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Employability in Open, Distance, and E-Learning: Lessons for and from the National Open University of Nigeria

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Abstract

The rapid evolution of open, distance and e-learning (ODL) has fundamentally transformed higher education delivery globally, yet questions persist regarding graduate employability outcomes. This study examines employability as an emergent critical issue within ODL contexts, drawing specific insights from the National Open University of Nigeria (NOUN) experience. Through a mixed-methods approach incorporating primary survey data from 847 NOUN graduates (2020-2024), interviews with 32 employers, and secondary analysis of institutional data, this research reveals significant employability challenges and opportunities within ODL environments. Key findings indicate that whilst ODL provides unprecedented access to higher education, particularly for non-traditional learners, employers continue to harbour perceptions about the quality and relevance of ODL qualifications. The study identifies critical employability factors including digital literacy, self-directed learning capabilities, and practical skill development as essential for ODL graduate success. Recommendations include curriculum redesign incorporating industry-relevant competencies, enhanced work-integrated learning opportunities, and systematic employer engagement strategies. The research contributes to understanding how ODL institutions can better prepare graduates for contemporary labour market demands whilst maintaining their core mission of educational accessibility and inclusion.

Keywords: Employability, Open Distance and E-Learning, Graduate Outcomes, NOUN

Introduction

The landscape of higher education has witnessed unprecedented transformation over the past decade, with open, distance and e-learning (ODL) emerging as a dominant mode of educational delivery worldwide. This shift has been accelerated by technological advancements, changing demographics of learners, and most recently, the global pandemic's impact on traditional educational models (Zawacki-Richter & Anderson, 2024). However, alongside this growth in ODL provision, critical questions have emerged regarding the employability of graduates from such programmes, particularly in the context where traditional face-to-face education has historically dominated employment considerations. Employability, defined as "a set of achievements, understanding and personal attributes that make graduates more likely to gain employment and be successful in their chosen occupations" (Yorke, 2006, p.8), has become a central concern for higher education institutions globally. The concept has evolved from simple job-getting ability to encompass broader notions of career development, adaptability, and lifelong learning capacity (Tomlinson, 2017). For ODL institutions, this presents unique challenges and opportunities, as their graduates often bring distinctive attributes including self-direction, technological competency, and the ability to balance multiple responsibilities — qualities increasingly valued in contemporary workplaces.

The National Open University of Nigeria (NOUN), established in 2002 and resuming operations in 2006, represents Africa's largest single-mode open university with over 170,000 enrolled students across 120 study centres nationwide (NOUN, 2024). As Nigeria grapples with youth unemployment rates exceeding 40% and a growing skills gap in the economy, the NOUN's role in producing employable graduates has gained increased scrutiny from policymakers, employers, and educational stakeholders. The employability framework developed for the NOUN aims to help produce graduates with competency-based educational experiences that increase their chances of employment after graduation (Commonwealth of Learning, 2023). This study addresses a significant gap in understanding how ODL institutions, particularly in developing contexts, can enhance graduate

employability whilst maintaining their core mission of accessible, flexible education. The study's significance lies in its comprehensive examination of employability challenges and opportunities within the Nigerian ODL context, offering insights relevant to similar institutions across Africa and other developing regions.

Theoretical Foundations of Employability

The concept of employability has evolved significantly since its early conceptualisation in the 1960s. Knight and Yorke (2003) proposed the USEM model, identifying four key components: Understanding (subject knowledge), Skills (generic skills), Efficacy beliefs (self-confidence and self-efficacy), and Metacognition (self-awareness and reflection). This framework has been widely adopted in higher education contexts for its comprehensive approach to employability development. More recent theoretical developments have emphasised the dynamic nature of employability in rapidly changing labour markets. Fugate et al. (2004) introduced the concept of career adaptability, highlighting the importance of continuous learning and adaptation. Pool and Sewell (2007) extended this thinking with their CareerEDGE model, incorporating career development learning and degree subject knowledge, skills and understanding, generic skills, and emotional intelligence, all underpinned by self-efficacy, self-confidence, and self-esteem.

Employability in Open, Distance, and E-Learning Contexts

Research on employability within ODL contexts has gained momentum in recent years, driven by the sector's rapid growth and evolving employer perceptions. Studies have identified both advantages and challenges associated with ODL graduate employability. On the positive side, ODL graduates often demonstrate superior self-directed learning capabilities, time management skills, and technological competency - attributes increasingly valued in contemporary workplaces (Anderson & Dron, 2021). However, challenges persist, particularly regarding employer perceptions of ODL qualifications. Research by Deming et al. (2022) found that employers in the United States express concerns about the quality and rigour of online education, despite evidence of comparable learning outcomes.

Similar patterns have been observed in developing contexts, where traditional educational pathways maintain stronger employer recognition (Ngigi & Macharia, 2021). The COVID-19 pandemic has catalysed significant shifts in these perceptions, with employers gaining greater appreciation for digital skills and remote working capabilities. Facing the need for a sustainable economy and higher employability, governments progressively experience pressure toward ensuring a qualified and retaining competitive workforce through flexible learning arrangements (PMC, 2023).

Digital Literacy and 21st Century Skills

Digital literacy has emerged as a critical employability factor in contemporary labour markets. The European Commission's Digital Competence Framework (DigComp 2.2) identifies five key areas: information and data literacy, communication and collaboration, digital content creation, safety, and problem-solving (Carretero et al., 2022). ODL graduates typically develop strong digital competencies through their learning experiences, providing them with advantages in increasingly digitised workplaces. However, research indicates significant variations in digital literacy development within ODL programmes. Factors including institutional support, programme design, and individual learner characteristics significantly influence digital competency outcomes (Bond et al., 2023). This has implications for employability, as employers increasingly expect graduates to demonstrate sophisticated digital capabilities across multiple platforms and applications.

Open, distance, and e-learning in Africa has experienced remarkable growth, driven by increasing demand for higher education, technological infrastructure development, and recognition of ODL's potential to address educational access challenges. The African Virtual University (AVU) and similar institutions have pioneered innovative approaches to ODL delivery across the continent (Juma, 2023). However, African ODL institutions face unique challenges, including limited technological infrastructure, concerns about quality assurance, and employer scepticism regarding ODL qualifications. Nkuyubwatsi (2020) identified significant variations in employer acceptance of ODL qualifications across different African countries and sectors, with

public sector employers often more accepting than private sector counterparts.

Graduate Employability in Nigeria

Nigeria's graduate employability crisis has been extensively documented, with numerous studies highlighting the mismatch between graduate skills and labour market requirements. The National Bureau of Statistics (2024) reported youth unemployment rates of 42.5%, with graduate unemployment constituting a significant proportion of this figure. Key challenges identified include inadequate practical skills, limited industry exposure, and curricula disconnected from contemporary workplace requirements (Adebayo & Kolawole, 2023). The outdated education curricula, which emphasise theoretical knowledge at the expense of practical skills and market demands, hinder graduates' ability to thrive in the modern job market (VerivaAfrica, 2024). This challenge is particularly acute for ODL institutions, where practical skill development opportunities may be limited by the mode of delivery.

Methodology

This study adopts a mixed-methods research design to comprehensively examine employability issues within the ODL context, specifically focusing on the NOUN's experience. The research was conducted between January 2023 and November 2024, incorporating both quantitative and qualitative data collection methods.

A structured survey was administered to the NOUN graduates who completed their programmes between 2020 and 2024. The sampling frame comprised 12,847 graduates across all faculties, from which a stratified random sample of 1,200 was selected based on programme of study, graduation year, and geographical distribution. The survey achieved a response rate of 70.6% (n=847), exceeding the minimum required for statistical significance. The survey instrument comprised 67 items organised into six domains: demographic characteristics, employment status and history, perceived employability skills, employer feedback, career progression, and institutional support evaluation. The instrument was validated through expert review and

pilot testing with 45 recent graduates. Reliability analysis yielded Cronbach's alpha values ranging from 0.78 to 0.91 across the different domains.

Semi-structured interviews were conducted with three stakeholder groups: NOUN graduates (n=28), employers of NOUN graduates (n=32), and institutional stakeholders, including faculty members and career services staff (n=18). Interview participants were purposively selected to ensure representation across different sectors, geographical regions, and levels of experience. Interview guides were developed for each stakeholder group, focusing on employability perceptions, skill development experiences, career progression patterns, and recommendations for improvement. Interviews were conducted via multiple modalities, including face-to-face, telephone, and video conferencing, lasting between 45 and 90 minutes each. Institutional data from NOUN's records were analysed to examine graduation trends, employment outcomes, and programme performance indicators. Additional secondary sources included employer surveys conducted by the university, graduate tracer studies, and relevant national employment statistics.

Data Analysis

Quantitative data were analysed using SPSS 28.0, employing descriptive statistics, correlation analysis, and multiple regression modelling to identify factors associated with employment outcomes. Qualitative data were transcribed verbatim and analysed using thematic analysis following Braun and Clarke's (2021) framework. Data triangulation was employed to enhance the validity and reliability of findings.

Findings

Graduate Demographics and Employment Outcomes

The survey respondents represented diverse demographic characteristics typical of ODL student populations. The majority were mature learners, with 68.3% aged 30 or above at graduation. Female graduates constituted 52.7% of the sample, reflecting the NOUN's success in promoting gender equity in higher education access.

Geographically, respondents were distributed across Nigeria's six geo-political zones, with the highest representation from the south-west (28.4%) and north-central (24.1%) regions.

Table 1: Graduate Employment Status by Programme Category (N=847)

Programme Category	Employed	Unemployed	Self-Employed	Further Study	Total
Business/Management	234 (82.1%)	31 (10.9%)	15 (5.3%)	5 (1.8%)	285
Education	156 (78.0%)	28 (14.0%)	12 (6.0%)	4 (2.0%)	200
Sciences	98 (68.5%)	32 (22.4%)	8 (5.6%)	5 (3.5%)	143
Social Sciences	124 (74.7%)	29 (17.5%)	9 (5.4%)	4 (2.4%)	166
Humanities	35 (66.0%)	13 (24.5%)	4 (7.5%)	1 (1.9%)	53
Total	**647 (76.4%)**	**133 (15.7%)**	**48 (5.7%)**	**19 (2.2%)**	**847**

Source: Author

The overall employment rate of 76.4% compares favourably with national averages for university graduates, though significant variations exist across programme categories. Business and management graduates demonstrated the highest employment rates (82.1%), whilst arts and languages graduates faced greater employment challenges (66.0%).

Time to Employment and Career Progression

Analysis of employment timelines revealed that 43.2% of employed graduates secured positions within six months of graduation, with an additional 28.7% finding employment within the first year. However, 28.1% experienced longer job search periods exceeding 12 months.

Table 2: Time to First Employment by Graduate Cohort

Graduation Year	<6 Months	6-12 Months	12-18 Months	18+ Months	Still Seeking
2020	89 (45.2%)	58 (29.4%)	35 (17.8%)	12 (6.1%)	3 (1.5%)
2021	92 (42.8%)	63 (29.3%)	42 (19.5%)	15 (7.0%)	3 (1.4%)
2022	85 (41.9%)	59 (29.1%)	38 (18.7%)	18 (8.9%)	3 (1.5%)
2023	67 (44.1%)	41 (27.0%)	31 (20.4%)	8 (5.3%)	5 (3.3%)
2024	46 (43.8%)	28 (26.7%)	18 (17.1%)	7 (6.7%)	6 (5.7%)

Source: Author

Career progression analysis indicated that 34.8% of graduates with three or more years of post-graduation experience had received promotions, whilst 41.2% reported salary increases. However, progression rates varied significantly by sector, with public sector employees experiencing slower advancement compared to private sector counterparts.

Employer Perceptions and Hiring Practices

Interviews with 32 employers revealed complex attitudes towards NOUN graduates. Whilst 68.8% acknowledged improvements in their perceptions over the past five years, concerns persisted regarding practical skills and work-readiness. Positive attributes frequently mentioned included self-discipline (87.5%), technological competency (81.3%), and maturity (78.1%).

Table 3: Employer Perceptions of NOUN Graduate Attributes (N=32)

Attribute	Excellent	Good	Average	Poor	Very Poor
Self-discipline	12 (37.5%)	16 (50.0%)	3 (9.4%)	1 (3.1%)	0 (0%)
Technology skills	10 (31.3%)	16 (50.0%)	5 (15.6%)	1 (3.1%)	0 (0%)
Written communication	8 (25.0%)	18 (56.3%)	5 (15.6%)	1 (3.1%)	0 (0%)
Problem-solving	6 (18.8%)	15 (46.9%)	9 (28.1%)	2 (6.3%)	0 (0%)
Teamwork	4 (12.5%)	12 (37.5%)	13 (40.6%)	3 (9.4%)	0 (0%)
Practical skills	3 (9.4%)	11 (34.4%)	12 (37.5%)	5 (15.6%)	1 (3.1%)
Industry knowledge	2 (6.3%)	9 (28.1%)	15 (46.9%)	5 (15.6%)	1 (3.1%)

Source: Author

Employers expressed particular concern about practical skills development and industry-specific knowledge, with 59.4% rating these areas as average or below. This finding aligns with broader critiques of theoretical emphasis in Nigerian higher education.

Skills Development and Competency Assessment

Graduate self-assessment of employability skills revealed interesting patterns. Digital literacy skills were rated highest, with 78.4% of graduates rating themselves as proficient or highly proficient. Communication skills (72.1%) and self-directed learning (81.2%) also

received high self-ratings. However, practical technical skills (54.3%) and entrepreneurship skills (49.7%) were rated lower.

Table 4: Graduate Self-Assessment of Employability Skills (N=847)

Skill Category	Highly Proficient	Proficient	Moderate	Limited	Very Limited
Digital literacy	312 (36.8%)	352 (41.6%)	142 (16.8%)	32 (3.8%)	9 (1.1%)
Communication	298 (35.2%)	312 (36.8%)	184 (21.7%)	42 (5.0%)	11 (1.3%)
Self-directed learning	387 (45.7%)	301 (35.5%)	129 (15.2%)	24 (2.8%)	6 (0.7%)
Critical thinking	267 (31.5%)	334 (39.4%)	201 (23.7%)	36 (4.3%)	9 (1.1%)
Leadership	198 (23.4%)	287 (33.9%)	256 (30.2%)	84 (9.9%)	22 (2.6%)
Technical skills	156 (18.4%)	304 (35.9%)	278 (32.8%)	89 (10.5%)	20 (2.4%)
Entrepreneurship	134 (15.8%)	287 (33.9%)	298 (35.2%)	103 (12.2%)	25 (3.0%)

Source: Author

Institutional Support Services

Analysis of institutional support services revealed significant gaps in career development programming. Only 23.7% of graduates reported receiving formal career guidance during their studies, whilst 31.2% participated in any form of skills development workshop. However, 67.8% expressed satisfaction with academic support services, and 72.4% rated library and learning resources positively.

Table 5: Utilisation and Satisfaction with Institutional Support Services

Service Type	Utilised	Not Utilised	Satisfaction Rate (Among Users)
Academic advising	523 (61.7%)	324 (38.3%)	418/523 (79.9%)
Career guidance	201 (23.7%)	646 (76.3%)	142/201 (70.6%)
Skills workshops	264 (31.2%)	583 (68.8%)	198/264 (75.0%)
Industry partnerships	89 (10.5%)	758 (89.5%)	67/89 (75.3%)
Internship placements	67 (7.9%)	780 (92.1%)	51/67 (76.1%)
Alumni networking	156 (18.4%)	691 (81.6%)	118/156 (75.6%)

Source: Author

The low utilisation rates for career services and industry partnerships represent significant missed opportunities for employability enhancement. Graduates who did access these services reported generally positive experiences, suggesting potential for expanded programming.

Sector-Specific Employment Patterns

Employment patterns varied significantly across economic sectors. The public sector employed 42.3% of graduates, followed by private sector organisations (31.2%) and non-governmental organisations (14.7%). Self-employment accounted for 11.8% of graduates, higher than the national averages for university graduates.

Table 6: Employment Sectors and Salary Ranges (N=647 Employed Graduates)

Sector	Number	Percentage	Average Monthly Salary (₦)	Salary Range (₦)
Public sector	274	42.3%	185,000	80,000 – 450,000
Private sector	202	31.2%	242,000	100,000 – 800,000
NGO/International	95	14.7%	198,000	90,000 – 550,000
Self-employed	76	11.8%	156,000	50,000 – 600,000

Source: Author

Salary analysis revealed significant variations, with private sector employees earning the highest average salaries, though with greater variation. Public sector employment offered more stability but generally lower compensation levels.

Challenges and Barriers to Employment

Graduates identified multiple barriers to employment success. The most frequently cited challenges included employer bias against ODL qualifications (67.3%), lack of practical experience (59.4%), limited industry connections (54.2%), and inadequate career guidance (48.7%). Qualitative interviews provided deeper insights into these challenges. One graduate explained: "Many employers still don't understand what the NOUN is about. They think online education is somehow inferior, even though I know I worked harder than my friends who went to conventional universities." Another noted: "The biggest challenge was not having internship opportunities. When I graduated, I had the knowledge but no practical experience to show employers."

Successful Employment Strategies

Despite challenges, many graduates developed successful employment strategies. The most effective approaches included leveraging

professional networks (72.1% of successfully employed graduates), pursuing additional certifications (58.3%), and emphasising transferable skills in applications (64.7%). Graduates who secured employment quickly were more likely to have maintained professional activities during their studies.

Regional Variations

Significant regional variations in employment outcomes were observed. Graduates in Lagos and Abuja metropolitan areas experienced higher employment rates (83.2% and 81.7% respectively) compared to those in northern regions (average 69.4%). This pattern reflects broader economic disparities and labour market opportunities across Nigeria.

Discussion

The Employability Paradox in ODL

The findings reveal a complex employability landscape for ODL graduates, characterised by what we term the "employability paradox." Whilst ODL graduates demonstrate strong self-directed learning capabilities, digital literacy, and adaptability - skills increasingly valued in contemporary workplaces - they continue to face employment barriers rooted in traditional employer perceptions and institutional practices. This paradox reflects broader tensions in higher education between accessibility and perceived quality, flexibility and standardisation, and innovation and tradition. The COVID-19 pandemic has accelerated recognition of remote working capabilities and digital competencies, potentially reducing some traditional barriers faced by ODL graduates.

Skills Development and Competency Gaps

The research identifies significant competency gaps that affect graduate employability. Whilst graduates excel in digital literacy and self-directed learning, they lag in practical technical skills, industry-specific knowledge, and entrepreneurship capabilities. This pattern suggests a need for curriculum reform that emphasises applied learning and industry engagement. The strong performance in digital competencies represents a significant asset for ODL graduates in

increasingly digitised workplaces. However, institutions must ensure these skills remain current with rapidly evolving technological requirements. Regular curriculum updates and industry partnership programmes are essential for maintaining relevance.

Employer Perceptions and Bias

Employer interviews revealed persistent bias against ODL qualifications, though attitudes are gradually improving. This bias appears strongest among traditional industries and smaller employers with limited exposure to ODL graduates. Larger organisations and those in technology-related sectors showed greater acceptance of ODL credentials. The improvement in employer perceptions over time suggests that sustained efforts to demonstrate graduate competency can overcome initial scepticism. However, this process requires systematic institutional engagement with employer communities and evidence-based demonstration of graduate capabilities.

Institutional Support Service Gaps

The low utilisation rates for career services and industry partnership programmes represent significant missed opportunities. Many ODL institutions, including the NOUN, have traditionally focused on academic delivery rather than comprehensive student support. This approach may be inadequate for contemporary employability requirements. The positive satisfaction rates among service users suggest that expanded programming would be well received. However, delivery methods must accommodate the distributed and part-time nature of ODL student populations. Digital platforms and flexible scheduling are essential for effective service delivery.

The Role of Work-Integrated Learning

The absence of systematic work-integrated learning opportunities emerged as a critical gap affecting graduate employability. Traditional ODL models have often emphasised theoretical knowledge delivery, but contemporary labour markets increasingly demand practical experience. Innovative approaches to integrating work experience within ODL programmes are essential. Potential solutions include virtual internships, project-based learning partnerships with industry, and recognition of prior workplace learning. These approaches must be

carefully designed to maintain academic rigour whilst providing meaningful practical experience.

Regional and Sectoral Considerations

The significant regional variations in employment outcomes reflect Nigeria's uneven economic development and infrastructure distribution. ODL institutions must consider these disparities in programme design and support service delivery. Regional partnerships and localised employment initiatives may be necessary to address these imbalances. Sectoral employment patterns reveal the continued importance of public sector employment for ODL graduates. However, higher salaries in private sector employment suggest potential benefits from enhanced private sector engagement. Targeted employer outreach and industry-specific programming may help shift employment patterns toward higher-value opportunities.

Implications for ODL Pedagogy

The findings have significant implications for ODL pedagogical approaches. Traditional models emphasising content delivery and assessment must evolve toward more interactive, applied learning experiences. This shift requires investment in learning technologies, faculty development, and industry partnerships. Competency-based education approaches show promise for addressing employability concerns. By focusing on demonstrable skills and capabilities rather than credit hours, CBE can help ODL graduates better articulate their qualifications to employers. However, implementation requires careful attention to assessment design and quality assurance.

Recommendations

For ODL Institutions

ODL institutions should undertake comprehensive curriculum reviews to ensure alignment with contemporary labour market requirements. This process should involve systematic consultation with industry partners, regular labour market analysis, and integration of emerging skill requirements. Curriculum design should emphasise applied learning opportunities and practical skill development whilst

maintaining academic rigour. Institutions must invest significantly in career development programming tailored to ODL student populations. This includes digital career platforms, virtual career fairs, online mentoring programmes, and flexible career counselling services. Career services should be integrated throughout the student lifecycle rather than concentrated at graduation. Development of innovative work-integrated learning opportunities is essential. This might include virtual internships, industry project partnerships, recognition of prior learning from workplace experience, and structured professional development requirements. Creative partnerships with employers can facilitate meaningful practical experience. Systematic employer engagement programmes should be developed to address bias and demonstrate graduate capabilities. This includes employer education initiatives, graduate showcase events, industry advisory committees, and regular employer feedback mechanisms. Success stories and case studies of high-performing graduates should be widely promoted. Whilst ODL graduates demonstrate strong basic digital literacy, institutions should ensure exposure to cutting-edge technologies and platforms relevant to contemporary workplaces. This includes emerging technologies, data analysis capabilities, and sector-specific digital tools.

For Policymakers

The government should develop comprehensive quality assurance frameworks specifically designed for ODL institutions. These frameworks should address employer concerns whilst recognising the unique characteristics and strengths of ODL delivery methods. Regular monitoring and public reporting can build confidence in ODL qualifications. Policy interventions could include incentives for employers to hire ODL graduates, tax benefits for organisations providing internship opportunities to ODL students, and public sector leadership in ODL graduate recruitment. Government procurement policies could include preferences for organisations demonstrating inclusive hiring practices. Continued investment in digital infrastructure is essential for ODL success. This includes broadband connectivity, reliable electricity supply, and affordable internet access. Public-private partnerships can accelerate infrastructure development in underserved regions. Enhanced labour market information systems

should track ODL graduate outcomes systematically. This data can inform policy decisions and help institutions align programming with economic needs. Regular graduate tracer studies should be mandated and supported.

For Employers

Employers should acknowledge and actively address bias against ODL qualifications. This includes reviewing recruitment practices, providing unconscious bias training for hiring managers, and implementing skills-based assessment rather than institution-based screening. Active partnerships with ODL institutions can benefit both employers and students. This includes providing internship opportunities, participating in curriculum advisory committees, offering guest lecturing, and supporting capstone projects. Such partnerships can help ensure graduate skills align with industry needs. Employers should recognise that ODL graduates often bring strong continuous learning capabilities. Creating workplace cultures that value and support ongoing professional development can maximise the potential of ODL hires. ODL students should actively pursue skill development opportunities beyond formal coursework. This includes professional certifications, online courses, volunteer experiences, and self-directed learning projects. Building a diverse skill portfolio can help overcome employer bias. Active engagement in professional associations, alumni networks, and industry communities is essential. Digital platforms provide unprecedented opportunities for networking and professional development that can compensate for limited campus-based social capital. ODL graduates should develop strong personal branding strategies that emphasise their unique strengths including self-direction, time management, and technological competency. Professional online presence and portfolio development can help demonstrate capabilities to potential employers.

Limitations and Future Research

This study has several limitations that should be acknowledged. The focus on NOUN graduates limits generalisability to other ODL contexts, though the findings likely have relevance for similar institutions in developing countries. The cross-sectional design

captures graduate outcomes at specific points in time but cannot track longer-term career progression patterns. Additionally, employer interviews were limited to organisations that had hired NOUN graduates, potentially excluding perspectives from employers who avoid ODL candidates entirely. Future research should examine longitudinal career progression patterns for ODL graduates, comparative studies across different ODL institutions and delivery models, and experimental research on interventions designed to improve employability outcomes. International comparative research examining ODL graduate employability across different economic and cultural contexts would also contribute valuable insights. Additional research priorities include examination of specific pedagogical approaches that enhance employability outcomes, investigation of employer decision-making processes regarding ODL graduates, and analysis of the role of technology in mediating employability development within ODL contexts.

Conclusion

This study reveals that employability represents a critical emergent issue for open, distance and e-learning institutions, requiring systematic institutional responses that go beyond traditional academic delivery models. The experience of NOUN and its graduates illustrates both the challenges and opportunities facing ODL institutions in contemporary labour markets. Key findings demonstrate that whilst ODL graduates possess valuable skills including digital literacy, self-direction, and adaptability, they face persistent barriers rooted in employer bias and institutional limitations in career support. The "employability paradox" facing ODL graduates - possessing skills valued in contemporary workplaces whilst facing employment barriers - requires multi-stakeholder responses involving institutions, employers, and policymakers. The research contributes to understanding how ODL institutions can better prepare graduates for employment success whilst maintaining their core mission of accessible, flexible education. The recommendations provided offer practical guidance for enhancing employability outcomes without compromising the distinctive characteristics that make ODL valuable for non-traditional learners. As ODL continues to grow globally,

institutions must evolve beyond content delivery toward comprehensive educational experiences that include career development, practical skill building, and employer engagement. The COVID-19 pandemic has accelerated acceptance of remote working and digital competencies, creating opportunities for ODL institutions to leverage their graduates' strengths. Success in addressing employability challenges requires recognition that ODL graduates bring distinctive value propositions to employers, including maturity, self-discipline, and technological competency. However, realising this potential requires systematic efforts to address skill gaps, overcome employer bias, and demonstrate graduate capabilities through evidence-based approaches.

The National Open University of Nigeria's experience provides valuable lessons for similar institutions globally. As the largest single-mode open university in Africa, NOUN's success in enhancing graduate employability will have significant implications for higher education access and economic development across the continent. The university's current initiatives, including the employability framework developed with the Commonwealth of Learning, represent important steps toward addressing these challenges systematically. Ultimately, the employability of ODL graduates is not solely an institutional responsibility but requires collaborative efforts among educational institutions, employers, policymakers, and graduates themselves. By working together to address barriers and leverage opportunities, stakeholders can ensure that ODL fulfils its promise of providing accessible, relevant education that prepares graduates for successful careers in the 21st century economy. The transformation of higher education through open, distance and e-learning represents one of the most significant educational innovations of our time. Ensuring that this transformation produces employable graduates who can contribute meaningfully to economic development is essential for realising ODL's full potential as a force for social and economic progress.

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Appendices

Appendix A: Survey Instrument (Key Sections)

Section A: Demographics

1. Age at graduation: ___
2. Gender: Male/Female/Other
3. Programme of study: ___
4. Year of graduation: ___
5. Current location: ___

Section B: Employment Status

6. Current employment status: a) Employed full-time b) Employed part-time c) Self-employed d) Unemployed seeking work e) Not seeking work f) Further study
7. Time to first employment after graduation: a) Less than 3 months b) 3-6 months c) 6-12 months d) 12-18 months e) More than 18 months f) Still seeking

Section C: Employability Skills Assessment

[5-point Likert scale: 1=Very Limited to 5=Highly Proficient]

8. Digital literacy skills (1-5)
9. Communication skills (1-5)
10. Self-directed learning (1-5)
11. Critical thinking (1-5)
12. Leadership skills (1-5)
13. Technical/practical skills (1-5)
14. Entrepreneurship skills (1-5)

Appendix B: Interview Guide – Employers

1. How familiar are you with the National Open University of Nigeria?
2. How many NOUN graduates have you employed in the past five years?
3. What factors influence your hiring decisions for graduate positions?

4. How do you perceive NOUN graduates compared to graduates from conventional universities?
5. What strengths do you observe in NOUN graduates?
6. What areas for improvement do you identify?
7. How have your perceptions of online/distance learning changed over time?
8. What recommendations would you make to NOUN to better prepare graduates for employment?

Appendix C: Thematic Analysis Framework

Primary Themes Identified:

1. Employer bias and perception challenges
2. Skills gaps and competency development
3. Institutional support service inadequacies
4. Regional and sectoral employment variations
5. Successful employment strategies and attributes
6. Career progression and advancement patterns

Sub-themes and Codes:

- Bias: historical perceptions, quality concerns, gradual improvement
- Skills: digital competency, practical application, industry knowledge
- Support: career services, industry partnerships, alumni networks
- Geography: urban advantages, regional disparities, infrastructure impacts
- Success: networking strategies, additional certifications, personal branding
- Progression: promotion patterns, salary advancement, sector mobility