



Strengthening Industry Partnerships through Dual Apprenticeship: A Work-Integrated Learning Approach for TVET Institutions in Uganda

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Abstract

A dual apprenticeship as a form of work-integrated learning has had remarkable success in the Global North in improving graduates' employability, reducing the costs of recruitment, enhancing the seamless transition of graduates to the world of work, and promoting a symbiotic linkage of TVET institutions with industry for knowledge, skills and experience transfer and acquisition. However, this has not been the case in the Global South, where it continues to be envied but scarcely implemented. This study set out to explore the dual apprenticeship practice as a strategy for strengthening partnerships between TVET institutions and industry. Using in-depth interviews and focus group discussions, data was collected from the teaching staff and administrators involved in the programme regarding the benefits and challenges of dual apprenticeships. Data was thematically analysed, themes generated, and results presented verbatim to articulate opinions and perceptions. The findings indicate that with a dual apprenticeship, institutions are able to meaningfully engage with industry in shaping the training process, assessment of learning,

and building closer collaboration arising from the repeated and lengthened engagement despite the challenges. The study concludes that embracing dual apprenticeships greatly benefits institutions and outweighs the encountered challenges, ultimately benefitting the students, who seamlessly transit into work life with reliability, loyalty, and dedication. The study recommends that TVET institutions should continue engaging industry through dual apprenticeships, and that the government, through its regulatory agencies, should set up an enabling regulatory framework to ease the adoption of dual apprenticeships.

Keywords: *Apprentices; Workplace; Industry linkage; TVET institutions; World of work.*

Introduction

A dual apprenticeship is generally known as a form of work-integrated learning that combines learning and training in a collaboration between the training institution and the workplace. It emphasises “learning by doing” (Fuller & Unwin, 2011), in which an apprentice undertakes routine tasks under the guidance of an experienced mentor under a contractual relationship (Smith, 2013) for on-the-job and off-the-job training (Lerman, 2019) to improve employability. The Organisation for Economic Co-operation and Development (OECD) (2022) clarifies that dual apprenticeships are pathways that can be used to develop a labour force that is well orientated to the needs of the industry. Dual apprenticeships are managed through contracts with the apprentices that aim at imparting to them and enabling them to acquire competences for an occupation. The apprentice has to be paid by the employer, and combines on-the-job and off-the-job training, leading to the attainment of a recognised qualification (International Labour Organisation, 2024; Gallup, 2024; Markowitsch & Wittig, 2022; Smith, 2013). They can also be informal apprenticeships (Esson & Okeke, 2014). Formalised apprenticeships are gaining international recognition (Deissinger, 2022; Vanderhoven, 2023).

Owing to the benefits of dual apprenticeships, many countries have been enticed to adopt them. Thus, there is need to explore the

benefits and challenges that can be attributed to dual apprenticeships to inform the stakeholders. The benefits of dual apprenticeships range from bridging academic and practical training, to improving the employability of students, improving students' adaptability to industry, and ensuring a seamless transition to the labour market (Deissingner, 2015; Jackson, 2024; Lerman, 2019; Tremblay & Le Bot, 2000; Valiente & Scandurra, 2016). Dual apprenticeships also promote collaboration between TVET institutions and industry as key stakeholders in the delivery of training and turning workplaces into learning spaces (Quew-Jones, 2023). Dual apprenticeships produce work-ready students that are also academically prepared (Voeller, 2022), an ingredient that may be missing in the non-apprenticeship programmes. With supported workplace well-being, apprenticeships contribute greatly to the attainment of job placements (Ullibarriarana-Garate, 2023), and TVET graduate completion (Jackson, 2024). Dual apprenticeships have proven to be instrumental in solving particular skills shortages (Güden, 2022; Li & Pilz, 2021), aligning TVET training with industrial demand (Singh, 2019), and enhancing industry competitiveness (Euler, 2017; OECD, 2022).

The benefits of dual apprenticeships to TVET institutions include faster training programme development and timely reviews, sustainable and close partnerships with industry, quick feedback, improved quality of training, strengthened reputation, and reliable workforce training (European Centre for the Development of Vocational Training (Cedefop), 2022; OECD, 2022; United States Department of Labour (US DOL), 2024). Furthermore, institutions can diversify revenue sources via performance-based funding, apprenticeship grants, and shared investments in equipment and tools (US DOL, 2024; OECD, 2022), which enables institutions to serve both school leavers and adults in re-skilling, expanding enrolment and community impact (European Council, 2020; European Commission, 2023), and provides for co-teaching and joint supervision with industry mentors, which keeps pedagogy or andragogy relevant (Cedefop, 2021, 2022). As a paid undertaking, a dual apprenticeship strategy provides a paid pathway that reduces financial barriers for underprivileged communities (Government Accountability Office (GAO), 2025; US DOL, 2024; OECD, 2022; Cedefop, 2022). Therefore, TVET institutions in Uganda can reap significantly

from dual apprenticeships by cultivating stronger industry links and keeping curricula aligned with industry needs at minimum costs for infrastructure, tools, equipment and materials. This can be achieved through leveraging industry facilities and mentoring capacity, as well as turning workplaces into effective learning spaces. Although there are several benefits of dual apprenticeships to both students and workplaces, this study underscores the benefits to training institutions so as to increase appreciation of the primary initiator (higher education institutions (HEIs)) embracing them in their curricula and strengthening their linkage to industry.

However, providers of dual apprenticeship programmes face placement bottlenecks, uneven industry capacity, and the administrative burden of coordinating tripartite assessment, quality assurance, and compliance (Roeloffze & Kleynhans, 2018). Smith et al. (2020) also noted with concern that dual apprenticeships, with its benefits of closing in on the world of work, narrowing competence gaps and providing the much-needed ready-to-work labour, is multifaceted, with a sophisticated set-up that requires all key players, especially institutions, to understand its effective execution for long-term viability. Dual apprenticeships can be complex in terms of aligning curricula, verifying workplace learning, and supporting diverse cohorts (Cook, 2024; Jones et al., 2023). Staff workload increases as workers act as assessors, as well as mentors (Jones et al., 2023). These pressures strain resources and can compromise consistency unless robust partnerships and a clear governance framework are in place (Cook, 2024; Roeloffze & Kleynhans, 2018). There exist rigid systems that may not be accommodative of flexible dual apprenticeships, and continued lower endorsement dual apprenticeship by institutions (Mulkeen et al., 2017; Nawaz et al., 2023). Institutions have not been helped by the diversity of the dual apprenticeship applications (Smith, 2023) and the paradigm shift of study-as-you-earn Voeller (2022), which have also affected its charm. The complex role of the training institutions in tri-stakeholder engagement (Taylor-Smith et al., 2023), the requirement of very close collaboration (James-Relly & Laczik, 2021), insufficient resources (Jackson, 2024), and the required off-the-job training (Poole, 2023), quality assurance, heterogenic workplaces (Quew-Jones, 2022) and apprentice-imbalanced demand from industry (Cook, 2024), as

well as others that are still emerging (Chadwick, 2025), have not helped either. Green et al. (2022) proposed that institutions ought to invest in calming the fears and stress connected with dual apprenticeships. As to how training institutions in Uganda understand the complexities related to dual apprenticeships, not much is known, and this could be contributing to its slow adoption. Without clear partnership mechanisms and management buy-in, institutions may struggle to sustain coherence, feedback loops, and consistent mentoring arrangements across multiple organisations.

Boundary crossing theory (BCT), which hypothesises and depicts the classic scenarios of two interacting systems with boundaries between TVET institutions and hosting organisations, informed the study. As advanced by Sanna and Anton (2011), BCT proposes the ways through which individuals are able to explore or circumnavigate learning while moving between different environments of practice or work. BCT also posits that the boundaries that exist between different environments provide learning avenues, learning itself and new knowledge, skills and attitudes for acquisition (Akkerman & Bakker, 2011; Engeström, 2016; Engeström & Sannino, 2010). By this theory students, while undertaking dual apprenticeships, have to cross the boundaries of their training institutions and get into unknown environments of the hosting workplaces to interact with the new-found environment and its objects to be able to acquire the required skills. This is achieved through dealing with new challenges (Konkola et al., 2007; Lambert, 2001). Without understanding the benefits and challenges to TVET institutions during dual apprenticeships, the strengthened linkage would be missed.

Globally, there is a growing interest in dual apprenticeship programmes. In the USA, although there has been low uptake (Lerman, 2020), the programme is meant to break barriers to employment for traditionally underrepresented populations such as women, youth, individuals with disabilities, veterans and people of colour (Butrica et al., 2023; Fortwengel et al., 2021). Meanwhile, the European Union has been spearheading its promotion (Martínez-Izquierdo & Sánchez, 2022) and emphasising continuous improvement (D'Agostino & Vaccaro, 2021). On the hand, in Asia policymakers emphasise the need to invest in promoting systems of dual apprenticeship through integrating work-

based learning into formal VET (Maurer, 2019; Paudel et al., 2023; Yan, 2023). These adaptations reflect a growing recognition of the scheme's capacity to enhance employability in rapidly industrialising economies and, therefore, understanding the benefits of dual apprenticeships and how to mitigate the inherent challenges.

In Africa, dual apprenticeships remain limited, with informal apprenticeships still dominating. There are pilot projects in countries like Ghana, Kenya, and South Africa (African Union Commission, 2020; Walther, 2011). However, emphasis on integrating work continues to take other forms, such as industrial training attachments (Kalanda et al., 2020), and suffer from lacunae in legislation (Kalanda et al., 2021), as well as a dearth of institutional policies (Kalanda et al., 2025). Therefore, understanding and implementation of dual apprenticeships in Africa and Uganda's HEIs are worth investigating. In West Africa, despite serious challenges hampering access to formal education, reforms have been carried out to improve informal apprenticeship systems as a skills development alternative for the youth (Nunyonamehet al., 2024). For example, in Benin dual apprenticeships have been used to increase the enrolment of youth in formal education (Odjo et al., 2021). Experiences of dual apprenticeships in Sub-Saharan Africa have shown that they require extensive and context-specific discussions and concepts, thus this study (Gewer, 2021). In Tanzania, apprentices (students) spend different weeks of the year alternating between training centres and industry, and dual apprenticeships were starting to attract some interest from industry (Koma, 2021).

In Uganda, dual apprenticeships are scantily documented, and may be shyly implemented in TVET institutions. However, some strides have been made with the establishment of the National Apprenticeship Framework (UNAF) that intends to guide and regulate apprenticeships (Ministry of Gender, Labour and Social Development (MGLSD), 2018). At Alpha Institute, with support from the International Labour Organisation (ILO), a dual apprenticeship programme has been ongoing for three years. This one-year programme has had two cohorts of about 200 graduates. The structuring of the programme is such that the students spend a total of three months at the institute, and the rest of the 13 months at the partner establishments. Through regular visits to the apprentices by the

training staff from the institute and in collaboration with the trainers in the workplaces, assessments are carried out and the suitability of the students to fit into a particular line of work is established. Summative assessment is then carried out at the tail end of the programme for certification. This example of dual apprenticeship was selected for this study to explore the benefits and then evaluate the related challenges. The findings of the study could be useful in understanding in context the implementation of dual apprenticeships in Uganda. The objective of the study was to explore dual apprenticeships as a strategy for strengthening partnerships between TVET and higher education (HE) institutions and industry.

Methodology

Research design and sample

This study employed the qualitative approach using a case study design to explore experiences and insights related to implementing the dual apprenticeship programme at Alpha Institute, where the study was carried out. The institute has had two dual apprenticeship cohorts. Interpretative methods were used in data collection and analysis, and the results presented verbatim. Alpha Institute is a TVET institution located in Jinja, Uganda, and the TVET training staff and administrators involved in the institute's apprenticeship programme were sampled. The institution had carried out a dual apprenticeship programme for the last three years and had graduated two cohorts of students, and the graduates were expected to have gained the required experiences of dual apprenticeships for use in this study.

The study participants were 25 (15 training staff, one dual apprenticeship coordinator and nine institute administrators), and were selected purposively as they were expected to have the requisite knowledge and experiences to inform the study. However, data saturation was reached after interviewing eight participants. At this point, the participants started providing similar data on related subjects.

Data collection

Data was collected using an interview guide from seven institute administrators and one dual apprenticeship coordinator, as well as

focus group discussions (FGD) with 15 training staff in groups of five. An interview guide with open-ended questions about the benefits and challenges of dual apprenticeship was used. In-depth interviews were conducted in person for about an hour with one apprenticeship coordinator and seven institute administrators. The interviews provided an in-depth understanding of the benefits and challenges that had been enjoyed or faced during the undertaking. The FGDs lasted for 45 minutes and were conducted at the institute. During the discussions participants were guided into highlighting the benefits and the challenges of dual apprenticeships as trainers. As Mugenda (2013) argues, the openness of the questions in an interview guide makes it feasible to seek a deeper understanding and clarity of the information provided by recasting and iterating them. With the participants' consent and permission, interviews were audio-recorded for subsequent transcription.

Data trustworthiness

As asserted by Alexandar (2019) and Mirza et al. (2023), trustworthiness of a study can be ensured by establishing credibility and transferability. For this study, credibility was attained through method triangulation as data was collected from participants using in-depth interviews and FGDs, prolonged engagement with the interviews that lasted between and 60 minutes, and person triangulation by collecting data from administrators and trainers involved in dual apprenticeships. Furthermore, conclusions were only drawn upon cross-referencing the data from the interviews and FGDs. By presenting data obtained from the participants verbatim, lucid and textured thick descriptions to ensure transferability were done.

Data management

The data gathered during interviews was transcribed, coded and analysed thematically to identify the emerging themes (Creswell & Guetterman, 2024). The data collected using the interview guide was coded as A1, A2, A3, A4, A5, A6, A7, and A8, following the order in which the interviews were conducted. Data obtained from the FGDs was coded as FGD1, FGD2, and FGD3, with "FGD" representing focus group discussions and the numbering reflecting the sequence in which they occurred. The sub-themes that were generated include improvement in the institutional partnerships with the world of work; quick feedback on

the quality and content of the curriculum; exploration of co-teaching and supervision of learning; improved reputation of the institution; reduced costs of training in terms of teaching materials and acquisition of up-to-date equipment; and improved community engagement, networking and teamwork of the training staff. On the other hand, the themes that were generated regarding the challenges that the training institutions faced include the availability of credible workplaces to engage in the comprehensive training requirements of the students undertaking dual apprenticeships; coordination of double assessment; uneven implementation of the programme with the world of work; incompetent and inadequate trainers in the world of work; an unclear and unknown governance framework for dual apprenticeships; and coordination challenges of the whole undertaking.

Ethical considerations

As Mirza et al. (2023) opine, ethical considerations in qualitative research should contemplate on informed consent anonymity, confidentiality and protection of the participants of the study from harm. For this study, the participants were fully informed that the study was intended for academic purposes only, and that no physical harm could be expected to be inflicted on them as a result of their participation before they consented to participate in the study. They were also informed that their participation was voluntary, and thus they were free to withdraw at any time they chose to do so. Regarding anonymity, the name of the institution was concealed in the pseudonym (Alpha Institute) and the names of the study participants were not revealed. Furthermore, the data notes and recordings were secured in passworded files. The findings of this study have been used for academic purposes only and will not be shared for any other purpose.

Results

The results of this study are presented according to the themes and the corresponding sub-themes: benefits enjoyed and challenges faced by the training institution when undertaking dual apprenticeship programmes.

Benefits of offering dual apprenticeship to the training institution

The findings regarding the benefits of dual apprenticeship to the training institution include;

Improved partnership with the world of work

The participants indicated that for the period that they had implemented the dual apprenticeship programme, they had noticed a profoundly improved relationship with industry, compared to the previous short-term attachments of the students through the placement arrangement. When the participants were asked to describe the kind of relationship their institution has had through the dual apprenticeship programme, the following were the most noticeable responses. A5 observed that “[m]ost of the persons in charge of our dual apprenticeship students make regular contacts through emails and telephone to get clarity and in most cases they usually want to know other programmes we offer”. Participant A4 added, “In as much as this programme is new even to us but it seems to have given me a opportunity to work more with the industry than before.” As if to affirm the benefit, A2 proposed that “... with this apprenticeship we have been missing the close meaningful engagement with the world of work”.

These findings provide insights into the discovery by TVET institutions as regards their unexploited relations with industry in the absence of apprenticeships. FGD1 revealed that they were now more comfortable dealing with the trainers in industry than before. FGD2 observed comfortable interactions between the trainers and supervisors during supervision activities in the industrial workplaces. These findings affirm the need to underscore the apprenticeship undertaking as one of the ways of ensuring that HEIs reap better relations with the industry.

Appreciated curriculum implementation

As a way of understanding how the undertaking of dual apprenticeships affected the institution’s curriculum, the participants in the study were asked to comment on the effect of the dual apprenticeships on their curriculum. The findings revealed that the programme had a positive impact on the curriculum in that it provided opportunities for a quick

response and turnaround as compared to mere engagement of the stakeholders in the development of the curriculum, but, more realistically, in its implementation as well. During FGD3, the training staff concurred that currently industry, through the assigned trainers, was able to provide insights into ways of improving the curriculum to cover the necessary aspects for both better outcomes and ease of training. The same group pointed out that “[w]ith the help of the trainers in our partner industries, teaching has been easy to relate with practice and, also, the diversity of supervision has improved the shared responsibility of training.” The observation mentioned beforehand corresponded with what A3 had foretold: “In future we look at the improvement of our curriculum with ease as the world of work will have directly participated in the training.” A1 had earlier noted, “[w]ith co-training between staff and trainers on the other end of the world of work, teaching and learning or delivery of competences will be holistic.” The findings show that quick feedback on the quality and content of the curriculum, exploration of co-teaching and supervision of learning during dual apprenticeships provide an opportunity to the institution to compile and improve their curriculum in a timely manner, without having to undertake the rigorous and sometimes unrealistic programme review process that usually considers industry as peripheral.

Improved reputation and community engagement

Dual apprenticeships were found to provide the training institution with an opportunity to work and improve on its reputation. They further provided a forum for better community engagement. Although dual apprenticeships are intended for the training of students complementarily in a training institution and industry, the training institute gained a stronger reputation, and the apprenticeships pushed the staff of the institution out into the field to supervise the students, hence community engagement. Without dual apprenticeships, training institutions would rarely have opportunities to engage constructively with industry. This was borne out by some of the responses. For instance, participant A1 asserted, “If apprenticeship is done right or well organised, the industry can believe and trust the institution. It has to be done right; there is no shortcut.” A2 added, “Much as we were already known as specialising in

our field and being planned as a centre of excellence, dual apprenticeship is seemingly selling us faster in the industry than I had imagined". A5 stated that "... working with the industry through dual apprenticeship is just enough to sell the institution." The training staff during FGD2 pointed out that "[t]hrough this period of undertaking dual apprenticeship activities, we have had a closer interaction with the industry than before." Although not a directly intended benefit of dual apprenticeships to the training institution, as indicated, when well organised and executed, dual apprenticeships can improve the reputation of training institutions. Furthermore, the continued and lengthened engagement of the training institution with industry during dual apprenticeships provides adequate time for credible community engagement.

Reduced training cost benefits

In training programmes at HEIs, and particularly in TVET institutions where technical skills acquisition is supposed to be prioritised, well-structured dual apprenticeships greatly minimise spending. The findings show that, compared to the requirements for students on non-dual apprenticeship programmes, the expenditure on those on dual apprenticeship is minimal. When asked to compare the expenses on training materials and equipment, A4 observed, "The fact that students spend most of the time of the programme in industry, the institute spends less on their training materials even when we shall be required to provide basic skills training during their orientation and specialisation months." Another participant, A1, had earlier said, "Even the industry does not spend on the apprentices any funds for training as they are immersed in real production in the industry during the dual apprenticeship so it is a saving on all sides." A5 supplemented: "As long as the structure of the programme requires that largest part of the training to be at the workplace while learning, the requirement of the training materials per apprentice and cumulatively for the programme becomes low." FGD1 and FGD3 were even more specific: "Imagine training a very competent person in terms of technical skills using a short period at the school and more in the industry incurring less on materials! That is what dual apprenticeship is about." When the costs of training per student are

reduced and the cost of continued equipment upgrade is minimised, dual apprenticeships provide sustainable training.

Challenges of offering dual apprenticeship programmes

The findings regarding the challenges of dual apprenticeships seem to be based on the requirements for adjustments to accommodate an understanding that industry spaces are learning spaces or can be turned into learning spaces, or even an understanding that work can be used for learning. Furthermore, it can derive from an understanding that when work is allowed to take its place as an effective learning focus, then dual apprenticeships can be appreciated. The following were, however, identified as the critical challenges of implementing dual apprenticeships to the training institution.

Limited availability of credible workplaces to engage

Much as dual apprenticeships have been part of society as a learning strategy, the emerging forms, such as dual apprenticeships, need credible workplaces that can provide the needed infrastructure and personnel to implement. Many workplaces focus on production and profiteering and are not willing to invest in the training of their future workforce, as highlighted in the following responses. Interviewee A3 pointed out: “Haaa, we struggle to get host workplaces to take on the apprentices. They usually think that we are giving them a burden to training.” A5 clarified that “[s]ometimes we have to change dual apprenticeship placements for the apprentices because of the uncondusive environments in the assumed workplace.” A1 added, “Through the implementation of the dual apprenticeship we have come to appreciate that evaluating host workplaces is one of the key aspects that should never be ignored.” A2 further clarified, “Getting the right workplaces that can train our apprentices as required by the programme is not easy. Some of the workplaces want them as workers, not apprentices, yet the two are not necessarily the same.” For a long time, workplaces have not been seen or even perceived themselves as learning venues. Therefore, turning them into long term training places may be an uphill task, as evidenced in these findings.

Coordination of double assessment

As part of quality dual apprenticeships, certification is key. Certification would then require a robust assessment to be carried out. Assessment of work-integrated learning schemes like dual apprenticeships, where training institutions take centre stage and yet most of the learning takes place in industry, can be challenging, as indicated by some of the responses from the participants. A4 observed: “Balancing and synchronising assessment when the apprentices undertake dual apprenticeship from different places is very difficult.” FGD1 presented a similar observation: “Even with continued sensitisation the trainers in the workplaces are unfamiliar with the requirements of assessing the learning of the apprentices.” These findings further indicate the need to prepare the trainers in industry for the unfamiliar tasks connected with dual apprenticeships like assessment, mentorship and training through work for dual apprenticeships to be effective, and benefit from reliable assessment.

Misconceptions about dual apprenticeship

Dual apprenticeships getting into the curriculum of HE is like a rebirth. Misconceptions and even rejection are bound to happen, as can be observed from the following responses. A3 shared their experience thus: “Until we received the testimonies from the previous apprentices, we could not be sure that the programme could deliver meaningful learning and transition to the industry.” A5 supplemented: “It was hard to convince some of us the trainers at the institute that dual apprenticeship would work.” FGD2 affirmed that “it will take sometime to convince other players, even institutions, to take on dual apprenticeship.” Misunderstanding of dual apprenticeships and other misconceptions do not make the scheme ineffective in itself. Continued engagement and sensitisation could be some of the remedies.

Unclear and unknown governance framework for dual apprenticeship

For dual apprenticeships to be effective, they have to be governed and regulated. Dual apprenticeships, as borne out by their description and form, involve several stakeholders (apprentices, training institution and

industry). This tripartite involvement requires regulation for all the aspects of quality dual apprenticeship to be realised, as noted in the following finding. A1 emphasised that “the regulation of dual apprenticeship is very thin to all the stakeholders, especially the status of the apprentice, compensation to the apprentice.” Investment in sensitisation has to be deliberate if quality apprenticeships have to be realised.

Discussion

The study established that dual apprenticeships provide better liaison and strong relations between TVET institutions and industry, with active participation in the implementation of the curriculum, and with industry giving timely and applicable feedback. When well-managed, dual apprenticeships greatly enhances the reputation of the initiating institution, and also provides a cost benefit as training costs of materials, equipment and tools are shifted to industry. This is akin to OECD’s (2022) and Cedefop’s (2022) propositions that the TVET curriculum becomes relevant and closer to industry through organised apprenticeships. Additionally, institutional reputation can be repaired, sustained and improved through the same strategy (US DOL, 2024). Dual apprenticeships further provide an avenue for reducing operational training costs (Voeller, 2022) by utilising learning through practice and by doing during actual production, as opposed to the wastage entailed in demonstrations in the TVET institution practice spaces that are divorced from actual work (Valliente & Scandurra, 2016). It also provides a basis for embedding meaningful learning and fostering of academic knowledge (Deissinger, 2015; Ullibarriarana-Garate, 2023; Güden, 2022). The benefits of an appreciated curriculum where the key players (industry) are much more directly involved in its implementation and robust feedback, in addition to improved community engagement, cannot be overemphasised.

As the findings indicate, institutions continue to face the challenges of complexity and compliance while offering dual apprenticeships (Roeloffze & Kleynhans, 2018). The key challenges are limited workplaces to provide the training; industry trainers are not conversant with the

required assessment for certification; the scheme is still unappreciated, misunderstood and misconceived; and governance is still unknown. As observed by Smith et al. (2020), the challenges of dual apprenticeship implementation are many and multifaceted and require a combined effort by the training institution and training providers. Regarding the unclear regulations that make it difficult to ensure strong partnerships and adequate input by the different stakeholders, the need to provide clear, widely disseminated policies is critical (Smith, 2023; Voeller, 2022; Taylor-Smith et al., 2023; MGLD, 2018; Chadwick, 2025). As opposed to the Global North where the industry partners involved in dual apprenticeships may have the infrastructure and structures for training, the findings indicate that such enablers are missing and that this affects the intended outcomes of dual apprenticeships (Lerman, 2019; Sigh, 2019). Concerns connected with assessment, as highlighted by Quew-Jones (2022) and Cook (2024), continue to haunt dual apprenticeships, and they require redress through enthusiastic retooling of the trainers in industry. Whereas the credibility of the participating industry players is still an issue, continuous engagement and sensitisation could improve the capacity of the participants and calm the existing fears (Green et al., 2022). Furthermore, close collaboration, as advanced by James-Relly and Laczik (2021), as well as the provision of the required resources (Jackson, 2024) cannot be overemphasised.

Conclusion

Notwithstanding the challenges of implementing dual apprenticeships, such as limited workplaces to participate in the scheme, rigorous assessment requirements for certification, misunderstanding, and missing governance and regulations, its benefits cannot be overemphasised. The TVET and HEIs can still benefit from the improved liaison with industry, curriculum improvements, better reputations and appeal, as well as and cost diversification. Thus, all efforts to incorporate dual apprenticeships would be a worthwhile venture to benefit the students.

Recommendation

The study therefore recommends that HEIs offering dual apprenticeship programmes should continue to engage the industry players to sensitise them on the assessment requirement, benefits and application of dual apprenticeship. With low adaptation of the dual- apprenticeship, institutions that have adapted the programme ought to reach out to others to promote its inclusion in their curriculum to be able reap the benefits too. The ministries of labour and education, which are charged with setting regulations of dual apprenticeship, should develop and disseminate the required policies to guide the implementation and minimise the misconception of the undertaking.

Limitations

This study was limited by the use of a case study and qualitative approach whose findings may not be generalisable. A mixed approach could be used in future studies to generate data that provides in-depth understanding and which can be generalised.

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