

## **Challenges Facing the Entry of Graduates of Technical Training Institutions into Self-employment: The Case of North Rift Region**

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### **Abstract**

*Technical Vocational Education and Training programmes provide significant inputs for young people to become self-reliant, opens the opportunities for innovativeness and discover jobs which fits their choices and competencies. This study examined the Challenges facing the entry of graduates of technical training institutions into self-employment in the North Rift region of Kenya. TVET, if made affordable and widespread, can greatly reduce unemployment rates by giving the youth useful skills for self-employment. The study was guided by the following specific objectives; establish whether technical knowledge and skills acquired prepared automotive graduates for self-employment; establish whether entrepreneurial knowledge and skills learnt adequately prepared automotive graduates for self-employment; establish the effectiveness of industrial attachment placement in imparting hands on skills necessary for self-employment. The study adopted a survey research design. Questionnaires were the main instrument used for data collection. Purposive sampling technique was used to identify the subjects for the study and data gathered was analyzed using descriptive statistical analysis. Technical graduates (N-130) and instructors (N-120) were given questionnaires where an overall total of 230 questionnaires were returned. Ten former students included in the 130 who were self-employed also participated in the study. Initial findings show that, apart from taking entrepreneurship as theory unit, trainees should be attached to various business concerns to learn hands-on practical skills in business start-ups and management. Another finding identified by the study was a limited rate of employment after completing their courses. Further, despite the industrial attachment providing hands-on practical skills to trainees, the attachment was found to be insufficient and should also include experiences in the Jua Kali sector as well. The study recommended that the course content in automotive courses should be reviewed to match the current developments in technology in the motor vehicle industry; TVET institutions and the private sector should work together to create opportunities for comprehensive internship programmes with attachment period of three months replaced with internship period lasting for twelve months after the training, and the government should set up start-up loans for graduates willing to enter self-employment.*

**Keywords:** *TVET graduates, challenges, self-employment, entrepreneurial skills*

### **Introduction**

Many factors hinder the ability of graduates from technical training institutions from entering self-employment in the North Rift. Among these are lack of technical skills in the trade area, lack of entrepreneurial knowledge and skills, unfavorable

economic conditions, lack of start-up capital and lack of hands-on-practical skills in the industry. Other factors such as self-drive, family background and prevailing cultural and traditional occupational practices can influence one to enter into self employment. However, the question the study sought to answer was why are significant numbers of TVET graduates deemed to have acquired the requisite employable skills not entering into self-employment? Can people increase their opportunities to enter into self-employment by acquiring, technical and entrepreneurial knowledge and skills and being attached in the relevant industry? Parker (2004) and Porsche, (2013) assume that being an entrepreneur/self-employed requires a separate skill, potentially different than a skill needed to be an employee. One of the most important features of TVET is its orientation towards the world of work and the emphasis of the curriculum on the acquisition of employable skills.

Studies on self-employment have focused on both microeconomic and macroeconomic aspects. At the microeconomic level, studies analyze the probability of becoming self-employed and its association with unemployment rate and country wealth (Blanchflower, 2000). Macroeconomic Context on the other hand looks at the unemployment rate in order to analyze the unemployment push and prosperity pull effects. Specific human capital theory suggests that individuals possess skills that are directly relevant to their occupation. Brixy & Hessels (2010) opine that an education and work experience in the auto-mechanic field should result in higher economic success for an individual starting an auto-shop compared to an education and experience in music for an individual trying to start the same auto shop. Human capital investments have a positive relationship with self-employed income (Parker, S. & Van Praag, 2007). The relatively sparse research on the challenges facing graduates of technical training institutions who wish to enter self-employment has left room for further research. First, much of the research has focused on the economic aspects of self-employment compared to being employed at one end of the continuum or on the pushing forces to self-employment. Second, other studies done show that training and experiences are not the only factors that can drive one into self-employment, but other variables such as family background, personal characteristics, age and gender.

UNDP (2013) observes that in Sub-Saharan Africa, self-employment accounts for 66% of total employment in Kenya, 83% in Mali and 85% in Madagascar and Ghana respectively. Despite these numbers, there are still few TVET graduates who engage in self-employment.

Therefore the current study will help us understand the challenges that TVET graduates wishing to enter self-employment face specifically the component of

technical knowledge and skills acquired, entrepreneurial knowledge and skills acquired and hands-on experience gained during industrial attachment.

### **Statement of the Problem**

Unemployment among Kenya's youth stands at 26.17% which is among the world's highest (World Bank, 2018). Kenya's ability to create new jobs has lagged behind population growth thus denying the country the opportunity to put its growing labour force to productive use. This has led to the development of the national employment policy to address rising youth unemployment which has been blamed for insecurity, radicalization and disillusionment among young Kenyans. Recent initiatives by the government of Kenya to launch the Youth Enterprise Development and Uwezo funds is aimed at empowering the youth to venture into self-employment as job creators. The government also had initiated a working relationship with private sector to provide work place experience for unemployed youth to increase their employment opportunities either as fully employed or self-employed.

The overall research problem addressed in this study is that despite the government's efforts and an increase in the number of trainees in the automotive field joining the unemployed in Kenya's labour market, few are motivated to enter into self-employment. To change this scenario, the national government, county governments and private sector should partner to set up and administer revolving funds and training to TVET graduates to enable them enter self-employment and contribute to national development and wealth creation. Public tertiary institutions with technical and vocational programs have played a small role than might be anticipated in preparing workers for informal sector employment (Atchoarena, 2001). If the national goal of promoting youth enterprise through the entrance of TVET trainees into the informal sector is not urgently reviewed, then the whole purpose of TVET training in self-reliance and poverty reduction would be defeated. This in the long run would impact negatively on self-employment and job creation. Scholars including Limatainen, (2002), have shown that training offered in public TVET institutions is considered theoretical in focus without sufficient opportunities for practice and is biased towards formal wage sector. Many TVET systems fail because they focus on the needs of the formal economy contrary to a common tendency distinguishing the formal economy from the informal economy and developing different approaches for each of these sectors (Rioust, 2009). Although training continues to be carried out in these institutions with trainees expected to join the Jua kali sector upon completion of their courses by virtue of skills acquired,

challenges facing TVET graduates' entry into the sector have not been fully assessed (Rioust, 2009).

According to Johanson and Adams (2003), reveals that the existing public technical and vocational education and training (TVET) in Kenya suffers from critical problems including the decline in quality, lack of relevance to occupational and technological realities, under enrolment and underfunding. However, the government in the recent past has put emphasis in TVET. This suggests that although Kenya faces a serious shortage of employable skills, the future remains promising because the importance of competency based training and skills tailored towards industry needs cannot be overemphasized as it is the expertise and technology that differentiates between the developed and the developing countries like Kenya. However, since TVET is designed to prepare individuals for self-employment and wage employment, it was necessary to establish the challenges facing TVET graduate's entry into self-employment. Youth unemployment in Africa has become a major development issue and they account for 60% of the unemployed (AfDB, OECD, UNDP, UNECA 2012). Large numbers of young people who are not in employment, training, or education are a threat to national security concern as witnessed in Kenya during the post-election violence of 2007/2008 general elections. Unemployed youth are likely to be recruited into armed gangs and are also easy targets for illicit activities such as drug trafficking, cyber -crime (World Bank, 2008). Youth unemployment in Kenya and other African countries is compounded by substantial levels of underemployment and poor quality jobs in the informal sector. This situation presents the youth as needy, helpless and unprepared to make any contribution to national development affairs and is consequently marginalized in national state policies and has a weak legal position (Adams, 2008). Thus this study seeks to assess the challenges faced by TVET graduates in their journey towards self-employment and decent occupations. For a long time low status syndrome has been ascribed to TVET and this has negatively affected occupational choices of TVET graduates as most would prefer white collar jobs. However, the situation may change if sustainable efforts are made to upgrade vocational institutions and improve on employable skills through provision of in modernization of equipment in TVET institutions.

### **Purpose of the Study**

The research was conducted to identify the challenges faced by graduates of technical training Institutions wishing to join self-employment in the North Rift.

### **Specific Objectives of the Research**

1. Establish whether technical knowledge and skills acquired during training at TVET institutions adequately prepare automotive graduates for self-employment.
2. Establish whether entrepreneurial knowledge and skills acquired at TVET institutions adequately prepare automotive graduates for self-employment.
3. Establish the effectiveness of industrial attachment placement in imparting Work – place experiences necessary for self-employment.

### **Significance of the Research Study**

The research study is expected to make a good understanding of the challenges of self-employment. It will also highlight the factors that motivate or hinder graduates of TVET institutions' entry into self-employment. It will also enable all stakeholders to recognize whether self-employment policies and youth empowerment programmes in place are relevant towards addressing the high rate of unemployment among the youth from Technical Training Institutions in Kenya. Besides that, this research provides useful literature and knowledge for future reviews based on the theoretical views and opinions of several cited authors from the world of academia that are included in this research paper.

This research study is also relevant especially when it seeks to make policy recommendations as an aspect that will help in building institutional capacities and human capabilities.

### **Research Methodology**

The study area was the North Rift region and specifically centered on three counties of Nandi, Uasin-Gishu and Trans-Nzoia where the three technical training institutes, namely Kaiboi Technical Training Institute, Rift Valley Technical Training Institute and Kitale National Polytechnic are located. The respondents in this research all came from the study area.

### **Research Design**

In this study, survey research design was the methodology chosen. This design was appropriate for the study as it enabled the researcher to gather facts on the challenges facing graduates of technical Training institutions wishing to enter into

self-employment. The sample size for the study was 120 TVET instructors as the respondents drawn from automotive and mechanical departments in three technical training institutes, 70 TVET automotive graduates and 60 trainees in their final year of study at diploma and certificate level. Thus, the total sample population was 250 respondents. Purposive sampling technique was used to select TVET instructors and trainees in their final year of study since it was only a particular kind of people who had the needed information. With this method there was a possibility to reflect the descriptive comments about the sample. The method was chosen because it has the element of cost and time-effectiveness. Along with questionnaires that were given out to respondents for the statistical representation of the findings in the study, interviews with the respondents and a few experts in this field was also conducted. The purposively sampled respondents were asked by the researcher for consent and approval to answer the questionnaire until the desired number of respondents which is 250 is reached. The opinion of informants who were previously trainees and now in self-employment was also sought in this research through interviews to provide explanations regarding the respondents' behaviours and practices regarding self-employment. Data gathered was analyzed using descriptive statistical analysis. The arithmetic mean was used at a decision point of 2.50. The implication was that a mean value of above 2.50 would be considered as 'agree' and values below 2.50 as 'disagree'.

## **Findings**

### **Technical Knowledge and Skills**

Firstly, the study sought to establish TVET institution's view on training offered at the institutions with regard to the job market. Respondents were asked to rate their opinion on the provided statements. Majority of the instructors were of the opinion that the course content in automotive courses should be revised to match the developments in technology in the motor vehicle industry.

Table 1

*Technical Knowledge and Skills*

<b>Characteristic of Automotive Course</b>	<b>Mean</b>	<b>Std. Dev</b>	<b>Skew.</b>	<b>Kurt.</b>
<b>Course content in automotive courses should be revised to match the developments in technology in the motor vehicle industry</b>	4.26	.543	.071	-.491
<b>Training offered gives graduates sufficient practical experience to work in the Jua Kali sector as independent persons</b>	3.57	.565	-.362	1.482
<b>Instructors need periodic refresher courses on the latest car diagnostic and service technology</b>	3.37	.664	-.298	.040
<b>Trainees need more time for practical lessons than is currently allocated</b>	3.22	.816	-.704	.821
<b>Knowledge and skills offered in the curriculum are relevant to the needs of the informal sector</b>	3.10	.713	-.852	1.834
<b>Knowledge and skills offered in automotive curriculum are relevant to the job market</b>	3.00	.871	-.792	.420
<b>Graduates may need re-training after being employed</b>	2.73	.745	.055	-.564
<b>The college automotive workshop are equipped enough to provide quality practical training to trainees</b>	2.67	.624	.143	.742
<b>The industry rates TVET trainees highly</b>	2.66	.612	-.491	.092
<b>Graduates often find employment after completing their courses</b>	2.43	.707	-.362	1.211

Source: Author, 2015

Further results from graduates on technical knowledge and skills were as provided below. The graduates were asked to rate their knowledge and experience with the given statements. The results are as shown in table 2.

Table 2

*Technical Knowledge and Skills of Final Year Trainees and Graduates*

<b>Technical Knowledge and Skills</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Rank</b>	<b>Skewness</b>	<b>Kurtosis</b>
<b>Have good basic knowledge and skills of vehicle assembly</b>	3.97	1.455	1	-.634	.468
<b>Good knowledge of engine repair and testing</b>	3.85	1.236	2	-.579	.343
<b>Good knowledge and skills of good metal processing</b>	3.62	1.856	3	-.365	.302
<b>Good knowledge of manual and automatic transmission systems</b>	3.62	0.986	4	-.835	1.128
<b>Good practical skills and knowledge of vehicle service and body work repair</b>	3.59	0.856	5	-.937	.432
<b>Training met my expectations</b>	2.42	0.563	6	-1.075	.631

*Source:* Author, 2015

Graduates and students in their final year of study agreed that they had good basic knowledge and skills of vehicle assembly and supported by respondents with a mean of 3.97.

The respondents however, felt that the training did not meet their expectations. Interview results from key informants already in self-employment indicated that the course offered had not been satisfactory to equip graduates with necessary entrepreneurial skills that help them to create self-employing business. Some of the reasons for the problems were found to be: inadequate time given and lack of paying due emphasis for the course and trainees’ background information about entrepreneurship education at elementary or secondary school level are some of the aforementioned problems reported by the respondents. They further indicated that they had to seek addition advice elsewhere on how to be self-employed.

**Entrepreneurial Knowledge and Skills**



There was also need to establish the adequacy of entrepreneurial knowledge and skills imparted at the TTI. Respondents were asked to rate their opinions on a scale of 1-5. Results are shown in Table 3.

Table 3

*Entrepreneurial Knowledge and Skills of Instructors*

<b>Entrepreneurial knowledge and skills of instructors</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Rank</b>	<b>Skewness</b>	<b>Kurtosis</b>
<b>Trainees are confident enough to enter into self-employment in their areas of their specialization</b>	4.38	2.456	1	-.823	1.565
<b>The annual TVET fair has had a positive impact in terms of motivating trainees to venture into self-employment</b>	4.31	2.123	2	-1.185	2.898
<b>Entrepreneurship training offered in TVET institutions has a positive impact on graduates upon completion of their training</b>	4.25	1.862	3	-.692	.608
<b>Trainees can present a fundable business proposal</b>	4.12	1.526	4	-.790	1.076
<b>Trainees from TVET institutions are rated highly by the industry on managerial, team work ability, self-drive, punctuality and self-discipline after attachment</b>	4.06	1.325	5	-1.286	.957
<b>Availability of a collaborative program to engage industry players in automotive industry to talk to trainees</b>	3.97	1.122	6	-.093	-1.157

The instructors majorly agreed that trainees are confident enough to enter into self-employment in their areas of specialization. Trainees were found to be confident enough to enter into self-employment in their areas of specialization.

## Results from Graduates on Entrepreneurial Knowledge and Skills

Table 4

*Entrepreneurial Knowledge and Skills of Final year Trainees and Graduates*

<b>Entrepreneurial Knowledge and Skills</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Rank</b>	<b>Skewness</b>	<b>Kurtosis</b>
<b>Good interpersonal skills</b>	4.21	1.364	1	-1.305	4.335
<b>Have good knowledge and skills with regard to cultivating new friends, taking interest in new products, seizing a new opportunity that benefits</b>	4.01	1.145	2	-.542	.161
<b>Envisage starting own business in future</b>	3.25	1.012	3	-1.025	2.774
<b>Usually updates oneself with business-related issues in automotive industry</b>	3.23	0.985	4	-1.178	2.446
<b>Often seek advice of more than two people before making a major decisions</b>	3.18	0.754	5	-1.406	4.089

Respondents were however undecided on starting own business in future. They were also unsure of updating themselves with business-related issues in automotive industry and seeking advice of more than two people before making a major decision. Results from key informants already in self-employment acknowledged the impact of entrepreneurial skills before going into self-employment. They agreed that the entrepreneurial knowledge they got however little has helped them continue with self-employment.

### **Industrial Attachment Effectiveness**

The study further sought to examine the effectiveness of industrial attachment schemes. Instructors were asked to rate their opinion on students' performance and experience after the attachment.

Table 5

*Industrial Attachment Effectiveness*

<b>Industrial attachment effectiveness</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Rank</b>	<b>Skewness</b>	<b>Kurtosis</b>
<b>Industrial attachment placement is effective in imparting hands on practical experience to trainees</b>	4.25	2.458	1	-1.71	7.831
<b>Trainees possess basic practical skills to identify and use correctly different workshop tools and equipment after attachment period</b>	4.21	2.598	2	-1.46	5.51
<b>Trainees should be attached to the Jua Kali sector as well</b>	4.13	2.156	3	.079	-1.09
<b>Trainees possess practical experience and skills to disassemble, rebuild and test the engine and other systems</b>	4.02	2.789	4	-.545	.898
<b>Trainees are able to handle and use electronic engine diagnostic equipment and interpretation of various codes and engine data</b>	3.95	1.956	5	-.727	1.257
<b>Trainees possess knowledge of spare parts specification and procurement</b>	3.77	1.876	6	-.349	-1.17
<b>Trainees follow guidance of supervisors, operation manuals and safety standards</b>	3.74	1.977	7	.138	-1.52
<b>Trainees have good practical experience of job planning and evaluation of workshop organization</b>	3.70	1.865	8	-1.406	4.089
<b>Trainees show good team work ability</b>	3.70	1.764	9	-1.155	1.362
<b>Trainees show good skills of quality control</b>	3.56	1.752	10	.242	-1.385
<b>Trainees prefer being attached to large formal establishment</b>	3.50	1.652	11	-1.129	2.425

From the results, industrial attachment placement was found to be effective in imparting hands on practical experience to trainees with a mean of 4.25. Instructors were also of the idea that trainees should be attached to the Jua Kali sector as well and that they possess practical experience and skills to disassemble, rebuild and test

the engine and other systems. They were however of the idea that trainees did not show good skills of quality control and they did not prefer trainees being attached to large formal establishments. These were ranked last with a mean of 3.56 and 3.50 respectively.

Table 6

*Industrial Attachment Effectiveness on Final-year Students and Graduates*

<b>Industrial attachment effectiveness</b>	<b>Mean</b>	<b>Std. Dev</b>	<b>Rank</b>	<b>Skewness</b>	<b>Kurtosis</b>
<b>Possess basic practical skills to identify and use correctly different workshop tools and equipment</b>	4.54	1.945	1	-1.71	7.831
<b>Possess good practical experience to diagnose and repair latest models of cars in the market</b>	4.49	1.845	2	-1.46	5.51
<b>Acquired practical experience and skills to disassemble and inspect the condition of engine parts</b>	4.48	1.798	3	.079	-1.09
<b>Acquired practical experience and knowledge of spare parts specification and procurement</b>	4.32	1.786	4	-.545	.898
<b>Have good practical experience of job planning and evaluation</b>	4.28	1.652	5	-.727	1.257
<b>Have good team work ability</b>	4.14	1.528	6	-.349	-1.17
<b>Have good skills of quality control</b>	4.02	1.458	7	.138	-1.52
<b>Follow guidance of supervisors, operation manuals and safety standards</b>	3.94	1.689	8	-1.406	4.089
<b>Good practical supervisory and customer care skills</b>	3.87	1.235	9	-1.155	1.362
<b>Good knowledge of various legal requirements of a business entity</b>	3.75	1.163	10	.242	-1.385

## Conclusion

The study aimed at identifying the challenges facing these graduates. The results show that the course content in automotive courses is a challenge and should be reviewed to match the developments in technology in the motor vehicle industry. Another challenge identified by the study was the low rate for graduates in finding employment after completing their courses. Further, despite the industrial attachment providing practical skills to trainees, the attachment was found to be inadequate and should also include the Jua Kali sector as well.

## Recommendations

Both industry and TVET institutions should work together to create opportunities for comprehensive internship programme for students and the internship programme period to be twelve months long instead of six month or three months

Since internship provides chances to apply theory based learning into practice, the organization should be more concerned about the students' skill development especially creativity based learning, projects and presentation skills, team working activities and managerial skills are some important skills to be inculcated and developed.

In order to boost the image of TVET in self-employment, the government and private sector partners should finance those TVET graduates in self-employment who have proven successful operations of their businesses.

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