

## Coping with the Challenges of Over-Schooling among Nigerian Youth Through Technical Vocational Education and Training

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### **Abstract**

*Nigeria has experienced remarkable expansion in formal education access over the past four decades. Despite this achievement, growing number of graduates face unemployment, underemployment, and job mismatch, a phenomenon known as over-schooling. This occurs when individuals hold qualifications exceeding job requirements or when the labour market fails to appropriately absorb highly educated workers. The consequences include youth unemployment, declining productivity, poverty, social frustration, brain drain, and excessive dependence on government employment. Technical and Vocational Education and Training (TVET) offers a practical strategy to address these challenges by equipping young people with employable skills, entrepreneurial competencies, and industry-relevant knowledge that foster self-reliance and economic growth. This paper examines over-schooling, reviews relevant theoretical perspectives, discusses associated challenges among Nigerian youth, and explores TVET as an intervention strategy. The paper suggested that strengthening TVET through improved funding, curriculum modernisation, industry partnerships, policy implementation, and public reorientation can significantly reduce graduate unemployment and promote sustainable youth empowerment in Nigeria.*

**Keywords:** Employability, Entrepreneurship, Over-schooling, TVET, Unemployment

### **Introduction**

Education has long been recognised as a fundamental instrument for national development, economic transformation, and human capital formation. Nations worldwide invest substantially in education for its potential to enhance productivity, reduce poverty, foster innovation, and improve citizens' quality of life (Becker, 1993). In Nigeria, successive governments have expanded educational access through various initiatives, including the Universal Basic Education (UBE) programme, increased establishment of universities, polytechnics, colleges of education, and private tertiary institutions. These efforts have significantly boosted school enrolment and graduation rates.

Despite these achievements, Nigeria continues to experience alarming graduate unemployment and underemployment. According to the National Bureau of Statistics (2023), youth unemployment and underemployment remain significant socio-economic concerns despite rising educational attainment. Thousands of graduates enter the labour market annually, yet employment opportunities have not expanded proportionately. Consequently, many graduates accept positions requiring lower qualifications than they possess, while others remain jobless for extended periods. This mismatch between educational attainment and labour market demand has intensified concern over over-schooling. Over-schooling reflects a situation where educational qualifications exceed occupational requirements, resulting in inefficient human capital utilisation (Duncan & Hoffman, 1981). Rather than serving as a pathway to productive employment, higher education sometimes produces graduates whose skills remain underutilised due to structural economic imbalances. The Nigerian labour market exhibits unique characteristics that exacerbate this problem. Many employers increasingly demand practical experience and technical competencies rather than academic certificates alone. However, Nigeria's educational system has historically emphasised theoretical knowledge at the expense of practical and vocational skills (Okolie *et al.*, 2020). Consequently, many graduates leave tertiary institutions with limited employability skills required in contemporary workplaces.

The rapid expansion of tertiary education without corresponding industrial growth has further widened the gap between graduate output and labour market absorption capacity. This imbalance has intensified competition for limited white-collar jobs, leaving many graduates either unemployed or employed in occupations unrelated to their fields of study. Such circumstances reduce productivity, discourage educational investment, and generate frustration among young people. Technical and Vocational Education and Training (TVET) has emerged as a promising strategy for addressing these challenges. TVET equips learners with practical competencies, technical knowledge, entrepreneurial skills, and occupational expertise required for gainful employment and self-reliance. UNESCO (2022) identified TVET as an essential mechanism for promoting inclusive economic growth, sustainable development, decent work, and lifelong learning. In Nigeria, renewed attention has been directed towards strengthening TVET as a means of reducing youth unemployment, stimulating entrepreneurship, and supporting industrial development. By aligning educational outcomes with labour market needs, TVET can reduce over-schooling incidence and improve graduate employability.

This paper therefore examined the concept of over-schooling, reviewed relevant theoretical perspectives, discusses associated challenges, and explored how TVET can serve as an effective intervention for improving youth employment outcomes in Nigeria.

## The Concept of Over-schooling

Over-schooling refers to a labour market condition in which an individual's educational attainment exceeds the level required to perform their occupation (Duncan & Hoffman, 1981). Also described as educational mismatch, qualification mismatch, or overeducation in labour economics literature, the concept gained prominence during the 1970s and 1980s when economists observed that increasing educational attainment did not always translate into corresponding occupational advancement. Rather than obtaining jobs commensurate with their

qualifications, many graduates accepted positions requiring lower educational credentials. According to Hartog (2000), over-schooling occurs whenever workers possess more years of schooling than employers require for effective job performance. This mismatch often results in underutilised worker skills, lower job satisfaction, reduced earnings relative to expectations, and decreased productivity. Sicherman (1991) further argues that over-schooling represents an imbalance between educated labour supply and skilled worker demand. When educational expansion outpaces economic growth and job creation, graduates inevitably compete for fewer professional positions, forcing many into lower-skilled occupations.

In Nigeria, over-schooling has become increasingly visible due to the rapid proliferation of universities and tertiary institutions without corresponding industrial expansion. While higher education access has improved considerably, economic diversification and manufacturing growth have not kept pace with graduate production. Consequently, thousands of graduates are employed in occupations such as sales, clerical work, ride-hailing services, and other informal sector activities that do not require university degrees. Scholars distinguish between vertical and horizontal mismatch in explaining over-schooling. Vertical mismatch occurs when educational qualifications exceed job requirements, while horizontal mismatch arises when graduates work outside their field of specialisation (Robst, 2007). Both forms are common among Nigerian graduates. Over-schooling may also be temporary or permanent. Temporary over-schooling occurs when graduates initially accept lower-skilled jobs while searching for more suitable employment. Permanent over-schooling exists when labour market conditions consistently prevent individuals from obtaining jobs matching their qualifications (McGuinness, 2006).

## **Causes of Over-schooling**

The causes of over-schooling are multifaceted. A major factor is the rapid expansion of higher education without proportional growth in employment opportunities. Technological change also plays a role, altering skill demands more rapidly than educational institutions can adapt. Weak collaboration between educational institutions and industries contributes to curriculum relevance problems. Furthermore, societal preference for university education over vocational and technical education has created excessive demand for academic degrees while neglecting technical occupations.

## **Theories Related to Over-schooling**

Several theoretical perspectives explain the causes, consequences, and persistence of over-schooling. These theories provide useful frameworks for understanding the relationship between education and labour market outcomes among Nigerian youth.

## **Human Capital Theory**

Human Capital Theory, developed primarily by Becker (1964, 1993) and Schultz (1961), viewed education as an investment that enhances individuals' productivity, knowledge, skills, and earning capacity. According to the theory, employers reward higher educational attainment because educated workers are expected to be more productive. However, the existence of over-schooling challenges some assumptions of Human Capital Theory. If educational investment consistently leads to improved productivity, graduates should obtain

employment matching their qualifications. Instead, many highly educated individuals remain unemployed or work in jobs requiring lower qualifications. This suggests that education alone is insufficient to guarantee favourable labour market outcomes when economic growth and employment creation lag behind educational expansion. In Nigeria, the rapid increase in university graduates without equivalent industrial development demonstrates this limitation. Consequently, while Human Capital Theory explains why individuals pursue higher education, it does not fully account for persistent graduate unemployment and qualification mismatch.

## **Job Competition Theory**

Job Competition Theory, developed by Thurow (1975), argues that employers compete for the most trainable workers rather than the most educated workers. According to this perspective, educational qualifications serve primarily as indicators of an individual's ability to learn rather than direct measures of job competence. Employers incur training costs after recruitment and therefore prefer applicants with characteristics that minimise these costs. As educational attainment increases across society, employers simply raise educational requirements for jobs without corresponding increases in job complexity. This phenomenon contributes significantly to over-schooling because graduates compete intensely for limited employment opportunities, leading many to accept positions below their educational qualifications. The theory is particularly relevant in Nigeria, where employers frequently require university degrees for jobs that previously demanded only secondary or diploma qualifications.

## **Assignment Theory**

Assignment Theory, advanced by Sattinger (1993), emphasized the importance of matching workers' skills with job requirements. Productivity depends not only on workers' educational attainment but also on appropriate skill allocation across occupations. According to this theory, economic inefficiency occurs when highly educated individuals occupy low-skilled jobs while suitable positions remain unavailable. Such mismatches reduce both individual productivity and organisational efficiency. Assignment Theory provides a useful explanation for the Nigerian labour market, where graduate oversupply coexists with shortages of skilled artisans, technicians, and vocational professionals. It underscores the need for educational systems that produce competencies aligned with labour market demands.

## **Credentialism Theory**

Credentialism Theory, associated with Collins (1979), argued that educational certificates increasingly function as social credentials rather than indicators of actual competence. Employers use academic qualifications as screening devices to reduce recruitment costs, even when qualifications are not directly relevant to job performance. As more people obtain higher educational qualifications, individuals pursue additional certificates to remain competitive. This credential inflation increases educational attainment without necessarily improving productivity or employability. In Nigeria, credentialism is evident in the growing demand for postgraduate qualifications for positions that previously required bachelor's degrees. This trend contributes to over-schooling by encouraging continuous educational attainment without corresponding labour market expansion.

## Signalling Theory

Signalling Theory, proposed by Spence (1973), suggested that education serves as a signal of individuals' ability, discipline, and potential productivity rather than directly increasing productivity itself. Employers interpret educational qualifications as indicators of desirable personal characteristics. Where many applicants possess similar qualifications, educational credentials lose their signalling power, prompting individuals to acquire even higher qualifications to distinguish themselves. This process may inadvertently encourage over-schooling, especially in labour markets characterised by intense competition for limited formal-sector jobs. The Nigerian labour market reflects this trend, as employers increasingly use higher educational qualifications to differentiate applicants despite limited differences in actual job requirements. Collectively, these theories demonstrate that over-schooling results from complex interactions among educational expansion, labour market structures, employer recruitment practices, economic development, and public perceptions of educational attainment. They also highlight the need for practical, skills-oriented educational approaches such as TVET, which better align educational outcomes with labour market realities.

## Challenges of Over-schooling

The increasing incidence of over-schooling among Nigerian youth has become a significant socio-economic concern with far-reaching consequences for individuals, organisations, and national development. Although education remains a critical driver of human capital development, the inability of the labour market to absorb highly educated graduates has resulted in widespread educational mismatch. The following are major challenges associated with over-schooling in Nigeria.

## Graduate Unemployment

One of the most visible consequences of over-schooling is graduate unemployment. Nigerian tertiary institutions produce hundreds of thousands of graduates annually, yet the economy has not generated sufficient employment opportunities to accommodate them. As a result, many graduates remain unemployed for prolonged periods after graduation. According to the International Labour Organization (ILO, 2022), youth unemployment remains one of the most pressing labour market challenges confronting developing countries, particularly in sub-Saharan Africa. Graduate unemployment not only represents a waste of human resources but also discourages educational investment, increases dependency ratios, and limits national productivity. Prolonged unemployment among graduates often leads to frustration and diminished confidence in the education system.

## Underemployment and Skills Mismatch

Closely related to unemployment is underemployment, where graduates accept jobs that neither utilise their educational qualifications nor fully engage their acquired competencies. Many university graduates in Nigeria work in occupations requiring only secondary school qualifications or unrelated skills, including retail sales, commercial transportation services, clerical work, and other informal-sector occupations. McGuinness (2006) argues that educational mismatch reduces labour productivity because workers cannot

effectively utilise knowledge and competencies acquired through years of schooling. Employers likewise experience inefficiencies when workers become dissatisfied due to skill underutilisation. The mismatch between educational curricula and labour market requirements has further aggravated this challenge. Employers increasingly seek practical, digital, entrepreneurial, and technical competencies, while many graduates possess predominantly theoretical knowledge (Okolie *et al.*, 2020).

## **Declining Returns on Educational Investment**

Education is generally regarded as an investment expected to yield economic and social returns through improved employment opportunities and higher earnings (Becker, 1993). However, when graduates are unable to secure suitable employment, expected returns on educational investment decline considerably. Families often make substantial financial sacrifices to educate their children through tertiary institutions. When graduates remain unemployed or underemployed, these investments fail to produce anticipated economic benefits, leading to public dissatisfaction and reduced confidence in higher education. At the national level, governments also experience diminished returns on public expenditure devoted to education because skilled human resources remain underutilised.

## **Poverty and Economic Hardship**

Persistent unemployment and underemployment contribute significantly to poverty among Nigerian youth. Many graduates struggle to meet basic needs despite possessing advanced educational qualifications. Financial dependence on parents and relatives often continues well into adulthood, delaying financial independence and reducing overall household welfare. The inability of educated youths to secure stable incomes also limits their capacity to invest, establish businesses, or contribute meaningfully to national economic development.

## **Social Frustration and Psychological Challenges**

Over-schooling frequently generates emotional and psychological distress. Graduates who are unable to secure employment consistent with their qualifications often experience disappointment, anxiety, depression, stress, and low self-esteem. Persistent joblessness may also contribute to feelings of social exclusion, hopelessness, and reduced life satisfaction. Some graduates begin to question the value of their education when years of academic investment fail to produce expected career outcomes. Research has consistently shown that prolonged unemployment negatively affects mental health, social relationships, and overall quality of life (OECD, 2019).

## **Increased Crime and Social Vices**

Youth unemployment associated with over-schooling has been linked to increasing rates of social unrest and criminal activities. Although unemployment does not directly cause crime, prolonged economic hardship may increase vulnerability to illegal activities such as cybercrime, kidnapping, internet fraud, cultism, armed robbery, political violence, and drug abuse. Nigeria has witnessed growing concerns regarding youth involvement in various criminal activities, partly attributed to limited employment opportunities for educated young



people. Productive employment remains one of the most effective strategies for reducing youth vulnerability to social vices.

## **Brain Drain**

One of the consequences of over-schooling is the migration of highly educated Nigerians to countries offering better employment prospects. Skilled professionals, including doctors, engineers, nurses, academics, information technology specialists, and other professionals increasingly relocate abroad in search of improved working conditions and career opportunities. This phenomenon, commonly referred to as "brain drain," deprives Nigeria of valuable human capital needed for national development. According to the World Bank (2023), the migration of skilled professionals continues to pose significant developmental challenges for many African countries.

## **Increased Competition for White-Collar Jobs**

The cultural preference for university education has intensified competition for a limited number of white-collar jobs. Most Nigerian youths aspire to careers in banking, government ministries, multinational companies, and other formal-sector organisations, while relatively few consider technical occupations or skilled trades. Consequently, vacancies often attract thousands of applicants possessing similar academic qualifications. Employers respond by raising educational requirements, thereby contributing to credential inflation and further intensifying over-schooling.

## **Weak Industrial Growth**

Nigeria's industrial sector has not expanded sufficiently to absorb increasing numbers of tertiary graduates. Manufacturing contributes a relatively modest share to national employment compared with countries that have successfully linked education with industrialisation. Limited industrial development reduces demand for highly educated labour, thereby increasing educational mismatch. Without sustained economic diversification and industrial expansion, graduate unemployment is likely to persist despite improvements in educational access.

**Entrepreneurship Deficit** Many graduates leave tertiary institutions without adequate entrepreneurial competencies necessary for self-employment. Traditional university curricula have historically emphasised preparation for paid employment rather than enterprise creation. This deficiency limits graduates' ability to establish successful businesses capable of generating employment for themselves and others. Consequently, dependence on government and corporate employment continues to increase despite limited job availability.

## **The Concept of Technical Vocational Education and Training (TVET)**

Technical, Vocational Education and Training (TVET) refers to organised educational programmes designed to equip individuals with practical knowledge, occupational competencies, technical skills, entrepreneurial capabilities, and work attitudes required for employment, self-reliance, and lifelong learning. UNESCO (2022) defined TVET as education, training, and skills development relating to a wide range of occupational fields, production

processes, services, and livelihoods. TVET integrates theoretical instruction with practical experience to prepare learners for the world of work. Similarly, the International Labour Organization (ILO, 2022) describes TVET as an essential component of human resource development that enhances employability, productivity, innovation, and economic competitiveness. In Nigeria, TVET is recognised within the National Policy on Education (Federal Republic of Nigeria, 2013) as a strategic instrument for producing skilled manpower necessary for technological advancement and national development. The policy emphasises the acquisition of practical skills, scientific knowledge, and technical competencies relevant to various occupations.

### **TVET is offered through several institutions, including:**

Technical Colleges, Vocational Training Centres, Polytechnics, Monotechnics Colleges of Agriculture, Colleges of Health Technology, Industrial Training Centres, Skills Acquisition Centres, pprenticeship Programmes, and Entrepreneurship Development Centres. Unlike conventional academic education, which often emphasises theoretical knowledge, TVET places greater emphasis on competency-based learning, hands-on practical training, industrial attachment, problem-solving, creativity, and entrepreneurship.

### **Major Objectives of TVET**

Major objectives of TVET include:

- i. Developing skilled manpower for industrial and economic development
- ii. Promoting self-employment and entrepreneurship
- iii. Reducing unemployment and poverty
- iv. Improving productivity and innovation
- v. Supporting technological advancement
- vi. Enhancing employability through industry-relevant skills
- vii. Encouraging lifelong learning and continuous skills upgrading

TVET covers diverse occupational areas such as engineering, technology, building construction, electrical installation, automobile technology, welding and fabrication, mechatronics, information and communication technology (ICT), renewable energy technology, fashion design, agriculture, hospitality, tourism, cosmetology, plumbing, carpentry, furniture making, and many other skilled trades. Recent technological advancements have expanded TVET beyond traditional crafts to include digital skills, robotics, artificial intelligence applications, cybersecurity, software development, renewable energy systems, and advanced manufacturing technologies.

### **The Role of TVET in Addressing Over-schooling**

Technical and Vocational Education and Training has become increasingly recognised as one of the most effective strategies for addressing challenges associated with over-schooling among Nigerian youth. By emphasising practical competence rather than certificate acquisition, TVET helps bridge the gap between education and labour market demands.



## **Enhancing Employability**

One of TVET's greatest strengths lies in its ability to equip learners with practical competencies demanded by employers. Unlike many conventional academic programmes that focus primarily on theoretical knowledge, TVET emphasises workplace skills, technical competence, and occupational proficiency. Graduates possessing practical skills are generally more employable because they require less additional training after recruitment. Employers increasingly value competence and productivity over academic credentials alone.

## **Promoting Entrepreneurship**

TVET encourages entrepreneurship by equipping learners with business management skills alongside technical competencies. Graduates acquire the capacity to establish and manage small and medium-sized enterprises (SMEs), thereby creating employment for themselves and others. Entrepreneurship development reduces excessive dependence on government employment and contributes to economic diversification. Successful TVET graduates often become job creators rather than job seekers.

## **Reducing Skills Mismatch**

TVET curricula are designed in collaboration with industries to ensure alignment with labour market requirements. Such partnerships enable educational institutions to respond more rapidly to changing technological developments and employer expectations. By producing graduates whose competencies match occupational demands, TVET minimises educational mismatch and enhances labour market efficiency.

## **Supporting Industrial Development**

Industrialisation depends heavily on the availability of skilled technicians, technologists, artisans, and vocational professionals. TVET supplies the skilled workforce required for manufacturing, construction, transportation, agriculture, telecommunications, renewable energy, and other productive sectors. A stronger industrial base subsequently creates additional employment opportunities, thereby reducing graduate unemployment and over-schooling.

## **Encouraging Innovation and Creativity**

TVET emphasises practical problem-solving, creativity, innovation, and technological adaptation. Learners develop competencies for designing products, improving production processes, maintaining equipment, and adopting emerging technologies. These innovative capabilities contribute to increased productivity and national competitiveness.

## **Promoting Self-Reliance**

TVET empowers young people to become economically independent by providing marketable skills that generate sustainable income. Skilled graduates can establish businesses in electrical installation, fashion design, ICT services, automobile repairs, welding, catering, agriculture, furniture production, plumbing, and numerous other vocational occupations. Self-employment significantly reduces reliance on scarce formal-sector jobs.

## Supporting Poverty Reduction

Income generated through skilled occupations contributes directly to poverty reduction. As more young people acquire employable vocational competencies, household incomes improve, local economies expand, and community development accelerates. The World Bank (2023) recognised skills development as an important strategy for promoting inclusive economic growth and reducing poverty in developing economies.

## Improving National Productivity

A workforce equipped with technical competencies contributes more effectively to industrial production, infrastructure development, technological innovation, and service delivery. Increased productivity strengthens national competitiveness and supports sustainable economic development. Consequently, expanding access to quality TVET represents an investment not only in individual employability but also in national economic transformation.

The successful implementation of TVET therefore requires adequate funding, modern training facilities, qualified instructors, competency-based curricula, industry partnerships, quality assurance mechanisms, and positive societal attitudes toward vocational careers. When these conditions are met, TVET becomes a powerful instrument for addressing over-schooling and promoting sustainable youth empowerment in Nigeria.

## Suggestions

Based on the discussion of the paper, the following suggestions are proposed

1. Government should significantly increase investment in TVET institutions through improved budgetary allocations. Modern workshops, laboratories, digital equipment, training facilities, and instructional materials are essential for effective practical skills acquisition
2. NBTE, NUC and other stakeholders should be review TVET curricula regularly to reflect emerging technologies and labour market demands. Greater emphasis should be placed on digital literacy, artificial intelligence, renewable energy, robotics, mechatronics, automation, agribusiness, and entrepreneurship.
3. Educational institutions should establish stronger partnerships with industries through internship programmes, industrial attachments, apprenticeships, workplace learning, curriculum development, and collaborative research. Such partnerships will improve the relevance of graduates' skills.
4. Government should be integrate entrepreneurship education across all levels of education. Graduates should acquire competencies in business planning, financial management, marketing, innovation, and enterprise development to encourage self-employment.
5. Negative societal attitudes towards vocational education remain a major obstacle. National Orientation Agency should embark on public enlightenment campaigns to

promote respect for skilled trades and demonstrate that vocational careers offer attractive employment and income opportunities. Parents, teachers, religious leaders, and community leaders should encourage young people to pursue technical careers where appropriate.

6. Educational institutions should strengthen career guidance services to help students make informed educational and occupational choices. Career counselling should expose learners to emerging employment opportunities beyond traditional white-collar occupations.
7. Quality assurance mechanisms should ensure that TVET programmes meet national and international standards. Regular accreditation, instructor certification, competency assessment, and monitoring should be strengthened.
8. Private sector organisations should actively participate in TVET financing, curriculum development, apprenticeship programmes, and graduate recruitment. Incentives such as tax relief could encourage industries to invest in workforce development.
9. Government and financial institutions should provide accessible credit facilities, grants, equipment leasing schemes, and business incubation services for TVET graduates wishing to establish enterprises.
10. Government and other stakeholders should provide reliable labour market information to guide educational planning and policy decisions. Accurate data on skills demand, employment trends, occupational shortages, and emerging industries will improve alignment between education and labour market needs.

## Conclusion

Over-schooling has emerged as one of the most significant labour market challenges confronting Nigerian youth despite increasing access to formal education. The rapid expansion of tertiary education without corresponding growth in productive employment has resulted in graduate unemployment, underemployment, educational mismatch, declining returns on educational investment, brain drain, and widespread social frustration. These challenges undermine national productivity and weaken the contribution of education to sustainable economic development.

Technical Vocational Education and Training (TVET) provides a viable and sustainable solution to this challenge by equipping young people with practical competencies, entrepreneurial capabilities, and industry-relevant skills required for employment and self-reliance. Unlike conventional academic education that often emphasises theoretical knowledge, TVET promotes competence-based learning, innovation, productivity, and enterprise creation. The experiences of institutions such as the National Directorate of Employment, Industrial Training Fund, and National Board for Technical Education, and various state and international development programmes demonstrate that properly

implemented TVET can significantly improve youth employability and reduce dependence on scarce white-collar jobs.

For TVET to achieve its full potential in addressing over-schooling, sustained government commitment, adequate funding, curriculum modernisation, strong industry partnerships, effective policy implementation, and positive societal attitudes toward vocational education are indispensable. Furthermore, integrating digital skills, entrepreneurship, and emerging technologies into TVET programmes will ensure that Nigerian youths are adequately prepared for the changing world of work. Ultimately, repositioning TVET as a central component of Nigeria's education and employment strategy will not only reduce the incidence of over-schooling but also promote inclusive economic growth, technological advancement, poverty reduction, and sustainable national development.

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