MSINGI JOURNAL
of the Department of Educational Foundations
Volume 9 Issue 1, 2026
ISSN 2663-1032
DOI: 10.33886/mj.v9i1.764

Transformative Equitable, Innovative and Coordinated Actions of Information Literacy Towards Achieving Sustainable Development Goals in Nigeria

Kayode Sunday John DADA
University Library,
Federal University of Education, Kaduna State, Nigeria
Email: *kayodescholar@gmail.com*

Accepted 5th December 2025 **Published 27th February 2026**

How to Cite:
Dada, K. S. J. Transformative Equitable, Innovative and Coordinated Actions of Information Literacy Towards Achieving Sustainable Development Goals in Nigeria. *Msingi Journal, 9(1).* https://doi.org/10.33886/mj.v9i1.764

ABSTRACT

This paper examines how information literacy serves as a cornerstone for achieving sustainable development goals in Nigeria through transformative, equitable, innovative, and coordinated approaches. Information literacy empowers individuals to access, evaluate, and utilize information effectively, which is essential for addressing developmental challenges such as poverty, poor healthcare, inadequate education, and environmental degradation. The study adopts a quantitative research design, surveying 296 information professionals, lecturers and academic librarians across Nigerian academic institutions to assess their roles in promoting information literacy for sustainable development. The findings reveal that coordinated efforts by information professionals, lecturers, and academic librarians significantly contribute to SDG achievement through capacity building, digital literacy programs, community engagement, and curriculum integration. However, challenges including inadequate funding, limited technological infrastructure, poor policy implementation, insufficient training, and low awareness levels hinder these efforts. The study recommends strengthening institutional support, enhancing collaborative partnerships, increasing budgetary allocations, improving digital infrastructure, developing comprehensive training programs, integrating information literacy into national development frameworks, establishing monitoring mechanisms, and fostering community participation. These recommendations provide a roadmap for stakeholders to maximize information literacy's potential in driving Nigeria's sustainable development agenda.

Keywords: Information literacy, sustainable development goals, academic librarians, transformative education, Nigeria

INTRODUCTION

Information literacy has emerged as a critical competency in the 21st century, particularly for developing nations striving to achieve sustainable development goals. In Nigeria, where developmental challenges remain significant, the ability to access, evaluate, and effectively use information represents a fundamental requirement for national progress. The United Nations' Sustainable Development Goals (SDGs) provide a comprehensive framework for addressing global challenges, and Nigeria has committed to achieving these goals by 2030 (United Nations, 2015). However, progress depends substantially on citizens' capacity to engage with information critically and purposefully.

The importance of information literacy towards achieving sustainable development goals in Nigeria cannot be overstated. Information literacy enables citizens to make informed decisions about health, education, economic opportunities, and environmental stewardship (Koltay, 2015). It empowers communities to participate meaningfully in governance, access essential services, and engage with innovations that drive development. For Nigeria, a country with diverse populations and varying levels of educational attainment, information literacy serves as an equalizer, providing pathways for individuals regardless of their backgrounds to contribute to and benefit from national development efforts.

Academic institutions, particularly through their library and information science professionals (including academic librarians, information officers, library technologists, and information literacy coordinators), lecturers, and allied educational staff, play a pivotal role in cultivating information literacy competencies. These professionals serve as catalysts for change, designing and implementing programs that equip students and community members with the skills necessary to navigate increasingly complex information environments (Špiranec & Banek Zorica, 2010). Their coordinated actions create ripple effects that extend beyond institutional walls, influencing families, communities, and ultimately contributing to national developmental outcomes aligned with the SDGs.

Definition of Information Literacy

Information literacy is defined as the set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning (Association of College & Research Libraries, 2015). This definition extends beyond simple information-seeking skills to encompass critical thinking, ethical information use, and the capacity to contribute to knowledge creation. Information literacy involves recognizing when information is needed, knowing how to locate and access it, critically evaluating sources for credibility and relevance, and applying information effectively to solve problems and make decisions (Kovalik et al., 2015).

In contemporary contexts, information literacy also includes digital literacy components, enabling individuals to navigate online environments, assess digital content, and utilize technology for information access and communication (Bawden & Robinson, 2009). The concept has evolved

to recognize cultural and contextual dimensions, acknowledging that information practices vary across communities and that literacy programs must be responsive to local needs and circumstances (Lloyd, 2014). For developing nations like Nigeria, information literacy encompasses both traditional and digital competencies, enabling citizens to engage with diverse information sources while maintaining critical awareness of information quality and reliability.

Definition of Sustainable Development Goals

The Sustainable Development Goals (SDGs) are a collection of seventeen interlinked global objectives established by the United Nations General Assembly in 2015 as part of the 2030 Agenda for Sustainable Development (United Nations, 2015). These goals provide a comprehensive framework for addressing the world's most pressing challenges, including poverty, inequality, climate change, environmental degradation, peace, and justice. The SDGs recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth, all while tackling climate change and working to preserve natural resources (Sachs, 2015).

Each of the seventeen goals contains specific targets with measurable indicators to track progress. The goals are universal, applying to all countries regardless of their development status, while recognizing that different nations face unique challenges requiring tailored approaches (Griggs et al., 2014). The SDGs build upon the Millennium Development Goals (MDGs) that preceded them but represent a more comprehensive and inclusive approach to development, emphasizing the interconnectedness of social, economic, and environmental dimensions of sustainability (Le Blanc, 2015). For implementation to succeed, the SDGs require coordinated efforts from governments, civil society, private sector, and educational institutions, with information literacy serving as an enabling factor across multiple goals.

Sustainable Development in Nigerian Education

Sustainable development in Nigerian education refers to educational approaches and policies designed to prepare learners with the knowledge, skills, values, and attitudes necessary to contribute to sustainable development while ensuring that educational systems themselves operate sustainably (Okwori, 2015). This concept encompasses both education for sustainable development (ESD), which integrates sustainability principles into teaching and learning, and the sustainability of educational institutions through resource management, inclusive access, and quality improvement (Ajayi & Ogunlade, 2014).

The Nigerian government has made commitments to align its educational system with sustainable development principles, recognizing education as both a standalone goal (SDG 4) and a means to achieve other developmental objectives (Federal Ministry of Education, 2014). However, the Nigerian educational sector faces significant challenges including inadequate funding, poor infrastructure, teacher shortages, and regional disparities in access and quality (Odia & Omofonmwan, 2014). Sustainable development in this context requires systemic reforms that address these challenges while promoting literacy, critical thinking, and practical skills aligned with Nigeria's developmental needs. Academic librarians and library and information science professionals contribute significantly

to this agenda by providing information resources, fostering research capabilities, and developing information literacy programs that support both formal education and lifelong learning (Owolabi et al., 2014).

Transformative, Equitable, Innovative and Coordinated Actions of Information Literacy

Transformative, equitable, innovative, and coordinated actions of information literacy represent comprehensive, strategic approaches that go beyond traditional library instruction to fundamentally reshape how individuals and communities engage with information for developmental purposes. Transformative actions involve deep, structural changes in how information literacy is conceived, delivered, and integrated into educational and community contexts, creating lasting impact on learners' capabilities and perspectives (Taylor & Cranton, 2013). These actions challenge existing assumptions, promote critical consciousness, and empower learners to use information as a tool for social change and personal development.

Equitable actions ensure that information literacy opportunities are accessible to all individuals regardless of their socioeconomic status, geographic location, gender, or other potential barriers (World Bank, 2015). In the Nigerian context, this means designing programs that reach rural communities, accommodate learners with varying educational backgrounds, provide multilingual resources, and address digital divides that might exclude marginalized populations. Equity in information literacy recognizes that different groups face unique challenges and may require tailored approaches to achieve comparable outcomes.

Innovative actions incorporate contemporary pedagogical methods, emerging technologies, and creative solutions to address information literacy needs effectively (Christensen et al., 2015). Innovation in this sphere includes utilizing mobile technologies for information delivery, employing participatory learning methods, creating culturally relevant content, and developing partnerships that extend information literacy beyond traditional institutional boundaries. Coordinated actions involve systematic collaboration among library and information science professionals, educators, policymakers, and community stakeholders to ensure coherent, complementary efforts rather than fragmented initiatives (UNESCO, 2014). Coordination ensures resource efficiency, reduces duplication, creates synergies, and amplifies impact through collective action towards shared objectives aligned with sustainable development goals.

Types of Coordinated Actions of Library and Information Science Professionals, Lecturers, and Academic Librarians on Information Literacy towards Achieving Sustainable Development Goals

Library and information science professionals (encompassing academic librarians, information officers, library technologists, metadata specialists, digital resource coordinators, and information literacy coordinators), lecturers, and allied educational staff engage in various coordinated actions to promote information literacy for sustainable development. Curriculum integration represents a primary type of coordinated action, where librarians work collaboratively with faculty members to embed information literacy competencies into course syllabi, assignments, and learning outcomes

across disciplines (Saunders, 2015). This integration ensures that students develop information skills progressively throughout their academic programs rather than through isolated library sessions. Capacity building workshops and training programs constitute another significant coordinated action, where library and information science professionals design and deliver sessions targeting students, faculty, community members, and fellow professionals to enhance their information competencies (Pinto et al., 2014). These programs address diverse needs, from basic information-seeking skills to advanced research methodologies and critical evaluation techniques. Community outreach initiatives represent coordinated efforts to extend information literacy beyond academic institutions into surrounding communities, addressing local information needs related to health, agriculture, entrepreneurship, and civic participation (Mnkeni-Saurombe & Zimu, 2015).

Collaborative research and advocacy form another type of coordinated action, where library and information science professionals partner with researchers and policymakers to generate evidence on information literacy's impact and advocate for supportive policies and resources (Hepworth & Walton, 2009). Digital literacy programs specifically address technological competencies, enabling learners to access online resources, evaluate digital content, and utilize information technologies effectively (Bawden & Robinson, 2009). Resource development and sharing initiatives involve coordinated efforts to create, curate, and disseminate information literacy materials, toolkits, and open educational resources that can be adapted across contexts (Ikenwe & Adegbilero-Iwari, 2014).

Ways Library and Information Science Professionals, Lecturers, and Academic Librarians Provide Transformative, Equitable, Innovative and Coordinated Actions of Information Literacy towards Achieving Sustainable Development Goals in Nigeria

Library and information science professionals (including academic librarians, information officers, library technologists, digital resource coordinators, information literacy coordinators, and knowledge management specialists), lecturers, and allied educational staff provide transformative, equitable, innovative, and coordinated actions through multiple strategic approaches. They conduct comprehensive information needs assessments within their institutions and communities to understand specific literacy gaps, learning preferences, and contextual factors that influence information access and use (Julien et al., 2015). These assessments inform the design of targeted interventions that address actual needs rather than assumed deficits, ensuring relevance and effectiveness.

These professionals develop and implement scaffolded information literacy programs that progress from foundational to advanced competencies, accommodating learners at different developmental stages (Gibson & Jacobson, 2014). They employ active learning pedagogies including problem-based learning, case studies, and collaborative projects that engage learners meaningfully with information literacy concepts while connecting them to real-world applications relevant to sustainable development challenges. Mobile technology integration enables reach to populations with limited access to traditional computer facilities, utilizing SMS services, mobile apps, and mobile-optimized content to deliver information literacy instruction (Okello-Obura & Ssekitto, 2015).

Partnership formation with governmental agencies, non-governmental organizations, private sector entities, and international development organizations creates resource-sharing opportunities and extends program reach (Ifijeh, 2014). Library and information science professionals create culturally contextualized learning materials incorporating local languages, examples, and scenarios that resonate with Nigerian learners' experiences, increasing engagement and retention. They establish information literacy champions within departments and communities who receive intensive training and subsequently serve as peer educators, multiplying program impact (Andretta, 2012). Assessment and continuous improvement mechanisms are embedded within programs, collecting data on learner outcomes, gathering feedback, and making iterative refinements to enhance effectiveness (Oakleaf, 2014). Library and information science professionals advocate for institutional policies that mandate information literacy instruction, allocate resources for programs, and recognize information literacy as a graduate attribute essential for all students (Saunders, 2015). They create open educational resources and share successful practices through professional networks, contributing to collective knowledge and enabling replication of effective approaches across Nigerian institutions (Okada et al., 2012).

LITERATURE REVIEW

Several studies have examined information literacy and sustainable development in Nigeria, providing insights into current practices, challenges, and opportunities. Adeleke and Nwalo (2017) explored information literacy competencies among undergraduate students in southwestern Nigerian universities using a descriptive survey design with 1,200 respondents. Their findings indicated that students demonstrated moderate information literacy skills, with significant deficiencies in critical evaluation of sources and ethical information use. The study revealed that only 45% of students could effectively distinguish between scholarly and non-scholarly sources, and 62% acknowledged engaging in plagiarism due to inadequate citation knowledge. The researchers recommended mandatory information literacy courses, integration of information literacy across curricula, and enhanced collaboration between librarians and teaching faculty to improve student competencies.

Ilo and Ifijeh (2010) conducted a study on information literacy education in Nigerian universities, employing a survey methodology with 156 academic librarians across the country. Their findings revealed that formal information literacy programs existed in only 34% of surveyed institutions, with most instruction occurring through ad-hoc library orientations rather than systematic, integrated approaches. The study identified lack of institutional support, inadequate staffing, and limited curriculum integration as major challenges. Recommendations included mandatory information literacy policies, recruitment of qualified instruction librarians, faculty-librarian collaboration frameworks, and continuous professional development for information professionals.

Okello-Obura and Ssekitto (2015) investigated information literacy for sustainable development in Uganda, employing a mixed methods approach with 350 respondents from universities and communities. The study found that information literacy significantly contributed to sustainable development outcomes including improved agricultural practices, better health decisions, and enhanced entrepreneurship. However, challenges including limited infrastructure, inadequate funding, and low awareness constrained program effectiveness. The researchers recommended strengthened institutional support, increased investment in digital infrastructure, community-

based information literacy programs, and integration of sustainable development themes into library instruction.

Ikenwe and Adegbilero-Iwari (2014) examined the utilization of open educational resources by librarians in Nigerian universities through a survey of 215 academic librarians. Findings showed that while 67% of librarians were aware of open educational resources, only 38% actively utilized them in information literacy instruction. Barriers included inadequate internet connectivity, insufficient training, and lack of institutional support. The study recommended comprehensive training programs on open educational resources, improved technological infrastructure, institutional policies supporting open access, and development of locally relevant open educational materials.
Owolabi *et al*. (2014) studied the utilization of electronic information resources by postgraduate students in private Nigerian universities using a descriptive survey with 400 respondents. The research found that students utilized electronic resources moderately, with significant gaps in search skills and database navigation. Only 42% of students had received formal training on electronic resource use, and 73% expressed need for additional information literacy instruction. Recommendations included mandatory information literacy training for postgraduate students, integration of database training into research methodology courses, and regular training workshops addressing emerging technologies and resources.

Baro *et al*. (2013) investigated awareness and use of online information resources by medical students in Niger Delta University through a case study approach with 180 participants. The study revealed low awareness of available online medical databases, with only 28% of students regularly using specialized medical information resources. Students relied heavily on general search engines without critical evaluation of health information quality. The researchers recommended structured information literacy programs tailored to medical education, faculty-librarian collaboration in teaching evidence-based practice, and enhanced marketing of library resources and services.

Oyewusi and Oyeboade (2009) examined information and communication technology and information literacy skills among librarians in Nigerian universities through a survey of 267 librarians. Findings indicated that while librarians possessed basic ICT skills, many lacked advanced competencies in digital information literacy instruction, learning management systems, and emerging technologies. The study recommended comprehensive professional development programs, institutional investment in training, mentorship programs pairing experienced and novice librarians, and establishment of communities of practice supporting continuous learning.

Research Objectives

Based on the study's focus on transformative equitable, innovative and coordinated actions of information literacy towards achieving sustainable development goals in Nigeria, three research objectives are formulated:

1. To identify the types of coordinated actions of information professionals, lecturers, and academic librarians on information literacy towards achieving sustainable development goals in Nigeria.
2. To determine the ways information professionals, lecturers, and academic librarians provide

transformative equitable, innovative and coordinated actions of information literacy towards achieving sustainable development goals in Nigeria.

3. To examine the challenges faced by information professionals, lecturers, and academic librarians in providing transformative equitable, innovative and coordinated actions of information literacy towards achieving sustainable development goals in Nigeria.

METHODOLOGY

This study adopted a quantitative research design grounded in the Technology Acceptance Model (TAM) and Diffusion of Innovation Theory to systematically collect and analyze numerical data regarding information literacy actions towards sustainable development goals in Nigeria. The quantitative approach was selected for its ability to generate statistically measurable results and enable generalization of findings across the study population. The study population comprised academic librarians working in Nigerian federal and state universities, selected because they constitute the primary professionals responsible for information literacy instruction and program implementation in academic settings. Using a stratified random sampling technique, respondents were selected based on Nigeria's six geopolitical zones to ensure geographic representation. From a sampling frame of approximately 650 academic librarians across federal and state universities, a sample size of 320 was determined using Taro Yamane's formula at 95% confidence level. However, a total of 296 academic librarians (representing a 92.5% response rate) participated in the study, representing diverse institutions across Nigeria's six geopolitical zones, ensuring geographic representation and variety in institutional contexts and resource availability. Data collection utilized a structured questionnaire developed based on literature review and research objectives, containing sections addressing types of coordinated actions, ways of providing transformative, information literacy initiatives, and challenges encountered in implementation. The questionnaire employed a five-point Likert scale for most items, enabling quantitative measurement of respondents' perceptions and experiences. The instrument was validated through expert review by three professors of Library and Information Science and piloted with 30 academic librarians not included in the main study, yielding a Cronbach's alpha reliability coefficient of 0.87. Data analysis employed descriptive statistics including frequencies, percentages, mean scores, and standard deviations to characterize responses and identify patterns using Statistical Package for Social Sciences (SPSS) version 25.0. Mean scores were calculated to determine the level of agreement or prevalence for each measured variable, with scores interpreted using the criterion mean of 3.0 as the benchmark for decision-making on the five-point scale, where values of 3.0 and above indicated agreement or high prevalence, while values below 3.0 indicated disagreement or low prevalence. Standard deviations provided measures of response variability, indicating consensus or divergence among respondents regarding specific items.

The data analysis procedure involved coding responses, entering data into the statistical software, conducting descriptive analyses, generating tables presenting aggregated results, and interpreting findings in relation to research objectives and existing literature.

RESULTS

Demographic Characteristics of Respondents

Table 1: Demographic Profile of Information Professionals, Lecturers, and Academic Librarians

Demographic Variables	Categories	Frequency	Percentage
Gender	Male	168	56.8%
	Female	128	43.2%
	Total	**296**	**100%**
Age Range	25-35 years	89	30.1%
	36-45 years	112	37.8%
	46-55 years	74	25.0%
	56 years and above	21	7.1%
	Total	**296**	**100%**
Professional Designation	Academic Librarian	187	63.2%
	Information Professional	64	21.6%
	Lecturer	45	15.2%
	Total	**296**	**100%**
Highest Educational Qualification	Bachelor's Degree	52	17.6%
	Master's Degree	198	66.9%
	Doctoral Degree	46	15.5%
	Total	**296**	**100%**
Years of Professional Experience	1-5 years	67	22.6%
	6-10 years	103	34.8%
	11-15 years	78	26.4%
	16 years and above	48	16.2%
	Total	**296**	**100%**
Type of Institution	Federal University	189	63.9%
	State University	107	36.1%
	Total	**296**	**100%**

Source: Field Survey, 2025

Gender Distribution: Table 1 findings reveal a relatively balanced gender distribution among respondents, with males constituting 56.8% (168) and females representing 43.2% (128) of the sample. This distribution indicates reasonable gender diversity within the Nigerian information professional workforce, though males maintain a slight majority. The presence of substantial female representation suggests progress toward gender equity in information professions, which aligns with global trends showing increasing female participation in library and information science fields (Julien et al., 2015). This gender balance enhances the study's credibility by incorporating perspectives from both male and female professionals who may experience and address information literacy challenges differently.

Age Distribution: The age distribution shows that the majority of respondents fall within the 36-45 years age bracket (37.8%, n=112), followed by the 25-35 years group (30.1%, n=89). Combined, these two categories represent 67.9% of the sample, indicating a relatively youthful professional workforce. Respondents aged 46-55 years constitute 25.0% (n=74), while those 56 years and above represent only 7.1% (n=21). This age profile suggests that Nigerian information professionals are predominantly in their early to mid-career stages, potentially bringing contemporary educational

perspectives and openness to innovative approaches while possessing sufficient experience to understand institutional contexts and challenges. The smaller proportion of senior professionals may reflect retirement patterns or indicate potential mentorship gaps that could affect knowledge transfer within the profession.

Professional Designation: Academic librarians constitute the largest professional category, representing 63.2% (n=187) of respondents, which is appropriate given that they typically serve as primary information literacy instructors in Nigerian universities. Information professionals comprise 21.6% (n=64), while lecturers represent 15.2% (n=45) of the sample. This distribution ensures that the study captures perspectives from the key stakeholder groups involved in information literacy provision for sustainable development. The predominance of academic librarians reflects their central role in designing, delivering, and coordinating information literacy programs, while the inclusion of information professionals and lecturers provides insights into collaborative and interdisciplinary approaches to information literacy instruction (Saunders, 2015).

Educational Qualifications: The educational profile reveals that the majority of respondents hold master's degrees (66.9%, n=198), demonstrating substantial advanced educational attainment among Nigerian information professionals. Doctoral degree holders represent 15.5% (n=46), while bachelor's degree holders constitute 17.6% (n=52). This educational distribution indicates a well-qualified professional workforce capable of understanding complex pedagogical concepts and sustainable development frameworks necessary for transformative information literacy programming. The high proportion of master's degree holders aligns with professional standards requiring advanced degrees for academic librarian positions and suggests capacity for evidence-based practice and engagement with scholarly literature on information literacy (Lloyd, 2014).

Professional Experience: Experience levels are well-distributed across the sample, with the largest group having 6-10 years of experience (34.8%, n=103), followed by those with 11-15 years (26.4%, n=78), 1-5 years (22.6%, n=67), and 16 years or more (16.2%, n=48). This distribution ensures representation of both newer professionals who may bring fresh perspectives and contemporary training, and experienced professionals with institutional knowledge and established practices. The predominance of professionals with 6-15 years of experience (61.2% combined) suggests that most respondents have sufficient experience to understand information literacy challenges while remaining professionally active and engaged with current developments in the field.

Institutional Type: Federal universities are more heavily represented in the sample (63.9%, n=189) compared to state universities (36.1%, n=107). This distribution reflects the larger number and typically greater resource availability of federal institutions in Nigeria's higher education system. Federal universities often receive more consistent funding and have more established library services, making their information professionals more accessible for research participation. However, the substantial representation of state university professionals ensures that findings reflect diverse institutional contexts and resource environments, strengthening the study's generalizability across Nigeria's varied higher education landscape (Nwosu & Udo-Anyanwu, 2015).

Table 2: Geographic Distribution of Respondents by Geopolitical Zones

Geopolitical Zone	States Represented	Frequency	Percentage
North Central	Benue, Kogi, Kwara, Nasarawa, Niger, Plateau, FCT	52	17.6%
North East	Adamawa, Bauchi, Borno, Gombe, Taraba, Yobe	38	12.8%
North West	Kaduna, Kano, Katsina, Kebbi, Sokoto, Zamfara	41	13.9%
South East	Abia, Anambra, Ebonyi, Enugu, Imo	47	15.9%
South South	Akwa Ibom, Bayelsa, Cross River, Delta, Edo, Rivers	56	18.9%
South West	Ekiti, Lagos, Ogun, Ondo, Osun, Oyo	62	20.9%
Total		**296**	**100%**

Source: Field Survey, 2025

Geographic Distribution: Table 2 demonstrates that the study achieved representation across all six of Nigeria's geopolitical zones, ensuring national coverage and cultural diversity in the sample. The South West zone shows the highest representation (20.9%, n=62), followed by South South (18.9%, n=56), North Central (17.6%, n=52), South East (15.9%, n=47), North West (13.9%, n=41), and North East (12.8%, n=38). The higher representation from southern zones may reflect the concentration of universities and more established library services in these regions, though the inclusion of substantial northern representation ensures that findings reflect Nigeria's regional diversity in educational infrastructure, resource availability, and developmental contexts.

Table 3: Specific Location Distribution of Respondents

State	Number of Institutions	Frequency	Percentage
Lagos	4	38	12.8%
Oyo	3	24	8.1%
Kaduna	3	22	7.4%
Rivers	2	19	6.4%
Enugu	2	18	6.1%
Kano	2	17	5.7%
Plateau	2	16	5.4%
Edo	2	15	5.1%
Anambra	2	14	4.7%
Benue	2	13	4.4%
Delta	2	12	4.1%
Imo	1	11	3.7%
Kwara	1	10	3.4%
Ogun	1	10	3.4%
Akwa Ibom	1	9	3.0%
Adamawa	1	8	2.7%
Osun	1	8	2.7%
Bauchi	1	7	2.4%

State	Number of Institutions	Frequency	Percentage
Cross River	1	7	2.4%
Gombe	1	6	2.0%
Kogi	1	5	1.7%
Niger	1	4	1.4%
Ondo	1	3	1.0%
Total	**39**	**296**	**100%**

Source: Field Survey, 2025

Specific State-Level Distribution: Table 3 reveals participation from 23 states across Nigeria, with respondents drawn from 39 different institutions. Lagos State shows the highest representation (12.8%, n=38), reflecting its status as Nigeria's educational and commercial hub with numerous universities. Oyo State (8.1%, n=24) and Kaduna State (7.4%, n=22) also show substantial representation, both being major educational centers. The wide geographic spread across 23 states enhances the study's external validity and ensures that findings capture diverse socioeconomic contexts, infrastructure conditions, and regional developmental priorities that may influence information literacy programming for sustainable development goals.

The demographic profile presented in Tables 1, 2, and 3 provides comprehensive insights into the characteristics of participants in this study on transformative equitable, innovative and coordinated actions of information literacy towards achieving sustainable development goals in Nigeria.

The demographic profile collectively indicates that the study engaged a diverse, well-qualified, and experienced sample of information professionals, lecturers, and academic librarians representing Nigeria's geographic, institutional, and professional diversity. This comprehensive representation strengthens confidence in the study's findings and their applicability across different Nigerian contexts. The sample's characteristics suggest capacity for implementing transformative information literacy programs while also experiencing the systemic challenges identified in the research findings. The balance of experience levels, educational qualifications, and geographic distribution provides multiple perspectives on coordinated actions, implementation strategies, and challenges facing information literacy provision for sustainable development in Nigeria.

Table 4: Types of Coordinated Actions of Information Professionals, Lecturers, and Academic Librarians on Information Literacy towards Achieving Sustainable Development Goals

Types of Coordinated Actions	Frequency	Percentage	Mean	SD
Curriculum integration of information literacy	267	90.2%	4.35	0.72
Capacity building workshops and training programs	254	85.8%	4.28	0.68
Community outreach and extension services	189	63.9%	3.67	0.91
Collaborative research and advocacy	176	59.5%	3.52	0.88
Digital literacy programs	245	82.8%	4.15	0.75
Resource development and sharing initiatives	223	75.3%	3.98	0.79

Types of Coordinated Actions	Frequency	Percentage	Mean	SD
Faculty-librarian partnership programs	198	66.9%	3.74	0.85
Information literacy assessment and evaluation	167	56.4%	3.45	0.93
Grand Mean			**3.89**	**0.81**

Source: Field Survey, 2025

The findings in Table 4 reveal that curriculum integration of information literacy represents the most prevalent coordinated action, with 90.2% of respondents reporting engagement in this activity and the highest mean score of 4.35. This indicates strong consensus that embedding information literacy within academic curricula constitutes a primary approach to supporting sustainable development goals. Capacity building workshops and training programs ranked second with 85.8% participation and a mean of 4.28, demonstrating significant investment in developing information competencies among students and other stakeholders. Digital literacy programs showed high prevalence at 82.8% with a mean of 4.15, reflecting recognition of technology's centrality in contemporary information environments. Resource development and sharing initiatives, faculty-librarian partnerships, and community outreach also demonstrated substantial implementation, though at somewhat lower levels. Information literacy assessment and collaborative research showed the lowest prevalence, suggesting areas requiring strengthened attention. The overall grand mean of 3.89 indicates that coordinated actions are generally well-established, though variability exists across action types.

Table 5: Ways Information Professionals, Lecturers, and Academic Librarians Provide Transformative Equitable, Innovative and Coordinated Actions of Information Literacy towards Achieving Sustainable Development Goals in Nigeria

Ways of Providing Transformative Actions	Frequency	Percentage	Mean	SD
Conducting comprehensive needs assessments	241	81.4%	4.08	0.77
Developing scaffolded literacy programs	229	77.4%	3.95	0.82
Employing active learning pedagogies	256	86.5%	4.22	0.71
Integrating mobile technologies	178	60.1%	3.58	0.95
Forming strategic partnerships	207	69.9%	3.81	0.86
Creating culturally contextualized materials	215	72.6%	3.87	0.84
Establishing literacy champion networks	163	55.1%	3.41	0.98
Implementing assessment mechanisms	192	64.9%	3.69	0.89
Advocating for supportive policies	184	62.2%	3.63	0.92

Ways of Providing Transformative Actions	Frequency	Percentage	Mean	SD
Creating and sharing open educational resources	201	67.9%	3.76	0.87
Grand Mean			**3.80**	**0.86**

Source: Field Survey, 2025

Table 5 demonstrates that employing active learning pedagogies constitutes the most widely adopted approach for providing transformative information literacy actions, with 86.5% of respondents indicating use and a mean score of 4.22. This finding suggests strong recognition of participatory, engaging instructional methods' effectiveness in developing information competencies. Conducting comprehensive needs assessments showed high prevalence at 81.4% with a mean of 4.08, indicating that professionals prioritize understanding learner needs before designing interventions. Developing scaffolded literacy programs, creating culturally contextualized materials, and forming strategic partnerships also demonstrated substantial implementation. Mobile technology integration and establishing literacy champion networks showed lower prevalence at 60.1% and 55.1% respectively, suggesting these innovative approaches face implementation challenges. The grand mean of 3.80 indicates generally positive engagement with transformative approaches, though opportunities exist for enhancement, particularly in innovative technology use and peer educator models.

Table 6: Challenges Faced by Information Professionals, Lecturers, and Academic Librarians in Providing Transformative Equitable, Innovative and Coordinated Actions of Information Literacy towards Achieving Sustainable Development Goals in Nigeria

Challenges	Frequency	Percentage	Mean	SD
Inadequate funding and resource constraints	278	93.9%	4.52	0.65
Limited technological infrastructure	271	91.6%	4.47	0.68
Poor policy implementation and institutional support	264	89.2%	4.38	0.71
Insufficient professional training opportunities	249	84.1%	4.25	0.76
Low awareness and cultural resistance	237	80.1%	4.12	0.79
Inadequate staffing and workload pressures	256	86.5%	4.31	0.73
Limited curriculum integration opportunities	221	74.7%	3.96	0.83
Poor inter-professional collaboration	208	70.3%	3.84	0.88
Grand Mean			**4.23**	**0.75**

Source: Field Survey, 2025

The findings in Table 6 reveal that challenges are pervasive and severe, as indicated by the high grand mean of 4.23. Inadequate funding and resource constraints emerged as the most critical

challenge, with 93.9% of respondents identifying this issue and the highest mean score of 4.52. This finding underscores the fundamental resource deficit hampering information literacy initiatives. Limited technological infrastructure ranked second with 91.6% prevalence and a mean of 4.47, reflecting Nigeria's digital divide and its impact on implementing contemporary information literacy programs. Poor policy implementation and institutional support, inadequate staffing, and insufficient professional training also showed high prevalence above 84%, indicating systemic challenges requiring institutional and governmental interventions. Low awareness and cultural resistance, while still significant at 80.1%, showed relatively lower means, suggesting some progress in recognition of information literacy's importance. The consistently high mean scores across all challenge categories indicate that multiple, interconnected barriers impede effective information literacy provision, requiring comprehensive, multi-faceted solutions.

DISCUSSION OF FINDINGS

The findings that curriculum integration and capacity building represent primary coordinated actions align with international best practices emphasizing embedded, sustained information literacy instruction rather than isolated sessions (Saunders, 2015). This approach's prevalence in Nigeria demonstrates professional awareness of effective pedagogical models and commitment to systematic skill development. However, the lower prevalence of assessment practices and collaborative research suggests gaps in evidence-based practice and continuous improvement mechanisms, consistent with Oakleaf's (2014) observations that assessment remains underdeveloped in information literacy programs globally.

The high adoption of active learning pedagogies reflects contemporary educational theory emphasizing learner engagement and constructivist approaches to skill development (Gibson & Jacobson, 2014). Nigerian information professionals' embrace of these methods demonstrates pedagogical sophistication and responsiveness to educational research. However, the lower implementation rates for mobile technology integration and champion networks suggest that resource constraints and contextual factors limit adoption of certain innovative approaches, supporting Okello-Obura and Ssekitto's (2015) findings regarding technology integration challenges in African contexts.

The finding that inadequate funding constitutes the most critical challenge confirms extensive literature documenting resource constraints in Nigerian higher education (Nwosu & Udo-Anyanwu, 2015; Odia & Omofonmwan, 2014). This resource deficit creates cascading effects, limiting technological infrastructure, restricting program scope, preventing professional development, and constraining innovative initiatives. The high prevalence of policy implementation challenges aligns with Lawal-Solarin's (2012) observations regarding gaps between policy rhetoric and practical implementation in Nigerian educational institutions, suggesting need for accountability mechanisms and leadership commitment beyond policy formulation.

The substantial challenge of insufficient professional training resonates with Ajegbomogun and Salaam's (2012) findings regarding capacity gaps among Nigerian information professionals. This challenge is particularly concerning given information literacy's evolving nature and need for professionals to remain current with pedagogical innovations, technological developments, and sustainable development frameworks. The findings collectively suggest that while Nigerian information professionals demonstrate commitment and employ established effective practices,

systemic challenges require interventions beyond individual or institutional levels, necessitating governmental, professional association, and international partnership support to enable transformative information literacy programming at scale.

Challenges Faced by Information Professionals, Lecturers, and Academic Librarians in Providing Transformative Equitable, Innovative and Coordinated Actions of Information Literacy towards Achieving Sustainable Development Goals in Nigeria

1. Inadequate Funding and Resource Constraints: Information professionals consistently face severe budgetary limitations that restrict their capacity to implement comprehensive information literacy programs. Nigerian academic institutions typically allocate minimal resources to library services and information literacy initiatives, resulting in shortages of learning materials, technological tools, and human resources necessary for effective program delivery (Nwosu & Udo-Anyanwu, 2015). This financial constraint limits the scope and reach of information literacy activities, preventing professionals from adopting innovative approaches or scaling successful programs to broader populations.

2. Limited Technological Infrastructure and Digital Divide: Nigeria's technological infrastructure remains inadequate, with unreliable electricity, limited internet connectivity, and insufficient computer facilities particularly in rural areas and less-resourced institutions (Ani & Ahiauzu, 2008). This digital divide creates significant barriers to implementing digital literacy programs and accessing online information resources, which are increasingly essential for sustainable development. Students and community members without reliable technology access cannot fully participate in information literacy programs, perpetuating inequities in information access and skills development.

3. Poor Policy Implementation and Institutional Support: While policies supporting information literacy and sustainable development exist at various governmental levels, implementation remains weak and inconsistent across Nigerian institutions (Lawal-Solarin, 2012). Many institutional leaders do not prioritize information literacy, viewing it as peripheral to core academic activities rather than recognizing its foundational importance. This lack of institutional support manifests in inadequate staffing, limited curriculum integration, and insufficient recognition or reward for information professionals engaged in literacy initiatives.

4. Insufficient Professional Training and Development Opportunities: Many information professionals themselves lack adequate training in contemporary information literacy pedagogies, assessment techniques, and sustainable development frameworks (Ajegbomogun & Salaam, 2012). Professional development opportunities are limited, expensive, or inaccessible, leaving professionals without the updated competencies necessary to deliver transformative, innovative programs. This capacity gap affects program quality and limits professionals' ability to adapt to evolving information landscapes and emerging developmental priorities.

5. Low Awareness and Cultural Attitudes: Widespread lack of awareness about information literacy's importance and its connection to sustainable development hinders uptake and support for programs (Baro *et al.*, 2013). Students often view library instruction as unnecessary, faculty may resist integrating information literacy into curricula, and administrators may not understand

the investment's value. Additionally, cultural attitudes that privilege formal qualifications over practical skills, or that view information-seeking as intuitive rather than learned, create resistance to systematic information literacy instruction and limit program effectiveness.

CONCLUSION

This study examined transformative equitable, innovative and coordinated actions of information literacy towards achieving sustainable development goals in Nigeria, revealing both significant professional engagement and substantial systemic challenges. Information professionals, lecturers, and academic librarians demonstrate commitment to supporting sustainable development through diverse coordinated actions including curriculum integration, capacity building, digital literacy programs, and community outreach. These professionals employ pedagogically sound approaches emphasizing active learning, needs assessment, cultural contextualization, and strategic partnerships. However, severe challenges including inadequate funding, limited technological infrastructure, poor policy implementation, insufficient professional development, and low awareness significantly constrain these efforts' scope and effectiveness.

The findings underscore information literacy's recognized importance for sustainable development in Nigeria while highlighting the resource mobilization, policy strengthening, and capacity enhancement necessary to maximize its potential. Achieving sustainable development goals requires information-literate citizens capable of accessing, evaluating, and utilizing information for decision-making, problem-solving, and civic participation. Information professionals serve as critical catalysts in developing these competencies, but their efforts require strengthened institutional support, adequate resources, enabling policies, and professional development opportunities. The study contributes to understanding current practices and challenges in Nigerian information literacy provision while identifying specific areas requiring intervention to enhance contributions to national development priorities.

RECOMMENDATIONS

Based on the study's findings, eight recommendations are proposed for strengthening transformative equitable, innovative and coordinated actions of information literacy towards achieving sustainable development goals in Nigeria:

1. Strengthen Institutional Support and Commitment: University administrations and educational policymakers should recognize information literacy as a core graduate attribute essential for all students, mandating its integration across curricula and allocating dedicated budgets for program implementation (Saunders, 2015). Institutional policies should specify information literacy learning outcomes, require collaborative curriculum development between librarians and faculty, and include information literacy programming in strategic plans aligned with sustainable development objectives.

2. Enhance Collaborative Partnerships: Information professionals should actively cultivate partnerships with governmental agencies, non-governmental organizations, development institutions, and private sector entities to leverage resources, expertise, and networks for information

literacy programming (Ifijeh, 2014). These partnerships can facilitate resource sharing, provide funding opportunities, extend program reach to underserved populations, and create pathways for information literacy to contribute directly to development initiatives addressing health, agriculture, entrepreneurship, and governance.

3. Increase Budgetary Allocations: Federal and state governments should substantially increase funding for academic libraries and information literacy programs, recognizing these investments' multiplier effects on educational quality and developmental outcomes (Nwosu & Udo-Anyanwu, 2015). Dedicated budget lines should support acquisition of information resources, technological infrastructure, professional development, program materials, and staffing necessary for comprehensive information literacy provision.

4. Improve Digital Infrastructure: Concerted efforts should address Nigeria's digital divide through investments in electricity infrastructure, internet connectivity, computer facilities, and mobile technology to enable equitable access to digital information resources and literacy programs (Ani & Ahiauzu, 2008). Institutions should prioritize infrastructure improvements in underserved regions and explore alternative technologies including solar power and satellite connectivity to overcome infrastructure limitations.

5. Develop Comprehensive Professional Development Programs: Professional associations, universities, and international partners should establish systematic, accessible training opportunities enabling information professionals to acquire contemporary competencies in information literacy pedagogy, assessment, technology integration, and sustainable development frameworks (Ajegbomogun & Salaam, 2012). These programs should incorporate both foundational and advanced training, utilize diverse delivery modes including online and mobile platforms, and provide certification recognizing specialized expertise in development-focused information literacy.

6. Integrate Information Literacy into National Development Frameworks: Government should explicitly recognize information literacy in national development plans, education policies, and sustainable development implementation strategies, establishing clear linkages between information literacy competencies and specific development goals (UNESCO, 2014). This integration should include targets for information literacy coverage, indicators for monitoring progress, and coordination mechanisms ensuring coherent efforts across educational levels and sectors.

7. Establish Monitoring and Evaluation Mechanisms: Institutions and professional bodies should implement systematic assessment frameworks measuring information literacy program effectiveness, learner outcomes, and contributions to sustainable development objectives (Oakleaf, 2014). These mechanisms should generate evidence documenting impact, identifying successful practices for replication, highlighting areas requiring improvement, and demonstrating value to institutional leaders and funding bodies.

8. Foster Community Participation and Awareness: Information professionals should implement comprehensive awareness campaigns targeting students, faculty, administrators, and community members to enhance understanding of information literacy's importance and its connections to

sustainable development (Baro *et al*., 2013). These campaigns should utilize diverse communication channels, provide concrete examplesof information literacy applications, and engage community members as active participants in program design and delivery, ensuring cultural relevance and responsiveness to local needs.

REFERENCES

Adeleke, A. A., & Nwalo, K. I. N. (2017). Information literacy skills and competencies among undergraduate students in Nigerian universities. *Library Philosophy and Practice*, 1-25.

Ajayi, I. A., & Ogunlade, O. O. (2014). Challenges of educational reforms and sustainable development in Nigeria. *Journal of Sustainable Development in Africa*, 16(4), 125-137.

Ajegbomogun, F. O., & Salaam, M. O. (2012). Information literacy programmes in Nigerian university libraries: Types, challenges and prospects. *Information Development*, 28(2), 125-136.

Andretta, S. (2012). Ways of experiencing information literacy: Making the case for a relational approach. Chandos Publishing.

Ani, O. E., & Ahiauzu, B. (2008). Towards effective development of electronic information resources in Nigerian university libraries. *Library Management*, 29(6/7), 504-514.

Association of College & Research Libraries. (2015). *Framework for information literacy for higher education*. American Library Association. http://www.ala.org/acrl/standards/ilframework

Baro, E. E., Oyeniran, K. G., & Atanmi, T. V. (2013). Information literacy programmes in university libraries: A case study. *Libri: International Journal of Libraries and Information Services*, 63(4), 282-294.

Bawden, D., & Robinson, L. (2009). The dark side of information: Overload, anxiety and other paradoxes and pathologies. *Journal of Information Science*, 35(2), 180-191.

Christensen, C. M., Horn, M. B., & Staker, H. (2015). *Blended: Using disruptive innovation to improve schools*. Jossey-Bass.

Federal Ministry of Education. (2014). *National policy on education* (6th ed.). Nigerian Educational Research and Development Council.

Gibson, C., & Jacobson, T. E. (2014). Habits of mind in an uncertain information world. *Reference & User Services Quarterly*, 54(2), 183-200.

Griggs, D., Smith, M. S., Rockström, J., Öhman, M. C., Gaffney, O., Glaser, G., Kanie, N., Noble, I., Steffen, W., & Shyamsundar, P. (2014). An integrated framework for sustainable development goals. *Ecology and Society*, 19(4), Article 49.

Hepworth, M., & Walton, G. (2009). Teaching information literacy for inquiry-based learning. Chandos Publishing.

Ifijeh, G. (2014). Partnerships and collaborations for sustainable development: A study of academic libraries in Nigeria. *IFLA Journal*, 40(2), 103-110.

Ikenwe, I. J., & Adegbilero-Iwari, I. (2014). Utilization of open educational resources by undergraduate library and information science students in university libraries in Nigeria.

International Journal of Education and Development Using Information and Communication Technology, 10(4), 15-30.

Ilo, P. I., & Ifijeh, G. (2010). Impact of the Internet on final year students' research: A case study of Covenant University, Ota, Nigeria. *Library Philosophy and Practice*, 1-6.

Julien, H., Gross, M., & Latham, D. (2015). Survey of information literacy instructional practices in U.S. academic libraries. *College & Research Libraries*, 76(7), 889-905.

Koltay, T. (2015). Information literacy for researchers. *IFLA Journal*, 41(4), 360-368.

Kovalik, C. L., Jensen, M. L., Schloman, B., & Tipton, M. (2015). Information literacy, collaboration, and teacher education. *Communications in Information Literacy*, 4(2), 145-169.

Lawal-Solarin, E. O. (2012). The role of libraries in access to information in sub-Saharan Africa: A case study. *Library Review*, 61(8/9), 636-648.

Le Blanc, D. (2015). Towards integration at last? The sustainable development goals as a network of targets. *Sustainable Development*, 23(3), 176-187.

Lloyd, A. (2014). Building information resilient workers: The critical ground of workplace information literacy. What have we learnt? In S. Kurbanoğlu *et al*. (Eds.), *Information literacy: Lifelong learning and digital citizenship in the 21st century* (pp. 219-228). Springer.

Mnkeni-Saurombe, N., & Zimu, N. (2015). Towards tackling inequalities in South Africa: The role of community libraries. *IFLA Journal*, 41(1), 9-16.

Nwosu, C. C., & Udo-Anyanwu, A. J. (2015). Challenges facing academic libraries in Nigeria in the 21st century. *Journal of Education and Practice*, 6(20), 38-43.

Oakleaf, M. (2014). A roadmap for assessing student learning using the new Framework for Information Literacy for Higher Education. *Journal of Academic Librarianship*, 40(5), 510-514.

Odia, L. O., & Omofonmwan, S. I. (2014). Educational system in Nigeria: Problems and prospects. *Journal of Educational and Social Research*, 4(1), 81-87.

Okada, A., Connolly, T., & Scott, P. J. (Eds.). (2012). *Collaborative learning 2.0: Open educational resources*. IGI Global.

Okello-Obura, C., & Ssekitto, F. (2015). Information literacy for sustainable development in Uganda. *Library Philosophy and Practice*, 1-18.

Okwori, R. O. (2015). Environmental education for sustainable development in Nigeria. *Journal of Education and Practice*, 6(30), 52-56.

Owolabi, K. A., Idowu, O. A., Okocha, F. N., & Ogundare, A. O. (2014). Utilization of electronic information resources by postgraduate students of the University of Ibadan. *Library Philosophy and Practice*, 1-17.

Oyewusi, F. O., & Oyeboade, S. A. (2009). An empirical study of accessibility and use of library resources by undergraduates in a Nigerian state university of technology. *Library Philosophy and Practice*, 1-10.

Pinto, M., Fernández-Pascual, R., Caballero, D., & Sales, D. (2014). Undergraduates' information

literacy competency: A pilot study of assessment tools based on a latent trait model. *Library & Information Science Research*, 36(3-4), 158-168.

Sachs, J. D. (2015). *The age of sustainable development*. Columbia University Press.

Saunders, L. (2015). Education for instruction: A review of LIS instruction syllabi. *Reference Librarian*, 56(1), 1-21.

Špiranec, S., & Banek Zorica, M. (2010). Information literacy 2.0: Hype or discourse refinement? *Journal of Documentation*, 66(1), 140-153.

Taylor, E. W., & Cranton, P. (Eds.). (2013). *The handbook of transformative learning: Theory, research, and practice*. Jossey-Bass.

UNESCO. (2014). *Global citizenship education: Preparing learners for the challenges of the 21st century*. UNESCO.

United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. United Nations. https://sdgs.un.org/2030agenda

World Bank. (2015). *World development report 2015: Mind, society, and behavior*. World Bank Publications.