



Understanding barriers to optimal supervision and delivery of the National Certificate (vocational) curriculum through TVET college lecturers' reflective evaluations

Angelona Rewhydah Williams; Karel Prins; Bongani Innocent Nkambule*; Sindile Amina Ngubane

University of South Africa, South Africa

*Corresponding Author. E-mail: nkambbi@unisa.ac.za

ARTICLE INFO

Article History

Submitted:

29 March 2024

Revised:

8 May 2024

Accepted:

14 June 2024

Keywords

curriculum; delivery; national certificate; reform; supervision; technical vocational education and training

Scan Me:



ABSTRACT

Propounded by reflective theory, this qualitative case study drew on TVET lecturers' reflective evaluations of factors that they considered to have a bearing on optimal supervision and delivery of the National Certificate (Vocational) curriculum. Data were collected from participants across three campuses of a TVET college in the Eastern Cape Province, South Africa. Twelve lecturers of different seniority were purposively sampled and interviewed in two focus group sessions. The first focus session involved six participants: four post-level 2 and two post-level 3 personnel recognized by the South African Council for Educators (SACE) as "office-based lecturers" and classified within the middle management echelon of curriculum management and supervision. The second focus group session entailed six post-level 1 personnel (recognized by SACE as "classroom-based lecturers"). The findings problematized (1) the Department of Higher Education and Training's failure to monitor and evaluate curriculum delivery processes; (2) a lack of comprehensive professional development opportunities for classroom-based lecturers; (3) poor coordination of work-integrated learning (WIL) programs and processes; (4) curriculum supervisors' limited time for classroom visits due to heavy administrative workload; (5) the absence of communities of practice for knowledge sharing purposes among lecturers; (6) students' language barriers, which led to low pass rates; (7) shortage of qualified student support practitioners and onsite academic support programs; and (8) unreliable Internet connectivity and rigid access to technology infrastructure. The study recommends that the college leadership should address these challenges by applying all possible measures to optimize lecturers' curriculum supervision and delivery practices at the selected TVET college.

This is an open access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



To cite this article (in APA style):

Williams, A., Prins, K., Nkambule, B., & Ngubane, S. (2024). Understanding barriers to optimal supervision and delivery of the National Certificate (vocational) curriculum through TVET college lecturers' reflective evaluations. *REID (Research and Evaluation in Education)*, 10(1), 80-98.

doi:<https://doi.org/10.21831/reid.v10i1.72274>

INTRODUCTION

Following nearly two decades of neglect, technical vocational education and training (TVET) has now become an area of interest for governments, philanthropists, and donor organizations across the Global South economies, including the sub-Saharan region of Africa (King & Palmer, 2010). In such world contexts, it is imperative to understand that decades of colonization did more harm than good. Hence, in post-colonial Africa, access to higher education is hotly contested. The "Fees Must Fall" protests demonstrated how South African youth would risk their lives to demand their right to tertiary education. In terms of popularity, university education, being the most preferred form of higher education (Nkambule & Ngubane, 2023a) is followed by technical and vocational education and training (TVET). The United Nations Educational,

Scientific, and Cultural Organization (UNESCO, 2016, p. 2) succinctly defines "TVET as [a learning experience that encapsulates] education, training, and skills development relating to a wide range of occupational fields, production, services, and livelihood". Njenga (2020, p. 4) sees it as "a feature of the education system that cuts across various sectors and institutions, providing both formal and informal training". Students' reasons for choosing TVET education vary. These may include not meeting the university selection criteria, being unable to afford a university education, or being a kinaesthetic learner more inclined to practical learning. What is clear is that TVET education is becoming a preferred option for many young people who want to acquire comprehensive skills and practical exposure to the world of work (Nonyana et al., 2024).

There is a belief that TVET education can help decolonize the South African higher education landscape (Anthonie, 2019) and mitigate youth unemployment (Du Plooy & Du Preez, 2022). However, for it to live up to these expectations, Anthonie (2019) and Marimo (2020), supported by Terblanche and Bitzer (2018), argue that it must be subjected to a rigorous curriculum reform process. Simultaneously, UNESCO-UNEVOC (2017) stresses the need to develop a context-specific TVET curriculum, effective curriculum teaching, and responsive curriculum delivery management strategies. Additionally, Levin et al. (2021) cogitate that a reformed TVET curriculum has the potential to convey solid practical skills and practice-oriented skills that can help expedite the integration of the Global South youth into the world of work. Therefore, the urgent transformation of the TVET sector is necessary, especially amid some employers' growing dissatisfaction with university graduates who come to the industry insufficiently capacitated with practical skills (Jaichand & Vimba, 2023).

Evidence suggests that a well-reformed TVET curriculum promotes "work readiness in the new knowledge economy" (Nefdt, 2015, p. ii) by "equip[ing] youth and adults with the skills required for employment, decent work and entrepreneurship" (UNESCO, 2017, p. 8). The National Certificate Vocational (NCV) is one such qualification whose curriculum consists of different learning streams designed to transmit theory and practical experience in different vocational fields of specialization in a simulated workplace environment. Research indicates that the curriculum delivery experiences of lecturers are likely to present diverse perspectives in different TVET contexts (Brand, 2021). This may also be the reason why extant literature points to two perspectives. There is the one that cites lecturers' lack of proper training, low grasp of NC(V) curriculum content (Ngubane, 2016), lack of motivation, professional support, and heavy administrative workload (Makole, 2015) as having a bearing on NC(V) curriculum delivery. Another perspective also demonstrates that through teamwork, proper planning, and execution, NC(V) curriculum delivery yields a transfer of context-specific industrial practices and life skills (Nefdt, 2015).

A review of the literature points to the scantiness of research profiling the relationship between professional development and job execution levels (or efficacy) of lecturers in South African TVET institutions (Govender & Dhurumraj, 2024; Msibi, 2015; Ngubane-Mokiwa & Khoza, 2016). The dominance of a finding that the NC(V) learning programs are besieged by low completion rates (Buthelezi, 2018; Khuluvhe & Mathibe, 2021; Kraak, 2013; Nonyana et al., 2024; Nthako, 2020; Williams, 2021), precipitated the conceptualization and implementation of the study, to explore factors/barriers affecting the optimal effectiveness of the supervision and delivery of the NC(V) curriculum in a TVET college in the Eastern Cape Province of South Africa, as propounded by the following research questions:

RQ1: Which factors do lecturers in charge of curriculum management consider as barriers to optimal supervision of curriculum delivery in a South African TVET college?

RQ2: Which factors do classroom-based lecturers consider as barriers to the optimal delivery of the NC(V) curriculum in a South African TVET classroom context?

The following sections dissect the position of extant literature regarding the topic and theoretical framing of the study, followed by concise discussions of how research methodologies and ethics were employed to investigate the research problem. The last segment of the study discusses the findings related to recommendations to improve practice.

The Socio-Political Impact of Post-Apartheid TVET Institutions

In 1994, following a resounding victory of the African National Congress in the national elections, South Africa ushered into a democratic political dispensation colloquially called the "New South Africa." Such political gains will go down in history as they have allowed historically disadvantaged youth access to post-school education and training. [Matabane et al. \(2022\)](#) echo this sentiment by stating that the annulment of racially motivated institutional policies that precluded a majority of black youths from gaining access to higher education marked a milestone in the fight against exclusionary education policies. These policies are responsible for the diversified student populations found in public higher education institutions. TVET is touted as one of the available post-schooling sectors that can respond "to the human resource needs of the country for personal, social, civic, and economic development" ([Terblanche 2017, p. 2](#)).

Records show that, despite the TVET sector having a long history in South Africa dating as far back as the 1800s ([Nzimande, 2023](#)), it was the post-apartheid political dispensation that accentuated its relevance in promoting access to affordable post-school education. The relevance of the sector is lucidly documented in a report authored by the Department of Higher Education and Training (DHET), which expounds that the 2016 figure of 705,397 students ([Department of Higher Education and Training, 2019](#)) made its way up from the 345,000 margin of 2010 ([Department of Higher Education and Training, 2014](#)). Notwithstanding many other achievements in the country's post-school education and training landscape, the report largely showcases the inroads made to assimilate students from disadvantaged social settings into the TVET sector. These students are said to be spread across different learning specializations of the National Technical Education Diploma (N1 to N6), National Certificate (Vocational) ([Dlamini, 2014](#)), and learnership programs (with the latter conducted in conjunction with the Sector Education and Training Authorities [SETAs]) ([Matabane et al., 2022](#)). From the onset, most of the learning programs on offer, especially the NC(V) and learnerships, were designed to capacitate students in the vocational education system with future ready-skills and orient them to problem-based learning, self-directed learning, and creative thinking as per the dictates of the different sectors of the knowledge economy/4IR ([Nkambule & Ngubane, 2023a, 2023b](#)).

"From the skills-demand perspective, the greater supply of educated female talent on the labor market is good news for talent-stretched high-growth sectors" ([World Economic Forum, 2017, p. 1](#)). With that said, the notion of 4IR careers being not so much about "leveraging one's masculinity to do the job" but more about "the application of context-specific tacit knowledge and competencies to do the job" has had a positive effect on gender redress in South African TVET college classrooms. To that end, the South African TVET sector has cemented its position as one of Africa's transformed and gender-balanced learning ecologies. A study by [Khuluvhe and Mathibe \(2021\)](#) established that female TVET students enrolled in different specializations of the NC(V) learning programs had a high completion rate and academic resilience during their studentship. According to the 2017 headcount, the NC(V) programs comprised 142,373 students, of whom 90,099 were female and 52,274 were male ([Department of Higher Education and Training, 2020a](#)). Meanwhile, the NATED programs had a total of 282,609 female students versus 227,544 male students ([Nghonyama et al., 2023](#)).

"Diversity and inclusivity in the modern-day classroom are important as students coming from different backgrounds bring with them a variety of learning experiences, knowledge values, abilities, and skills to each course" ([Mahlangu & Mtshali, 2024, p. 166](#)). Much of the student diversity that populates TVET college campuses ([Mudau, 2018](#)) is indicative of the success of the government initiatives that were put in place to render the sector accessible to students who otherwise would not have had the opportunity to gain access to it and earn a qualification that will transform their livelihoods ([Du Toit-Brits & Roodt, 2017](#)). Moreover, the National Student Financial Aid Scheme (NSFAS) has, over the years, enabled a significant number of students from marginalized corners of society to acquire post-school education through the TVET system ([Anthonie, 2019; Nkambule & Ngubane, 2023b; Yende, 2021](#)). Despite its shortcomings ([Bhorat](#)

et al., 2018; De Villiers, 2022, 2023; Goyayi, 2021; Maphumulo, 2021; Matukane & Bronkhorst, 2017; Matyana et al., 2023; Nkambule & Ngubane, 2023b; Yende, 2021), the NSFAS will go down in history as a transformative legislative framework that has drastically accelerated gender and participation parities in the vocational education sector and other sectors within the umbrella of postschool education and training. A similar conclusion was reached by Bhorat et al. (2018), who noted that the number of beneficiaries of the scheme, specifically women, African, coloured, and Indian higher education students, has increased exponentially within a relatively short space of time.

Some Notable Reforms Aimed at Professionalizing the TVET Sector

Massell (2001) describes education reforms as a series of policy-informed changes that improve the efficiency of public educational processes by ensuring that the extension of education as a public service is complementary to the needs and values of contemporary society systems. In healthy democracies, educational reforms, inter alia, redress *disparities* along issues of race, human conditions (i.e. disability), socio-economic conditions, and gender of students; they also seek to transform the state of institutional funding models, resource mobilization, student support mechanisms, and institutional cultures. Buthelezi (2018) contends that much of what contributed to the staggering TVET enrolment can be referenced to the implementation of the post-school education reforms, most of which occurred between 2000 and 2017, discussed as follows.

TVET Image Branding and Resource Mobilization

The National Development Plan (NDP) regards technical vocational training as the nation's answer to technical skills shortages. It has set a target for TVET colleges to produce 2.5 million skilled workers by 2030 (National Planning Commission of the Republic of South Africa, 2012). The NDP gives the government powers to determine the kinds of reforms needed to optimize the productivity of public TVET institutions and exercise oversight of the implementation of such reforms. Following a nationwide merger of 152 colleges into 50 multi-campus colleges, the name "technical colleges" was changed to "further education and training colleges", only to be later changed to "technical and vocational education and training (TVET) colleges" (Williams, 2021). The outcome of the merger yielded more than 300 campuses (St Claire, 2023) spread across urban and rural areas in all nine provinces of South Africa. Consistent with the Continuing Educators Act 16 of 2006, TVET colleges were moved from the control of the Department of Basic Education and Training (DBE) to the Department of Higher Education and Training (DHET) (Sithole, 2020). To align the status of TVET teaching with higher education academic designations, the "educator" status was done away with in favor of "lecturer" (Ncobela, 2022). Shortly thereafter, the government allocated R1,9 billion to TVET colleges to cover the shortage of teaching and learning materials, procure ICT tools, and refurbish the physical infrastructure of colleges (Ralushai, 2021). It can be argued that despite having narrowed down resource scarcity in TVET college campuses, misappropriating portions of funds rendered the recapitalization program a partial rather than a resounding success (Buthelezi, 2018).

The National Policy Framework for FET Lecturer Qualifications, which emphasizes life-long learning for TVET personnel, precipitated the designing of new professional development qualifications with in-service lecturers of different ranks and educational backgrounds in mind. They include the Advanced Diploma in TVET for in-service (and in some cases pre-service) lecturers in possession of a professional qualification and field experience for them to acquire pedagogical skills and a Postgraduate Diploma in TVET for in-service lecturers who already possess pedagogical qualification and/or professional qualification to deepen their teaching and curriculum management efficacy. These qualifications were designed to "attempt to decolonize the pedagogy of TVET lecturers" (Yassim et al., 2019, p. 15) by orienting them to vocational pedagogy, 21st-century teaching approaches, and professional practices. Moreover, when teaching in the 4IR context, technological advancements bind education practitioners to undergo continuous

professional development (CPD) and reskilling (Magagula & Awodiji, 2024; Nkambule, 2020, 2023a). Suffice it to mention that all the efforts made by the government demonstrate that it fully understands the importance of strengthening the credibility and image of the TVET education system as a brand that can offer comprehensive learning programs that meet the standards of the industry (Abd Hamid & Othman, 2024) through cost-effective means.

The Phasing in of the National Certificate (Vocational) Curriculum

The NC(V) is an occupationally directed vocational curriculum divided into different disciplines of specialization ranging between levels 2, 3, and 4 of the National Qualifications Framework (NQF) offered by all public TVET Colleges countrywide (Umalusi Council for Quality Assurance in General and Further Education and Training, 2016). Qualifications were introduced to respond to the demand for priority skills in the modern South African economy. The NC(V) courses cater to students in possession of Grade 9 (Nkalane, 2015) and those in possession of Grade 10 to 12 who want to enter the vocational education stream to acquire practical learning experience and exposure to industrial practices (Western Cape Government, 2020). For each level of training, a certification is awarded. After three years of studying, a student acquires a level 4 certificate, which enables them to pursue further education or employment. Table 1 provides the areas of specialization currently offered by public TVET colleges countrywide.

Table 1. NC(V) Fields of Specialization (Umalusi Council for Quality Assurance in General and Further Education and Training, 2016)

Engineering and ICT Specializations	Business Specialisations	Services Specializations
- Civil Engineering and Building Construction	- Finance, Economics, and Accounting	- Primary Agriculture
- Infrastructure Construction	- Management	- Primary Health
- Engineering and Related Design	- Marketing	- Safety in Society
- Process Instrumentation	- Office Administration	- Education and Development
- Process Plant Operations		- Hospitality
- Drawings		- Transport and Logistics
- Electrical Engineering		- Tourism
- Mechatronics		
- Information Technology and Computer Studies		

Each NC(V) qualification has seven modules per NQF level, three of which are compulsory, namely Life Orientation, English First Additional Language, Mathematics (for students in Engineering and ICT-related fields), or Mathematical Literacy (for students in Business and Services fields) in addition to one specialization module and three supporting modules (Human Resources Development Council, 2014). It is important to mention that the introduction of the NC(V) was initially not well received by the sector. Many colleges refused to heed a call from the government to suspend the facilitation of the NATED programs in favor of the NC(V) programs (Williams, 2021). Instead of doing away with the former, they elected to teach both programs (Buthelezi, 2018). As such, the NC(V) programs are taught full-time, while NATED programs take place in the afternoons or weekends on a part-time basis (Buthelezi, 2018).

To contextualize the lens through which lecturers' characterization of barriers to optimal supervision and delivery of the NCV curriculum in a South African TVET college is to be contextualized, the study adopted reflective theory. Propounded by Dewey (1933), the reflective theory holds that teaching is inherently an intellectual career that propels practitioners to engage in moments of reflection about classroom events. According to the theory, reflecting on an event is a three-fold process, consisting of (1) returning to experience by recalling the unfolding of events; (2) immersing oneself in interrogating the level of the impact the event has on one's emotions; and (3) using the benefit of hindsight to generate new perspectives and strategies to construct and reconstruct knowledge, understandings, and skills to achieve efficiency (Boud et al., 1985).

The theory further propounds that, to some extent, social dynamics in the classroom are conditioned by various underlying and salient social situations (Dewey, 1933). Gibbs subsequently reconceptualised it in 1988, who then based it on six (instead of three) stages of learning from experience. He argued that as a part of their learning, practitioners go through cycles of (a) attempting to dissect the experience, (b) drawing on feelings and thoughts about the experience, (c) evaluating the experience (both negative and positive), (d) rationalizing the experience, (e) concluding what they learned and what they could have done differently, and (f) designing a plan of action to circumvent the reoccurrence of similar situations in the future (Gibbs, 1988). In a theoretical sense, the theory is used to curate the narrative that it is through reflections that lecturers can self-introspect on their efficiencies and inefficiencies and identify underlying contextual, social, and human resource factors that have a bearing on their curriculum delivery efficacy or lack thereof. In a practical sense, it provided a lens through which authors could frame their discursive engagements with participants and interpretations of responses within its ambit. The theory further enabled the authors to justify the need for lecturers to consciously attune themselves to problem-solving and innovative thinking to enhance their role in the sector.

METHOD

Research Design

The study adopted a qualitative research case study design. Conducting qualitative research implies that the researchers have the privilege of spending time in participants' localities to understand, interpret, and make sense of their lived experiences concerning the research problem. Also worth noting is that choosing qualitative research enables the researchers to deepen their probing of unsatisfactory responses by paraphrasing their line of questioning or asking follow-up questions to generate more perspectives on the issue in question. Interpreting participants' body language and reactions during the investigation is also one of the positive attributes of applying qualitative research (Onwuegbuzie et al., 2009).

Participants

"In qualitative research, representation of a population is not achieved through statistical means" (Romm & Nkambule, 2022, p. 170). Hence, a specified number of participants must be selected from the wider population of others to participate in the investigation. As per the tradition of socially responsive research practices, researchers ought to outline the selection criteria to account for how they included or excluded some members of the broader population in their research (Patino & Ferreira, 2018). The study comprised 12 lecturers of different seniority, gender, qualifications, and experience who teach different learning disciplines of the NC(V) curriculum and were purposively selected to take part in the investigation. The participants were from three TVET campuses/sites in the Eastern Cape Province. Not only did the adoption of the criteria enable the researchers to select the participants and have diverse categories of them represented in some way, but it also helped the researchers to understand the research problem from diverse participants' subjective perspectives, interpretations, and experiences.

Instruments and Data Collection

Focus group interviews were used in conjunction with document analysis to collate data. The effectiveness of focus group interviews is well documented. They are "a way of collecting qualitative data, which—essentially—involves engaging a small number of people in an informal group discussion (or discussions), 'focused' around a particular topic or set of issues" (Wilkinson, 1998, p. 177). Focus group interview sessions were broken down into two groups. The first group included six post-level 2 and 3 (PL2-3) lecturers, while the second group comprised six post-level 1 (PL1) lecturers. The decision to divide participants according to seniority was based

on the need to draw different facets of feedback on curriculum processes and practices. It was noted that PL1 participants possessed firsthand knowledge of the dynamics that affect the NC(V) curriculum delivery in a classroom context. Meanwhile, the grouping of PL2-3 lecturers was deemed logical owing to their close association with curriculum supervision and other aspects of curriculum management. To maintain a sense of structure and an orderly manner of conducting interviews, an interview guide (also known as an interview protocol) bearing a set of semi-structured interview questions was used as one of the data collection instruments. Table 2 shows a tabulated extract of the interview questions.

Table 2. Interview Guide Questions

Focus Group 1: PL 2-3 Lecturers (Curriculum Supervisors and Managers)	Focus Group 2: PL 1 Lecturers (Classroom-based Lecturers)
1. What do you understand under the term “managing curriculum delivery in TVET Colleges?”	1. What do you understand under the term “curriculum delivery in TVET Colleges?”
2. Do you have a formal teacher’s or industry-related qualification, and how does this assist you in managing the NC(V) curriculum delivery?	2. Did you have any training in delivering the NC(V) curriculum, and how relevant is it to the actual class set-up?
3. Do you receive support and guidance from the Department of Higher Education and Training to ensure the successful management of the delivery of the NC(V) curriculum?	3. Which resources do you employ to aid the successful delivery of the curriculum?
4. How actively involved is the college leadership in addressing contextual and resource-based problems that constrain curriculum management and delivery processes in your college?	4. Do you have a formal teacher’s or industry-related qualification, and how does this assist you during the delivery of the NC(V) curriculum?
5. How frequently do you go to classrooms to exercise direct curriculum supervision, provide coaching, or conduct observations?	5. How would you characterize the effectiveness of support and guidance from the college management to deliver the NC(V) curriculum successfully?

“Asking questions and getting answers is a much harder task than it may seem” (Fontana & Frey, 2000, p. 645). Hence, the researchers altered the focus group questions to fit the study's objectives. This is in line with Brinkmann and Kvale (2014), who state that when interview questions are derived from the primary research questions, they tend to stimulate participants’ active engagement throughout the interview process. As exemplified in Table 2, the researchers worded the interview questions using simple language and an easy-to-follow style of questioning to enable the participants to share their experiences freely and unconstrained by ambiguities (Brinkmann & Kvale, 2014).

As a data triangulation exercise, document analysis included perusal of the following policy documents: (1) Strategic Plan of the selected TVET College 2018; (2) Teaching and Learning Plan for TVET Colleges 2019; and (3) Guidelines for the NC(V) Qualifications 2019. Collectively, these documents gave a glimpse into the norms and standards that must be upheld by TVET institutions, lecturers, and other role players within the curriculum management chain to promote effective teaching and learning.

Data Analysis

The audio-recorded focus group interviews were subsequently transcribed, and a word-by-word inspection of the transcribed text was conducted repeatedly. Familiarity with the gist of the text enabled researchers to discover recurring patterns, out of which the coding process ensued. Through the iterative coding process, preliminary themes were generated. Researchers' awareness of their role as the primary instrument for data analysis (Stuckey, 2015) prompted them to revisit the preliminary themes compared to the research questions to eliminate incoherent ones and retain the ones that best responded to the research questions. In their seminal work, Lincoln and Guba consistently emphasize the need for trustworthiness in reporting social research findings

(Johnson et al., 2020). As such, upon completion of the article write-up process, authors conducted member checking (a process that required them to go back to the participants to allow them the opportunity to read through the study to identify discrepancies in the reporting of their utterances). Furthermore, the study was reviewed by peers (authors' colleagues who acted as independent auditors) whose comments were taken into consideration as a measure to reduce data reporting bias. Additionally, data triangulation was enabled through document analysis, which, as pointed out by Nzuzza (2023), serves to illuminate elements of evidence that could either endorse or discredit the findings generated through other means of data collection. Finally, at the granular level of data reporting, the researchers conducted reflexivity to moderate the degree of subjectivity and the tone of rationality in presenting the study findings. Hecker and Kalpokas (2023) argue that reflexive practices are necessary to ensure that the data bear credibility and findings are trustworthy, both from the qualitative researcher's and the potential reader's point of view.

Ethical Practices

Ethical clearance was obtained to conduct the research (under the reference number 2019/10/16/45807493/25/MC issued by the Unisa College of Education Ethics Review Committee). Before the commencement of the fieldwork, participants were consulted about the terms and conditions of their participation, their right to anonymity, and their withdrawal from the study. Therefore, instead of using their real names, codes were used to identify each of them and the focus groups they belonged to. For example, P1FG1 refers to Participant 1 belonging to focus group 1, whereas P7FG2 refers to Participant 7 belonging to focus group 2, and so forth.

FINDINGS AND DISCUSSION

The iterative exercise of conducting a thematic analysis of the focus group data produced two main and eight subsidiary themes, which are comprehensively discussed as follows.

Theme 1: Office-based Lecturers' Reflective Evaluations of Curriculum Delivery Supervision

The four subthemes, under the ambit of theme one, are anchored around utterances made by office-based lecturers. Being ranked between PL2 and PL3 of the college organogram implies that they are immediate supervisors/managers of PL1 lecturers (i.e., classroom-based lecturers). They commented as follows.

Subtheme 1: DHET's Failure to Monitor Curriculum Delivery

Effective service delivery in the educational sector requires cooperation from all stakeholders to assume the responsibilities that they were assigned (Romm & Nkambule, 2022). Rightfully, as a key stakeholder, the Department of Higher Education and Training (DHET) is entrusted with conducting regular oversight of TVET institutions' implementation of programs (Aina & Ogegbo, 2022), including curriculum delivery and management processes. Commenting on the effectiveness of DHET in monitoring curriculum delivery processes in the college, P3FG1 stated,

Oversight support in terms of this is legislation or this is added to the new. But because they never come to explain anything, it's just more like you should go figure things out on your own.

Dissatisfied with the state of communication between the college and DHET (Williams, 2021), P6FG1 referred to instances where feedback on "reports that were sent to them [i.e., DHET] at the end of each moderation [period] are not being returned by DHET". The finding replicates that of Nkambule and Ngubane (2023a), whose study established that DHET has been failing to conduct regular oversight visits to understand the challenges that affect the operationalization of various TVET programs, including curriculum delivery processes. This trajectory effec-

tively implies that the site for accountability is far removed from the TVET college concerned (Jaichand & Vimba, 2023).

Subtheme 2: Lack of Comprehensive Professional Development Opportunities for Lecturers

It is widely accepted that continuous professional development hones educators' curriculum delivery efficacy, classroom management skills, and policy implementation skills (Mashiane-Nkabinde, 2020; Mashiane-Nkabinde et al., 2023). Be that as it may, lecturers were reportedly in dire need of continuous professional development (CPD) funding opportunities in the studied TVET sites. Frustrated by the lack of provision of further education and training opportunities to underqualified lecturers, P5FG1 commented: *"I would say minimal on my side depending on who is supporting the staff to go and do the Advanced Diploma, for example"*. They, however, mentioned that they attended short in-service training from time to time. To characterize the effectiveness of such training interventions, P6FG1 said

We were like so bored you know, not telling us anything new and we were a lot of experienced educators there, so we weren't happy with the quality of the training.

P4FG1 added,

as I was sitting there and listening to the presenter and what we should do, there are many gaps that we need to fill with regards to that.

All six participants belonging to focus group 1 generally appeared to be either concerned by the slow uptake of professional development support towards novice and underqualified lecturers or were unsatisfied with the quality and infrequency of available training initiatives. The professional development of lecturers is restricted by lack of proper application of skills audits and non-discriminatory allocation of opportunities and resources (Jaichand & Vimba, 2023). This finding is similar to a study by Dilshad et al. (2019), which demonstrated that lecturers generally do not acquire enough professional development to be capacitated with skills and knowledge to improve their execution of responsibilities diligently and productively.

Subtheme 3: Poor Coordination of Work-Integrated Learning

Work-integrated learning (WIL) constitutes a practical learning component of the NC(V) curriculum and occurs in workplace environments to expose students to firsthand "discipline-specific knowledge and skills" (Ndlovu & Mofokeng, 2018, p. 3) or a simulated learning environment. Ideally, WIL must occur regularly. The need to regularly expose students to WIL, as pointed out by P1FG1, will eliminate *"the complaint that is made by the industry of students qualifying, but not knowing how to do the work"*. Unfortunately, that was not the case with the studied TVET college, as lecturers conceded that there were insufficient opportunities or conducive simulation facilities to facilitate students' regular exposure to the industry through WIL. Since WIL sessions only take place during school holidays, P4FG1 expressed, *"I would like to see that the WBE (workplace-based experience) becomes part of the curriculum."* In another study conducted at a TVET college in the Eastern Cape Province, Jaca and Marongwe (2023) pointed to the inadequacy of WIL opportunities as a factor that negatively impacts the delivery of the practical component of the NC(V) curriculum. The fact that this finding occurred/emerged in two separate (case study) investigations in the same province raises a serious question about the effectiveness of implementing WIL initiatives across TVET college campuses in the Eastern Cape Province.

Subtheme 4: Limited Time for Classroom Visits due to Heavy Administrative Workload

According to Brand (2021), curriculum delivery in TVET colleges is an arduous task that requires curriculum managers to prioritize classroom visits. Concerns raised by participants (PL2 and PL3 lecturers whose core duties include curriculum supervision and management) were about the heavy administrative workload. P1FG1 commented,

First thing when I get to work, I have to catch up on the previous day's work because we have some much admin work and tight submission timelines. Once I get down to business [of processing admin work] I do not find time to go to classrooms to observe my staff.

Meanwhile, P5FG1 added,

I do try my best to be present in classrooms but due to too much paperwork, the day goes fast, and you cannot attend to all your duties, especially curriculum supervision in the classrooms. I so wish I had enough time to develop teachers in the classroom, but I simply cannot find enough time to do so.

Other participants (specifically P2FG1, P3FG1, P4FG1, and P6FG1) held a view that too much paperwork stood in their way of conducting regular class visits to monitor classroom-based lecturers' teaching practices, track their pace of curriculum delivery and adherence to stipulated timeframes, and monitor their implementation of policies that promote inclusive education.

Theme 2: Classroom-based Lecturers' Reflective Evaluations

The four subthemes under the ambit of these two embody the subjective reflections of PL1 lecturers. The scope of their work situates them at the coalface of curriculum delivery in classroom contexts and servicing learners of different academic and social orientations. The six interviewed participants commented discussed as follows.

Subtheme 5: Absence of Communities of Practice for Knowledge-sharing Purposes

In the context of public education, communities of practice (CoPs) can be characterized as self-arranged or pre-arranged groups of practitioners who share divergent and convergent views to develop new ways of dealing with professional challenges and formulating strategies to sustain effective delivery of education as an essential public service (Nkambule, 2023b). Wenger (2011) points out that the formation of workplace-based communities of practice (among groups of workers) creates a social learning environment that leads to the sharing of best practices and co-creation of knowledge context-specific knowledge. According to Wenger (2011, p.1), belonging to a CoP helps individual members "share a concern or a passion for something they do and learn how to do it better as they interact regularly." However, in the context of this study, the lack of interest in establishing CoPs was identified as problematic during a focus group interview session held with lecturers belonging to Group 2. Referring to her colleagues, P7FG2 said, "*For selfish reasons... people just don't like to empower one another*" [through knowledge sharing]. As an acknowledgement of the need for forming CoPs, P8FG2 said, "*What we need are more discussions like core group discussions where you have discussions to say what we can do*". By shying away from establishing CoPs, they effectively distance themselves from exploring each other's expertise and knowledge and collectively developing best practices (Nonaka & Takeuchi, 1995).

Subtheme 6: Students' English Language Barriers — A Hindrance to Effective Content Absorption, Learning Agency, and Academic Success

Literature holds that learners' comprehension of the curriculum and inclinations for active involvement in learning tend to be high if their command of the language of instruction is strong (Mudaly & Singh 2018). Participants indicated that since most of the students they teach use English as a third additional language of communication, they usually struggle to contend with learning in English. According to P3FG2, the language barrier affects timely curriculum delivery processes "*...because it's not easy to finish a syllabus if your students are still stuck and don't understand*". Also, having noted the challenges posed by students' language barriers, P3FG1 said, "*There needs to be more of a focus on addressing language barriers in education*". P9FG2 echoed, "*...more emphasis must be placed on teaching, learning and policy changes*." As such, not only did large chunks of non-English-speaking students struggle to surmount language-induced learning obstacles, but also experienced low academic achievement (Mudaly & Singh 2018). This finding is similar to that of Stander et al. (2022), whose study (also conducted in one TVET college in the Eastern Cape Province, South

Africa) concluded that most engineering students struggled to achieve good academic results due to poor English language proficiency. Given this finding, [Mdzanga and Moeng \(2021\)](#) propose that education policymakers must consider incorporating indigenous languages in TVET teaching and learning processes as a strategy to improve students' levels of curriculum content absorption, active participation in learning, and the bigger scheme of things, academic success.

Subtheme 7: Shortage of Qualified Student Support Practitioners and Onsite Academic Support Programs

Student support services are a combination of support systems, which, inter alia, encompass student wellness and academic support programs ([Department of Higher Education and Training, 2020b](#)) aimed at supporting at-risk students, including those with language barriers. However, it has repeatedly been demonstrated in higher education research that ineffective implementation of student support services, moreover the ones that are needed the most, such as academic support, have adverse effects on student success ([Nzembe, 2018](#)). It was reported that the Student Support Service Plan (SSSP), which, among other things, emphasizes the provision of Supplementary Instruction (SI) and Workplace-Based Experience (WBE), was not fully implemented. In highlighting how the student support services department contributes to the ineffective delivery of the practical component of the NC(V) curriculum, P8FG2 mentioned, "...*having simulation rooms is also important, and it needs to be prioritized*". Simulation rooms are makeshift workshops or specially designated facilities used by WIL instructors to facilitate the practical component of the curriculum. In summing up their perception of the state of student support services, P10FG2 said

...support is more of a talk show, to be honest with you. It's in writing and I mean if you look at everything, it is on the White Paper [policy document] but it's never implemented practically.

As such, most of the participants belonging to focus groups 1 and 2 held a view that the lack of adequately qualified student support staff (particularly counsellors) was partly responsible for students' poor academic achievement for failing to conduct remedial academic support and coordinate effective implementation of WIL. The inadequacy of academic support was mostly felt by students (at risk of not graduating or meeting the pass requirements) who need it to derive motivation to try harder and acquire skills to approach their studies more effectively ([Jaichand & Vimba, 2023](#)). This finding resembles that of [Buthelezi et al. \(2024\)](#) alongside [Makibinyane and Khumalo \(2021\)](#), whose studies lucidly identified the lack of academic support as one of the factors that diminish TVET students' academic achievement.

Subtheme 8: Unreliable Internet Connectivity and Rigid Access to Technology Infrastructure

Internet connectivity and access to technology are increasingly becoming mandatory for both lecturers and students ([Nkambule et al., 2023](#)). [Mncube et al. \(2024\)](#) posit that Internet-powered ICT technologies are a useful source for managing and processing the flow of academic knowledge from lecturers to students. Unfortunately, a full realization of digital transformation remains a pipeline dream for many TVET colleges in South Africa ([Holler et al., 2023](#)). This was proven by participants' allusion to the unreliability of connectivity and rigid access to technology as some of the many barriers to optimal delivery of the NC(V) curriculum. P10FG2 commented, "*Our [college] wi-fi is not up to... Hopefully, it's gonna be sorted next year with the broadband connectivity of DHET.*" P3FG1 added, "*Office 365 is not really up and running because of the lack of infrastructure*". They expressed that poor connectivity made their efforts to integrate technology into curriculum delivery untenable ([Makaring, 2022](#)). Further, P7FG2 alluded to the rigidity of access to teaching technology devices by stating,

We have projectors, but most of the classrooms don't have it, installed because of security reasons. Now you must go through the IT person to book it out and then that's a bit of a challenge to take it back again.

The finding points to minimal (instead of maximal) adherence to the TVET College Strategic Plan of 2018, which, among other things, advocates for reliable information and communications technology (ICT) infrastructure as well as access to well-equipped teaching and learning amenities (Williams, 2021).

General Summary of the Findings

TVET institutions were established to ensure an adequate supply of students endowed with skills required by the industry to achieve productivity and sustain the nation's economic growth. The footprints of effective TVET teaching are noticeable in students' effective absorption of the content of the curriculum and improved academic achievement, both dependent on the efficiency of practitioners' curriculum delivery and management practices. UNESCO-UNEVOC (2017) stresses the need to implement a context-specific TVET curriculum, effective curriculum teaching, and responsive curriculum delivery management strategies. Moreover, at the time when completion rates in the NC(V) learning programs are worryingly low (Nthako, 2020).

This study is built on empirical studies' insights on curriculum delivery and management processes in South African TVET colleges. By incorporating the subjective perspectives of both curriculum supervisors (i.e., PL2-3 lecturers) and curriculum implementors (i.e., PL1 lecturers), the study introduced a novel and comprehensive approach to understanding diverse spectrums of barriers that affect the management/supervision and delivery processes of the NC(V) curriculum. A total of 12 purposively sampled participants were interviewed in a focus group setting.

The first focus group discussion consisted of six participants: four post-level 2 lecturers and two post-level 3 lecturers whose job descriptions entail curriculum management and supervision. As barriers to optimal curriculum delivery, participants mentioned DHET's failure to monitor curriculum delivery, lack of comprehensive professional development opportunities, poor coordination of WIL programs and processes, and limited time for classroom visits due to heavy administrative workload. The findings of the second focus group discussion, which involved six post-level 1 participants (i.e., classroom-based lecturers), identified as barriers to the optimal delivery of the curriculum, the absence of communities of practice for knowledge sharing purposes; students' language barriers; shortage of qualified student support practitioners; as well as unreliable Internet connectivity and rigid access to technology infrastructure. Generally, the findings illuminated areas of TVET operations that need to be addressed to enhance the effectiveness of curriculum delivery and management processes at the selected institution.

The study recommends that the college leadership must address these challenges by calling upon the DHET to conduct external curriculum oversight, as mandated by the National Development Plan (NDP); providing continuous professional development opportunities related to the individual lecturers' developmental needs; frequently improving the coordination of WIL programs by liaising with the industry and the government to accommodate students; employing qualified student support practitioners to implement the Student Support Plan maximally, especially the Supplementary Instruction (SI) and also Workplace Based Experience (WBE) components. Considering the importance of complying with 21st-century ways of teaching, the study further recommends that priority be given to improving the technology infrastructure and Internet connectivity and easing the rigidity of access to technological tools. It would also be advantageous if the management motivated senior lecturers to manage their time wisely to conduct regular class visits and work alongside classroom-based lecturers to create communities of practice to promote knowledge sharing, collegiality, and the development of best practices.

Since limitations are eminent features of any research (Nkambule, 2023b, 2023c), the authors identified the single case study configuration of the investigation as a limitation that affected the generalisability of the findings across all TVET colleges in the Eastern Cape. To address this limitation, it is suggested that future researchers should apply quantitative research to assess the extent to which these findings (or at least some of them) correlate with lecturers' curriculum supervision and delivery practices across the TVET colleges in the province.

CONCLUSION

In South Africa, TVET is touted as one of the available post-schooling sectors that can respond to the needs of the country's development in various sectors. Therefore, it is important to use research as a barometer to measure the effectiveness of the TVET sector in meeting its objectives of conducting quality teaching and learning, as per the dictates of the National Development Plan 2030, which relies on the sector to provide high-quality vocational education and transmit a comprehensive range of skills that will render students attractive to the knowledge economy. Having noted the sector's importance to the nation's development, the authors conducted the study, contextualising lecturers' reflective evaluations of barriers to optimal supervision and delivery of the NC(V) curriculum across three TVET college sites in the Eastern Cape Province of South Africa. The gist of the findings revealed that classroom-based lecturers were deprived of continuous and context-specific professional development opportunities, which they need to improve the efficacy of their curriculum delivery practices and proactively respond to the industry's expectations by capacitating students with high-impact vocational and practical skills. From the curriculum management point of view, it can be concluded that there is a paucity of stakeholder-led initiatives and collaborative efforts between the DHET and executive leadership of the college to enable practitioners within the ecology of curriculum management, such as campus managers, curriculum supervisors, and curriculum managers to successfully moderate social and contextual challenges that besiege curriculum delivery practices, work integrated learning (WIL) initiatives, student support systems, and the infusion of technology in curriculum teaching in the affected campuses of the studied TVET college. The study recommends that the college leadership address these challenges by applying all possible measures to optimize lecturers' curriculum supervision/management and delivery practices at the selected TVET college.

DISCLOSURE STATEMENT

The authors declare that no conflicts of interest are linked to this publication.

REFERENCES

- Abd Hamid, H. S., & Othman, M. (2024). Predicting behavioural intention to enroll at a TVET institution. *Sains Humanika*, 16(2), 1–8. <https://doi.org/10.11113/sh.v16n2.2085>
- Aina, A. Y., & Ogegbo, A. A. (2022). Investigating TVET college educators' experiences while transitioning from the traditional classroom to the virtual classroom during the COVID-19 pandemic. *Perspectives in Education*, 40(1), 129-142. https://hdl.handle.net/10520/ejc-persed_v40_n1_a8
- Anthonie, A. N. (2019). Decolonisation and South African TVET: A different missing middle. *Progressio*, 41(1), 1-16. <http://orcid.org/0000-0001-9695-9926>
- Bhorat, H., Kimani, M., & Pillay, N. (2018). The evolution of National Student Financial Aid Scheme (NSFAS) funding. *Labour Market Intelligent Partnership (LMIP) Policy brief*; 22. <http://hdl.handle.net/20.500.11910/13768>
- Boud, D., Keogh, R., & Walker, D. (Eds.). (1985). *Reflection: Turning experience into learning*. Routledge. <https://doi.org/10.4324/9781315059051>
- Brand, M. (2021). *Exploring the curriculum implementation experiences of TVET college lecturers* [Master's thesis, Stellenbosch University].
- Brinkmann, S., & Kvale, S. (2014). *Interviews: Learning the craft of qualitative research interviewing* (3rd ed.). Sage. <https://uk.sagepub.com/en-gb/eur/interviews/book239402#contents>
- Buthelezi, N. (2018). Lecturer experiences of TVET colleges challenges in the post-apartheid era: A case of unintended consequences of educational reforms in South Africa. *Journal of*

Vocational Education and Training, 70(3), 364-383.
<https://doi.org/10.1080/13636820.2018.1437062>

- Buthelezi, M., Ntshangase, M., & Molise, H. (2024). The Impact of Psychosocial Support Services on Students' Development at a South African TVET College. *Research in Educational Policy and Management*, 6(1), 138-160. <https://doi.org/10.46303/repam.2024.10>
- Department of Higher Education and Training. (2014). *White paper for post school education and training*. Government Printer. https://www.gov.za/sites/default/files/gcis_document/201409/37229gon11.pdf
- Department of Higher Education and Training. (2019). *The revised norms and standards of TVET colleges*. Government Printer.
- Department of Higher Education and Training. (2020a). *Technical and vocational education and training colleges' 2020 student support services annual plan*. Government Printers. <https://www.dhet.gov.za/SiteAssets/Technical%20and%20Vocational%20Education%20and%20Training%20Colleges%202020%20Student%20Support%20Services%20Annual%20Plan.pdf>
- Department of Higher Education and Training. (2020b). *Statistics on post-school education and training in South Africa 2020 report*. <https://sagea.org.za/statistics-on-post-school-education-and-training-in-south-africa-2020-report/>
- De Villiers, J. H. (2022). *A conceptual service quality management framework for the NSFAS* [Unpublished Doctoral thesis].
- De Villiers, P. (2023). Perspective chapter: The role NSFAS has played to facilitate poor students in South Africa. In L. Waller & S. K. Waller (Eds.), *Higher education - Reflections from the field* (Vol. 2). IntechOpen. <https://doi.org/10.5772/intechopen.109664>
- Dewey, J. (1933). *How we think*. D. C. Heath.
- Dilshad, M., Hussain, B., & Batool, H. (2019). Continuous professional development of teachers: A case of public universities in Pakistan. *Bulletin of Education and Research*, 41(3), 119-130. <http://files.eric.ed.gov/fulltext/EJ1244673.pdf>
- Dlamini, Z. H. (2014). *The alignment and responsiveness of further education and training colleges towards the skills needed by local businesses* [Doctoral thesis, University of Witwatersrand]
- Du Toit-Brits, D., & Roodt, C. (2017). Teaching-learning factors contributing to student dropout in TVET Colleges. *Tydskrif vir Geesteswetenskappe*, 57(2-2), 627-648. <http://dx.doi.org/10.17159/2224-7912/2017/v57n2-2a9>
- Du Plooy, B., & Du Preez, K. (2022). Perceptions of staff and students about the NC (V) model of workplace engineering artisan training offered by South African TVET colleges. *South African Journal of Higher Education*, 36(1), 98-114. https://hdl.handle.net/10520/ejc-high_v36_n1_a6
- Fontana, A., & Frey, J. H. (2000). The interview: From structured questions to negotiated text. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp.645-672). Sage.
- Gibbs, G. (1988). *Learning by doing: A guide to teaching and learning methods*. Oxford Polytechnic.
- Govender, S., & Dhurumraj, T. (2024). Opening up TVET lecturer professional learning and development through work integrated learning in South Africa. In T. Mayisela, S. C. Govender, & C. A. Hodgkinson-Williams (Eds.) (pp. 338-373), *Open learning as a means of advancing social justice: Cases in Post-School Education and Training in South Africa*. African Books Collective.

- Goyayi, M. (2021). *Police brutality and student protest in South Africa*. Democracy Development Program. <https://ddp.org.za/blog/2021/04/15/police-brutality-and-student-protest-in-south-africa/>
- Hecker, J., & Kalpokas, N. (2023). *The ultimate guide to qualitative research - Part 1: The basics*. <https://atlasti.com/guides/qualitative-research-guide-part-1/reflexivity>
- Holler, S., Brändle, M., & Zinn, B. (2023). How do South African TVET lecturers rate their digital competencies, and what is their need for training for a digital transformation in the South African TVET sector?. *Journal of Vocational, Adult and Continuing Education and Training*, 6(1), 65-89. <https://doi.org/10.14426/jovacet.v6i1.314>
- Human Resources Development Council. (2014). *TVET Colleges Africa: Pathways workstream in South*. Government Printers. <https://hrdcsa.org.za/wp-content/uploads/research-reports/PATHWAYS%20-%20TVETColleges%20in%20South%20Africa%20REPORT%20-%202015%20August.pdf>
- Jaca, C., & Marongwe, N. (2023). Elephant in the room: Placing of technical and vocational training college students for work-integrated learning in Eastern Cape Province. *Journal of Education, Society and Multiculturalism*, 4(2), 144-164. <https://intapi.sciendo.com/pdf/10.2478/jesm-2023-0024>
- Jaichand, V., & Vimba, M. (2023, March 12). TVET colleges need a radical overhaul to become centres of excellence. *Daily Maverick Newspaper*. <https://www.dailymaverick.co.za/article/2023-03-12-tvet-colleges-need-a-radical-overhaul-to-become-centres-of-excellence/>
- Johnson, J. L., Adkins, D., & Chauvin, S. (2020). A review of the quality indicators of rigor in qualitative research. *American Journal of Pharmaceutical Education*, 84(1), 7120. <https://doi.org/10.5688/ajpe7120>
- Khuluvhe, M., & Mathibe, R. (2021). *Throughput rate of TVET college students (National Certificate Vocational) for the period 2016 to 2018*. Department of Higher Education and Training. <https://www.voced.edu.au/content/ngv%3A90541>
- King, K. & Palmer, R. (2010). *Planning for technical and vocational skills development*. UNESCO: International Institute for Educational Planning.
- Kraak, A. (2013). State failure in dealing with the NEET problem in South Africa: Which way forward?. *Research in Post-Compulsory Education*, 18(1-2), 77-97. <https://doi.org/10.1080/13596748.2013.755819>
- Levin. M., Weber, M., & Pela, K. (2021, April 26). What we've been reading: How to improve technical and vocational education and training for youth in developing countries. *World Bank Blogs*. <https://blogs.worldbank.org/jobs/what-weve-been-reading-how-improve-technical-and-vocational-education-and-training-youth#:~:text=Imparting%20practical%20skills%20and%20work%20readiness%20are%20Oat,and%20livelihoods%20of%20young%20workers%20in%20developing%20countries>
- Magagula, M. M., & Awodiji, O. A. (2024). The implications of the fourth industrial revolution on technical and vocational education and training in South Africa. *Social Sciences & Humanities Open*, 10, 100896. <https://doi.org/10.1016/j.ssaho.2024.100896>
- Mahlangu, S.W., & Mtshali, T.I. (2024). Inclusive education strategies for knowledge development of teachers enrolled in the Advanced Vocational and Training Education Program. *International Journal of Religion*, 5(3), 166 – 174. <https://doi.org/10.61707/bdbp4z72>
- Makaring, B. A. (2022). *Using information and communication technology in teaching English at a technical vocational education and training college* [Master's thesis, University of South Africa].

- Makibinyane, J. M., & Khumalo, S. S. (2021). Exploring factors that impede student support services and throughput rate: the case of TVET colleges in South Africa. *International Journal of Education Economics and Development*, 12(4), 397-411. <https://doi.org/10.1504/IJEED.2021.118388>
- Makole, K. R. (2015). *The implementation of the National Certificate Vocation programme at Tshwane North FET College* [Master's thesis, University of the Witwatersrand].
- Maphumulo, N. (2021). *The transition from a decentralised to centralised NSFAS System: A case study of the impact on students from 2016 to 2018 at a historically black university* [Doctoral thesis, University of the Western Cape].
- Marimo, A. (2020). *Comparing vocational education in India, South Africa and United Arab Emirates to develop guidelines for South Africa* [Doctoral thesis, North-West University].
- Mashiane-Nkabinde, M. M. B. (2020). *Managing teacher professional development: A case study of foundation phase heads of departments in Mpumalanga province* [Doctoral thesis, University of South Africa].
- Mashiane-Nkabinde, B., Nkambule, B., & Ngubane, S. (2023). Foundation phase educators' views on the management of professional development in historically disadvantaged schools. *Research in Educational Policy and Management*, 5(2), 289-311. <https://doi.org/10.46303/repam.2023.32>
- Massell, D. (2001). *Standards-based reform in the states: Progress and challenges*. University of Illinois Press.
- Matabane, M. E., Matabane, R. B., Moloi, T. J., & Sibaya, K. T. (2022). Exploring factors that teachers view as hindering quality in teaching and learning at a TVET College. *Research in Educational Policy and Management*, 4(1), 51-64. <https://doi.org/10.46303/repam.2022.9>
- Matukane, M. M., & Bronkhorst, S. (2017). *Student funding model used by the National Student Financial Aid Scheme (NSFAS) at universities in South Africa*. <https://ujcontent.uj.ac.za/esploro/outputs/journalArticle/Student-funding-model-used-by-the/9910346407691>
- Matyana, M., Thusi, X., Xaba, M. R., Dlamini, N., & Sigwaza, S. L. (2023). An evaluation of the National Student Funding Aid Scheme (NSFAS) policy in South African universities: Implications and challenges. *JISR Management and Social Sciences & Economics*, 21(4), 1-16. <https://doi.org/10.31384/jirmsse/2023.21.4.1>
- Mdzanga, N., & Moeng, M. (2021). Critical perspectives on language as a social-justice issue in post-colonial higher-education institutions. In C. McNaught & S. Gravett (Eds.), *Embedding social justice in teacher education and development in Africa* (pp. 181-194). Routledge. <https://doi.org/10.4324/9780429341212>
- Mncube, S., Nkambule, B., & Ngubane-Mokiwa, S. (2024). ICT tools for open educational resources used in an open distance e-learning institution in the fourth industrial revolution era. *Mousaion: South African Journal of Information Studies*, 42(1), 1-19. <https://doi.org/10.25159/2663-659X/15200>
- Msibi, A. N. (2015). *An exploration of the identities of qualified artisans employed as Technical Vocational Education and Training College lecturers* [Doctoral thesis, University of KwaZulu-Natal].
- Mudau, 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. <http://doi.org/10.18848/2327-0020/CGP/v17i04/39-50>

- Mudaly, V. & Singh, K. (2018.) Language: A barrier when teaching and learning business studies. *International Journal of Sciences and Research*, 74(9)1, 56–71. <http://dx.doi.org/10.21506/j.ponte.2018.9.4>
- National Planning Commission of the Republic of South Africa. (2012). *National development plan 2030: Our future – Make it work*. Government Printer. https://www.gov.za/sites/default/files/gcis_document/201409/ndp-2030-our-future-make-it-workr.pdf
- Ncobela, S. (2022, August 11). Links between colleges, industry necessary. *Mail & Guardian*. <https://mg.co.za/education/2022-08-11-links-between-colleges-industry-vital/>
- Ndlovu, T. P., & Mofokeng, N. E. M. (2018). The value of work integrated learning in attaining discipline-specific skills for ecotourism employment. *African Journal of Hospitality Tourism and Leisure*, 7(4), 1-13. https://www.ajhtl.com/uploads/7/1/6/3/7163688/article_45_vol_7_4__2018.pdf
- Nefdt, J. (2015). *The life skills programme in the national certificate vocational (NCV) and 'employability' – A human capital development* [Master's thesis, University of the Western Cape].
- Nghonyama, M. G., Maluleke, L., & Seitshiro, T. (2023). Careership: The experiences of women in choosing career paths in TVET in South Africa. *African Journal of Career Development*, 5(1), a84. <https://doi.org/10.4102/ajcd.v5i1.84>
- Ngubane, N. B. (2016). *Exploring the understanding, experiences and practices of lectures in leading and teaching the NCV level 2 curriculum at a technical and vocational education and training college in KwaZulu-Natal* [Doctoral dissertation, University of KwaZulu-Natal].
- Ngubane-Mokiwa, S., & Khoza, S. B. (2016). Lecturers' experiences of teaching STEM to students with disabilities. *Journal of Learning for Development*, 3(1), 37-50. <https://doi.org/10.56059/jl4d.v3i1.125>
- Njenga, M. (2020). *A practical conceptualization of TVET*. https://www.researchgate.net/publication/348676612_A_Practical_Conceptualization_of_TVET#fullTextFileContent
- Nkalane, P. K. (2015). *Factors influencing quality assessment practices in business studies at technical vocational education and training colleges* [Master's thesis, University of South Africa].
- Nkambule, B. I. (2020). *Knowledge management application in township schools: A case study of Emalableni Circuit 1, 2, and 3* [Doctoral thesis, University of South Africa].
- Nkambule, B. I. (2023a). The perceived heads of departments' infusion of Ubuntu values in curriculum and knowledge sharing leadership in under-resourced public schools. *Journal of Curriculum Studies Research*, 5(2), 186-205. <https://doi.org/10.46303/jcsr.2023.26>
- Nkambule, B. I. (2023b). Organisational learning and knowledge sharing culture in township schools: An Exploration of effective and ineffective practices. *Jurnal Penelitian dan Pengkajian Ilmu Pendidikan: E-Saintika*, 7(1), 60–74. <https://doi.org/10.36312/esaintika.v7i1.1123>
- Nkambule, B. I. (2023c). Discourse on unequal power relations in knowledge sharing transactions at selected township schools in Nkangala Education District. *Discourse and Communication for Sustainable Education*, 14(2), 75-90. <https://doi.org/10.2478/dcse-2023-0019>
- Nkambule, B.I., & Ngubane, S. A. (2023a). Eradicating a culture of public mistrust in TVET college education in South Africa: A manifesto for the sector's sustainability ahead of 4IR. *Research in Social Sciences and Technology*, 8(4), 301-329. <https://doi.org/10.46303/ressat.2023.44>

- Nkambule, B.I., & Ngubane, S. A. (2023b). Towards a just distribution of student funding to youth with learning disabilities in vocational education and training. *Research in Educational Policy and Management*, 5(2), 124-143. <https://doi.org/10.46303/repam.2023.13>
- Nkambule, B., Ngubane, S., & Mncube, S. (2023). Learning Management System (LMS) for academic inclusion and learning agency: An interpretive review of technoprogressivism in ODL instructional technology policy. *Journal of Education, Society & Multiculturalism*, 4(2), 48-84. <https://doi.org/10.2478/jesm-2023-0018>
- Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. Oxford University Press.
- Nonyana, M. S., Mtshali, T. I., & Makgato, M. (2024). Intervention strategies to improve Technical Vocational Education and Training College students efficacy towards their education. *Kurdish Studies*, 12(2), 2802-2817. <http://kurdishstudies.net/menu-script/index.php/KS/article/view/2387>
- Nthako, M. D. (2020). *Factors contributing to low completion rates of national certificate vocational (NCV) students at a TVET college in Northwest Province* [Master's thesis, University of South Africa].
- Nzembe, A. (2018). Access, participation and success: The tri-dimensional conundrum of academic outcomes in a South African TVET College. *Academic Journal of Interdisciplinary Studies*, 7(2), 31-42. <http://dx.doi.org/10.2478/ajis-2018-0044>
- Nzimande, B. (2023, August 28). Progress on building a sustainable TVET sector. *South African Government Official Information and Services*. <https://www.gov.za/news/speeches/minister-blade-nzimande-tvet-curriculum-transformation-and-innovation-summit-28-aug>
- Nzuza, Z. D. (2023). Strategies for creating inclusive learning for learners experiencing barriers to learning. *REID (Research and Evaluation in Education)*, 9(2), 130-140. <https://doi.org/10.21831/reid.v9i2.64913>
- Onwuegbuzie, A. J., Dickinson, W. B., Leech, N. L., & Zoran, A. G. (2009). A qualitative framework for collecting and analyzing data in focus group research. *International Journal of Qualitative Methods*, 8(3), 1-21. <https://doi.org/10.1177/160940690900800301>
- Patino, C. M., & Ferreira, J. C. (2018). Inclusion and exclusion criteria in research studies: definitions and why they matter. *Jornal Brasileiro de Pneumologia*, 44, 84. <https://doi.org/10.1590/s1806-37562018000000088>
- Ralushai, M. M. (2021). *Perspective on the CET and TVET colleges infrastructure development support (equipment/workshops/connectivity/ict)*. Local Government Sector Education and Training Authority. <https://cdn.lgseta.co.za/resources/Research/Final%20Report%20TVET%20and%20CET%20V8.pdf>
- Romm, N., & Nkambule, B. (2022). Knowledge management for effective and ethical management of public schools: Perspectives from South Africa. *Participatory Educational Research*, 9(3), 166-179. <https://doi.org/10.17275/per.22.60.9.3>
- Sithole, M. D. (2020). *Enhancing management structures at TVET colleges: A case study of uMgungundlovu TVET College* [Master's dissertation, University of KwaZulu-Natal].
- St Claire, R. (2023, November 28). Bridging the gap: The transformative power of TVET colleges and applied skills training. *Public Sector Leaders*. <https://publicsectorleaders.co.za/tvet-colleges-transforming-the-employment-landscape/>
- Stander, L., Plooy, B. D., & Scheckle, E. (2022). "Some of them are afraid of the language": Perceptions of TVET college staff about the relationship between English language

- proficiency and academic performance among Engineering students. *South African Journal of Higher Education*, 36(1), 296-311. https://hdl.handle.net/10520/ejc-high_v36_n1_a16
- Stuckey, H. (2015). The second step in data analysis: Coding qualitative data. *Journal of Social Health and Diabetes*, 3, 7-10. <https://doi.org/10.4103/2321-0656.140875>
- Terblanche, T. (2017). *Technical and Vocational Education and Training (TVET) colleges in South Africa: A framework for leading curriculum change* [Doctoral thesis, University of Stellenbosch].
- Terblanche, T., & Bitzer, E. (2018). Leading curriculum change in South African technical and vocational education and training colleges. *Journal of Vocational, Adult and Continuing Education and Training*, 1(1), 104-125. <https://hdl.handle.net/10520/EJC-1b91f323d7>
- Umalusi Council for Quality Assurance in General and Further Education and Training. (2016). *Recognition of the National Certificate (Vocational) Level 4 by public HEIs for access into programs offered by the higher education institutions*. Department of Higher Education and Training (DHET), Universities South Africa (USAF). <https://www.umalusi.org.za/docs/pr/2016/2016.12.21%20Joint%20Communique%201%20NCV%20recognition.pdf>
- UNESCO. (2016). *Certified copy of the recommendation concerning technical and vocational education and training (TVET)* (Vol. 33). UNESCO Press.
- UNESCO. (2017). *Moving forward the 2030 Agenda for Sustainable Development*. UNESDOC Digital Library. <https://unesdoc.unesco.org/ark:/48223/pf0000247785>
- UNESCO-UNEVOC. (2017). *Greening technical and vocational education and training: A practical guide for institutions*. UNESCO & UNEVOC. https://unevoc.unesco.org/up/Greening%20technical%20and%20vocational%20education%20and%20training_online.pdf
- Yende, S. J. (2021). Funding opportunities and challenges: A case of South African institutions of higher learning. *Journal of Public Administration*, 56(1), 70-79. <https://hdl.handle.net/10520/ejc-jpad-v56-n1-a6>
- Wenger, E. (2011). *Communities of practice: A brief introduction*. University of Oregon. <http://hdl.handle.net/1794/11736>
- Western Cape Government. (2020). *Technical vocational education and training (TVET) colleges*. <https://www.westerncape.gov.za/general-publication/technical-vocational-education-and-training-tvet-colleges>
- Wilkinson S. (1998). Focus group in health research: Exploring the meanings of health and illness. *Journal of Health Psychology*, 3(3), 329-348. <https://doi.org/10.1177/135910539800300304>
- Williams, A. R. (2021). *Managing curriculum delivery in South African TVET Colleges: A case study* [Master's thesis, University of South Africa].
- World Economic Forum. (2017). *Accelerating gender parity in the fourth industrial revolution: An agenda for leaders to shape the future of education, gender and work*. World Economic Forum (in-house publication). https://www3.weforum.org/docs/WEF_EGW_White_Paper_Gender_Parity_4IR.pdf
- Yassim, K., Rudman, N., & Maluleke, L. (2019). Enabling vocational lecturer capacities towards sustainable human development: Towards radical revisioning. In S. McGrath, M. Mulder, J. Papier, and R. Suart (Eds.), *Handbook of vocational education and training: Developments in the changing world of work*, (pp. 1-18). Springer. https://doi.org/10.1007/978-3-319-49789-1_6-1