

**Article**

# Interventions for Inclusion in TVET through Private-Public Development Partnership in Ethiopia and Zambia

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## Abstract

The study is about reconfiguring Technical and Vocational Education and Training (TVET) through Private-Public Development Partnership (PPDP) for the inclusion of disadvantaged groups in Ethiopia and Zambia. A PPDP is a cooperation between national and foreign actors targeted at development activities and is a governmental strategy to increase the standard of TVET, including strategies to include disadvantaged learners. This article focuses on two PPDPs, one comprising a TVET college in Ethiopia and another in Zambia. The aim is to analyse and compare the curricular strategies of these two PPDPs to revamp TVET for the inclusion of disadvantaged learners. Data was generated through document analysis, interviews and focus groups. The findings indicate that both PPDPs served as an intervention to the TVET institutions, thereby including disadvantaged learners in contexts of huge inequality of opportunities. The article points to tensions relating to inclusion, particularly about how global educational policy trends contend with the realities in local labour markets and the needs of TVET graduates who will work therein.



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**Keywords:** Private-Public Development Partnership (PPDP), inclusion, Technical and Vocational Education and Training (TVET), Ethiopia, Zambia

## Introduction

This study is about reconfiguring Technical and Vocational Education and Training (TVET) through small-scale Private-Public Development Partnerships (PPDP) for equal opportunities and the inclusion of disadvantaged groups in Ethiopia and Zambia. Our definition of disadvantaged groups is broad and relates to socio-cultural complexities including poverty, ethnic diversity, and gender (Muzite, 2021). In both countries, primary school completion rates are low, even if societal groups have big differences. Ethiopia and Zambia are among the poorest countries in the world with a high degree of child labour, which risks taking children away from school (Eriksen & Mulugeta, 2021). Both countries are ethnically diverse, and this might contribute to the social marginalization of minority groups and prejudices against TVET (Tiruye, 2019). The many languages spoken in the countries also may cause significant educational challenges. Additionally, deeply rooted cultural and social norms are reflected in gender stereotyping, violence, and inequalities (Johnson Ross & Parkes, 2021).

It is commonly argued in national and international policy documents that participation in TVET will lead to equality and improvement of life chances (e.g., African Union, 2018; MoE, 2008; MSTVT, 1996). However, the resources and capacities of the educational systems at all levels to mitigate an unfair distribution of educational opportunities are limited. In addition, the labour markets are segmented with few opportunities for early school leavers (Allais, 2020). As argued by Bennell (2021), “the minimal threshold of educational attainment needed [...] effectively filters out most of the poorest” (p. 10) from the good jobs in the formal sector. In low-income countries<sup>1</sup>, TVET is often considered an inclusive educational pathway for students excluded from general upper secondary education (Jayaram et al., 2017). However, as has been argued by Alla-Mensah et al. (2021), TVET can lead to further exclusion of disadvantaged groups due to curricular designs and limited capacities to adapt to the various and often complex needs of students.

Despite the faith in TVET in national and international policy, there seem to be few strategic efforts that explicitly target the problem of inclusion of disadvantaged groups in this sector (cf., African Union, 2018). PPDPs working within the TVET sector and that have a focus on providing youth with high-quality training is one option. A PPDP is a capacity-building approach where a set of national and foreign actors, including private, public and agencies for development, come together in joint efforts for a specific purpose to support local actors in development activities (Johansson de Silva et al., 2015). However, the task of a PPDP is challenging. As pointed out by Allais and Wedekind (2020), TVET institutions in low-income countries are fragile and there are many complexities connected to TVET with its embedding in national and global policy making, national education systems, the economy, and labour markets.

A PPDP should be differentiated from the loosely defined Public Private Partnerships (PPP), which assume that the private sector can provide public services more effectively (Leigland, 2018). A PPDP typically involves development agencies and implies a broader view on development in low-income countries for

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<sup>1</sup> The World Bank (2022) categorizes both Ethiopia and Zambia as low-income countries. Zambia was reclassified as a lower-middle income country in 2021 because of the deterioration of GNI/capital.

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poverty reduction (Moll De Alba & Stucki, 2019). The few studies we have found on TVET and PPD projects have focused on systemic outcomes. Cerar et al. (2019) addressed best practices and constraints for scaling up the projects. A study by Moll De Alba and Stucki (2019) focused on skills provided for the industries' need of manual labour. In a PPD there might also be tensions between commercial and development interests (Johansson de Silva et al., 2015).

Given that research on PPDs for the development of TVET is very limited, there is a need to study curricular arrangements for the inclusion of disadvantaged students in such projects. Therefore, our aim is to analyse how the work within two PPDs, one in Ethiopia and one in Zambia, unfolded in local curricula as intended and experienced by the local actors involved (i.e., instructors, administrators, and students).

## Research on the inclusion of disadvantaged groups

Sub-Saharan Africa is home to socio-economically diverse populations and there is a large inequality of opportunity. As argued by Brunori et al. (2019), "circumstances beyond individual control such as ethnicity, birthplace and parental background interact in determining individual opportunity in a much more complex way than what we typically observe in Western societies" (p. 6442). There are also differences between the countries. For instance, in Zambia during colonialism, racial discrimination forced people to train for unskilled tasks meaning that it kept people away from getting more prestigious education and work (Mulimbika & Karim, 2018). Consequently, TVET got a lower status. In Ethiopia particularly, TVET was associated with artisans, blacksmiths, and craftsmen whose skills were considered to have a very low status and they were exposed to marginalization (Tiruye, 2019). Consequently, participation in TVET risks leading to stigmatization (Muzite, 2021). As pointed out by Muzite (2021), such complexities must be acknowledged, including "the power dynamics that exists between those who are 'included' and those with powers upon them to 'include'" (p. 90).

Even so, research on the inclusion of disadvantaged groups in this context is limited, and existing studies have focused on pointing out barriers to inclusion for certain societal groups. A literature review by Bray-Collins et al. (2022) identified the main barriers to women's inclusion in TVET, including curriculum content and material that reinforces gender stereotypes. In a study of Ethiopia, Kenya, Rwanda, and Uganda, Ebuenyi et al. (2020) identified several structural barriers to the inclusion of students with mental illness in TVET. For example, they pointed to strict admissions requirements that students with mental illnesses largely do not meet, inflexible curricula, and teachers who are unfamiliar in working with the challenges experienced by students with mental illness. Similarly, Mosalagae and Bekker (2021) noted that removing certain admissions requirements, like exempting students with intellectual disabilities from taking an entrance examination, can promote more inclusive access to TVET in Botswana. However, despite inclusionary recruitment practices such as this, they found that students still became marginalized and felt excluded, even if the institution deliberately strived toward inclusion. One explanation for why these challenges persist is because inclusive strategies in TVET have not been locally driven. Instead, Malle et al. (2015) argue that policies supporting the inclusion of people with disabilities in Ethiopian TVET, for example, have been initiated by international donors.

Another challenge for the inclusion of disadvantaged groups is related to the strong alignment between TVET and the world of work. Allais and Wedekind (2020) have for instance problematized TVET curricula in low-income countries and argued that they were designed “for labour markets that do not exist and for student populations that countries do not have” (p. 336). The transfer of international TVET policy goals without considering the socio-economic contexts of the local communities and ignoring the complex living conditions of disadvantaged groups might preserve unequal access to education even if the intentions were good (Powell & McGrath 2019).

Taken together, these studies illustrate that inclusion in TVET in Sub-Saharan Africa is a complex challenge and underscores the need for more research. This article builds upon this existing scholarship by analysing and comparing the curricular strategies of two PPDP-based TVET institutions, one in Ethiopia and one in Zambia, to revamp TVET for the inclusion of disadvantaged youths as an intended and experienced curriculum. In the Ethiopian case, vocational education and training of maintenance technicians were provided, and in the Zambian case, vocational education and training of mining workers. The questions are:

- Which groups of learners were targeted through TVET?
- What curricular strategies were used to enhance the inclusion of these learners?
- How was the curriculum for inclusion experienced by the learners?

## The TVET systems of Ethiopia and Zambia

Both Ethiopia and Zambia have informal and formal TVET systems. The informal system is not systematically delivered or regulated and operates on a small scale. The training is usually offered at community skill training centres, prisons, farmers' training centers and through home-based activities or in locations that are not fixed. Non-governmental, private, and church-run organizations typically provide this form of TVET training (MoE, 2008; MSTVT, 1996). One purpose of informal TVET is to promote labour market inclusion amongst those who do not meet the entry requirements of formal TVET.

To understand the entry requirements of formal TVET, some background knowledge of the Ethiopian and Zambian education systems is required. The Ethiopian education system consists of eight years of primary education and four years of secondary education. Secondary education is divided into two cycles. The first cycle covers grades 9–10, and the second cycle covers grades 11–12. Upon completion of grade 10, all students are supposed to take a national examination. Those who score well continue to grades 11 and 12 where they are prepared for university. However, those who do not score well proceed to formal TVET (MoE, 2008).

In Zambia, students spend seven years in primary school and five years in secondary school. Secondary education is divided into two cycles: lower secondary, or the upper stage of basic education, covering two years (grades 8–9) and the three-year upper secondary cycle (grades 10–12). In Zambia, to pass from one level to another, all students must take national examinations three times: in grades 7, 9, and 12. These examinations can hinder students from proceeding within secondary education. However, based on their achievements from the examination, students can enter formal TVET or higher institutions (UNESCO, 2016).

TVET has been recognized as “an effective tool for capacity building” that can equip populations with “high

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employment potential” and the possibility “to avoid cycles of hunger and famine” (UNESCO, 2020, p. 11). This is particularly important in contexts such as Ethiopia and Zambia where the population is young with around 21% between the ages of 15-24 years (UNESCO 2022a, 2022b) and inclusion in the formal labour market is low (ILO, 2020). Consequently, in Ethiopia for example, the government has taken efforts to increase access to formal TVET.

Formal TVET in Ethiopia is organized into five levels. Levels I-IV are at the secondary level and level V is at the tertiary level. Students are assigned to each level based on the results they achieved in the national examination after grade 10 and the cut point for continuation to education that can lead to university as declared by the Ministry of Education (MoE, 2008). In Zambia, formal TVET is organized into four levels: trade test, craft, technician, and technology (diploma). Students are assigned to each level based on the results they achieve on the national examinations (UNESCO, 2016). This article exemplifies two PPDP-based TVET institutions that are part of the formal sector.

## Curriculum as intended and experienced

A curriculum represents knowledge and competencies that are viewed as indispensable in certain socio-cultural contexts; it gives an idea of how learning should be organized and what activities to include but is always enacted locally (Lundgren, 1983). Following Billett (2018) there must be alignment between what is intended, provision of experiences, and students’ engagement in TVET settings (i.e., school and workplaces). However, as he has shown in Australian studies, this does not happen spontaneously but must be intentionally supported. In other words, learners’ experience of the intended curriculum is supported and constrained by the availability and type of assistance and resources provided by workplaces and educational institutions (Billett, 2011). Integration of students’ experiences across TVET settings is a kind of socio-personal construct where students are active participants. What makes sense for them to engage with is shaped by their previous experiences, interactions, values and so on, and makes them ready to learn (Billett, 2018). Regarding the inclusion of disadvantaged students, like in this study, an experienced curriculum must integrate rather broad issues to support students in coping with life situations.

However, a curriculum is not left untouched by global forces. In the context of TVET, the making of well-educated “modern” workers, who can contribute to economic growth and satisfy the needs of industries, follows widespread and globalized ideas on how nation states should behave to show that they are up-to-date and forward-looking (Allais, 2020). Both the Ethiopian and the Zambian governments refer to inspiration from other countries in their development of formal TVET systems (Geleto, 2017). In the context of development aid, like that of PPDP interventions, such policy “borrowing” is often a condition for receiving aid (Steiner-Khamisi, 2016). Here, a TVET curriculum is negotiated between private, public, and development actors with diverse interests. Consequently, certain aspects of a curriculum may represent the interests of some powerful actors at the expense of others. However, as has been pointed out by Steiner-Khamisi (2004), the process is more complex; educational ideas are always “unpacked” and shaped in a certain cultural, economic, and political context. Thus, an analytical point of departure is how an intended curriculum for the inclusion of disadvantaged groups was shaped in these PPDP contexts and how the intentions were perceived by students.

## Method

This study concerns two local PPD-based departments at TVET institutions in Ethiopia and Zambia. In the Ethiopian case, the local PPD actor has been given the name Birhan Technical and Vocational College (“Birhan College”). Birhan College was the host of a department given the name Yemekina Tigena Department (“YTD”) that provided the training. In the Zambian case, the local PPD actor has been given the name Tesfa Technical and Vocational College (“Tesfa College”). Tesfa College was the host of a department given the name Kebadmashin Tigena Department (“KTD”) that provided the training. In addition, the Ministries of Education and local industry representatives as potential future employers for the students were part of the PPDs.

The cases were selected as they are similar in terms of challenges in the education system, and both experienced challenges to inclusion in TVET arising from socio-cultural complexities in the countries. Furthermore, the same international actors were involved in both. The international actors were a world-leading private manufacturing company (here: “Heavy Metal”), and two international public actors that target poverty reduction: one is a global organization (here: “Global Aid”) and one is an international government agency for development cooperation (here: “Government Aid”).

**Table 1.** Data sources

	YTD	KTD
Total interview participants	13	15
Administrators	4	4
Industrial representatives	3	3
Graduates	3	3
Instructors	3	5
<b>Total focus group participants</b>	<b>24</b>	<b>24</b>
Total documents	6	3
Initiation documents	1	1
Evaluation documents	1	1
Curricular documents	4	1

Data was collected through interviews, focus groups, and documents. For both cases, administrators, industrial representatives from separate industries, and graduates working in different industries were interviewed as clarified in Table 1.

One difference between the cases is the number of interviews with instructors. For the Ethiopian case, the total population of three instructors were interviewed. However, for the Zambian case, five instructors were interviewed. This is because the total number of instructors at KTD (i.e., 19 instructors) exceeded that of YTD. In total, 13 individual interviews were conducted at YTD and 15 at KTD.

The participants were selected since they worked closely with the PPDs at YTD and KTD. Regarding the administrators, there were two deans and two project coordinators in each department. Thus, all were interviewed. They had a role in supervising the implementation of the training. The industry

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representatives were connected to the PPDPs through their participation in curriculum development and implementation. Available graduates on the spot at the time of data collection were selected from these industries.

Focus group discussions were held with willing students. In both cases, the data collector (one of the authors) posted a notice on a board that invited students to participate. Focus group discussions were then conducted with men and women who came voluntarily from all four educational levels offered at YTD and KTD. For both cases, there were four focus groups composed of six students. In total, twenty-four students from each case participated. Additionally, the following project documents were analysed: initiation documents for YTD and KTD, two evaluation documents authored by Global Aid and one of the partners, and curriculum documents for levels I-IV for YTD and the four educational levels at KTD.

For the Ethiopian case, all interviews and focus group discussions were conducted in the Amharic language by the data collector. They were audio recorded and later transcribed into English. For the Zambian case, all interviews and focus group discussions were conducted in English because English is the official language, and all participants were able to communicate in it. Ethical guidelines stipulated by Addis Ababa University and the Swedish Research Council were followed. To support the trustworthiness and credibility of our findings, we employed some strategies outlined by Creswell and Creswell (2018) for qualitative research. For example, participants were asked to check the accuracy of transcriptions and were given the opportunity to add further information. Administrators were also contacted after the interviews for further and clarifying information.

The data collector made an initial sorting of the data, focusing on how the research participants described inclusion in the curriculum. Parts were selected that concerned curricular strategies and individual outcomes related to poverty reduction and improving the life situations of youths. Individual outcomes here refer to the experienced curriculum and to how students valued the training they received. After this initial sorting, the other authors served as peer debriefers (Creswell & Creswell, 2018) by reviewing and asking questions about the data and interpretations to facilitate accuracy.

In the following sections, we present the results of our analysis followed by a combined discussion and conclusion. We begin by describing the groups of learners YTD and KTD aimed to reach and what curricular strategies they took to include diverse groups of learners in the training programs. Thereafter, we present students' experiences of the curriculum for inclusion to illustrate how they perceive the training has impacted their life situations.

## Target groups of learners

In both cases, the PPDP project documents recognized the local TVET institutions as instruments to support students with school failures and dropouts, regardless of gender, and socio-cultural and historical influences.

## The Ethiopian case

At YTD, unemployed men and women between the ages of 17 and 21 years old were the primary target group. The objective was to equip them with skills to enhance their employability, which was believed would enable them to get out of poverty and obtain stable long-term income. Although any citizen who met the entry requirements to YTD was entitled to take part in the training, most learners at YTD had low levels of education, which made them ineligible to attend upper secondary school or beyond. While targeting learners with low educational achievements was not explicitly stated in the project documents, they were still a group of interest in the project.

In contrast, the project documents make explicit mention of not excluding low-income groups. This group was of particular interest to Birhan College because it is part of a humanitarian organization for children who have lost their parents:

It was not the success stories of the college that attracted expatriate actors to form a partnership with us. /.../ the intention of the partnership was to upgrade the quality of life of the orphans and other destitute who are in need (Project coordinator).

To achieve the goal of including low-income groups, reasonably expensive tuition fees of 25-30 USD were charged to students on an annual basis. For students who could not pay, other arrangements were made:

Students who are living in [Birhan] children's village do not pay as they are orphans and living in the centre. However, there are some students who are not living in the centre but cannot afford to pay for the training and are sponsored by the project to attend the training for free. (Project coordinator)

One group that was explicitly mentioned as a target in the project documents was women. According to the YTD program evaluation, enhancing opportunities for women was of particular interest from the beginning of the project. One reason may be that women face challenges in the labour market related to traditional gender stereotypes (Bray-Collins et al., 2022), particularly in the automotive industry where they are underrepresented. This sentiment was echoed by a project coordinator: “[YTD] is a gender-sensitive department where all opportunities will be equally accessible to females, and we strongly stand against the harassment of female trainees and staff members.” In summary, from the beginning of the project, YTD intended to be an academy for diverse groups of learners including students with low educational levels, low incomes, and women.

## The Zambian case

Unemployed men and women between the ages of 17 and 30 years old were the initial target group at KTD. However, in the project evaluation document, it was acknowledged that women were targeted to a lesser extent. The reason was that very strict admissions requirements limited the groups of learners who could apply. According to the project evaluation document, when the training began, only learners who had completed grade 12 (i.e., had an advanced technician certificate) and two years of work experience in relevant industries were admitted. Few women met these requirements, so women particularly were left out. Considering these requirements, the training centred around the

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diploma level (i.e., the highest possible college level) and preparing learners for middle management positions.

Concerns over inclusion, together with an overall lower-than-expected number of participants, led to KTD showing interest in lower levels of certification, from trade tests to technician levels. By opening the education to lower levels of certification, KTD simultaneously broadened its scope to include a more diverse group of learners, including women:

Many of our students, including females, do not complete secondary school. There are so many reasons for their drop-out, but [KTD] has created diverse opportunities for them by providing admission to the program. (Dean of the department)

We do not have many girls in this field (mining sector), but the establishment of KTD has highly promoted girls to join. (Dean of the department)

In other words, KTD's initial target group was educated workers seeking to upgrade their certification to a more advanced level. However, following the initial phases of the program, the targeted groups grew to include learners with lower educational backgrounds and women. This meant that Grade 7 completers were eligible for the trade test level, and Grade 12 completers could be admitted for the craft level or technician level depending on the number of credits completed.

Like the Ethiopian case, there was also concern over low-income groups being able to access the training. At KTD, tuition was higher than at YTD with fees ranging from 148-159 USD. Regarding these fees, one project coordinator pointed out: "students, especially girls, who came from rural areas but could not afford the tuition fee, attend the program for free." However, we learned from the focus group discussions with students that many students perceive that tuition fees are too high.

## Curricular strategies

In both cases, the curriculum was developed based on the knowledge, skills, and abilities needed by the local industries engaged in the PPDPS. An analysis of the curriculum documents in both cases indicated that competencies were mainly composed of practical (i.e., hands-on) training connected to well-defined work tasks.

Tables 2 and 3 show some examples of competencies and allotted hours for YTD and KTD respectively.

**Table 2.** Examples of competencies and allotted hours, YTD

Levels	Competencies	Hours at the workshop	Hours in industry	Total hours
Level I	Remove and tag vehicle body system components	40	0	40
Level II	Inspect and service manual transmission	30	20	50
Level III	Service and repair electronically controlled suspension and steering system	30	15	45
Level IV	Carry out a diagnosis of complex system faults	29	13	42

Source: curricular document

As illustrated in Table 1, students who are level I in YTD mainly take part in the training at the college workshop. This was deliberately intended to avoid burden on the industries. However, students from level II and above take the training in both the college workshop and in industries. All competencies were arranged in the same fashion.

**Table 3.** Examples of competencies and allotted hours, KTD

Levels	Competencies	Hours at the workshop
Trade test	Not specified	Not specified
Craft	Not specified	Not specified
Technician	Not specified	Not specified
Technology (diploma)	Replacing electronic diesel fuel injection systems components in heavy equipment	20
	Performing maintenance on dump truck in line with manufacturer specification recommendations	20

Source: curricular document

Like YTD most of the competencies in the Zambian case were arranged as hands-on training that took place in both the college workshop and industry. All competencies were arranged similarly. Students were supposed to spend three months in the industry for workplace learning but the content and hours in the industry were not indicated.

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In the Zambian case, lower levels of education (i.e., trade test, craft, and technician) have no specified curriculum, and these students did not have access to the modern equipment provided by Heavy Metal. This was confirmed by one of the instructors: “I teach the technology (diploma) level. The rest have no readymade curriculum to attend in [KTD] and they have the least probability to even touch machinery.” The content that is taught and how it is taught is decided individually by instructors (Table 2). Given that these lower levels of certification were added to KTD after the project was initiated, this non-specified curriculum may imply that the actors involved in the project did not view education at these levels to be of equal importance with the technology (diploma) level.

The above-described core curriculum for both YTD and KTD represents the content and experiences all learners were intended to gain. However, both recognized that there were some groups of learners, particularly women, where further strategies were necessary to enhance their access to education. Therefore, co-curricular strategies, which included various activities and measures, were added on to the formal curriculum. One such activity explained in the YTD and KTD project documents was the organization of sexual harassment and sensitization courses. These were organized to limit barriers to women’s participation by raising awareness of traditional gender stereotypes. To illustrate, one instructor from KTD said, “I prepare campaigns to raise awareness about sexual harassment and similar gender issues against gender stereotypes that hinder the success of females.” Similarly, an instructor from YTD mentioned, “...not obligatory but sometimes we arrange a campaign against gender-based violence and discrimination.” Both instructors said that the campaigns were organized as either demonstrations or social gatherings and were only organized intermittently.

Beyond these activities, both programs also took measures to ensure that the physical learning spaces were responsive to women’s needs. For example, changing rooms that were gender-separated were made available at the institutions. Furthermore, the programs negotiated with local industries for similar conditions where the students completed their workplace learning. All of these are necessary to promote women’s full participation and possibilities for equal outcomes in TVET (Bray-Collins et al., 2022).

## Experienced curriculum

When the students talked about their experiences, inclusion on the labour market was a focus. According to graduates from YTD and KTD, the training equipped them with skills to enter work in relevant industries and gave them a path out of poverty. For instance, one YTD graduate explained how the training served as an alternative way to further education after dropping out of school, which led to employment in the automotive industry.

After I failed to join upper secondary school, which is a way to university, I was desperate how to support myself and my mother...now I am employed in this motor company and at least helping my mother...this is just the beginning. I have a big dream because I have a skill. (YTD graduate)

Similarly, a graduate from KTD explained how he was happy to have joined the department for his education and gained employment in the mining industry afterwards: “... through [KTD], I got my dream

job. Now I am helping myself and my family too." (KTD graduate).

Several students and graduates who have not yet gained employment nevertheless expressed that they gained skills and confidence in their ability to do so. One YTD student explained: "I have gained valuable skills related to heavy-duty equipment and commercial vehicle maintenance... I am now quite confident that I will successfully join and work in a reputable company."

Not everyone who was interviewed shared this outlook, however. One KTD student from the trade test level described how he felt restricted by the curriculum.

I failed from grade 7...even if I came to [KTD] hoping to be employable in any mining company, I couldn't get the training access as it is only for diploma level ...I couldn't get what I wanted to be employable. (KTD student)

Since access to the modern machinery provided by Heavy Metal was only available to students studying at the technology (diploma) level, this student felt that he was not gaining the experience needed for gainful employment. Instead, the curriculum at KTD was targeted toward upgrading the skills of those who were already employed in the mining industry rather than being responsive to the needs of diverse groups of students, such as those who left school early.

A female graduate of KTD described how she struggled for inclusion in the labour market despite having participated in the training. She explained how her challenges related to traditional gender stereotypes that are prevalent in the industry: "Employers are reluctant to select female graduates as their employee... instead they prefer male graduates ... I struggled a lot to be here."

Other female students had hopeful outlooks for the future and described how the training instilled a sense of equality in relation to their male counterparts.

As you can see, I am female. However, the training gives me and the rest of my female friends the best opportunity to be part of the training. I believe I can equally compete with male students ... hopefully, at the end of the day, I will become a chief mechanic... (YTD student)

The number of female students is increasing from year to year ... I am surprised that we are equally competing with our male classmates in a field traditionally associated with males. (KTD student)

Like these two examples, many of the interviewed students indicated that the training boosted their self-confidence. Beyond confidence in gaining employment, another YTD student added, "I want to restore my pride by joining a university ... now I'm successfully completing my training in here..." This student indicated that she does not intend to engage in the labour market through TVET, rather she aspires to go on to higher levels of education by using her training at YTD as a springboard. Likewise, another YTD student stated, "[YTD] receives failures like me to gain an opportunity to train on heavy equipment machinery." This level I student, while perceiving himself as a failure, anticipated that the skills he was gaining from YTD would help him to become successful in his next journey in life.

The students also discussed self-employment. A student from YTD said, "my dream is to have my own maintenance workshop, but I don't think I have the right business skill and finance. Therefore, I have

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decided to work in the industry for a few years.” A group interview consisted of former KTD students who were self-organized in a mobile car washing service. One of them said, “Although we have a skill gained from [KTD], we are engaged in a car washing service, but we lack business skill and finance.” Another said, “now we have decided to get some experience and finance from the mining industry...we have already started applying to different vacancies.” In both cases, education was narrowly directed toward wage employment rather than self-employment, the most common way of earning a living in these countries.

## Conclusion

We have analysed the curricular strategies of two PPDPs, which served as an intervention to revamp TVET for the inclusion of disadvantaged youths: one in Ethiopia for the education of maintenance technicians with the local actor YTD and one in Zambia for the education of mining workers with the local actor KTD.

The intended target groups at YTD and KTD were different and mirrored the local socio-economic contexts of the two institutions and the involved industries. At YTD, unemployed students who, because of low grades, could not proceed to studies that prepared them for university, poor children, and women were the main target groups. In contrast, the target group at KTD was higher-level students. However, these ambitions seemed to be somewhat optimistic since the number of students with higher qualifications were too few. Therefore, KTD opened for students with lower grades and in disadvantaged situations in life. The new requirements also made it easier for women to enter the mining sector. The shift in target groups of learners in the Zambian case might also reflect the stereotyped labour market and that PPDPs are broad coalitions with possible tensions between actors in terms of interests (cf., Malle, 2015).

The intended curricula for inclusion of disadvantaged students might on one hand be seen as rather weak. In both cases, the curricula were based on demands from industries and closely related to the work processes of particular jobs. In addition, only side events were organized that, for instance, targeted the needs of women. Besides, the education provided no foundational skills. In addition, the lower TVET levels at KTD were not regulated at all. Thus, students had very different opportunities to get access to an appropriate education, partly also expressed as far-reaching gender stereotypical attitudes.

Even so, many students experienced that the education put them in a better position to cope with their life situation, and in some cases even gave hope of entering higher education. It was also telling that some students talked about themselves as “failures” and said that they now had hope for a better life. In view of that, the intended curricula for inclusion might on the other hand be seen as rather strong and in alignment with the PPDPs’ intentions.

These ambiguities point to the complexities embedded in the idea of education for employability and the inclusion of disadvantaged groups within TVET. These include the low status that is even further driven by views that TVET mainly is for those less able, policy demands for early specialization that leads to educational dead ends, gender stereotyping, and specialized work processes, to name but a few. It might very well result in persistent negative attitudes towards TVET.

The two PPDPs are hybrid constructions for the organization of knowledge viewed as essential in the

contexts of application (cf., Billett, 2011; Lundgren, 1983). Partnerships indicate entanglements of ideas. The idea of applied skills as vital for inclusion in the job market within the automotive and mining industries is reflected in the intended curricula of the PPDPs but also in the national governments' TVET policies. This idea is "borrowed" (Steiner-Khamisi, 2016) from a widespread international policy agenda on how to best organize TVET in low-income countries to reduce poverty (Allais & Wedekind, 2020). In addition, students are not passive receivers of educational content. They have agency, they are diverse, and they need a secure job (Billett, 2018). Given the socio-cultural complexities of these societies (Brunori, 2019), there is a risk if curricular development within the TVET sector becomes too narrowly defined, without considering the integration of students' broader needs for a stable situation in life.

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