Infopreneurship: A Catalyst for Youth Employment and Economic Development among Library and Information Science Graduates in Nigeria

By

Sumayya Hassan Abubakar
Kamaluddeen Isa El-Kalash
&
Muhammad Haruna
Library Complex, Federal College of Education (Technical), Yauri, Kebbi State. **Corresponding Email**: maimartabachief@gmail.com

Abstract

Nigeria has been experiencing a rising rate of graduate unemployment. The situation has continued to pose serious socioeconomic challenges. Among the unemployed are graduates of Library and Information Science (LIS) who are usually affected as a result of the dwindling employment opportunities within conventional library settings. Hence, this paper examines infopreneurship as an emerging area that promotes job creation, self-reliance, and economic development among LIS graduates in the country. The paper explores the concept and dimensions of infopreneurship within the LIS landscape, the changing landscape of LIS practice in Nigeria and highlights various infopreneurial opportunities available to LIS professionals, including digital publishing, content development, information consultancy, social media information services, database management, among others. Further, the paper discusses the relevance of infopreneurial competencies, innovation, digital literacy, and information technology skills in enabling LIS graduates to establish sustainable information-based enterprises. Challenges such as inadequate infopreneurial training, limited access to funding, poor technological infrastructure, and low awareness of infopreneurial opportunities are also discussed. The paper concludes that infopreneurship has significant potential to reduce unemployment, increase self-sustenance, and stimulate economic growth by transforming LIS graduates from job seekers to job creators, and recommends the integration of practical infopreneurship courses into the LIS curricula amongst others.

Keywords: Infopreneurship, youth employment, economic development, library and information science graduates.

Introduction

Nigeria's educated population represents both a significant development opportunity and a pressing policy challenge. This tension stems from the social and economic difficulties many unemployed graduates face despite the growing number of young people leaving universities, polytechnics, and colleges of education with strong potential. According to the State of the Nigerian Youth Report 2025, presented to the House of Representatives Committee on Youth, roughly 1.7 million graduates leave Nigeria's universities and polytechnics every year, a figure the economy has consistently failed to absorb into the labour market (Plan International Nigeria, 2025). Graduate unemployment in Nigeria cuts across disciplines, and Library and Information Science (LIS) graduates are no exception.

Traditionally, LIS graduates looked toward public libraries, archives, academic libraries, school libraries, and documentation centres as their primary career destinations. These settings remain important, but they can no longer absorb the growing number of LIS graduates entering the labour market each year. At the same time, the profession itself has changed, especially with the rise of computers, the internet, social media, digital libraries, and electronic databases that have transformed how information is produced, organised, shared, stored, and used. The development has opened an array of opportunities for people with information-related skills. Infopreneurship is one of the clearest examples of this shift, offering LIS graduates a viable career path beyond the confines of conventional institutional employment. In support of the above, Sulayman *et al.* (2014) posited that Nigerian LIS graduates show considerable readiness to create employment through infopreneurial and technopreneurial activities, although barriers such as inadequate capital, poor internet infrastructure, and unfavourable policies remain significant constraints. Similarly, Okwu *et al.* (2024) identified information brokerage, information-systems consultancy, and information-organisation services as emerging entrepreneurial opportunities for LIS professionals.

No doubt, the above shift matters because information and digital competencies are increasingly central to participation in the modern economy. UNESCO's most recent global assessment of media and information literacy policy found that while national recognition of these competencies is growing, implementation remains fragmented, underscoring the continued need to translate digital and information skills into genuine economic participation rather than treating them as abstract policy goals (UNESCO, 2025). Infopreneurship offers exactly this kind of translation because it is a pathway through which LIS graduates' human capital can be converted into productive employment and value creation. For LIS graduates, this calls for a shift in mindset, from viewing employment as something obtained from an organisation to viewing professional knowledge and information competencies as resources that are capable of generating economic value in their own right. This does not mean abandoning the traditional values of librarianship; rather, it means extending those values into emerging economic and technological spaces.

LIS graduates already possess strong foundations for this shift. Their core competencies in information identification, evaluation, organisation, retrieval, dissemination, and preservation, combined with entrepreneurial skills, digital literacy, creativity, communication, marketing, and a clear understanding of users' information needs, position them well to build viable information enterprises. Nigeria therefore presents a compelling case for examining infopreneurship as a catalyst for gainful employment and economic development among LIS graduates. The central question is not whether these graduates possess entrepreneurial aspirations, but whether their professional competencies, entrepreneurial capabilities, and access to enabling resources can be converted into sustainable economic activity.

It is against this background that this paper examines infopreneurship as a catalyst for gainful employment and economic development among LIS graduates in Nigeria.

Conceptual Clarifications

What is Infopreneurship? Infopreneurship simply means the process of selling information to make profits (Khumalo and Nkala, 2015). In the view of El-Kalash *et al.* (2016), the concept is unarguably an extension of two distinct fields, as the term has its etymology from the words: 'information' and 'entrepreneurship'. Further, the authors argued that the practice is an emerging business model in mainstream information practice that is profit-oriented in nature, based on a vision and passion for using the internet medium to create and/or develop, package and sell information products and services to generate income.

For this paper, infopreneurship is defined as an emerging business concept in our contemporary knowledge-based economy that involves the creation, processing, packaging, dissemination, marketing, and commercialisation of information, knowledge, and information-based resources and services to satisfy the information needs of users, and generate economic value. It represents a feasible and potentially sustainable business model because individuals, businesses, educational institutions, governments, and other organisations place a considerable premium on timely, accurate, relevant, and specialised information for learning, decision-making, research, innovation, and problem-solving.

Explaining Youth Employment: Youth employment refers to the engagement of young individuals, typically aged 15 to 24, in work opportunities that contribute to their economic independence and skill development (UNESCO, n.d). In other words, youth employment refers to youth participation in decent, productive, and remunerative work that enables them to fend for themselves and contribute positively to society's development.

Understanding Economic Development: Economic development refers to programs, policies, or activities that seek to improve the economic well-being and quality of life for a community (British Columbia, 2024). It is the continuous improvement in the economic and social well-being of a society through employment, income generation, human-capital development, increased productivity, innovation, and improved living standards.

Library and Information Science (LIS) Graduates: These are trained professionals in the systematic creation, acquisition, organisation, preservation, retrieval, management, dissemination, and use of information and knowledge resources. According to Iowa Graduate College (n.d), LIS professionals work in public libraries, school libraries, college and university libraries, corporate libraries, law libraries, medical libraries, special collections, historical societies, community archives, museums and galleries, non-profits, corporations, hospitals, and state and federal agencies, or anywhere that there is a need to collect, organise, and access documents and information resources.

Conceptual Framework

This paper is anchored in the Human Capital Theory, which conceptualises education, knowledge, skills, competencies, and experience as investments that enhance individuals' productivity and economic value (Becker, 1964). Within this framework, LIS education and professional competencies constitute the foundational human capital of graduates, while digital literacy, information-management expertise, research competence, creativity, and entrepreneurial skills strengthen their capacity to identify and exploit emerging opportunities. However, infopreneurship

serves as the mediating mechanism through which these competencies are transformed into marketable information products and services. The framework assumes that the effective conversion of the graduates of LIS human capital into infopreneurial activities can improve their capacity to create sustainable livelihoods for themselves and contribute to the Nigerian economy.

The Changing Landscape of LIS Practice in Nigeria

In Nigeria, LIS practice is experiencing a fundamental shift. Traditionally, the professional identity of the librarian was largely associated with the physical library and activities such as cataloguing and classification, collection development, reference services, circulation, preservation and user education. While all of these functions still remain relevant, technological advancement and changes in the information environment have expanded the scope of the professional practice of librarians. LIS professionals now operate within an ecosystem that is characterised by electronic resources, digital scholarship, open access, data-intensive research, artificial intelligence (AI), social media, digital publishing, knowledge management and rapidly changing patterns of information production and consumption (International Federation of Library Associations and Institutions [IFLA], 2024a). Further, the report identifies changing knowledge practices, technological transformation, renegotiation of trust, increasingly complex skills and uneven distribution of digital technologies as major forces shaping the information environment.

The above transformation is undoubtedly occurring alongside a labour market in which technological change is reshaping occupations and the skills required for employment. For instance, the World Economic Forum (WEF, 2025) reported that technological change, particularly AI, information processing and expanding digital access, is among the most significant drivers of labour-market transformation. Further, the forum projected substantial job creation alongside job displacement by 2030 and identified AI and big data, networks and cybersecurity, technological literacy, creative thinking and adaptability among increasingly important skills. By implication, the possession of a degree alone is insufficient for the LIS graduates of the present century. In other words, they must develop the ability to constantly update their skills and commercially apply their professional competencies to remain relevant in the current economic ecosystem.

Cascading it down to the Nigerian scenario, however, the implications are particularly important because traditional library employment has limits, especially since conventional employment opportunities in the discipline are concentrated mainly in a variety of library settings. Such settings have their established staffing structures, limited vacancies and recruitment processes that are unlikely to accommodate the growing pool of LIS graduates who graduate from tertiary institutions across the country on a yearly basis.

Moreover, the constant harvesting of information daily has made information work more diversified. It has paved the way for the smart LIS professionals of the contemporary era to engage in infoprenurial activities such as digitisation, electronic publishing, data management, information literacy, research support, digital curation, information consultancy, records and knowledge management, and digital-content services.

By implication, the conception of LIS graduates in Nigeria need to move from institution-centred professional practice towards information-centred or infopreneurial opportunities, especially since the information landscape remains an important employer of their services. In other words, LIS graduates need to recognise information as a valuable economic resource that can be transformed into products, services and solutions for identified users. They should think outside the box by way

of deploying their professional competencies into identifying the unmet information needs of society, develop services around them and create alternative sources of income for themselves. In support of the above, Okwu *et al*., (2024); Ofodu and Whong (2024) noted that entrepreneurship studies in the Nigerian LIS context have already identified information brokerage, consultancy, digitisation, publishing, research support and other activities as potential avenues for professional self-employment for LIS graduates. In sum, the changing landscape does not make traditional librarianship obsolete, but rather expands the boundaries of LIS practice that necessitates more diversified employment strategies.

Infopreneurship: A Catalyst for Youth Employment among LIS Graduates in Nigeria

Infopreneurship is a practice that offers a promising pathway for unemployed LIS graduates to transform their professional knowledge into gainful employment and income generation for a sustainable living. It is a smart way of identifying, creating, organising, packaging, marketing and commercialising information and knowledge into products or services to satisfy identified user needs. Its significance to LIS graduates lies in the fact that their professional competencies already provide a substantial human-capital foundation for the information-based enterprise.

No doubt, LIS education equips graduates with competencies in information searching and retrieval, information evaluation, organisation and classification, research, reference services, information literacy, preservation and dissemination. In the contemporary digital environment, these competencies can be combined with digital, communication, marketing, business-management and entrepreneurial skills to create new forms of employment. UNESCO (2021) stresses the importance of continuous education and capacity-building in digital literacy, data science, stewardship, curation and information and data literacy, reinforcing the need for information professionals to continually expand their capabilities. Similarly, IFLA (2025) emphasises that future-ready library and information workers require broader skills beyond those traditionally associated with the profession.

However, the employment potential of infopreneurship practice is particularly evident in the variety of services that LIS graduates can provide. These include information brokerage, research-support services, indexing and abstracting, bibliographic services, digitisation, electronic publishing, records and knowledge management, content development, information-literacy training, database services and specialised research services (El-Kalash *et al*., 2016). Recent Nigerian literature specifically identifies information brokerage, database brokerage, information-system consultancy and information-organisation services as entrepreneurial possibilities within LIS (Okwu *et al.*, 2024). Ofodu and Whong (2024) similarly identify research writing, indexing and abstracting, publishing, consultancy and freelancing as potential employment pathways for information professionals.

Empirical evidence further strengthens the case for infopreneurship as Sulyman *et al*. (2024) in a study of Nigerian LIS graduates, examined readiness for infopreneurship and technopreneurship as mechanisms for job creation and concluded that respondents demonstrated substantial readiness for creating employment through these activities. This is significant because it suggests that LIS graduates can potentially move beyond the conventional job-seeker orientation towards a job-creator orientation.

Moreover, research on entrepreneurship education among Nigerian LIS graduates indicates that graduates possess entrepreneurial competencies but that these competencies are not always translated into entrepreneurial practice. Ahmadu *et al.* (2025), for example, found high levels of

entrepreneurial skills among LIS graduates in Kano State but comparatively low levels of readiness, utilisation and self-reliance. This finding highlights an important distinction between possessing entrepreneurial knowledge and successfully converting that knowledge into an income-generating enterprise.

The development of such capacity is also consistent with broader changes in the labour market. The WEF (2025) reports that employers increasingly value technological literacy, creative thinking, analytical thinking, resilience, flexibility, adaptability and lifelong learning, while technological skills such as AI and big data are among the fastest-growing skill areas. LIS graduates who combine their established information competencies with these emerging capabilities can therefore position themselves to participate in a wider range of employment and entrepreneurial opportunities. Thus, infopreneurship has the potential to transform the unemployed LIS graduate into an active contributor to employment creation for economic growth.

Ultimately, infopreneurship provides a viable mechanism for converting LIS human capital into economic value. By transforming information expertise into marketable products and services, unemployed LIS graduates can diversify their employment pathways, generate income, establish enterprises and potentially create jobs for others because infopreneurship represents not merely an alternative to conventional library employment, but an entrepreneurial extension of LIS practice that can promote gainful employment while contributing to Nigeria's knowledge-based economic development.

Challenges Facing Infopreneurship Practice among LIS Graduates in Nigeria

Despite the growing relevance of information-based enterprises to employment creation and economic development, LIS graduates in Nigeria face several challenges in establishing and sustaining infopreneurial ventures. These challenges include inadequate practical training, limited entrepreneurial orientation, insufficient finance, poor digital infrastructure, restricted awareness of opportunities, and weak mentoring and institutional support.

A major challenge is the gap between infopreneurship education and practice. Although many LIS programmes expose students to entrepreneurship and information technology, acquiring theoretical knowledge does not necessarily translate into the readiness or ability to establish viable enterprises. For instance, Ahmadu *et al*. (2025) found that although respondents possessed relatively high entrepreneurial skills, their readiness, perceptions and utilisation of entrepreneurial opportunities for self-reliance remained low. This suggests that entrepreneurship education may sometimes be treated as an academic requirement rather than practical preparation for post-graduation enterprise.

Closely related is the limited practical orientation of infopreneurship training. Contemporary infopreneurship requires competencies beyond traditional library operations, including digital content creation, database development, web publishing, social media management, digitisation, data services, indexing and abstracting, research support and knowledge management. Studies have identified technical, managerial, business, ICT and information-literacy competencies as essential entrepreneurial capabilities among LIS professionals (Bumkeng and Adadu, 2023; Ezeani *et al.*, 2023). Where training remains predominantly theoretical, graduates may understand infopreneurship without possessing adequate skills to commercialise their knowledge and services.

Inadequate finance is another significant constraint. Although some information ventures can be initiated with modest capital, competitive enterprises may require computers, reliable internet,

software subscriptions, websites, cloud services, scanners, printers, digital storage, marketing and suitable workspace. Bumkeng and Adadu (2023) identified inadequate sources of finance as an impediment to entrepreneurial participation among LIS professionals. Financial difficulties are further compounded by inadequate digital infrastructure, including unreliable electricity, costly broadband services, insufficient technological equipment and uneven connectivity. Adeniran and Adeyemi (2023) similarly identified inadequate funding, economic constraints, legal and regulatory issues, insufficient ICT and business skills, workload and weak entrepreneurial orientation as barriers to LIS entrepreneurship. The World Bank (2025) also noted persistent gaps in Nigeria's digital-skills ecosystem and challenges in translating digital-skills policies into effective implementation.

Another challenge is limited awareness and narrow perceptions of infopreneurial opportunities. Some LIS graduates continue to perceive their career prospects primarily in conventional library employment, particularly within government institutions. This may cause them to overlook opportunities in digital publishing, competitive intelligence, knowledge consultancy, research-data services, information packaging, content development, digital archiving and online information services. Arowosola *et al*., (2022) reported variations in awareness of infopreneurial opportunities among LIS students and recommended stronger curriculum integration and industrial exposure to information-enterprise organisations.

Finally, inadequate mentoring, professional networks, incubation facilities and institutional partnerships can hinder the transition from LIS graduates to successful infopreneurs. Young graduates need access to experienced mentors, technology hubs, financial institutions, professional associations and potential markets. Without these forms of support, promising ideas may remain unrealised. Thus, the central challenge is not necessarily a lack of infopreneurial opportunities, but the absence of an integrated ecosystem capable of transforming LIS knowledge, entrepreneurial orientation, technology, finance and market access into sustainable information-based enterprises.

Strategies for Promoting Infopreneurship among LIS Graduates in Nigeria

Promoting infopreneurship among LIS graduates requires deliberate interventions that reposition LIS education beyond preparing graduates primarily for salaried employment. Based on the above, the following strategies for promoting infopreneurship among Nigeria's LIS graduates are recommended:

1. LIS programmes should equip graduates as information professionals, innovators and infopreneurs, particularly within an increasingly digital labour market where self-employment and digitally mediated work are becoming more significant.
2. LIS curricula should be restructured to incorporate practical infopreneurship education. Said differently, infopreneurship should not be treated as a generic university course detached from professional practice. Rather, LIS schools should incorporate information-product development, consultancy, digital publishing, data services, business intelligence, content management, digital marketing, intellectual property, pricing of information services, business-model development and financial management. Arowosola *et al*. (2022) recommend integrating infopreneurship into LIS curricula and providing students with industrial exposure to relevant organisations. A learning-by-doing approach should also be adopted, requiring students to develop and test practical information products such as specialised databases, digitisation and indexing services, digital repositories, research-support services and online

information portals. Such experiences can bridge the gap between entrepreneurial knowledge and its practical application (Ahmadu *et al.,* 2025).

3. Contemporary librarianship is deeply embedded in the digital economy. As such, LIS graduates require competencies beyond basic computer literacy. Their training should encompass web technologies, digital content management, data analytics, search-engine optimisation, database management, digital preservation, cloud collaboration, responsible artificial intelligence use and cybersecurity awareness. This aligns with the growing demand for digital, technical and complementary skills in Nigeria's labour market (World Bank, 2024).
4. LIS schools should establish infopreneurship and innovation hubs. These centres could provide internet facilities, computers, digitisation equipment, software, co-working spaces and technical support. They could also incubate student and graduate ventures by assisting with business planning, market research, business registration, product development and funding opportunities. Collaboration among LIS schools, university libraries, entrepreneurship centres, technology hubs and private information companies would strengthen such initiatives.
5. A framework should be created that will encourage experienced information consultants, publishers, database developers, knowledge managers, digital-content entrepreneurs, and librarians operating private ventures to mentor students and recent graduates. Professional associations, particularly the Nigerian Library Association, could facilitate networking platforms for sharing business experiences, opportunities and market intelligence. Such initiatives could help address weak entrepreneurial orientation among LIS professionals (Bumkeng and Adadu, 2023).
6. Higher institutions, government agencies, development organisations and financial institutions should provide micro-grants, seed funding, business competitions and affordable financing for information- and knowledge-based enterprises. These interventions should be complemented by financial literacy, bookkeeping and enterprise-management training to improve sustainability.
7. Lastly, industrial training should expose students to publishing firms, ICT companies, information consultancies, database organisations, archives, media organisations, research institutes and knowledge-management units, rather than conventional libraries alone. LIS graduates should also be trained to identify information needs for which individuals and organisations are willing to pay, including research support, data organisation, documentation, digitisation and customised information services. Government youth-employment policies should recognise knowledge-based entrepreneurship as a legitimate employment pathway.

Ultimately, integrating LIS competencies with technology, innovation, business skills, finance and institutional support can position infopreneurship as a viable pathway to self-employment, job creation and economic development in Nigeria.

Conclusion

Advances in technology and the changing information landscape have created new opportunities for LIS graduates through infopreneurship. In Nigeria, where conventional library employment cannot absorb the growing number of graduates, LIS professionals can leverage their competencies in information organisation, research, ICT and dissemination to provide services in consultancy, digitisation, database management, research support, digital publishing and content development. However, inadequate start-up capital, unreliable electricity, poor digital infrastructure, limited practical entrepreneurship training, and insufficient awareness of infopreneurial opportunities constrain participation. Strengthening practical digital and entrepreneurial skills can enable

graduates to view information as an economic resource, thereby promoting self-reliance, employment creation, and economic development.

References

Adeniran, A. O., & Adeyemi, B. M. (2023). Entrepreneurial skills assessment of Library and Information Science faculty and academic librarians in Nigeria: Issues and prospects. *Journal of Business & Finance Librarianship*, 28 (4), 255–277. Available at https://www.tandfonline.com/doi/full/10.1080/08963568.2023.2263315?utm_

Ahmadu, I., Abdulmalik, S. Y., & Isah, A. B. (2025). Entrepreneurship education for self-reliance: A study of Library and Information Science graduates in Kano State. *Information Impact: Journal of Information and Knowledge Management*, 16 (1), 24–35. Available at https://doi.org/10.4314/iijikm.v16i1.3?utm_

Arowosola, O., Kashim, M., Oyizea, L. B., Joseph, O., & Hussena, A. (2022). Awareness and relevance of infopreneurship among Library and Information Sciences (LIS), Prince Abubakar Audu University, Anyigba, Kogi State, Nigeria. *Library Philosophy and Practice (e-journal)* 7087. Available at https://scholarworks.sjsu.edu/libphilprac/7087/?utm_

Becker, G. S. (1964). Human capital: A theoretical and empirical analysis, with special reference to education. Columbia University Press.

British Columbia (2024). What is Economic Development? Available at https://www2.gov.bc.ca/gov/content/employment-business/economic-development/plan-and-measure/economic-development-basics

Bumkeng, Q. S., & Adadu, M. E. (2023). Entrepreneurial opportunities for Library and Information Science professionals in the contemporary era. *International Journal of Information Resource Management.* Available at https://www.ijirm.com.ng/article.php?id=170&utm_

El-Kalash, K. I., Mohammed, S. B. & Aniki, M. Y. (2014). Exploring Infopreneurship for Economic Growth and Sustainability in a Developing Economy: The Nigeria Perspective. Available from: https://www.researchgate.net/publication/306392056_Exploring_Infopreneurship_for_Economic_Growth_and_Sustainability_in_a_Developing_Economy_The_Nigeria_Perspective#fullTextFileContent [accessed Sep 02 2026].

International Federation of Library Associations and Institutions. (2024a). IFLA Trend Report 2024: Facing the future of information with confidence. Available at https://www.ifla.org/trend-report/?utm_

International Federation of Library Associations and Institutions. (2024b). New and emerging library workers. New and Emerging Library Workers. Available at https://www.ifla.org/news/new-and-emerging-library-workers/?utm_

International Federation of Library Associations and Institutions. (2025). A Skills Agenda for the Trend Report. IFLA Skills Agenda. Available at https://www.ifla.org/news/a-skills-agenda-for-the-trend-report/?

International Labour Organisation (2025). World employment and social outlook: Trends 2025. [ILO World Employment and Social Outlook 2025]. Available at https://www.ilo.org/publications/flagship-reports/world-employment-and-social-outlook-trends-2025?utm_source=chatgpt.com

International Labour Organization. (2024). Global employment trends for youth 2024: Decent work, brighter futures. International Labour Office. Available at https://doi.org/10.54394/ZUUI5430.

Iowa Graduate College (n.d). About Library and Information Science. Available at https://slis.uiowa.edu/about/what-library-and-information-science

Khumalo, N. B. and Nkala, G. S. (2015). The importance of infopreneurship training for records and archives management students in Zimbabwe. *Journal of the South African Society of Archivists*, 48. Available at: http://doi:129273-350043-1-PB.

Ofodu, P. N., & Whong, F. M. (2024). Information entrepreneurship freelancing in Library and Information Science for enhancing employment career opportunities for librarians. *International Journal of Innovation Research and Management*. Available at https://www.ijirm.com.ng/article.php?id=255&utm_

Okwu, E., Opurum, A. C., & Eke, P. C. (2024). Creating entrepreneurial possibilities in Library and Information Science: Remedying the narrative of unemployment. *Covenant Journal of Entrepreneurship*, 8(2), 36–41. Available at https://journals.covenantuniversity.edu.ng/index.php/cjoe/article/view/4368?utm_

Plan International Nigeria (2025). State of the Nigerian youth report 2025. Presented at the Nigerian Youth Dialogue, House of Representatives Committee on Youth, Abuja.

Sulyman, A. S., Ajani, F. O., Idowu, A. O., & Ojaja, I. B. B. (2024). Infopreneurship and technopreneurship readiness for job creation among Nigerian Library and Information Science graduates. *Asian Journal of Information Science and Technology*, 14 (2), 27–33. Available at https://www.ajist.co/index.php/ajist/article/view/4278?articlesBySimilarityPage=2&utm_source

UNESCO (2021). Recommendation on Open Science. Available at https://www.unesco.org/en/legal-affairs/recommendation-open-science?utm_source=

UNESCO (2025). Media and information literacy for all: Closing the gaps [Issue brief]. Available at https://www.unesco.org/en/articles/new-unesco-issue-brief-reveals-global-gaps-media-and-information-literacy-policies-and-education

UNESCO (n.d). Youth employment. Available at https://www.unesco.org/en/query-list/y/youth-employment

World Bank (2025). Digital skills in Nigeria. World Bank. Available at https://thedocs.worldbank.org/en/doc/a607bb6e3b76d2be0f3db8db34dcf73e-0140022025/?utm_

World Bank. (2024). Nigeria Skill demand trends: Insights from online job vacancy data. World Bank. Available at https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099010507222517560?utm_

World Economic Forum. (2025). Future of Jobs Report 2025: 78 million new job opportunities by 2030 but urgent upskilling needed to prepare workforces. Available at https://www.weforum.org/press/2025/01/future-of-jobs-report-2025-78-million-new-job-opportunities-by-2030-but-urgent-upskilling-needed-to-prepare-workforces/?utm_