

Aligning NC(V) TVET curriculum with Industry Needs: A Pathway to Enhanced Vocational Education.

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Abstract. The Technical and Vocational Education and Training (TVET) colleges' mandate is to address the skills shortages in the country by ensuring that the TVET college graduates meet the industry's needs. The purpose of this study was to establish if the NC(V) TVET Business Studies curriculum programs are aligned and responsive to real workplace demands. However, there are still issues that are hindering the fulfilment of this mandate. Curriculum alignment was identified as one of the contributing factors arising from the mismatch of skills between the TVET college graduates and the real world of work. The study was supported by the review of related literature. A qualitative inquiry was used to gather the perspectives of the participants on the responsiveness of the NC(V) Business studies curriculum to industry needs. In-depth interviews were used to collect data from 3 lecturers, 2 TVET graduate students and 1 Workplace-Based Experience(WBE) officer and these participants were purposively selected for this study. Thematic analysis technique was used to analyse the data. The findings of the study revealed that the NC(V) Business studies curriculum is not aligned with the industry needs which makes it difficult for NCV TVET graduates to be absorbed into the work industry. The study, therefore, recommends that the NC(V) Business studies curriculum be reviewed to meet the industry requirements. During the curriculum review, the study recommends that lecturers, students and industries must be part of the review meeting. Furthermore, the study recommends that as part of NCV training, there should be more practical work done than theory work. Finally, the study recommends the upskilling and reskilling of TVET college lecturers in line with the industry's needs.

Keywords: Alignment, Industry, TVET, Skills, Workplace

1. Introduction

The White Paper on Post School Education and Training (2013) set out a clear mandate for Technical and Vocational Education and Training (TVET) colleges which is to address the skills shortages in the country's economy. South African TVET colleges accept students who have passed grades 9, 10, 11 or 12. In this regard, TVET college education is meant to increase access to education for young people and adults who will become employable in the industries compared to non-TVET, be self-employed, or pursue further studies (Mkhize-Semelane, 2024). This is supported by UNESCO (2015) who state that the growth of a country's economy is dependent on the graduates who possess skills that will promote economic productivity and growth. Therefore, the TVET sector is meant to meet these industry demands. According to the mandate, the TVET sector has not yet met this mandate due to the challenges faced by them.

Building on this foundation, Kamaruzaman et al (2024) explores the challenges faced by TVET colleges such as skills mismatch, shortage of resources, curriculum which is not aligned with industry requirements and inadequate practical training of students. Their concern was that there is a mismatch of skills taught in the classroom and those required in the industry making it difficult for graduates to integrate well into the labour market. Research has proven that the Fourth Industrial Revolution (4IR), has led to a rapid change in

the skills industry and this change is not being addressed by the TVET education curriculum (Mkhize-Semelane, 2024) and (Wahungu et al. 2023).

The establishment of TVET colleges, as articulated by Affandi et al (2024) and Magagula and Awodiji, (2024), was that the TVET sector must partner with industries to produce graduates with versatile skills allowing a smooth transition into the work industry. The lack of collaboration between the two sectors has led to TVET college graduates failing to maintain their relevance in the labour market by failing to integrate technology into the work industry (Gani and Halim, 2024) (Mahmudah & Santosa, 2021). Furthermore, according to Magagula and Awodiji, (2024), the curriculum and syllabus review and reskilling of lecturers is still a challenge in the TVET sector leading to graduates who are in a dire position regarding employability due to the curriculum that is not aligned with the industry requirements. The study is aimed at determining if the curriculum of the NC(V) Business Studies programs is aligned and responsive to real workplace demands.

2. Objectives

The paper aims to investigate if the curriculum of the NC(V) Business Studies programs is aligned and responsive to real workplace demands. The following are the objectives of the study:

- To establish the skills that the real workplace requires.
- To determine if the NC(V) Business studies curriculum aligned with the demands of the real workplace.
- To establish how the TVET colleges can equip NC(V) Business studies students with the skills that the real workplace requires.

3. Materials and Methods

For this study, the researcher used a qualitative research method to study the phenomena whereby the concepts and meanings were interpreted instead of generalising the relationships (Cresswell & Cresswell, 2018). A case study approach was used in this study. This study adopted semi-structured interviews as the primary data collection technique, in assessing if the NC(V) Business Studies program curriculum is aligned with the demands of the real world. Furthermore, six participants were sampled purposively as they are directly affected by the TVET curriculum. Participants included are three lecturers, two TVET college graduates' students and one Workplace-Based Experience(WBE) officer. From the lecturers, the researcher was interested in getting their contributions as they teach and prepare students

for the real world of work, the WBE Officer, to get their perceptions on the employability of TVET college graduates and lastly, TVET graduates' students to check their employability in the real world of work after completion. The data analysis of this qualitative study uses a thematic analysis style enabling the researcher to be exposed to the experiences of the participants. Ethical considerations were adhered to throughout the study when obtaining information from participants.

4. Results

Semi-structured interviews were used to collect in-depth knowledge from the six sampled participants. The sample size was represented by 3 lecturers (LT1, LT2 & LT3), 2 TVET college graduates' students (ST1 & ST2) and 1 WBE officer. The following themes and sub-themes emerged from the study:

Theme 1: Understanding of the TVET curriculum

All participants had an understanding of what the TVET curriculum should entail.

WBE explained: “*TVET curriculum refers to the content that must be taught to students which must be theory, practical training, soft skills and industry placement. It must prepare students for the industry*”. LT2 stated: “*TVET curriculum is the content that we teach in class which must be in line with what is happening in the job industry*”. LT3 defined it as: “*My understanding is that the TVET curriculum, the government is trying to equip the workforce because the students that we are teaching, are the future workforce. We equip them with skills rather than teaching them*”.

ST1 said: “*My understanding of the TVET curriculum is that it gives you enough knowledge, theoretically and practically, so that whenever you finish with your studies, you are aware of what's happening in the work environment and what's expected of you in the work environment*”. ST 2 concurred with ST 1 by stating: “*TVET curriculum should address the country's skills shortages hence we produce students for the industry*”.

From all the definitions given by different participants. LT1 further explained that: “*TVET colleges were meant to bridge the skills gap in the country as the country used to outsource people with specialised skills meaning that their main purpose was to upskill the students so that they can fit into the world of work*”.

Theme 2: Challenges with the TVET Curriculum

Several challenges with the current TVET curriculum were raised by the participants. These challenges are stated below:

Subtheme 2.1 Curriculum alignment with the industry needs

The first challenge was that the curriculum taught in TVET colleges was outdated. The majority of participants alluded that what is being taught is not what is happening in the real world of work. LT 1 and LT3 shared the same sentiments about the curriculum. *LT1 stated: “We are teaching office admin students, about fax and envelope and looking at the era that we are in now, these are no longer used”.* LT3 said: *“We still teach students about the old filing systems, of which now they are using digital filing”.*

TVET college graduate students felt that they were not adequately equipped for the real world of work. ST1 highlighted that: *“The curriculum is pretty much aligned when coming to admin work, but we are lacking in preparing for the world of work and hands-on training. This makes it difficult for a TVET graduate to get a job as industries prefer university graduates”.* This was supported by ST 2 who stated: *“ In the world of work, some of the things they do align with what we have been learning at TVET institutions, although some of the things are quite a bit different from what we learned meaning that industries train you before you can start working”.* WBE officer concurred with all the participants by sharing how the industries are felt about the TVET curriculum. WBE stated: *“Most of the employers where we have placed our students complain that our students don’t know anything, they end up wasting most of their time training the students so that they can fit in the industry”.*

Subtheme 2.2 Lack of industry exposure of TVET lecturers and students

The lack of professional development and industry exposure of TVET college lecturers was another challenge which was highlighted by the participants. LT1 said: *‘When we do holiday placement for lecturers, one must find a company that they want to go to, and most companies are not doing what we are teaching. This thing is just a waste of time.’* LT3 said: *“I only attended lecturer placement for money because I did not gain anything. In the company that I was in, I was only filing documents which are different from what I am teaching”.* LT2 said: *“I have never bothered myself with lecturer placement as it does not serve a purpose. Different groups of lecturers who went for the program are saying that their expectations were not met, it was just a waste of time”.* LT2 further emphasises the need for industry exposure for lecturers by stating that: *“When taking vocational lecturers to industries, before sending them there, they must understand what they are teaching so that the requirements can match what is happening in the industry. Lecturer placement must go*

along with what they are teaching, to give them the practical of what they are doing in class”.

TVET college graduates were experiencing the same problem as lecturers of not having enough exposure to the real world of work. In this line, ST 1 alluded that *“It was not easy to get holiday placement when I was a student because most companies are not familiar with the work done at TVET colleges”*. ST2 highlights that: *“Most of the work that we did was theory with no practical. Even the assignments that we were doing were only done in class instead of visiting the industries for practical training”*.

WBE highlighted that even though their office is the one responsible for placing lecturers for work-based experience, it is not possible to do so. WBE said: *“It becomes difficult as the college does not have partnerships with companies. For better results from the lecturer placement program, TVET must visit the industries to check what they need from employees so that when they come back to the college, they teach what is required from the industry. Also, a partnership between the college and industry is needed so that what is taught can be what the industry requires”*.

Theme 3 Improving the curriculum

Almost all the participants concur that the curriculum should be reviewed so that it can cater for the industry's requirements and fulfil the TVET mandate. LT3 said: *“The curriculum must be updated and whoever is developing this curriculum should go to the industry and understand what is it that the industry requires and then re-skill us, the lecturers so that we can be taught differently from basic education”*. LT2 noted: *“TVET college curriculum must promote practical and hands-on training by adhering to 30% theory and 70% practical of the curriculum”*. LT1 states that: *“, I would advise the TVET to go visit the industries to check their requirements, and also check their needs to align the curriculum with industry needs. Even our practicum rooms, and assimilation rooms, have nothing. Absolutely nothing, ma'am”*.

Most participants want stakeholders to be consulted when reviewing the curriculum. LT3 highlights that *“The curriculum must be updated and whoever is developing this curriculum should go to the industry and understand what is it that the industry requires and then re-skill us, the lecturers, so that we can teach differently from basic education*. This was supported by LT1 noted that: *“the lecturers who are the end users, the receivers who are the students and also experts from the industry must be consulted when updating the curriculum”*. ST1 shared his frustrations with the TVET program: *“Most companies are not familiar with the*

work done at TVET colleges. So, it becomes a little bit difficult for you to be accepted at any company after you've completed your NCV program, TVET must form partnerships with industries". The WBE officer shared the same sentiments by stating: *"We need to form partnerships. We need to sign memorandums of understanding with relevant industries"*

5. Discussion of Findings

From the findings of the study, it was revealed by participants that they do have an understanding of what the TVET college curriculum is and currently, it is not responsive to the work industry as per its mandate. The curriculum is defined by Schleiff et al. (2021) as lessons or content taught to students in a specific program and can be learner, problem or subject-centred. According to Kana and Letaba (2024), TVET is a combination of education, training, and skill development for a variety of professions, encompassing formal, non-formal and informal learning methods. However, almost all the participants alluded that what is taught in TVET colleges is not in line with the industry requirements making it difficult for TVET college graduate students to be employable.

Different challenges emanated from the current study which includes the outdated curriculum. Participants echoed their frustrations about the current NC(V) Business studies curriculum which was made in 2007 and now is outdated and no longer relevant to the real world of work. Having an outdated curriculum is not the only challenge faced by TVET colleges but also TVET college graduates' students raised a concern that it is not easy to be absorbed by the industries. The industries often prefer university graduates to TVET graduates who they must reskill before they can start working. This is supported by the study of Jamaludin et al. (2023) state that graduates from TVET institutions lack competence in meeting the job requirements.

The lack of industry exposure of students and lecturers also contributes to the challenges that the TVET sector is facing. The students do a lot of Theory work instead of Practical work that can expose them to the industry sector. Even though students do practical assignments, they are still not relevant to what is happening in the real world of work. The study also revealed that industries, where students are placed, are complaining that students know nothing about the industry which makes it time-consuming for the industry to reskill them. The participants were asked if TVET colleges offer opportunities for staff development, to stay up to date with current trends in technology and industry and all lecturer participants agreed but were not satisfied about the process. According to Makole et al. (2023), opportunities for the development of TVET college lecturers must be prioritised to provide

them with regular workplace exposure and keep them abreast with development in the industry.

Another challenge that the participants brought up was that the colleges do not have partnerships with industries which hinders work-based exposure of both lecturers and students. This is supported by Magagula and Awodiji, (2024) who advocate cooperation between the two sectors of colleges and industries allowing for work-based exposure of lecturers. These partnerships are necessary for the students to gain employment in a country with high unemployment, where university graduates are often favoured (Kana & Letaba 2024). In relation to this, it can also be linked to the findings of Jamaludin et al. (2023) who state that continuous collaboration between the industry and TVET institutions is required to empower TVET education. For lecturers to be current and relevant to the real world of work, reskilling and upskilling are required so that the knowledge can be passed to the students during teaching and learning,

6. Conclusion

The primary aim of the study was to investigate if the curriculum of the NC(V) Business Studies programs is aligned and responsive to real workplace demands. Taking into account the research results for this study, the NC(V) Business Studies programs need to respond to the industry requirements. The study revealed that TVET college graduate students are not easily absorbed in the work industry as the skills they acquired in TVET colleges are different from what the industry requires. Employers have to spend time training the TVET college graduates before they can employ them. With what has been found in this study, students require exposure to more practical work to prepare them for the real world of work. This will also ease pressure from companies who waste time training the graduates before absorbing them into the work industry. The study results also advocate for collaboration between the college and industries so that industry demands are met. The relationship between the two sectors will assist both the lecturers and the students in knowing what is expected in the real workplace. The study recommends the review of the current TVET college curriculum whereby students must be exposed more to the practicals rather than doing more theory. During the review of the curriculum, the study recommends that consultations be made with lecturers who are the end users, the students who are the receivers and also experts from the industry when updating the curriculum in that sitting so that they can contribute positively to the curriculum review. Lastly, continuous professional development through upskilling and reskilling of lecturers is of paramount importance

incapacitating them. Lecturers also require work-based exposure in industries relevant to programs offered in their colleges so that they can be able to marry theory with practice when delivering lectures.

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