VOCATIONAL AND TECHNICAL SKILLS AS A STRATEGY FOR ENHANCING GIRL-CHILD SCHOOL ENROLMENT IN ZARIA LOCAL GOVERNMENT AREA, KADUNA STATE

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Abstract

This study examined the role of vocational and technical skills in enhancing the school enrolment of the girl-child in Zaria Local Government Area. Despite the recognised importance of girls' education in promoting social and economic development, many girls in Northern Nigeria continue to experience low enrolment and retention in schools due to poverty, socio-cultural practices, gender discrimination, and limited educational opportunities. The paper explored how access to vocational and technical skills motivates girls to enrol in school, assessed parental perceptions toward vocational and technical skills training as a factor influencing girls' education, and identified challenges affecting the effective implementation of such programmes. The study adopted a review-based approach using existing empirical literature and reports relevant to girl-child education and vocational training. Findings revealed that vocational and technical skills enhance girls' interest in schooling by providing practical and income-generating competencies that improve self-reliance, confidence, and future employment prospects. Positive parental perceptions of vocational education were also found to encourage girls' enrolment and sustained participation in school. However, the implementation of vocational and technical programmes for girls is constrained by factors such as poverty, inadequate facilities, cultural barriers, gender stereotypes, a shortage of qualified instructors, and weak policy implementation. The study concluded that vocational and technical skills constitute an important strategy for improving girls' school enrolment and retention. It is therefore recommended that increased government support, provision of modern training facilities, community sensitisation, gender-responsive policies, and stronger partnerships with relevant stakeholders to promote effective vocational and technical education for the girl-child.

Keywords: Girl-child education, School enrolment, vocational and technical skills

Introduction

Education is universally acknowledged as a cornerstone for human development, social inclusion, and economic progress. In recent decades, the learning needs of girls have attracted significant global and national attention because of their well-documented potential to uplift families, strengthen communities, and accelerate overall development. Girl-child education encompasses the fair and meaningful provision of learning opportunities that equip girls with essential knowledge, skills, values, and competencies for both personal advancement and societal contribution. It extends beyond mere access to include active participation, sustained retention, successful completion, and the assurance of safe, inclusive, and supportive school environments. It is recognised as both a fundamental human right and a vital pathway to achieving gender equality, reducing poverty, and promoting sustainable development. These commitments ultimately point to the urgent need to increase efforts toward enrolling girls in school.

Enrolling girls in school is associated with numerous socio-economic and health benefits. Studies show that educated girls are more likely to delay marriage, reduce child and maternal mortality, participate in the labour market, and contribute meaningfully to household welfare (Abdulbaqi et al., 2025; UNESCO, 2022; World Bank, 2021). School enrolment also enhances girls' confidence, decision-making ability, and civic participation, with long-term intergenerational effects. Despite these benefits, disparities in girls' access to education persist in many developing nations, including Nigeria. Northern Nigeria, in particular, continues to record lower enrolment, retention, and transition rates for girls due to a combination of socio-cultural, economic, and structural barriers (NEMIS, 2021). Similarly, initiatives designed to strengthen girls' educational opportunities are growing worldwide, fueled by a recognition of the importance of equipping learners with practical, career-oriented competencies that enhance employability and support self-reliance. This global emphasis underscores the need to provide relevant and marketable vocational and technical skills.

Vocational and Technical skills provide occupationally relevant skills in areas such as catering, tailoring, ICT, carpentry, cosmetology, and agro-processing, enabling learners to engage productively in the labour market (UNEVOC–UNESCO, 2023). In Nigeria, vocational and technical skills are increasingly promoted as a strategy for reducing youth unemployment, enhancing economic resilience, and fostering self-reliance (Ahmadou, 2025). However, participation in vocational and technical skills programmes remains limited among girls due to gender stereotypes, cultural expectations, and limited exposure to diverse skill areas (Onyeocha, 2023). In Kaduna State, and particularly in Zaria Local Government Area, the issue of low girl-child enrolment and retention remains a significant concern. Evidence from programme evaluations and empirical studies reveals that many girls in Zaria still face barriers such as early marriage, household poverty, cultural norms favouring domestic roles, insecurity, and inadequate school facilities (Akorede, 2021; DRPC, 2021; Eboyem, 2024). These challenges contribute to reduced school attendance, irregular participation, and higher dropout rates among girls, affecting the efforts of government and non-governmental organisations.

The Government and non-governmental organisations have implemented various interventions, including community sensitisation and scholarship schemes, but enrolment levels remain below expected targets, indicating the need for alternative or complementary strategies. One emerging approach is the integration of vocational and technical skills into basic and secondary school education. The inclusion of skills-oriented modules can make schooling more attractive and relevant to girls and their families, especially in communities where economic necessity strongly influences educational decisions. Ahmadou (2025) suggests that families are more willing to invest in girls' education when they perceive direct economic benefits, such as skill acquisition.

Skill acquisition increases girls' confidence, expands their career options, and enhances their capacity for self-reliance, thereby strengthening their motivation to remain in school. Successful pilot interventions in parts of Kaduna State have shown improved participation when vocational skills such as tailoring, ICT, and entrepreneurship are integrated into school programmes (Abdulllahi et al., 2026; DRPC, 2021). However, despite the potential of vocational and technical skills to boost enrolment and improve retention rate, this strategy has not been adequately explored or implemented in many schools within Zaria LGA. Many educational institutions continue to operate purely on academic curricula without practical components that could attract and retain girls who may be discouraged by economic constraints or cultural expectations. The absence of a structured skills-based approach in basic and secondary schools may therefore be limiting the efforts to enhance girl-child enrolment in the area. Given these concerns, there is a growing need to investigate the role of vocational and technical skills in enhancing school enrolment of the girl-child in Zaria Local Government Area, Kaduna State. This paper will therefore focus on the following:

1. How access to vocational and technical skills influences the motivation of girls to enrol in school.
2. Perceptions of parents towards vocational and technical skills training as a factor that affects girls' school enrolment.
3. Challenges affecting the effective implementation of vocational and technical skills programmes for the girl child.

Girl-child Education

Girl-child education refers to formal, informal, and non-formal learning opportunities offered to females from early childhood through adulthood. It includes access to schooling, enrolment, retention, completion, and equal participation in academic and non-academic activities (UNESCO-IICBA, 2023). It goes beyond mere school entry, emphasising sustained engagement, completion, and gender-equitable participation in learning (Isola & Osundina, 2016). Educating girls strengthens human capital and contributes to national economic growth. Educated women are more likely to earn income, improve family welfare, and break intergenerational cycles of poverty (UNESCO-IICBA, 2023; Yasin-AlSys, 2021). At the national level, female education expands the workforce, enhances productivity, and supports sustainable economic development. Educated girls challenge patriarchal norms and are more likely to participate in decision-making, civic activities, and community leadership. They are also more likely to educate their own children, creating a cycle of educational attainment and social transformation.

Vocational and Technical Skills

Vocational and technical skills refer to practical and specialised abilities designed to prepare individuals for specific trades, occupations, or industries. These skills emphasise hands-on experience, problem-solving, and the application of knowledge in real-world contexts, distinguishing them from purely theoretical learning (Okoro, 2019). Common vocational and technical skills encompass a wide range of activities such as tailoring, hairdressing, baking, catering, bead-making, carpentry, agriculture, mechanical trades, and information and communication technology (ICT) skills (Afolabi & Oba, 2024; UNESCO, 2021). In the educational context, vocational and technical skills serve as a bridge between formal education and the labour market. By engaging learners in practical tasks, schools help students acquire competencies that are directly relevant to employment and entrepreneurship opportunities (Okojie, 2020). These skills not only enhance the employability of students but also foster self-reliance, creativity, and innovation, enabling learners to establish small businesses or participate effectively in the workforce (Eze, 2018). Furthermore, integrating vocational and technical skills into the school curriculum addresses the gap between academic knowledge and practical expertise, thereby contributing to national development and economic growth (Federal Ministry of Education, 2014).

Importance of Vocational and Technical Skills in Schools

The integration of vocational and technical skills into school curricula has increasingly been recognised as a crucial strategy for promoting educational relevance, student engagement, and socio-economic empowerment. Vocational and Technical Education (VTE) equips learners with practical skills applicable to specific trades and professions, thereby bridging the gap between theoretical knowledge and real-life employability (Njoku & Nwosu, 2019). Such education is particularly important for girls, as it enhances their confidence, fosters problem-solving abilities, and facilitates economic independence, which, in turn, motivates school enrolment and regular attendance (Morebise, 2022).

One of the primary benefits of vocational skills education is empowerment and economic independence. By providing learners with practical competencies, schools enable students, especially girls, to generate income through self-employment or wage employment in trades such as tailoring, ICT, carpentry, and catering. Studies indicate that access to vocational and technical skills reduces economic dependence and increases opportunities for self-reliance, particularly among marginalised groups (UNESCO, 2021; Okoye & Okwelle, 2020). This form of empowerment promotes social inclusion and contributes to broader poverty-alleviation efforts.

Vocational training also contributes significantly to improved self-esteem and life skills. The hands-on nature of practical education allows students to observe the tangible outcomes of their work, reinforcing a sense of competence and self-worth (Sentinelassam, 2023). In addition, vocational learning develops critical soft skills such as communication, time management, creativity, and entrepreneurial thinking, which are essential for both personal growth and employability (ILO, 2019). For girls, acquiring these skills challenges restrictive gender norms and expands opportunities for autonomy, decision-making, and empowerment within the family and community (UNICEF, 2020).

Another significant advantage of integrating vocational skills in schools is the reduction of dropout rates and the promotion of consistent enrolment. When students perceive education as directly linked to income-generating opportunities, their motivation to remain in school increases. Evidence suggests that vocational relevance enhances student engagement and reduces absenteeism, especially in settings where economic pressures may otherwise push girls out of school (World Bank, 2022; Adebayo & Musa, 2021). Thus, vocational and technical education strengthens the relevance of schooling and encourages both attendance and sustained participation.

Furthermore, the adoption of vocational training enhances parental and community support for girls' education. When parents recognise the economic and social benefits of vocational skills such as employability, entrepreneurship, and income generation, they are more likely to invest in their daughters' education (Ezeani & Ndolo, 2019). Community acceptance also grows as vocational programs demonstrate measurable returns, fostering a culture that values education and gender equity. Lastly, vocational and technical education promotes gender equality in skill acquisition. By providing girls with equitable access to trades traditionally dominated by males, schools help dismantle gender stereotypes and expand female participation in the labour market (UNESCO,

2020). This educational approach equips girls with the tools for long-term economic autonomy and contributes to improved household welfare and broader socioeconomic development.

School Enrolment for Girls

School enrolment constitutes the critical first step in shaping the educational pathway and long-term well-being of girls. It determines access to learning opportunities, future employability, and the overall capacity of girls to participate meaningfully in social and economic life. A substantial body of global evidence demonstrates that when girls are enrolled and retained in school, multiple developmental indicators improve. For instance, UNICEF (2023) notes that girls who attain at least a secondary level of education are significantly more likely to delay early marriage and childbirth, adopt healthier reproductive behaviours, and participate productively in the labour market. Education equips girls with knowledge, negotiation abilities, and awareness of their rights, which are essential for informed decision-making and personal agency.

Furthermore, education for girls has well-documented intergenerational effects. According to UNESCO (2022), educated women tend to place a higher value on schooling for their own children, resulting in better learning outcomes, improved child survival rates, and stronger family health practices. Girls' enrolment thus contributes to the transmission of educational advantages across generations, helping to break cycles of illiteracy and poverty within communities.

Economically, increasing girls' school enrolment is linked with national productivity and economic growth. The World Bank (2021) estimates that countries collectively lose trillions of dollars in lifetime productivity due to the exclusion of girls from education. When girls attend and complete school, they gain employable skills, earn higher incomes, and contribute more effectively to the labour force.

Socially, school enrolment broadens girls' opportunities for participation in community and civic affairs. Education enhances their confidence, strengthens autonomy, and nurtures the decision-making capacities required for leadership roles and social engagement. These social benefits contribute to narrowing gender inequalities and fostering inclusive development. Thus, Sustained school enrolment for girls remains a vital strategy for achieving global development priorities, reducing gender disparities, and empowering future generations.

How Access to Vocational and Technical Skills Influences the Motivation of Girls to Enrol in School

Access to vocational and technical skills has emerged as a major factor that enhances girls' motivation to enrol and participate in formal schooling. In many low-income and rural communities, parents and girls increasingly consider education valuable when it leads to tangible skills that can generate income or support self-reliance. The availability of vocational and technical skills within the school system strengthens the perceived relevance of schooling, making it more attractive to households that might otherwise deprioritise girls' education.

Vocational and technical skills provide girls with practical competencies in fields such as tailoring, catering, hairdressing, ICT, agriculture, and craft production. These opportunities shift the perception of schooling from a purely academic exercise to a pathway for economic empowerment and livelihood development. According to UNESCO (2022), vocational and technical education enhances learner engagement by linking classroom knowledge with real-life applications that prepare girls for work and entrepreneurship. This alignment increases girls' enthusiasm toward school, as they see education directly contributing to their future productivity.

Economic considerations are particularly influential. In many communities where poverty limits educational opportunities for girls, parents are more willing to invest in schooling when it promises future financial returns. UNICEF (2023) notes that households tend to support girls' enrollment when they believe that education will equip them with marketable skills that can alleviate economic hardship. Vocational and technical skills serve as an incentive by demonstrating clear economic value. They help families overcome the belief that educating girls yields limited returns due to early marriage, domestic roles, or gender norms.

Access to vocational and technical skills also improves girls' self-efficacy and aspirations. Studies show that practical skill acquisition increases confidence, problem-solving abilities, and a sense of achievement among female learners (Aina & Adedoja, 2021). When girls experience success in skill-oriented activities, they develop stronger academic identities and become more motivated to stay in school. This motivation is reinforced by the

growing visibility of female entrepreneurs, artisans, and professionals who serve as role models demonstrating the benefits of acquiring vocational skills.

Additionally, vocational skills in schools help address socio-cultural barriers that often discourage girls from enrolling. In societies where girls are expected to contribute to household income or domestic production, having access to school-based skills such as sewing, baking, or computer training reduces the conflict between educational participation and economic expectations. The World Bank (2020) highlights that vocational programs enhance school retention and enrollment by offering flexible and culturally acceptable pathways for girls whose families require them to engage in productive activities.

The integration of vocational and technical skills within school curricula also fosters community acceptance of girls' education. Parents who are sceptical about the value of formal education gain trust in the schooling process when they witness direct outcomes such as income-generating abilities or improved household productivity. Research by Okoro and Azih (2020) indicates that parents in many rural Nigerian communities become more supportive of girls' schooling when schools offer skill-based programs that align with local economic needs. Furthermore, exposure to technical and digital skills expands girls' career horizons beyond traditional gendered roles. ICT competencies, for example, open pathways to modern jobs in communication, digital entrepreneurship, and online services. This future-oriented relevance of vocational skills strengthens girls' interest in schooling by connecting education to contemporary economic opportunities (UNESCO-UNEVOC, 2021).

Parental Perceptions towards Vocational and Technical Skills Training as a Factor Affecting Girls' School Enrolment

Parents play a central role in determining whether girls enrol and remain in school, and their perceptions of the relevance of schooling often shape these decisions. When parents view formal education, particularly its vocational and technical components, as beneficial, they are more likely to support their daughters' participation. Conversely, when vocational or technical skills are perceived as irrelevant, time-consuming, or misaligned with cultural expectations, parents may hesitate to enrol girls or may withdraw them prematurely. Parental perceptions are strongly linked to the perceived economic value of education. Studies show that parents are more willing to invest in schooling when they believe that the skills taught will lead to future employment, entrepreneurship, or improved household productivity (UNESCO, 2022; FAWE, 2021).

Vocational and technical skills training, such as tailoring, catering, ICT, hairdressing, and agricultural skills, provide practical capabilities that families in low-income and rural communities often value. When parents recognise that these skills can generate income or contribute to family welfare, they view schooling as a worthwhile investment. This perception has been found to increase enrolment and regular attendance among girls (UNICEF, 2023). In many communities, however, negative perceptions persist. Some parents hold the belief that girls' education should be limited because girls will eventually marry and move into another household, reducing the long-term returns of investing in their education (Egun & Tibi, 2020). Where such attitudes dominate, even the availability of vocational skills training in schools may not be sufficient to motivate enrolment.

Parents may prefer to have their daughters learn skills informally at home or through apprenticeships rather than attend school. This preference is often rooted in cultural norms, early marriage traditions, or misconceptions about the role of schooling in girls' lives (Afolabi, 2021). Additionally, parental awareness of vocational and technical programs influences girls' educational participation. When parents are informed about school-based vocational programs and their benefits, such as improving employability, entrepreneurship, self-reliance, and life skills, they are more likely to support girls' enrolment (ILO, 2020). Awareness campaigns, community sensitisation, and school–community partnerships have been cited as effective in changing parental attitudes and increasing enrolment rates (UNESCO, 2022).

Socioeconomic status also shapes parents' perceptions. Low-income parents often base decisions on immediate economic needs. If vocational skills training is perceived as too lengthy or not immediately profitable, some parents may prioritise short-term apprenticeships over formal schooling. However, research shows that structured school-based vocational programs lead to better long-term outcomes than informal skill acquisition (World Bank, 2021). Families that understand these long-term returns tend to show higher support for girls' schooling. Parental perceptions act as a significant enabling or limiting factor in girls' enrolment. Positive views towards vocational

and technical skills training encourage investment in girls' education, while negative or uninformed perceptions contribute to low enrolment, irregular attendance, or dropout.

Challenges Affecting the Effective Implementation of Vocational and Technical Skills Programmes for the Girl-Child

Empirical evidence across Nigeria and other developing contexts consistently demonstrates that the implementation of vocational and technical education and training (TVET) programmes for girls is shaped by socio-cultural, economic, institutional, and infrastructural constraints. Studies conducted within Northern Nigeria, in particular, highlight persistent barriers that hinder girls' access to and participation in skills training. The following are major challenges affecting TVET implementation for the girl-child based on established empirical findings.

Socio-Cultural Norms and Gender Role Expectations

Empirical studies show that socio-cultural norms remain among the strongest predictors of girls' participation in vocational and technical programmes. Research in Northern Nigeria by Amina and Adamu (2021) found that early marriage, religious interpretations, and gender-defined domestic roles significantly limit girls' engagement in technical training. Similarly, Umar (2020) reported that parents often discourage girls from enrolling in trades considered "male-dominated," such as mechanical, electrical, or ICT-related skills. These studies confirm that cultural expectations reduce enrolment and increase dropout, thereby undermining programme implementation in places such as Zaria LGA.

Household Poverty and Economic Constraints

Studies consistently identify poverty as a major barrier to girl-child participation in education and skills training. According to Olojede and Ibrahim (2019), households in low-income communities tend to withdraw girls from training programmes due to their contribution to unpaid domestic labour or petty trading. Findings by Adeyemi (2022) further show that training fees, transportation costs, and the cost of purchasing materials significantly lower participation rates among girls in TVET programmes. Such empirical evidence indicates that economic hardship leads to irregular attendance, delayed completion, and reduced programme sustainability.

Inadequate Training Facilities and Learning Resources

Empirical evaluations of TVET institutions in Kaduna State and other regions reveal that poor infrastructural conditions adversely affect the quality and uptake of vocational programmes. A study by Yusuf and Hassan (2020) documented that many training centres lack functional workshops, updated tools, and required consumables, resulting in limited hands-on practice for trainees. Likewise, Nwakpa (2021) found that obsolete equipment and overcrowded workshop spaces undermine practical skill acquisition, particularly for female learners who may require gender-sensitive facilities. Such findings highlight that infrastructural deficits weaken programme outcomes and discourage girls' enrolment.

Shortage of Qualified and Gender-Sensitive Instructors

Findings from empirical studies also indicate that human resource limitations negatively affect programme delivery. Research by Ikegwu (2020) showed that TVET institutions often rely on underqualified instructors, particularly in technical trades, which reduces the quality of instruction. Furthermore, Haruna and Bello (2022) reported that the absence of female instructors contributes to low participation among girls, as male-dominated staff create environments that are often unfriendly or intimidating for female trainees. These studies demonstrate that instructor shortages and a lack of gender-sensitive pedagogy hinder girls' engagement and retention.

Weak Policy Implementation and Inconsistent Funding

Several empirical studies highlight gaps between TVET policy formulation and implementation in Nigeria. According to Onuoha (2019), although national policies promote vocational skills for youth empowerment, inconsistent funding, poor coordination, and weak monitoring mechanisms impede effective implementation. Similarly, the study by Garba and Aliyu (2021) revealed that insufficient budgetary allocation leads to irregular programme delivery, inadequate maintenance of equipment, and limited expansion of gender-inclusive initiatives.

Such empirical evidence shows that systemic weaknesses undermine the delivery of TVET programmes at the local government level.

Transportation, Safety, and Mobility Barriers

Safety concerns and mobility limitations also contribute to low participation in vocational programmes among girls. A study by Mohammed (2020) found that long distances to training centres significantly reduce girls' attendance in rural and semi-urban communities. Additionally, findings by Zubairu and Suleiman (2019) indicate that parents in Northern Nigeria often restrict girls' movement due to fears of harassment, insecurity, or cultural restrictions on mobility. This body of research suggests that transportation challenges and perceived threats to safety substantially hinder access to vocational training.

Gender Stereotyping in Curriculum and Career Guidance

Empirical studies also provide evidence that gender bias in vocational guidance influences programme uptake. According to Eze and Njoku (2021), girls are frequently guided toward "feminine" skills such as tailoring, catering, and hairdressing, while boys are encouraged to pursue higher-value technical trades. Research by Sadiq (2022) reinforces this trend, noting that institutional practices often reinforce stereotypes that limit girls' choices and reduce their long-term economic prospects. These findings indicate that gender stereotyping within the training system affects the breadth and impact of vocational programmes.

Weak Linkages to Labour Markets and Limited Start-Up Support

Studies further emphasise that ineffective transition pathways hinder programme success for female trainees. According to Ojo and Lawal (2020), many TVET graduates struggle to secure employment or access credit facilities due to inadequate linkages between training centres and employers. Empirical findings by Falola (2021) show that the absence of post-training support, such as start-up kits or mentorship, leads to skill underutilisation among female graduates. This underscores that without structured market linkages, the full benefits of training cannot be realised.

Time Poverty Due to Domestic Responsibilities

Empirical evidence also highlights that girls' heavy domestic responsibilities reduce their ability to participate fully in vocational training. A study by Ibrahim and Mohammed (2022) found that girls devote significantly more time than boys to household chores, which limits their attendance and engagement in training programmes. This reinforces earlier findings by Adebayo (2020) that time constraints remain a significant predictor of dropout among female trainees.

Conclusion

The evidence reviewed in this paper demonstrates that vocational and technical skills play a crucial role in promoting girls' school enrolment and retention rate in Zaria Local Government Area. Access to skill-based learning opportunities increases the perceived relevance of schooling by offering practical, income-generating competencies that appeal to both girls and their families. When girls acquire vocational skills, their confidence, aspirations, and motivation to continue schooling improve significantly. Parents are also more likely to support girls' enrolment when they recognise the economic value and empowerment potential of such training. However, the implementation of vocational and technical education for girls is hampered by entrenched socio-cultural norms, widespread poverty, inadequate instructional facilities, limited qualified and gender-sensitive instructors, weak policy execution, and mobility constraints. These barriers collectively reduce participation, hinder skill acquisition, and weaken the potential of vocational programmes to improve school enrolment outcomes and retention rate of the girl-child.

Recommendations

1. Schools should embed practical, market-oriented skills such as tailoring, ICT, catering, crafts, and agro-processing into regular classroom learning to enhance the attractiveness and relevance of education for girls.

2. Local authorities, NGOs, and schools should organise regular awareness campaigns to address misconceptions about girls' education and highlight the long-term economic and social benefits of vocational skills training.
3. Government and partner organisations should invest in modern workshops, updated tools, ICT equipment, and gender-sensitive facilities to ensure high-quality practical training.
4. Special attention should be given to employing female instructors and training teachers in gender-sensitive pedagogy to create supportive learning environments for girls.
5. Partnerships with local artisans, businesses, and entrepreneurship hubs should be developed to provide mentorship, internships, and post-training support, including access to start-up kits.
6. Family-level sensitisation should focus on redistributing household chores to allow girls adequate time for schooling and skill development.

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