). Digital learning makes it easy for teachers to identify learning, develop learning motives, and spur student interest. However, teachers are the vital players for effective implementation of digital policy in education at all levels. Moreover, teachers' perception desires to be considered in order to successfully integrate digital policy within the four walls of a classroom. As such it is very important to acknowledge, appreciate and understand teachers' knowledge and perceptions regarding various interactive digital pedagogy policy skills in order to facilitate its effective integration in the classroom (Ali, 2019). The digital pedagogy policies in education are effective means to broaden educational prospects for students as well as teachers in higher education of learning. As such it is essential to apprehend the significance of digital pedagogy policies in teaching and learning in all level of education. Subsequently, having a better understanding of teacher's knowledge, digital pedagogy policies and skills will enable a better integration of policies in the classrooms.

Assessment of Digital Pedagogy

Digital pedagogy policy assessment has become significant as ingredient of the digital learning process, as technology offers not only teaching and learning but also assessment, including productive feedback (Jur̄ane-Br̄emane, 2023). With rapid development of technology, education has speedily and permanently integrated with technology (Daniela, 2019) as such, different technological solutions are also involved in assessment (Chen, Koong, Liao, 2023). As learning and teaching develop and revolutionize in a digital track, assessment is also becoming more digital, opening up new chances and also generating new issues that require to be tackled, such as plagiarism, transparency, validity, and reliability (Lin, Wu, & Lee, 2022).

However, teachers and students are the key figures for effective implementation of digital policy in education at all levels. Moreover, at the same time they are also vital elements for any educational policy assessment. The participation of teachers and students in assessment is important for effective and productive learning process (Schofield, 2020). Assessment of digital pedagogy policy in technology education programs has been revealed to give crucial support and offer a different of solutions to educational problems. Digital pedagogy policy assessment can ensure students participatory and collaborative in a specific program (Podsiad, & Havard, 2020). One of the advantages of digital pedagogy policy assessment in educational program is that it can identify where students can improves his cognitively and affectively abilities (Loureiro, & Gomes, 2023). In addition, digital pedagogy policy assessment, can lead to the achievement of productive learning outcome (Lin, 2019). Thus, digital pedagogy policy assessment may contribute to higher learning outcomes through better pedagogy skills engagement.

Facilitating Teaching and Learning Processes Through Digital Pedagogy

The incessant supports of the digital pedagogy in teaching have revolutionized education, making teaching and learning very interesting across different methods of teaching (Akujieze, 2024). Pedagogy, as a focus for teaching and learning, involves reflecting on various instructional strategies and assisting students and teachers to innovate and enhance the art of teaching and learning process. The revolutionizing environmental paradigms need new kinds of graduates and bring renewed pressure for higher education to respond by cultivating and developing the students capable of meeting those challenges at their workplaces. Thus, teachers must assess students 'learning that accepts the corresponding pedagogical approach. Pedagogic skills as well encourage the enduring gaining practical skills and knowledge, facilitating students to conform to new technology, environments, and challenges with competence and selfconfidence (Akujieze, 2024). To empower students with 21st-century skills and deliver training, teachers must use pedagogical policies that might be active, comprehensive, and adaptive (González-Pérez & Ramírez-Montoya, 2022).

Furthermore, various students have their most favorable learning approaches. Some students are quick in learning what has been taught to them while others are not. Therefore, teachers should find the suitable means of facilitating means of teaching and learning (Digital Pedagogy Policy, 2020). In present time, digital pedagogy are inextricably linked and are conditioned by such characteristics as efficiency, quality, intensity, personalization and adaptation. The essence of digital pedagogy is not the traditional use of digital resources and information and communication technologies for teaching and creating the educational digital content. The meaning of the digital transformation of education and, in particular, digital pedagogy is to create non-standard algorithms for solving the traditional pedagogical problems, to form and develop an innovative learning process based on digital intelligence, big data, distributed computing (Toktarova & Semenova, 2020).

The use of technology aided-devices such as computers, internet and other telecommunication technology in classroom settings facilitate teaching and learning. The use of digital pedagogy skills in education is regarded as the solution through which knowledge and skills are transmitted and shared among students all over the world. Digital pedagogy skills also has the potentials to accelerate, enhance deepen skill to engage and motivate students to learn and assist them to share school experiences with work practices so as to help in creating economic possibility for tomorrow's workers. In addition, it will also contribute to essential changes in teaching and learning; strengthen teaching and learning and provide chances for connection between the learning environment and the world (Edwin, Shehu & Olusola, 2021). Digital technology facilitates effective teaching and learning enables both individuals and countries to meet the challenges presented by the knowledge and information age. As the vast majority of the Nigerian population dwells in rural areas that lack quality education, digital pedagogy policy can play a role in tackling problems of access to standard and quality of education. To facilitate teaching and learning technical education program, the application and use of digital pedagogy skills in teaching and learning must promote educational development, particularly in the training and development of teachers, and ensure that they possessed sufficient digital pedagogy skills and competences for effective teaching and learning (Yigezu, 2021).

Fostering Research and Development through Digital Pedagogy

The speedy advancement of digital pedagogical skills and the rising difficulty in teaching and learning technical education program, which explains why integration of digital pedagogy in technology education continues to receive exceptional consideration. The beginning of the new millennium witnessed the early access of the digital pedagogy in teaching and learning in our higher education institutes, which render special support and improvement in the development of education and as well foster research development (Ali, 2019). Various improved and revised educational policies and standards stresses that, teachers must utilize policies that improve teaching and learning practices that in turn foster effective research and development for national growth and progress particularly at higher education (Ali, 2019).

Digital Pedagogy is an innovative method of working and learning with ICT to facilitate quality learning practices for 21st Century learners. Digital pedagogies progress the center from ICT tools and skills to a method of working in a digital world. Consequently, there is no doubt that the implementation of digital pedagogy in the classroom enables both students and teachers to have easy access to quality information, skills and knowledge irrespective of time and context (Biswas, 2022). The implementation of digital pedagogy skills in teaching and learning will be an important prerequisite for both teachers and students that aids and assists them in fostering research and related educational activities. More so, digital pedagogy is considered as a significant driving force for educational

development, innovation and reform, it can also enhance student performance and there in foster effective research and education quality.

Promoting Problem Solving, Critical Thinking and Innovative Skills through Digital Pedagogy.

In the speedily developing landscape of technical education, the focus has moved toward promoting problem solving, critical thinking and innovative skills, knowledge and practically abilities needed to succeed within the 21st century. Implementation of Digital Pedagogy policies is the foundation of fostering 21st-century competencies (Adeoye, Prastikawati, & Abimbowo, 2024). Fostering critical thinking, innovation and creativity are also very importance for job creation, economic growth, and improving the quality of life, and economic growth. Critical thinking, innovation and creativity are necessary skills for students in the 21st century (Asimiran & Ismail, 2019). These skills allow students to recognize new chances, solve complex problems and create new products and services. Thus, teachers require utilizing creativity and innovation among students to prepare them for the future development.

The 21st century is characterized by rapid technological advancements, globalization, and a highly dynamic and complex environment (Muhali, 2019). These changes have created a need for learners to develop a set of skills that enable them to adapt to new challenges and opportunities. Innovation and creativity are two essential skills that learners need to thrive in the 21st century (Astuti, Wibawa, & Suarjana, 2020). Creative thinking and problem-solving abilities are adaptable tools used for handling a variety of unfamiliar situations in a flexible way that strengthens adaptive and constructive behavior. However, promoting innovation and creativity among learners is a complex process that requires educators to prioritize problemsolving skills (Asimiran & Ismail, 2019).

Critical thinking and problem-solving are fundamental skills needed by the students in order to master their subject matter. Poor teaching and learning and insufficient teaching facilities hindered critical thinking and problem-solving skills (Amanda, Sumitro, Lestari, & Ibrohim, 2024). Employed digital pedagogy policy in teaching technical trades, can accelerate, enrich, and deepen students basic skills in electrical electronics programs, the policy can also motivate and improve students engagement and as well encouraging them to become more independent and responsible for their learning. Furthermore, digital pedagogy helps to relate academics to the practices of today's work. Utilization of digital pedagogy, especially in teaching and learning technical education trade have been found to promote active learning, support modern teaching, minimize teachers isolation, and promote students and teachers to become active researchers and learners (Isa, Bale, Musa, & Salisu, 2020).

Prioritizing digital pedagogy can help students to develop problem solving, critical thinking and innovative skills they need to succeed in the 21st century. Innovation is the development or practice of new ideas to benefit individuals, teams or a broader range of society. Creativity is closely linked to problem-solving skills and can be promoted by providing learners with opportunities for creative expression and exploration (Rahmatullah, Mulyasa, Syahrani, Pongpalilu, & Putri, 2022). Utilizing digital pedagogy skills in teaching and learning technical trade such as electrical electronics, automobile technology, metal work, woodwork and building technology help learners to new thoughts can promote both creativity and problem-solving skills. Promoting problem-solving, critical thinking and innovative skills among 21st-century students' needs a multifaceted strategy that integrate right instructional approaches, utilizing digital pedagogy skills and creativity (Kartini, Widodo, Winarno, & Astuti, 2021).

Enhancing Teaching and Learning Strategies through Digital Pedagogy.

The educational landscape has witnessed a transformative shift with the overwhelming integration of digital pedagogy in teaching methodologies. The continuous support of the internet and the utilization of network-linked devices have revolutionized education, making digital pedagogy an essential aspect across various educational stages. Contemporary modalities for virtual training, such as Massive Open Online Courses (MOOCs) platforms, utilize ICT to provide electronic materials, e-books, videos, and e-transcripts, facilitating flexible and adaptable learning. These methods have proven advantageous due to their adaptability and remote utilization, enabling ubiquitous learning without restrictions on place and time (Akujieze, 2024). The utilization of Digital Pedagogy has significantly improved academic exhibitions, transforming how knowledge is disseminated, shared, and experienced. Digital Pedagogy facilitates knowledge sharing and mutual learning among learners, teachers, and professionals across diverse field of studies and geographical locations. Digital Pedagogy tools, such as computers, cell phones, and the internet, have significantly impacted organizations and people's lives, affecting their relationship with knowledge, expertise, and methods of operation. It also allow students to exchange ideas, co-create knowledge in real-time and work together on technical projects. By encouraging the culture of teamwork, group effort and open innovation, the use of digital

Pedagogy in teaching and learning encourage problem-solving, and knowledge creation, creativity, driving unremitting development in technical fields. Digital Pedagogy plays a significant responsibility in hastening the speed of scientific discovery and innovation by facilitating the exchange of research findings, data, and insights among practitioners, researchers and scientists. Digital pedagogy and repositories, scientific databases, and online research networks permit the teachers and researchers to access a huge array of technical literature and datasets, speeding the method of innovation and knowledge discovery (Nithya et al. 2024). The use of digital pedagogy aid collaborative research platforms and virtual laboratories and assist teachers and students to work together on difficult technical disputes, share resources and expertise and perform experiments remotely, leading to breakthrough in different areas such as building technology, wood work technology, and renewable energy. Digital pedagogy can enhance academic performance foster collaborative learning through peer participation, and hold teachers accountable for their students' learning. Additionally, utilizing digital pedagogy skills in teaching and learning can improve interactivity among students and researchers with supervisors, contributing to enhanced academic performance. Digital pedagogical skills, coupled with ICT tools, have been identified as a solution to enhance learning experiences. These skills allow students to communicate, edit, annotate, arrange, and generate texts quickly and freely.

Conclusion

This paper discussed Integrating Digital Pedagogy Policy in Teaching and Learning technical education Programs in Higher Education Institution. This work used Secondary data. It sourced the secondary data from print materials and online journal and articles. The paper identified concept of digital pedagogy, implementation of digital pedagogy, assessment of digital pedagogy, facilitating teaching and learning processes through digital pedagogy, fostering research and development through digital pedagogy and promoting problem solving, critical thinking and innovative skills through digital pedagogy. To address these challenges, the paper recommends the following; adequate funding of education, provision of adequate infrastructural facilities, fight institutional corruption, ensure adequate security in educational institutions, political officeholders should have positive political will towards implementation of higher education policies, employment of more professional teachers, implement any agreement with different union groups, and political officeholders and school administrators should have political will to continue with educational policies meet on groups.

References

Adeoye, M. A., Prastikawati, E. F., & Abimbowo, Y. O. (2024). Empowering Learning: Pedagogical Strategies for Advancing 21st Century Skills and Quality Education. *Journal of Nonformal Education, 10(2),* 10–21.

Akpotor, J (2018) Evaluating the Impact of Tertiary Institutions on Their Host Communities. International Journal of Humanities and Social Science Vol. 8 • No. 4 • April 2018 doi:10.30845/ijhss.v8n4p30.

Akujieze M. O. (2024). The Role of Digital Pedagogy in Enhancing Teacher Education. Open *Access J Educ & Lang Stud, 1 (3),* 1-8.

Ali, N. M. & Abdi, D. K. (2023). Role of Effective Monitoring and Evaluation in Promoting Good Governance in Public Institutions. Public Administration Research, 12, (2), 48-58.

Ali, W. (2019). The Efficacy of Evolving Technology in Conceptualizing Pedagogy and Practice in Higher Education. Higher Education Studies, 9, (2), 81-95.

Asimiran, S., & Ismail, I. A. (2019). Exploring Critical Success Factors in the Governance of Malaysian Public Universities. *International Journal of Innovation, Creativity and Change, 9(12),* 268–282.

Astuti, A. A. I. Y., Wibawa, I. M. C., & Suarjana, I. M. (2020). The Effectiveness of Problem Based Learning Toward Students' Science Learning Outcomes. *Journal Ilmiah Sekolah Dasar, 4(4)*, 573–580.

Barfi, K. A., Amenu, A. & Arkorful, V. (2020). "Assessing the Integration of ICT Resources in Teaching and Learning in Selected Senior Secondary Schools in Cape Coast Metropolis". *Library. Philosophy and Practice (e-journal).* 4111.

Biswas, S. (2022). Digital Pedagogy: A 21ST Century Approach of School Education. *IJASE., 10 (01)*, 41-51.

Ekpedeme, U. U. (2024). Teachers' Pedagogical Skills and Implementation of Trade/Entrepreneurship Subjects in Senior Secondary Schools in Uyo Education Zone, Nigeria. *Journal of Advances in Social Sciences and Management, 2, (5),* 01-14.

Emmanuel, G. S. (2019).The Role of Tertiary Education in Manpower Development in Nigeria. Global Academic Journal of Linguistics and Literature, 1(1) 17-19.

González-Pérez, L. I., & Ramírez-Montoya, M. S. (2022). Components of Education 4.0 in 21stcentury skills frameworks: a systematic review. Sustainability, 14, (3), 1493.

Idrees, M. & Shah, A. (2018). An empirical analysis of educational inequalities in Pakistan. Pakistan Economic and Social Review, 56 (2), 313 – 324.

Isa, S. G., Bale, T., Musa, M. A. & Salisu, S. (2020). Level of Utilization of Information and Communication Technology (ICT) Tools for Teaching and Learning Mathematics in Senior Secondary Schools in Kano Municipal Education Zone, Kano State, Nigeria. *Direct Research Journal of Education and Vocational Studies, 2 (4),* 60-77.

Jur¯ane-Br¯emane, A. (2023). Digital Assessment in Technology-Enriched Education: Thematic Review. Educ. Sci., 13, 522.

Kartini, F. S., Widodo, A., Winarno, N., & Astuti, L. (2021). Promoting Student's ProblemSolving Skills through STEM Project-Based Learning in Earth Layer and Disasters Topic. *Journal of Science Learning, 4(3),* 257–266.

Lin, C. H., Wu, W. H., & Lee, T. N. (2022). Using an online learning platform to show students' achievements and attention in the video lecture and online practice learning environments. Educ. Technol. Soc, 25, 155–165.

Lin, C. J. (2020). An online peer assessment approach to supporting mind-mapping flipped learning activities for college English writing courses. *J. Comput. Educ. 6*, 385-415.

Luca, C. S. (2023). Higher Education Institutions' Roles in Strengthening Local Capacity for Community Development: An Analytical Framework. Journal of Higher Education Outreach and Engagement, 26 (3), 163.

Muhali, M. (2019). Pembelajaran Inovatif Abad Ke-21. *Journal Penelitian Dan Pengkajian Ilmu Pendidikan: ESaintika, 3(2),* 25–50.

Nanjundaswamy, C., Baskaran, S. & Leela, M. H. (2021). Digital Pedagogy for Sustainable Learning." *Shanlax International Journal of Education, 9 (3),* 179-185.

Nithya et al. (2024), An Evaluation Of The Function Of Information and Communication Technologies In The Spread Of Technical Knowledge; An Employee Centered Analysis, Educational Administration: Theory And Practice, 30(4), 3826-3831, Doi:10.53555/kuey.v30i4.2127

Niyi, O. J., Temitope, A. S. & Jegede, S. (2020). University Education Policies in Nigeria: Challenges Preventing the Implementation and the Ways Forward. Journal Sinestesia, 10, (2), 66-85.

Nneamaka, I. E. (2021). The Role of Tertiary Education Trust Fund in the Development of Higher Institutions in Nigeria: A Case Study of Imo State, Nigeria. NIGERBIBLIOS VOL 31 NOS 2, 87-97.

Ogunode N J, Jegede D, Adah S, Audu E, I, &AjapeTemitope S (2020) Administration of Research Programs in Nigerian Public Universities: Problems and Way Forward. Riwayat: Educational Journal of History and Humanities, 3 (2), 21-32 10.

Ogunode. N, J, Dilmurod. A, & Abubakar, M (2021). Supervision of Higher Institutions in Nigeria: Unpublished Paper. Pg 6

Olo, D., Correia, L. & Rego, C. (2021). Higher Education Institutions and Development: Missions, Models, and Challenges. *Journal of Social Studies Education Research. Journal of Social Studies Education Research, 12 (2),* 1-25.

Power, L. Millington, A K. & Bengtsson, S. (2015). Building Capacity in Higher Education Topic Guide, 1-76.

Rahmatullah, A. S., Mulyasa, E., Syahrani, S., Pongpalilu, F., & Putri, R. E. (2022). Digital era 4.0. Linguistics and Culture Review, 6, 89–107.

Rastogi, S.   (2021). Academic   Staff   Development   in   Higher Education. https://www.researchgate.net/publication/360912269.

Sithomola, T., & Auriacombe, C. J. (2019). Developing a monitoring and evaluation (m&e) classification system to improve democratic good governance. International Journal of Social Sciences and Humanity Studies, 11(2), 86-101.

 Sonia Santoveña-Casal, S. & Regina, S. L. (2024). Mapping of digital pedagogies in higher education. Education and Information Technologies, 29, 2437–245.

Yigezu, M. (2021). Digitalization in teaching and education in Ethiopia Digitalization, the future of work and the teaching profession project.