MAKING TECHNICAL AND VOCATIONAL EDUCATION INCLUSIVE FOR PERSONS LIVING WITH DISABILITY: PROSPECTS AND CHALLENGES A CASE STUDY OF SOUTHWEST NIGERIA

Felicia Funmilayo POPOOLA¹; Samuel Olufemi POPOOLA²; Folasade Toyin FALAIYE³

1 Department of General Studies, Osun State College of Technology, Esa-Oke, Osun State, Nigeria

Email: <u>feliciapopoola77@gmail.com</u> Phone number: 08039669247

2 Department of General Studies, Osun State College of Technology, Esa-Oke, Osun

State, Nigeria

Email: popoola7@yahoo.com Phone number: 08034819035

3 Department of General Studies, Osun State College of Technology Esa-Oke, Osun

State, Nigeria

Email: <u>sadefalaiye@gmail.com</u> Phone number: 08068148651

Abstract

For many decades, proponents of inclusive education have been pressing for a change in mindset that would allow for the integration of pupils with disabilities into regular technical and vocational education and training (TVET) classroom settings. Although there is less debate about the advantages of inclusive education, there are still theoretical and practical issues about its implementation. In keeping with the aforementioned, this research was designed to look at the challenges and prospects of making TVET inclusive for PLWD in Nigeria. The purpose of this small-scale study is to shed light on the challenges encountered by PLWD in participating in TVET as well as proposed strategies for enhancing the inclusion of PLWD in TVET programmes in South-West, Nigeria. In order to achieve the objectives of the study, the qualitative research method was employed. A qualitative data instrument in the form of a semi-structured interview was designed to elicit information from the selected PLWD, instructors and TVET administrators in the study. The data that were gathered in the study were analyzed using thematic analysis. Based on the thematic analysis, two themes emerged: challenges of PLWD in participating in TVET; and strategies for enhancing the inclusion of PLWD in TVET programmes. The themes were discussed along with the research questions, juxtaposing the study's findings with the social model of disability and previous studies. Practical recommendations were given on how to solve the issues confronting challenges of PLWD in participating in TVET. Implications for future practice and research were also explored.

KEYWORDS: Vocational Education, PLWD Challenges, Participation, Training

1. Introduction

Technical Vocational Education and Training (TVET) plays a key role in developing the skills and competencies of the workforce in today's world. However, to be effective, it must be accessible to all, including the differently abled, minorities, and other vulnerable groups (Kohankhaki et al., 2021). In this context, inclusive policies and practices are central to ensuring equal access and equal opportunities for all actors. In the 21st century, people are becoming increasingly aware of the ideas of humanism that underpin modern society (Yeap et al., 2021). These ideas imply discovering and realizing the potential of each person, including the one with special needs. Creating equal opportunities and an accessible education environment, as well as successful integration into the social environment, is of paramount importance to these citizens (Chinyere Shirley et al., 2015). Hence, inclusive education remains the only viable way to achieve this.

Inclusive education is the process of ensuring that all students with special needs have equal access to high-quality, effective education. Its objective is to increase the accessibility of education for those with mental, emotional, or physical disabilities (Nugraha et al., 2020; Kinsella, 2018). The fact that the usual training procedure is far more challenging and confusing for the aforementioned persons is one of the main issues with conventional education. Unfortunately, the majority of the time, it is taught in the same manner. In this situation, inclusive education can assist modify the course material to make it simpler for students to understand. Using innovative interactive learning aids makes this feasible (Subbey, 2018; Brydges & Mkandawire, 2018).

As a result, important problems concerning the education of People Living with Disability (PLWD) arose. For example, how are students expected to continue studying if they are having difficulty and are attempting to catch up on their own? The typical training procedure is far more challenging and complex for them. Although these trainees put up great effort and are not always successful, they do not lack desire. All students have the opportunity to learn, understand, and be educated via inclusive education. Although inclusive education has been taken into consideration for the primary and secondary school stages in recent years, the subject remains underrepresented in the TVET area (Torgbenu et al., 2018).

1.1 Inclusive Education and Practices in TVET Education

According to Article 24 of the United Nations Convention on Persons with Disabilities (CRPD) (United Nations General Assembly, 2006), everyone, including people with disabilities, must have access to adult, vocational, and lifelong education. As to the OECD (2014), Vocational and Education Training (VET) programmes, which comprise education and training courses, are the kind of education that results in employment. According to the literature, there are several obstacles to inclusive education in TVET, including unclear policies, a lack of teacher expertise, inadequate in-service training for TVET teachers on inclusive paedagogies and methodologies, and a lack of professional support (Ntombela, 2019).

Another major obstacle to inclusive education achievement in TVETs is said to be the overemphasis on the medical approach to disability as opposed to the social approach. Infrastructure, finance, a shortage of support workers for students with disabilities, and equipment are some of the factors that hinder inclusive TVET education, according to Delubom, Marongwe, and Buka (2020) (Ngubane-Mokiwa & Khoza, 2016). Different writers provide different approaches to helping students with disabilities; in this context, Nkalane (2018) asserts that assistance for students with disabilities at TVETs should be customised based on the individual's impairment. Students at TVETIs may receive assistance with non-academic areas. In Zimbabwe, for example, one of the three Technical and Vocational instruction and Training (TVET) schools provides assistance to students in the form of fees, uniforms, stationery, instruction on sexual and reproductive health rights, and child care services for children of women pursuing technical and vocational education (Adetola, 2021). However, Mosalagae and Bekker (2021) contend that tackling the pedagogical and epistemological marginalisation of students—especially those with impairments like intellectual disabilities—could be greatly aided by concentrating on curriculum delivery techniques. A student-centered approach, an inclusive curriculum, teamwork, assistive technology, and flexible assessment may be necessary for inclusive education in TVETs, claim McGrath and Presha Ramsarup (2024).

1.2 Research Questions

The general aim of the study was to explore the challenges and prospects of making TVET inclusive for PLWD in Nigeria. Specifically, the study answers the following questions;

a. What are the challenges encountered by PLWD in participating in TVET in South-West, Nigeria?

b. What are the proposed strategies for enhancing the inclusion of PLWD in TVET programmes in South-West, Nigeria?

1.3 Theoretical Framework

This study is anchored in the Social Model of Disability (Oliver, 2013; Rieser, 2002), which frames disability not as an individual impairment but as a consequence of environmental, attitudinal, institutional, and financial barriers that hinder full participation in society. The model asserts that persons living with disabilities (PLWDs) are marginalized not by their physical or mental conditions, but by systemic exclusion embedded in societal structures, including education and vocational training institutions.

In the context of Technical and Vocational Education and Training (TVET) in Nigeria, this model is particularly relevant. It enables a critical analysis of how environmental inaccessibility (e.g., lack of ramps, elevators, or adapted tools), negative societal attitudes (e.g., stigma, low expectations), institutional inadequacies (e.g., poor policy implementation, insufficiently trained educators), and financial constraints (e.g., underfunding, lack of assistive technologies) collectively restrict access for PLWD.

Using this theoretical lens, the research shifts the focus from the limitations of PLWD to the limitations of TVET systems in accommodating diversity. This perspective promotes a rights-based approach to inclusion, urging reforms that address structural barriers and foster equality of opportunity (Oliver, 2013). Moreover, the social model provides a lens to explore the *prospects* for inclusive TVET by identifying enabling conditions — such as policy enforcement, inclusive infrastructure, capacity building, and stakeholder engagement — that can transform TVET institutions into inclusive spaces. Thus, the Social Model of Disability offers a robust conceptual base for understanding and addressing the systemic challenges facing PLWD in Nigeria's TVET sector.

2. Research Methodology

To accomplish the particular research goals that guided the enquiry and perform a comprehensive analysis of the topic, the current study combined the interpretivism philosophy with a qualitative research technique. The basis of qualitative research methodology, according to Watkins (2017), is the notion that social conceptions create reality and, as a result, enable a comprehensive understanding of a social event or behaviour from the perspective of the study

participants. Qualitative researchers observe people and things under various conditions in order to assess or understand occurrences from human practical viewpoints.

The interpretative nature of the study enquiry and the need to meet certain criteria led to the deployment of a purposive non-probability sampling approach (Etikan et al., 2016). Although the data collected may not accurately represent the complete population, purposeful sampling guarantees that it aligns with the goals of the study topic (Novosel, 2023). As a consequence, it provides the most important information. Participants in the research were chosen from four TVET institutions spread across two southwestern Nigerian states. Purposively chosen for the study were four TVET teachers, four administrators with more than five years of experience in their respective roles, and eight PWLDs enrolled in TVET who attended the programme for up to 12 months. The researcher is certain that the sample strategies used will yield data that can be used to accomplish the study's goals (Tongco, 2017).

The specific approach employed to collect data for the study was the interview method. Interviews are considered the most effective strategy for achieving the study's goals since they are a common way to collect data for this type of research (Wang, 2020). By eliciting each participant's experiences, thoughts, and points of view, an interview helps the researcher fully comprehend a certain topic (Ratislavová & Ratislav, 2014). Semi-structured interviews were employed in the study. The study's data gathering method was semi-structured interviews in order to reduce the quantity of information collected and exclude those that would not be pertinent to the investigation. A case study was used to collect semi-structured interviews with the chosen participants in TVET establishments. This is a great way to get in-depth information on a particular occurrence.

To analyse the data, a thematic approach was used. The information gathered from the interviews was carefully examined and organised. Themes surfaced following the triangulation and segmentation of the data. Thematic analysis is an excellent method for organising and assessing research and may be used to identify recurring themes in gathered material.

3. Results and Findings

To organize and analyze the data gathered in the study, the thematic analysis was utilized in this section. Themes that emerged under each of the research questions were organized using the analysis technique. According to Javadi and Zarea (2016), the theme-based approach has been proposed as an effective means of "encoding qualitative data". Based on the thematic analysis, two key themes have emerged. These themes include challenges of PLWD in participating in TVET;

and strategies for enhancing the inclusion of PLWD in TVET programmes. Each of the identified themes is analyzed in the paragraphs that follow.

3.1 Theme one: Challenges to PLWD's Participation in TVET

While there were diverse views on how participants perceive challenges of PLWD in participating in TVET, several fascinating responses came to light. The analysis of data indicated that the challenges of PLWD's in TVET can be broadly categorized into physical and environmental challenges, institutional and systemic challenges, resources and material inadequacies, social and attitudinal barriers. Each of the identified sub-categories are critically discussed using quotes from the data from participants in the study.

The majority of the responses indicated that physical and environmental barriers such as access to infrastructure and transport create obstacle for PLWDs when trying to access TVET facilities. This prevents many PLWDs from enrolling in the programme and fuel their shared believe that the TVET programmes was not made or build with their interest in mind. According to "P3" "my TVET centre has no ramps, the entry doors to classrooms and laboratories are very narrow to pass through with my wheelchair". This situation makes it very difficult for PLWDs to access this centre and learn adequately like all other learners. Aside from the inaccessible infrastructure of TVET centre, movement to and fro centres are extremely difficult for PLWDs. This make getting to the centre a challenge for them, since "public transportations" system are not disability-friendly and private transport is too expensive and unavoidable for me"(P7). This perceptive was not only shared by PWLDs but the instructors and administer of the centres share similar opinion. For instance "Admin 1" said "yes, inclusion of PLWDs is highly supported by the centre though there is still need to make some adjustment to the infrastructure of the centre to fully enhance inclusive learning for PLWDs". The inadequacies of the physical and environmental challenges have resulted in PLWDs lateness and absenteeism since they "always require extra support from friends to access the centre which when not available makes them to arrive late to class or outright absent themselves from classes" (Instructor 4).

Institutional and systemic challenges were mentioned by research participants as another significant barrier to PLWDs participation in TVET. The majority of the participants felt that while their policy in place, the failure to enforce such policies is a major problem for effective PLWDs inclusion in TVET. Such institutional and systemic barriers include limited course option, lack of trained personnel, and poor awareness about TVET for PWLDs among others. This is evident as

"P5" commented that, "....we are often discouraged from choosing certain vocational skills like carpentry, automobile repairs, or electrical work,with the advice that this is too dangerous for PWLDs". Even more, for courses they are allowed to choose, instructors don't give individualized learning that can meet their unique circumstance hence they are taught like every other learners enrolled in the programme. "P2" noted that "...many instructors don't know how to modify their teaching methods or provide extra support where needed". In support of the foregoing, "Admin 2" admits that ".....while the centre always tailors its activities to be inclusive, they are constrained by rigid curricula and the need to meet the schedule of work". This rigidity and tight work plan make it difficult for PLWDs with their unique situations to be carried along hence necessitating the need for "clearer policies and continuous professional development workshops for instructors and other personnel how to handle PLWDs" (Instructor 3). The lack of training have led to wrong believe among staff that "technical skills training is 'too difficult' for PLWDs" (Instructor 1). Again, there is lack of access to quality information on TVET among PLWDs, as "....information on the programme "hardly reaches our communities, and when it does, it's not tailored for us" (P1).

In the aspect of the resources and material inadequacies, the majority of the participants noted lack of resources and materials such as specialized equipment for PWLDs, lack of adaptive technologies inaccessible learning materials, financial constraints, lack of learning, among others affect their participation and full inclusion in PWLDs programmes. For instance 'P4' states that "tools and machines for easy learning are not modify for PWLDs". The participant proceeds further that "as a visually impaired person, I need tools with tactile features, but such things are not available" (P4). Similarly, 'P6' submitted that "most of the learning materials are only in printed text. There are no Braille versions, no audio recordings, nothing for the blind or low-vision students". In addition, the extra cost that comes with disability have made TVET inclusion difficult for PLWDs with 'P5' stating that "a personal assistant or buying adaptive equipment — are too much for me and my family". The experienced of PLWDs were highly supported by the data gotten from instructors and administrators. 'Instructors support the claim of lack of specialized resources when they say "available tools and equipments in the centre are not disability-friendly" (Instructor 1) and that most of the "...materials and assessments were not originally designed for inclusive education, hence they need redefine" (Instructor 4). Similarly, 'Admin 3' revealed that "lack of infrastructural facilities slow our progress to support PLWDs". Another administrator admit that

the "materials and assessments methods employed with the centre were not designed for inclusivity and they are adjusting gradually" (Admin 1).

Another important sub-category that emerged in the analysis of this theme was the social and attitudinal barrier to the inclusion of PLWDs in the TVET programmes. Social and attitudinal related challenges such as discrimination and negative attitudes, social biases, stereotypes, and informational gaps limits PLWDs opportunities and discourage their full inclusion to access TVET. The issue with discrimination and negative attitudes was especially pronounced as participant reported that "some instructors and even fellow students look at us (them) differently" (P2). According to the student, such dishonorable look was to the fact that they feel PLWDs "cannot perform well due to our (their) disability, so they don't take us seriously" (P5). Another participant shared a contrary opinion as to the reason they are perceived and view this way. According to 'P7' many of the staff views PLWDs the way they do because "they don't know how to support individual with disability"; this make some of the participant students to belief that they are only accepted in the programme "to meet a quota, not because they believe in our potential" (P 2), in fact they think PLWDs are "too slow or incapable" (P1). The social and attitudinal barrier to the inclusion of PLWDs was also identified by the instructors and administrators. Some instructors highlight that they don't create any attitudinal barriers for the inclusion of PLWDs but that in the efforts to support them, many of the instructors are "fear making mistakes or saying something offensive when teaching PLWDs" (instructor 1). In addition, Admin 1 submitted that "there is resistance from staff about PLWDs mastering technical skills."

3.2 Theme Two: Effective Strategies for Enhancing the Inclusion of PLWD in TVET Programmes

The analysis of responses in this theme revealed several important opinions on how the challenges of inclusion of PLWD in TVET Programmes can be solved. The synthesis of data indicate that effective strategies for enhancing the inclusion of PLWD in TVET programmes can be broadly categorized into three including; improved accessibility and infrastructural development, adoption of inclusive pedagogy and curriculum, and attritional change and systemic support for PLWD inclusive participation in TVET. Each of the identified sub-categories are critically discussed using quotes from the data from participants in the study.

The majority of the responses indicated that improve accessibility and infrastructure including physical and technological adoptions will enhance and facilitate the inclusion of the PLWD in

TVET programmes. Many PLWD have indicated that they are faced with the problem of accessing TVET classroom and workshop due to infrastructural barriers. Hence, a reoccurring view shared by the participant was the need to "consider ramps and accessible labs" (P8). According to them, the ramp will solve the problem of accessibility to workshop. Aside the issue associated with accessibility, many participants also identify the problem with operating the machine, and hence it was submitted by 'P7' that "TVET need to employ the use of adaptive equipment if PLWD are to be effectively cratered for". According to this participant, this will ensure that PLWD can "handle all relevant tools and machine". In support of the foregoing, Administrators that participated in the study emphasize the need for review of TVET infrastructure to ensure the centre inclusive objectives. For instance, 'Admin 2' noted that "TVET infrastructure need to be review to ensure all buildings are accessible to PLWD". While this may be difficult to achieve due to inadequate financial budget for the sector, 'Admin 4' emphasis the need for partnership and collaboration. He submitted that "TVET should collaborate with NGOs locally and international to access funding opportunities.....that can be use to provide assistive technologies and tools for it programmes". In addition, the objective to make TVET inclusive for all including PLWD should be strategically plan such as through "making scholarship offers specifically to PWLD to ease their financial problem" (Admin 1). 'Instructor 3' submitted that "TVET instructor should be engaged in practical oriented trainings on how they can modify their teaching to meet the needs of all learners".

Another important sub-category that emerged in the analysis of this theme was the inclusive pedagogy and curriculum adaptation. This theme is centered on the need to modify the curricula and teaching of TVET to accommodate the needs of different categories of learners including PLWD. In order to solve the many problems that PLWD faces in TVET, 'P5' suggest that TVET teaching team should include sign language interpreters that can help me and friends engage effectively in classroom teaching". In addition, 'P1' submit that the "TVET curriculum and teaching need serious modification to allow PLWD to learn practical skills that match (my) their abilities". Since PLWD faces several psychological problems that prevent their true engagement in the classrooms, "counselors that understand disability-related challenges should be employed to help manage stress and expectation" (P3). This will make the TEVT a better engaged platform for PLWD to effectively learn. In addition, many instructors at the centers complained about lack of resources and equipments to effectively engage PWLD. To solve this problem, 'Instructor 4'

submitted that "relevant tools and equipments should be made available for instructors to properly assist PLWD". Similarly, 'Instructor 1' states that TVET centres should be provided with teaching assistants that understand sign language to teaching deaf students as well as disability specialist to effectively handle the unique needs of PWLD". Many of the administrators suggest that the challenges of inclusion of PLWD in TVET can be solve through faculty and staff training, highlighting PLWD unique needs and adequate monitoring and evaluation mechanism. To support this 'Admin 1' point that "instructors and staff training on inclusive practices should be made a major part of annual development agenda". Even when the training programmes are enacted, it is important to ensure that it implementation are enforced. It is in light of this that 'Admin 3' shared that monitoring and evaluation mechanism should be effectively planned to track inclusion training and strategies".

Attitudinal change and building of strong support systems emerged as another reoccurring subtheme in the analysis of participants' responses to effective strategies for enhancing the inclusion of PLWD in TVET programmes. This theme emphasizes change of general perceptions and the need to establish support network to foster inclusive TVET environment for all learners. When PLWD were asked about how the TVET can be made inclusive for them, many suggest that awareness campaign to reduce stigma, adequate training for teachers, and peer support would aid them to effective learn in TVET centres. For instance, 'P1' noted that "general awareness campaign among students would help reduce social stigma they face daily". Taking it further to teachers, 'P6' submitted that "teachers should be given relevant training on disability inclusion so they can stop to see and treat PLWD as a burden during their teaching". In support of 'P6', 'Instructor 3' noted that such "training would help reduce unconscious bias among staff", since they always have certain kind of perception towards disability. To solve the overall problems of PLWD in TEVT, 'Instructor 1' suggest that "instructors should collaborate among themselves when designing learning materials that suit all types of learners". However, since the main barrier that prevents such collaboration is time, thus, there is need for "institutional support to manage inclusive practice without burning out" (Instructor 3). In addition, 'Admin 2' recommends the need to "establish disability support office that will be charged with the primary goal of coordinating the welfare services of PLWD". 'Admin 1' also suggest that the TVET sector should engage with industry partners to work out ways to ensure PLWD graduates are hired after their programme.

4. Discussion of Findings

The analysis of data indicated that the challenges of PLWDs in TVET can be broadly categorized into physical and environmental challenges, institutional and systemic challenges, resources and material inadequacies, social and attitudinal barriers. Several underlying reasons may explain these outcomes including policy-practice gaps, limited awareness and training, resource constraints and cultural attitudes (Addo et al., 2023; Murgor et al., 2014). While Nigeria has policies promoting inclusive education, weak implementation, poor monitoring and inadequate funding results in marginalization of PLWDs. Similarly, many educators and administrators lack training on inclusive pedagogy, leading to unintentional exclusion (Addo et al., 2023). The policy-practice gaps, limited awareness and training problem is compounded by budgetary limitations that hinder investment in infrastructure, assistive technologies, and curriculum development. In addition, the deep-rooted cultural beliefs and stereotypes may reinforce exclusion and devalue the potential of PLWDs, especially in practical fields like TVET (Makopoulou et al., 2019).

The challenges highlighted above are best understood through the lens of the Social Model of Disability. This model shifts the focus from individual impairments to the socially constructed barriers that exclude PLWDs from full participation. Physically inaccessible infrastructure such as buildings without ramps, elevators, or assistive technologies highlights society's failure to design inclusive environments, especially in hands-on learning contexts like TVET. Institutional and systemic challenges, including weak policy implementation, lack of disability support services, and non-inclusive governance, further entrench exclusion by maintaining rigid, ableist structures (D'Souza, 2019). Compounding this are resource and material inadequacies, such as the absence of adaptive learning tools and trained personnel, which reflect a societal neglect of its obligation to provide necessary accommodations (D'Souza, 2019). Perhaps most disabling are the social and attitudinal barriers—widespread stigma, stereotypes, and low expectations—which manifest in discriminatory behaviors from educators and peers, thereby undermining the educational experiences of PLWDs. In essence, these challenges underscore the social model's core claim: that disability is not caused by impairments, but by the failure of society to remove obstacles and create inclusive systems (D'Souza, 2019).

While the Social Model of Disability provides a robust framework for understanding these barriers, it is also important to recognize its limitations. It is argued that the model underplays the lived realities of impairment, particularly chronic pain or severe functional limitations, which can also

influence participation independently of social barriers. Nonetheless, in the context of TVET in Nigeria, where most of the barriers are environmental, institutional, and social, the social model remains highly relevant and useful (Chan-Seob Nam, 2009). It shifts the focus from "fixing" the individual to reforming the system, which is crucial for sustainable inclusion. In sum, these findings reaffirm the central thesis of the social model: that disability is a product of an exclusionary system. Real change in TVET requires a systemic shift—physically, structurally, materially, and attitudinally—to make education truly inclusive for all.

The findings of this study reveal that effective strategies for enhancing the inclusion of Persons Living With Disabilities (PLWD) in Technical and Vocational Education and Training (TVET) can be broadly grouped into three interconnected areas: improved accessibility and infrastructural development, adoption of inclusive pedagogy and curriculum, and attitudinal change supported by systemic reforms. Anchored in the Social Model of Disability, these strategies shift the focus from individual impairments to the disabling nature of societal structures. The issue of physical inaccessibility—manifested in poorly designed buildings, inadequate learning tools, and inaccessible environments—is understood not as a natural limitation of PLWDs, but as a result of societal failure to design inclusive systems. Thus, infrastructural development guided by universal design principles and supported by assistive technology is essential to dismantle these barriers (Chan-Seob Nam, 2009). However, such reforms risk being symbolic if not backed by sustained policy enforcement and funding. Similarly, inclusive pedagogy and curriculum reforms are necessary to accommodate diverse learning needs and reject one-size-fits-all teaching approaches. These adjustments promote equitable access to TVET but require significant investments in teacher training, curriculum flexibility, and alternative assessment methods, which remain limited in the Nigerian context. Lastly, addressing deep-seated negative attitudes and institutional inertia is vital. Sensitization campaigns, policy reforms, and leadership commitment must drive systemic change, but progress in these areas is often slow and fragile. Without accountability structures and inclusive governance, such efforts may lack depth or durability. Collectively, these strategies align with the Social Model's emphasis on restructuring systems rather than individual adaptation, underscoring the need for holistic, well-resourced, and long-term commitment to disabilityinclusive TVET.

4.1 Recommendations

The following recommendations were made based on the outcomes of the study:

- 1. TVET institutions should invest in disability-friendly infrastructure, such as ramps, accessible toilets, elevators, and signage in Braille. This will help eliminate physical and environmental barriers and facilitate easier mobility and access to facilities for PLWDs.
- 2. Curriculum planners and educators should adopt inclusive teaching methods that accommodate various types of disabilities. This includes the use of assistive technologies, simplified learning materials, sign language interpreters, and individualized learning plans tailored to the unique needs of PLWDs.
- 3. Education authorities and TVET regulatory bodies should develop and enforce institutional policies that mandate the inclusion of PLWDs. This includes teacher training on inclusive education practices, recruitment of disability support staff, and establishment of monitoring frameworks for accountability.
- 4. Government and stakeholders should ensure the regular supply of adaptive learning materials, assistive devices (e.g., screen readers, hearing aids), and other relevant resources. Funding and partnerships with disability-focused organizations can help address material inadequacies.
- 5. Continuous sensitization and awareness campaigns should be carried out within TVET institutions and communities to challenge stereotypes, reduce stigma, and foster a more inclusive and accepting environment for PLWDs.

5. References

- Addo, D. E., Efut, E. N., Akpo, D. M., & EGOR, O. W. (2023). Innovative Instructional Design Packages for Promoting Inclusive and Participatory Interactive Learning Experience in Nigeria. *Shodh Sari-an International Multidisciplinary Journal*, 70–87. https://doi.org/10.59231/sari7575
- Adetola, A. (2021). Vocational Technical Manpower Development in Nigeria: Issues and Strategies. *International Journal of Technology and Inclusive Education*, 10(1), 1639–1647. https://doi.org/10.20533/ijtie.2047.0533.2021.0201
- Brydges, C., & Mkandawire, P. (2018). Perceptions and experiences of inclusive education among parents of children with disabilities in Lagos, Nigeria. *International Journal of Inclusive Education*, 24(6), 1–15. https://doi.org/10.1080/13603116.2018.1480669
- Chan-Seob Nam. (2009). Definitions of Disability to Realize Social Model of Disability: A Suggestion for Amendment of the Definition of Disability in Current Act. *Korean Journal of Social Welfare*, 61(2), 161–187. https://doi.org/10.20970/kasw.2009.61.2.007
- Chinyere Shirley, A., Chijioke, O., P., & Benjamin Chukwumaijem, O. (2015). Towards Quality Technical Vocational Education and Training (Tvet) Programmes in Nigeria: Challenges and Improvement Strategies. *Journal of Education and Learning*, 4(1). https://doi.org/10.5539/jel.v4n1p25
- D'Souza, R. (2019). Exploring ableism in Indian schooling through the social model of disability. *Disability & Society*, 35(7), 1–6. https://doi.org/10.1080/09687599.2019.1668635
- Delubom, N. E., Marongwe, N., & Buka, A. M. (2020). Managers' challenges on implementing inclusive education. *Cypriot Journal of Educational Sciences*, 15(6), 1508–1518. https://doi.org/10.18844/cjes.v15i6.5294
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4.
- Javadi, M., & Zarea, K. (2016). Understanding Thematic Analysis and Its Pitfall. *Journal of Client Care*, *1*(1), 34–40. Researchgate. https://doi.org/10.15412/J.JCC.02010107
- Kinsella, W. (2018). Organising inclusive schools. *International Journal of Inclusive Education*, 24(12), 1–17. https://doi.org/10.1080/13603116.2018.1516820
- kohankhaki, samira, rahimi, fatemeh, & ghaffari, behzad. (2021). Presenting a production model of knowledge-based and job-creating based on technical-vocational skills (Case study: Technical and Vocational Education Organization). *Skill Training*, 10(37), 7–34. https://doi.org/10.52547/irtvto.10.37.7
- Makopoulou, K., Penney, D., Neville, R., & Thomas, G. (2019). What sort of "inclusion" is Continuing Professional Development promoting? An investigation of a national CPD

- programme for inclusive physical education. *International Journal of Inclusive Education*, 26(3), 1–18. https://doi.org/10.1080/13603116.2019.1647297
- McGrath, S., & Presha Ramsarup. (2024). Towards vocational education and training and skills development for sustainable futures. *Journal of Vocational Education & Training*, 76(2), 247–258. https://doi.org/10.1080/13636820.2024.2317574
- Mosalagae, M., & Bekker, T. L. (2021). Education of students with intellectual disabilities at Technical Vocational Education and Training institutions in Botswana: Inclusion or exclusion? *African Journal of Disability*, 10. https://doi.org/10.4102/ajod.v10i0.790
- Murgor, T. K., Changa'ch, J. K., & Keter, J. K. (2014). Accessibility of Technical And Vocational Training Among Disabled People: Survey Of TVET Institutions In North Rift Region, Kenya. *Journal of Education and Practice*, 5(3), 200–207.
- Ngubane-Mokiwa, S., & Khoza, S. B. (2016). Lecturers' Experiences of Teaching STEM to Students with Disabilities. *Journal of Learning for Development*, 3(1). https://doi.org/10.56059/jl4d.v3i1.125
- Nkalane, P. K. (2018). Inclusive Assessment Practices in Vocational Education: A Case of a Technical Vocational Education and Training College. *The International Journal of Diversity in Education*, 17(4), 39–50. https://doi.org/10.18848/2327-0020/cgp/v17i04/39-50
- Novosel, L. M. (2023). Understanding the Evidence: Non-Probability (Non-Random) Sampling Designs. *Urologic Nursing*, 43(5), 245–247. https://doi.org/10.7257/2168-4626.2023.43.5.245
- Nugraha, H. D., Kencanasari, R. A. V., Komari, R. N., & Kasda, K. (2020). Employability Skills in Technical Vocational Education and Training (TVET). *Innovation of Vocational Technology Education*, *16*(1), 1–10. https://doi.org/10.17509/invotec.v16i1.23509
- Oliver, M. (2013). The Social Model of Disability: Thirty Years On. *Disability & Society*, 28(7), 1024–1026. https://doi.org/10.1080/09687599.2013.818773
- Ratislavová, K., & Ratislav, J. (2014). Asynchronous email interview as a qualitative research method in the humanities. *Human Affairs*, 24(4). https://doi.org/10.2478/s13374-014-0240-y
- Subbey, M. (2018). Awareness of basic school heads in Agona Swedru towards the policy of inclusive education in the Ghana Education Service. *International Journal of Inclusive Education*, 1–10. https://doi.org/10.1080/13603116.2018.1464067
- Tongco, Ma. D. C. (2017). Purposive Sampling as a Tool for Informant Selection. *Ethnobotany Research and Applications*, *5*(1), 147–158.
- Torgbenu, E. L., Oginni, O. S., Opoku, M. P., Nketsia, W., & Agyei-Okyere, E. (2018). Inclusive education in Nigeria: exploring parental attitude, knowledge and perceived social norms

- influencing implementation. *International Journal of Inclusive Education*, 25(3), 1–17. https://doi.org/10.1080/13603116.2018.1554715
- Wang, S. (2020). Exploring a Research Method Interview. *Advances in Social Sciences Research Journal*, 2(7).
- Watkins, D. C. (2017). Rapid and Rigorous Qualitative Data Analysis. *International Journal of Qualitative Methods*, 16(1), 160940691771213. https://doi.org/10.1177/1609406917712131
- Yeap, C. F., Suhaimi, N., & Nasir, M. K. M. (2021). Issues, Challenges, and Suggestions for Empowering Technical Vocational Education and Training Education during the COVID-19 Pandemic in Malaysia. *Creative Education*, 12(08), 1818–1839. https://doi.org/10.4236/ce.2021.128138