

## Research Application Summary

### Perception of TVET Students towards the quality of TVET Education in Uganda

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#### Abstract

This study set out to investigate the perception of TVET students towards the quality of TVET training. We used primary data collected from current TVET students and principals of institutes and colleges. We constructed a composite quality score as well as sub-scores using the principal components approach. We employed descriptive and quantitative techniques to analyze quantitative data. The qualitative data were analyzed using thematic and content analysis. The factors revealed to influence the overall perception of quality of TVET were: training equipment, method of training, soft skills, curriculum and content, trainers' capability and public image. Students offering workshopbased courses were less likely to have positive perception towards TVET training. Government should provide up-to-date equipment and technology, trainers be attached to the industry, more time be spent in the lab/workshop than in class, and re-tooling of tutors and/or recruitment of new tutors in order to support the new curriculum. Career guidance structures need to be established both at national and also at school levels. Government should increase funding to TVET in order to support the fundamental changes proposed.

**Key words:** TVET education , student perception, Uganda

#### Résumé

Cette étude visait à étudier la perception des étudiants de l'EFTP vis-à-vis de la qualité de la formation EFTP. Nous avons utilisé des données primaires collectées auprès des étudiants actuels de l'EFTP et des directeurs d'instituts et de collèges. Nous avons construit un score de qualité composite ainsi que des sous-scores en utilisant l'approche des composantes principales. Nous avons utilisé des techniques descriptives et quantitatives pour analyser les données quantitatives. Les données qualitatives ont été analysées à l'aide d'une analyse thématique et de contenu. Les facteurs révélés pour influencer la perception globale de la qualité de l'EFTP étaient: le matériel de formation, la méthode de formation, les compétences générales, le programme et le contenu, les capacités des formateurs et l'image publique. Les étudiants proposant des cours en atelier étaient moins susceptibles d'avoir une perception positive de la formation en EFTP. Le gouvernement devrait fournir des équipements et des technologies actuels, des formateurs attachés à l'industrie, passer plus de temps dans le laboratoire / atelier qu'en classe, et ré-outiller les tuteurs et / ou recruter de nouveaux tuteurs afin de soutenir le nouveau programme. Des structures d'orientation professionnelle doivent être mises en place tant au niveau national que scolaire. Le gouvernement devrait augmenter le financement de l'EFTP afin de soutenir les changements fondamentaux proposés.

**Mots clés:** enseignement de l'EFTP, perception des étudiants, Ouganda

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## Introduction

Rising youth unemployment remains one of the most significant problems facing economies and societies in both developed and developing countries (UNESCO, 2016). The global youth unemployment rate was estimated at 13.1 percent in 2016 up from 12.9 percent in 2015 (International Labour Organisation (ILO), 2016). This translated into an estimated 71 million unemployed youth worldwide in 2016—half a million more than the previous year. At regional level, the Sub-Saharan Africa youth unemployment rate was projected to remain at its 2015 rate of 10.9 percent in 2016 (ILO, 2016). In Uganda, the youth unemployment rate was estimated at 18.6 percent in 2015 with a higher rate estimated among females (22.4 percent) compared to their male counterparts (14.0 percent) (Uganda Bureau of Statistics (UBOS), 2016a). In spite of the fact that Technical and Vocational Education and Training (TVET) is conceived to be more job specific than general education (Oketch, 2007; UNESCO-UNEVOC, 2013; UNESCO, 2015), there is still high unemployment rates among TVET graduates (14.2 percent) compared to their counterparts with no education (7.4%) (UBOS, 2016b).

The 14.2 percent unemployment rate among TVET graduates in Uganda could be explained by both demand and supply effects. On the demand side, this might point to the jobless quality of growth where the economy is: 1) not expanding fast enough to absorb the growing number of TVET graduates; and 2) the economy is growing without generating as much jobs as possible to absorb the growing number of TVET graduates hence jobless growth. On the supply side, it might be the case that the quality of TVET graduates is not sensitive to the labour market requirements. This type of unemployment emerges from skills mismatch

(African Economic Outlook (AEO), 2012). Indeed, in a study of private sector perception of quality of skills among TVET graduates show evidence of both soft and technical skill gaps although technical skills are argued to lack most (Okumu and Bbaale, 2018a).

This paper is concerned with the supply side of the TVET labour market. This is especially so as skill gaps induce frictions in transition into the labour market. TVET graduates skills gap speaks to the quality of training within TVET institutions. Indeed quality education is related to the acquisition of skills and techniques needed to perform at the job satisfactorily with a good combination of leadership, communication, and interpersonal skills (Adrian and Palmer, 1999). Furthermore, high quality training must be practical with real-life and hands-on learning experiences in emerging technologies (Lord, 1997; Haynes and Setton, 1998; Smart *et al.*, 1999; Wilson, 1999).

As such the Government of Uganda through the TVET strategic plan 2012-2022 has sought to strengthen the quality of skills development (MoES, 2011) through: 1) making TVET relevant to productivity development and economic growth; 2) increasing the quality of skills provision; 3) increasing equitable access to skills development; 4) improving the effectiveness in TVET management and organisation; and 5) increasing internal efficiency and resources available to TVET (Ministry of Education and Sports (MoES), 2011). As result, one of the interventions has been the churning out of the Competence-Based Education and Training (CBET) curriculum by the National Curriculum Development Center (NCDC) which emphasises: 1) more practically oriented learning than theory, indeed, for every hour of theory learning there are two hours of practical lessons; 2) soft skills development such as interpersonal skills, Swahili language, customer care, and basic accounts; all intended to help the TVET graduate to be able to trade the acquired skill more innovatively in addition to technical skills (Okumu and Bbaale, 2018b).

The aforementioned innovations have equally been adopted by TVET examinations boards. Indeed, under Uganda Allied Health Examination Board (UAHEB) and Uganda Nurses and Midwifery Examinations Board (UNMEB) which are examination agencies for paramedical sciences while

Uganda Business and Technical Examination Board (UBTEB) administers Business and Technical examinations, have all adopted real life examinations in addition to writing theoretical examinations. Furthermore, the examinations go beyond understanding a student's theoretical ability to netting out their technical skill and soft skill potential through real life projects. Also, under the Directorate of Industrial Training (DIT) the Uganda Vocational Qualifications Framework (UVQF) was adopted. Indeed UVQF is an innovation aimed at issuing competence certifications to not only TVET graduates but also to persons trained on job so as to establish their skill levels. Most importantly though, with competence testing, both a TVET graduate and potential employer are able to tell a TVET graduate's skill level to the extent that that transition into the labour market is smoothened.

In spite of all the aforementioned innovations that are aimed at partly abating youth unemployment through strengthening the skilling program, youth unemployment remains apparent. As such this paper attempts to understand the perception of TVET students about the quality of their training. Only if we are able to understand the quality of training as experienced by TVET students can one be in position to tell whether the reforms in the TVET subsector have been successful or unsuccessful in the skills development process. Therefore, this paper specifically considers TVET students in Technical Institutes and Technical Colleges taking courses in welding and metal fabrication, plumbing, horticulture and electrical installation and principals of Technical Colleges and Technical Institutes to: 1) establish their perceptions towards the quality of trainers; 2) evaluate their perceptions towards the sufficiency of the curriculum content; 3) establish their perceptions towards the quality of equipment and technology used during learning; and 4) assess their perceptions towards the method of delivery during training.

This paper is indeed conceived in the same perspective as Okumu and Bbaale (2018a) which attempts to identify the mechanism of improving skills training in Uganda by evaluating the perception of employers about the quality of TVET graduates. Okumu and Bbaale (2018a) argue that there are apparent technical and soft skills gaps among TVET graduates which are partly attributed to: 1) use of equipment that is not at the technology frontier; 2) insufficient exposure to equipment usage as a result of inadequate practical lessons; 3) insufficiently trained tutors; and 4) poor TVET student attitudes. This study therefore compliments Okumu and Bbaale (2018a) by specifically understanding the perception of TVET students about TVET skills development in Uganda.

Furthermore, Bbaale and Okumu (2018) argue that while secondary students have a positive perception about TVET skilling framework, this may not necessarily result in a secondary school student preferring TVET skilling stream over university skilling stream. In essence TVET skilling framework is second-based when compared to University skilling stream among secondary school students. Therefore to evaluate TVET student's perception about TVET framework could be helpful in identifying areas of improvement in TVET training in ways that can make it competitive as opposed to a second-best alternative to university skilling framework which is the basis of this paper.

While our paper is not the first to study TVET skilling framework, we are the first to study the perception of TVET students about TVET skilling stream in the Ugandan context. For example, Tukundane *et al.* (2015) examined the TVET practices in preparing the youth for the labour market and livelihood opportunities while Heitmann (2012) focused on lessons learned from selected National Qualifications Frameworks in Sub-Saharan Africa. In both papers no specific attention was given to TVET students' perceptions towards the quality of TVET which is the gist of this paper.

## **Materials and Methods**

This study used a cross-sectional sample survey design and quantitative data were collected through semi-structured questionnaire administered to the current TVET students doing a course in any of the following: welding and metal fabrication, plumbing, horticulture and electrical installation. Only

technical institutes and colleges were sampled from each region. In addition to interviewing students, qualitative data were collected from the principal/director or designate at each selected institution. All the five technical colleges in Uganda (Kichwamba in the West; Bushenyi in the West; Elgon in the East; Lira in the North; and Masaka in the Central) were visited.

A stratified two stage cluster sample design was used in sampling the vocational and technical institutes and college students. Stratification was done on regions - Eastern, Central, Northern and Western regions of Uganda. Five institutions were sampled from a list all vocational and technical institutes and colleges in each region using probability proportional to the total student enrolments in 2016. This was followed by taking a random sample of students doing a course in welding and metal fabrication, plumbing, electrical installation and horticulture. Regions where the main technical colleges were not sampled were purposively added to the sampled list.

We constructed a composite quality score as well as sub-scores of the indicator using the principal components approach. We employed descriptive analysis, logit and linear regression techniques to analyze quantitative data. The qualitative data was analyzed using thematic and content analysis.

## Results

The factors revealed to influence the overall perception of quality of TVET training were: training equipment, method of training, soft skills, curriculum and content, trainers' capability and public image. Students offering workshop-based courses were less likely to have positive perception towards TVET training. It is noteworthy that a lower average percentage of TVET students (only 5 percent) reported that TVET teachers focus more on hands-on learning. This finding supports those from another study where a lower average percentage of students agreed that they spent more time in lab/workshop than in class. However, this result contrasts sharply with the submission of principals of colleges and institutes where 65 percent argued that TVET teachers focused more on hands-on learning. However, the Principals of colleges and institutes submitted that the new Uganda curriculum was ill-supported in terms of recruiting new staff, refresher training/re-tooling of existing staff, and effective monitoring of the implementation by NCDC and government funding.

We furthermore undertook a descriptive analysis of the factors that influenced students' choice of TVET. The factors identified by TVET students as most important in influencing their choice were employment opportunities, practical nature of the TVET training, public image of TVET, and career guidance.

It is therefore recommended that; 1) Up-to-date equipment with technology matching those found in the marketplace be availed to the TVET institutions. 2) The trainers in TVET institutions should be attached to the industry so that they are in a better position to blend theory and practice; 3) Trainers should endeavour to focus more on hands-on training to the extent that more time is spent in the lab/workshop than in class. In so doing, TVET curriculum will be more aligned with the work environment; 4) Refresher or re-tooling courses should be mainstreamed in order to support the new curriculum; 5) Recruitment of new tutors that are specialized in the new aspects of the curriculum should be effected; 6) The need to establish career guidance structures both at national and also at school levels in order to bring both students and parents on board to the extent that the image of the TVET skilling track can be improved; and 7) Government should increase funding to TVET in order to support the fundamental changes proposed.

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