
Quality of Higher Education and E-Learning Implementation in a Nigerian Higher Education Institution

Fred Ojochide Peter, Adeshola Oluseyi Peter, Nicholas Chibogu Okolugbo, and Adewuyi Annie Moturayo

ABSTRACT

In the realm of higher education, Information and Communication Technology (ICT) stands as a pivotal tool for enhancing the quality of learning and teaching in today's rapidly evolving world. This study investigates the perceptions of teaching quality among both students and lecturers within higher education institutions, aiming to identify challenges and opportunities for improvement. Employing the Course Experience Questionnaire (CEQ), specifically the Student Course Experience Questionnaire (SCEQ), this research examines dimensions such as Good Teaching, Classroom Quality, Assessment Appropriateness, and Workload Suitability. The primary objective is to explore how ICT facilitates active student participation in selecting learning content and instructional methods, thus addressing gaps inherent in traditional educational paradigms. The study adopts a quantitative approach by administering the SCEQ to a sample of students and gathering feedback from lecturers to triangulate perspectives on teaching quality. The findings reveal diverse perceptions among students and lecturers regarding teaching effectiveness, classroom conditions, assessment practices, and workload management. While notable strengths are recognized, including the beneficial role of ICT in enhancing engagement and instructional diversity, persistent challenges remain in maintaining consistent teaching standards and aligning assessment methods with contemporary educational objectives. Based on these findings, recommendations are made to enhance teaching quality in higher education. These include the implementation of comprehensive ICT training programs for lecturers to improve their pedagogical skills and proficiency with digital tools. Additionally, efforts should focus on upgrading classroom infrastructure and resources, as well as revising assessment strategies to better reflect modern educational needs. Ultimately, leveraging ICT effectively in higher education promises to create a more interactive and student-centered learning environment, thereby fostering educational excellence and equipping graduates for success in the digital age.

Keywords: Quality Education; ICT; E-Learning; Higher Education.

INTRODUCTION

Instructional delivery through multimedia technologies and the internet has transformed educational access and quality in Nigerian tertiary institutions. E-learning platforms have emerged as pivotal tools in providing interactive and engaging learning experiences that are essential for students' competitiveness in a rapidly evolving global landscape (Agostini and Nosella, 2020; Eze et al., 2018). This paradigm shift is underscored by the recognition that information and communication technologies (ICTs) are integral to modern education, facilitating seamless communication and information transmission on a global scale.

Many private institutions in Nigeria are likely to be at the forefront of leveraging e-learning due to their better funding compared to public institutions. This disparity in funding may influence the extent to which students in private higher education institutions utilize e-learning compared to their counterparts in public institutions (Eze et al., 2018). Despite the transformative impact of digital technologies on information exchange and societal interactions, educational methodologies and institutional frameworks in Nigeria have shown limited adaptation over the past centuries (Davidson & Goldberg, 2009). This discrepancy highlights a critical gap between technological advancements shaping everyday life and the traditional educational practices prevalent in Nigerian higher education.

Education is widely acknowledged as the cornerstone of societal progress, influencing the quality of human capital that drives national transformation (Sanjaya, 2005; Asiyai, 2014). With Nigeria's population surpassing 200 million and growing, the demand for higher education is escalating, necessitating institutional capacity expansion. However, systemic challenges such as inadequate funding, operational inefficiencies, and persistently substandard educational quality continue to impede the effective fulfillment of higher education's pivotal role in national development. Despite previous governmental initiatives aimed at addressing these issues, substantial improvements have proven elusive based on available statistical data. Therefore, this study aims to assess the quality of teaching within a specific Nigerian institution and explore the correlation between teaching experience and global standards of educational excellence. By focusing on 400-level Business Administration and Economics students, along with faculty members, this research seeks to provide nuanced insights into the effectiveness of current educational practices and their alignment with international benchmarks. The study's scope acknowledges inherent limitations in sample size and potential biases in self-reported data, emphasizing the need for cautious interpretation and the potential for future research to enhance generalizability.

In essence, this research endeavors to contribute substantively to ongoing efforts to improve educational quality in Nigeria, thereby supporting national goals of fostering innovation, enhancing productivity, and addressing youth unemployment through robust educational reforms and strategic investments in digital learning technologies.

LITERATURE REVIEW

The Quality Education

Education is a cornerstone of society, and achieving quality education is fundamental to sustainable development. The future of society's citizens is shaped by their educational development, making the optimization and enhancement of mechanisms that ensure educational quality, particularly in higher education, crucial. Focusing on quality education will support future citizens as they transition to the workforce. Sanjaya (2005) asserted that education is the backbone of any society, emphasizing that the quality of education directly

influences the quality of human resources. The global community views total quality and educational reform as fundamental to progress and development. Access to total quality, however, is likely to be the significant challenge of the coming decades.(Qablan,Bataineh, & Al Kaabi, 2023). The degree of implementation of total quality management in universities and its relationship to the level of community service from the perspectives of faculty members.

Okebukola (2010) defines quality teaching as encompassing several key elements: ensuring classes are participatory, fostering an environment where eagerness to learn is evident among students; delivering lectures based on the latest advancements in the field sourced from current literature; providing high-quality course materials accessible to all students; maintaining punctuality among both lecturers and students; organizing classes in a manner conducive to effective teaching and learning; ensuring clear and audible communication by the teacher, possibly aided by a functional public address system; conducting hands-on and investigative laboratory/workshop practical sessions; demonstrating thorough pre-lab/workshop preparations; enforcing safety protocols throughout practical activities; and leveraging instructional aids, particularly new technologies, effectively to enhance learning experiences..

Furthermore, the aims of higher education in Nigeria, as articulated by the Federal Ministry of Education (2004) in section 8 (59), are multifaceted and encompass several key objectives. These include supporting national development through the training of high-level manpower, instilling proper values for individual and societal advancement, expanding intellectual competencies to understand both local and global environments, equipping individuals with physical and intellectual skills for self-reliance and societal contribution, promoting scholarship and community service, and fostering national and international unity and interaction. These goals underscore the comprehensive role that higher education institutions aim to play in shaping the intellectual, ethical, and professional capabilities of their students.

Additionally, section 8 (60) emphasizes that Nigerian higher education should actively pursue these objectives through teaching, research and development, knowledge generation and dissemination, and international cooperation. Additionally, institutions are encouraged to engage in dedicated services to communities through extramural activities and consultancy services. Together, these directives highlight the pivotal role of higher education in Nigeria not only in advancing academic and scientific knowledge but also in serving as a catalyst for national unity, economic growth, and societal development through education, research, and community engagement efforts.

2.2 Trends of Higher Education in Nigeria

The establishment and growth of higher education in Nigeria which started from the pre independence era till today has been an issue based on findings and recommendations of committees and commissions. Such commissions according to Osokoya (1989) include Asquith and Elliot Commissions of 1943, whose report signpost the establishment of the first University in Nigeria in 1948- (the University of Ibadan) and the Ashby Commission of 1960 that led to the establishment of additional universities. Osokoya (1989) opined that the recommendations of the Ashby Commission led to the expansion of the institutes in Enugu, Ibadan, Kaduna and Yaba. The commission also recommended the establishment of new institutes of Agriculture in Benin City, Port Harcourt and Kano respectively. Furthermore, the commission recommended the establishment of two more universities which were later established and located in Zaria in the president Kaduna State and Nsukka in Enugu.

According to Anya (2013), the first institution of higher learning in Nigeria was the Yaba Higher College founded in 1932. However, Kosemani and Okorosaye-Orubite (1995) called attention to the fact that the school, in 1934, moved from its temporary site in Kings College Lagos to her permanent site in Yaba, Lagos when the first set of students had already reached year three. The Yaba College, according to Kosemani and Okorosaye-Orubite, offered courses in engineering, medicine, agriculture, survey and teacher training. The entire courses led to the award of Diploma Certificates. Emanating from the report of the Asquith commission, the Hamilton-Style delegation on higher education in West Africa was formed. Kosemani and Okorosaye-Orubite further noted that, on the acceptance of the report of the Hamilton-Fyfe delegate, machineries were put in place for the establishment of a university college in Ibadan. After the entrance examination in November, 1947, the University College of Ibadan, now University of Ibadan was formally opened on 18 January 1948. Jonathan (2013) noted that the Yaba Higher College provided the rump of the first set of students of the University College Ibadan which offered first degrees in affiliation with the University of London. Following independence in 1960, the first university to offer its own degree in Nigeria, The University of Nigeria Nsukka was established in 1960. This was followed by three other universities established in October 1962 in Zaria, Lagos and Ile-Ife. Osokoya (1989) noted that subsequent increases in the number of universities in Nigeria have followed closely increases in the number of political units.

Thus, when Nigeria moved from regions to 12 states in 1967, there was a simultaneous increase in the number of universities. By 1977, the number of universities in Nigeria had increased to 13. From the 1979 constitution of the Federal Republic of Nigeria to the current 1999 constitution as amended, education has remained in the concurrent list. This gives the state governments right to establish universities within their territories. As noted by Osokoya (1989) by 1983 there were 8 state government owned universities in Nigeria. By 2013, there are a total of 128 universities in Nigeria, made of 40 Federal Government Universities, 38 state government owned universities and 50 universities owned by individuals, private and organizations. Apart from the universities, current information on higher education institutions revealed that as at 2010, there were about 67 polytechnics and 92 Colleges of Education spread across the 36 states and the Federal Capital Territory in Nigeria (Abiodun and Ganiyu, 2013).

Nigeria as a country is made of 170 million people out of which about 65% are youths that need higher education (Abiodun and Ganiyu, 2013). The Federal Minister of Education in her appraisal of the 2013 Unified Tertiary Matriculation Examination (UTME) observed that out of about 1.7 million candidates that sought for admission through the joint entrance examination only about 500,000 will be offered admission in the tertiary institutions. This consist of all the federal, state and private universities, Polytechnics and Colleges of Education.

Anya (2013) observed that until the 1980s, the standards and performance of the Nigerian higher education (represented by the university system) compared favorably with those of the best universities in the world but since the 1980s, the universities have suffered multiple instabilities and neglect. In buttressing this point, Obanya in Utomi (2008) to state categorically “higher education in Nigeria has not yet produced a critical mass of persons with the requisite generic skills that can be associated with the development of the Nigeria state”. As highlighted by Okebukola (2010), a report by the Nigerian university system evaluated by the NUC in 2004 using labor market surveys revealed significant deficiencies among graduates, particularly in Management and Social Sciences. These include a lack of

analytical and ICT skills essential for workplace readiness, insufficient entrepreneurial, problem-solving, and decision-making abilities, inadequate technical skills in applying knowledge effectively, a deficit in practical skills due to limited industry linkage, deficiencies in professionalism and ethical conduct, substandard teaching staff attributed to inadequate training and professionalism, as well as shortcomings in creativity, critical thinking, communication, and literacy skills.

The Challenges of quality in higher education in Nigeria

Factors responsible for the challenges of quality in higher education in Nigeria are discussed below:

Inadequate Funding

Inadequate funding and lack of prudent management of resources are the most critical challenges preventing the actualization of academic excellence in Nigerian university. Adequate funding and prudent management of resources have been attributed as the only panacea to education development (Ishola, 2014. Asiyai (2013). Pointed out that a major barrier to the attainment academic quality in Nigerian higher education is financial limitations which has subjected many academics and non-academics to tough working condition. Many universities in Nigeria lack the resources to construct students' hostels, lecture halls, equip laboratories and workshops and payment of staff salaries, research grants, allowances and medical bills (Ivara and Mbanefo cited in Asiyai 2013).

Inadequate Teaching Staff /Poor Quality of Teaching Staff

A major issue in the pursuit and realization of quality higher education in Nigeria has been attributed to lack of outstanding academic staff. Coombs (1970) stated that teachers are the pillars of any system of educational. Teachers are major determinant of the quality of education because they interpret and implement educational guidelines and policies into practice and action. Ukeje, (1996) opined that without adequate number of self-motivating, knowledgeable instructors, adequately prepared to take up their responsibilities in our schools.

Lack of Resources

The quality of education is contingent on the quality and quantity of human and material resources available in institution of higher learning. The absence of structures such as workshops, libraries, laboratories, portable water and power will diminish the quality of education. The delivery of quality education can only happen, when facilities in the universities meet the minimum standard specified by the National Universities Commission (NUC), the National Board for Technical Education (NBTE) and National Council for Colleges of Education (NCCE). For quality teaching and learning, the class size must be small and well equipped for effective and engaging lecturing activities.

Lack of information communication technology facilities

In many develop nation, information and communication technology (ICT) has a major influence on the development of educational curricula. Across the globe, latest and more sophisticated information and communications technologies (ICTs) continue to advance swiftly. Their adoption in higher institution of learning, the entertainment sectors, business and government is extensive. Nigerian higher education is faced with huge challenges on the use of information and communication technology unlike other elitist universities of the world. This has been attributed to factors such as cost of internet data and electronic,

computer illiteracy, lack of facilities, irregular power supply and the need for continuous training of staff (Anene, Imam & Odumuh, 2014)

The Future of Education: Net Generation of Students

The new generation of students are profoundly different type of learners and have been labelled in literature as the Net Generation (Barnes, Marateo, & Ferris 2007; Hendricks 2004). What differentiates the Net Generation, who were given birth after 1982, from any other generations before them is the fact they are raised in a digitally enhanced environment and, thus, their appreciation of the society has its roots in digital sources (Labbo, Reinking, & McKenna, 1998). Experts or educationist refer to these students as "digital natives" because they are the first generation of students to be raised in a digital environment (Prensky, 2001). It is important to note that when these students search for information, they are more likely to explore online platforms than anywhere else since this is the environment with which they are more comfortable with (Mabrito & Medley, 2008).

The advent of social media has undoubtedly transformed the landscape of modern society, permeating into nearly every aspect of our daily lives. This digital revolution has also had a profound impact on the educational sphere, presenting both challenges and opportunities for educators. The "Net Generation", or Net Gen, refers to the cohort of students who have grown up immersed in a world of information technology, which has inevitably shaped their aptitudes, attitudes, expectations, and learning styles.

As Educating the Net Generation notes, this generation's experience with technology has resulted in a decidedly different environment from that of their instructors (Oblinger et al., 2005). Many researchers have sought to unpack the characteristics of this demographic, revealing a generation that is tech-savvy, achievement-oriented, and attuned to social issues. (Worley, 2011) Garner's perspective, outlined in Educating College Students of the Net Generation, suggests that the Net Generation will go on to greatly influence various facets of society, including higher education, through their unique preferences and behaviors.

Looking ahead, the future of education for the Net Generation will likely continue to evolve with advancements in technology. Artificial Intelligence (AI), virtual reality (VR), and augmented reality (AR) are poised to further transform learning experiences by offering immersive and personalized educational content (Bennett, Maton, & Kervin, 2008). Educational institutions will need to adapt by fostering digital literacy among educators, investing in infrastructure, and embracing innovative pedagogical approaches to remain relevant in a digitally driven world (Krause & Coates, 2008).

2.3 Electronic Learning (E-learning)

In today's era, electronic learning (e-learning) has emerged as a pivotal educational approach in higher institutions, driven by rapid advancements in internet technologies. E-learning involves the application of information and communication technologies (ICTs) to enhance and streamline teaching and learning processes (Nwoke, Emenyonu, & Ihekaire, 2017). According to Rogers (2008), institutions that have embraced e-learning have gained a competitive edge and witnessed significant improvements in student performance. Fisser and Felicione (2001) noted that ICT advancements have revolutionized various sectors, including education.

Wild, Griggs, and Downing (2002) describe e-learning as the delivery of interactive education and training through networked distribution technologies. Similarly, Khan (2005) defines e-learning as the utilization of diverse technologies and methods to deliver instructional content

and facilitate learning. The integration of e-learning into Nigeria's educational system has the potential to enhance student engagement, motivation, and attendance, crucial factors for effective learning. E-learning simplifies the knowledge transfer process for both educators and students, fostering active learning and skill development. This transformative approach not only improves teaching methodologies but also contributes to the long-term economic development through a more educated workforce (Intel, 2012).

Several studies validate the benefits of e-learning adoption. For instance, research by IESD in the United States revealed that the adoption of web 2.0 technologies increased student academic engagement by 39% and promoted collaboration by 38% among 388 respondents, which included district technology directors (IESD, Year). Another study highlighted that schools with a 1:1 student-computer ratio demonstrated superior academic and behavioral outcomes compared to their counterparts (Greaves et al., 2010). These findings underscore the positive impact of e-learning on student learning outcomes and institutional effectiveness.

METHODOLOGY

This study adopted survey method. A set of questionnaires were administered online to the staff and students. The first section of the questionnaire required background information of the respondents. The second section of the questionnaire dealt with commitment of the University towards maintaining teaching quality. Each questionnaire was designed so that respondents could react to the degree of agreement to the issue being discussed as follows: Strongly Agree= 5 Agree= 4; Undecided= 3; Strongly Disagree = 2; Disagree= 1

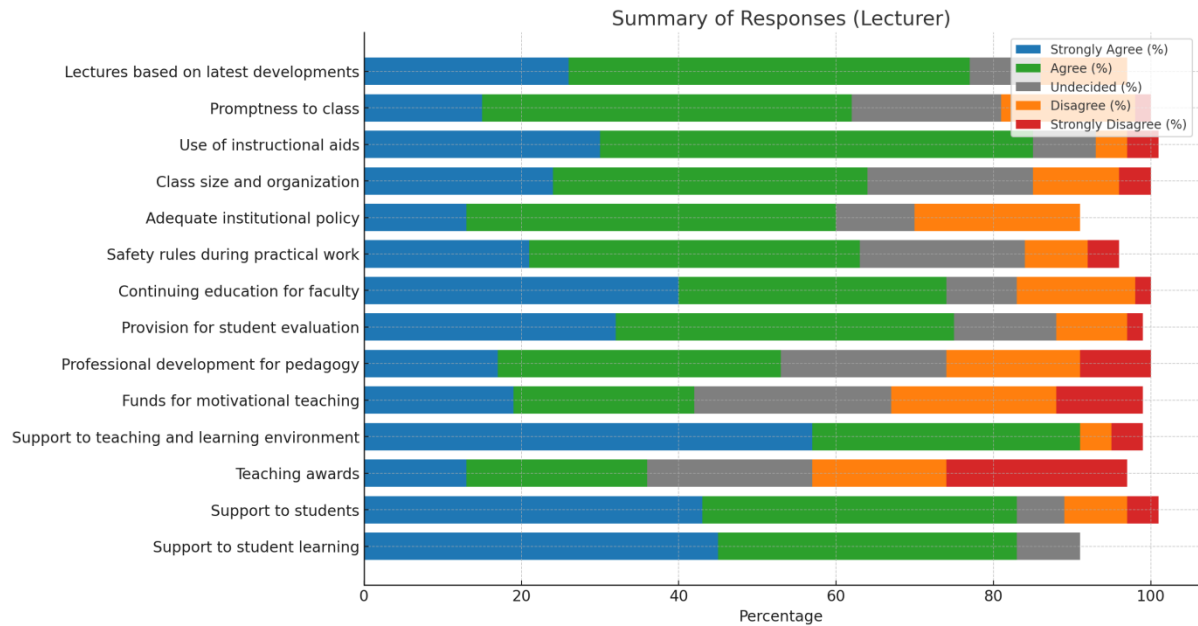
Sample and Sampling Techniques

A sample of 98 students and 300 Faculty was drawn using systematic random sampling approach. The instrument for data collection was a 14 –items each designed questionnaire by the researcher. The validity of the research instrument was carried out by experts on the subject matter of this study who were consulted accordingly on the measurement tool. The researcher used the various comments and observations in validating the instrument. A pilot study was conducted to establish the reliability of the study. Twenty (20) copies of the questionnaire were distributed to students in business administration in covenant university. Reliability analysis test was carried out to determine the internal consistency of the items of the questionnaire.

The population of the research study was classified into two groups namely: The first group, which comprises of students, while the second group comprises of the faculty. The entire faculty was used as the sample size. The questionnaires were distributed online to the faculty, however, 98 questionnaires were hand delivered to students. The sample size was determined using the sample size calculator as sample respondents for this study. Despite the repeated reminders 92 filled - up questionnaires, Faculty (50) and students (42) were received back in total. All the data analysis procedure was done using Google drive analytical tool

Result

Fig 1 Summary of Responses (lecturer)

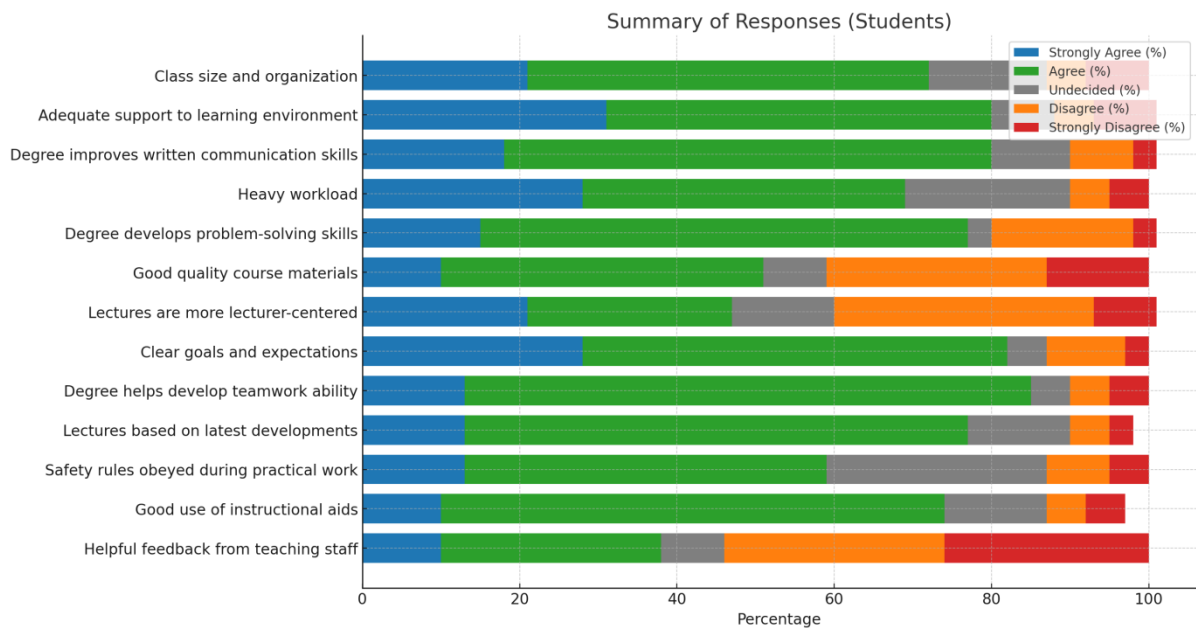


Each bar represents a question and is divided into segments for each response category (Strongly Agree, Agree, Undecided, Disagree, Strongly Disagree), showing the distribution of responses in percentages.

The summary of responses above reveals that the majority of lecturers agree that there is substantial support for student learning and student services, with 83% and 83% agreement respectively. However, there are significant areas of concern, such as the provision of teaching awards and motivational funding, where only 36% and 42% of lecturers agree, indicating room for improvement. The adequacy of the teaching and learning environment is highly rated (91%), yet the evaluation of institutional policies shows mixed feelings, with 60% agreeing but 31% undecided or disagreeing. Safety rules during practical work, continuing education for faculty, and the use of instructional aids also receive favorable responses, highlighting the importance of maintaining these strengths. Promptness to class and lectures based on the latest developments receive moderate agreement, suggesting the need for initiatives to enhance punctuality and ensure curriculum relevance. Overall, the feedback underscores the importance of continuous improvement in motivational and support mechanisms, policy implementation, and maintaining high standards in educational facilities and methodologies.

Result

Fig 2 Summary of Responses (students)



The summary of student responses above reveals mixed feedback on various aspects of their educational experience. A notable portion of students (54%) agree that the teaching staff provides helpful feedback, though 54% disagree or remain neutral, indicating room for improvement in communication. Instructional aids and new technologies are well-received (74% agreement), and safety rules during practical work are generally followed (59% agreement). Most students (77%) believe lectures are based on the latest developments, and teamwork skills are well-developed (85% agreement). Clear goals and expectations are perceived by 82%, while opinions on lecturer-centered teaching are divided, with 54% disagreeing that it is more lecturer-centered. Course materials receive mixed reviews, with 51% positive feedback but 41% neutral or negative. Problem-solving skills and written communication have been positively impacted (77% and 80% agreement, respectively), while workload is considered heavy by 69% of students. The learning environment is seen as adequately supported by 80%, and class size and organization conducive to effective learning by 72%. Overall, while there are strengths in teamwork development, use of technologies, and clear goal-setting, there is a need to enhance feedback mechanisms, reduce workload stress, and ensure high-quality course materials.

CONCLUSION AND IMPLICATIONS

The findings from this survey offer a detailed snapshot of the existing landscape of teaching and learning within the institution, encompassing viewpoints from both lecturers and students. Several positive aspects stand out, including the effective utilization of instructional aids, the successful cultivation of teamwork skills, and the provision of a conducive learning environment. These strengths underscore the institution's commitment to fostering a supportive educational atmosphere. However, the survey also highlights critical areas that warrant immediate attention and improvement. One such area is the feedback mechanisms in place. While a portion of students acknowledges receiving helpful feedback from teaching staff, a significant proportion remains dissatisfied or neutral. Implementing structured and timely feedback systems, coupled with training for lecturers on effective feedback

techniques, is essential to ensure that students receive constructive insights on their progress and performance.

Moreover, the quality of course materials emerges as another concern. Although some students perceive the course materials as adequate, a notable percentage expresses neutrality or dissatisfaction. Regular updates and reviews of course materials are imperative to uphold high academic standards and ensure accessibility for all students. Integrating the latest developments in the respective disciplines can enrich the learning experience and keep content relevant and engaging. Additionally, workload management appears to be a pressing issue affecting student well-being and academic performance. A substantial majority of students find the workload burdensome, which calls for a reassessment of course requirements and workload distribution. Implementing workload assessments and balancing course demands can mitigate stress levels and enhance learning efficiency among students.

Addressing these challenges presents opportunities for significant improvements in the educational experience at our institution. Enhancing feedback mechanisms, improving course material quality through regular updates, and managing workload effectively can contribute to a more engaging, supportive, and effective learning environment. These initiatives align with best practices in education and underscore our commitment to fostering academic excellence and student success. Moving forward, continued dialogue between faculty, administrators, and students will be crucial in identifying additional areas for improvement and implementing targeted interventions. By prioritizing these enhancements, we can ensure that our institution remains at the forefront of delivering quality education that meets the evolving needs of students in a dynamic and competitive global landscape.

Recommendations

Educational institutions should adopt structured feedback systems and train lecturers in effective feedback techniques to ensure students receive constructive and timely feedback. This can be facilitated through regular assessment cycles and the use of digital platforms to streamline the feedback process. Workshops and professional development courses can equip lecturers with the skills needed to provide specific, actionable, and balanced feedback.

Regular updates to course materials are essential to maintain relevance and engagement, reflecting the latest developments in the discipline. A review committee comprising academic staff and industry experts can help uphold high academic standards. Accessibility of course materials should be prioritized, ensuring they are available in multiple formats and through accessible platforms like the university's learning management system.

Increasing student-centered learning involves incorporating interactive teaching techniques such as flipped classrooms, group discussions, and practical applications like case studies and simulations. Investment in high-quality learning environments, including up-to-date libraries and virtual learning platforms, is crucial. Professional development for lecturers should focus on enhancing pedagogical skills and training in new technologies to create interactive and inclusive learning experiences.

REFERENCES

- Agostini L, Nosella A (2020) The adoption of Industry 4.0 technologies in SMEs: results of an international study. *Manag Decision* 58(4):625–643
- Akinpelu, J. A. (2000). *Philosophy and Adult Education* Stirling
- Al-Zoubi, Z., Qablan, A., Issa, H. B., Bataineh, O., & Al Kaabi, A. M. (2023). The degree of implementation of total quality management in universities and its relationship to the level of community service from the perspectives of faculty members. *Sustainability*, 15(3), 2404
- Anene, J., Imam, H., & Odumuh, T. (2014). Problem and prospect of e-learning in Nigerian universities. *International Journal of Technology and Inclusive Education (IJTIE)*, 3(2), 320-327.
- Asiyai, R. I. (2013). Challenges of quality in higher education in Nigeria in the 21st century. *International Journal of Educational Planning & Administration*, 3(2), 159-172
- Barnes, K., Marateo, R. C., & Ferris, S. P. (2007). Teaching and learning with the net generation. *Innovate: Journal of Online Education*, 3(4), 1
- Coombs, P. H. (1970). The need for a new strategy of educational development. *Comparative Education Review*, 14(1), 75-89.
- Eze S, Duan Y, Chin H (2014) Examining emerging ICT's adoption in SMEs from a dynamic process approach. *Inform Technol People* 27(1):63–82
- Hendricks, P. C. (2004). *The role of physical education in South African primary schools* (Doctoral dissertation, University of the Western Cape).
- Ishola, B. C. (2014). *Funding Problems in Nigerian University Libraries: Fee Based Library and Information Services to the Rescue, Focus on Pricing Policy*.
- Labbo, L. D., Reinking, D., & McKenna, M. C. (1998). Technology and literacy education in the next century: Exploring the connection between work and schooling. *Peabody Journal of Education*, 73(3-4), 273-289.
- Mabrito, M., & Medley, R. (2008). Why Professor Johnny can't read: Understanding the Net Generation's texts. *Innovate: Journal of Online Education*, 4(6).
- Ndiomu, C. B. (1989). Standards and the national policy on education and the associated hydraheaded problems. *Quality in Nigerian education*. Benin City: Supreme Ideal International Ltd. Nigerian universities. *International Journal of Technology and Inclusive Education (IJTIE)*, 3(2), 320-327.
- Nwoke, B. I., Emenyonu, A. O., & Ihekaire, U. R. (2017). Effect Of Blended E-Learning On Pre-Service Teachers' achievement In Mathematics: A Case For Sustainable Teacher Education. *European Journal Of Education Studies*.

- Okebukola, P. (2010, September). Fifty years of higher education in Nigeria: Trends in quality assurance. In An Unpublished Paper presented at International Conference in Abuja.
- Prensky, M. (2001). Digital natives, digital immigrants part 1. *On the horizon*, 9(5), 1-6.
- Ukeje, B. O. (1996). Teacher education for national development. *Education: An imperative for National Development*, Kaduna: NCCE Publication
- Ukeje, B. O. (1996). Teacher education for national development. *Education: An imperative for National Development*, Kaduna: NCCE Publication.
- UNICEF, I., & UNICEF. (2000, June). Defining quality in education. In A paper presented by UNICEF at the meeting of The International Working Group on Education Florence, Italy June.
- Wild, R. H., Griggs, K. A., & Downing, T. (2002). A framework for e-learning as a tool for knowledge management. *Industrial Management & Data Systems*, 102(7), 371-380.
- .