

***Technical Vocation Education and Training (TVET) in Changing Times, a Critical View of Prior Learning as a Link to Entrepreneurship and Employment***

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**Abstract**

For many countries, lifelong learning is a key component to building the human capital that is innovative and competitive in the fast-changing global economy. Most people's learning take place through non-formal and informal means, whether at work, home, or elsewhere. In many developing countries with their high school dropout rates, majority of people acquire workplace skills through informal means. Education and training play a fundamental role in Kenya's development, it is not possible for any country to achieve sustainable economic advancement without a substantial investment in education and training. People improve the quality of their lives if their productivity improves by adopting entrepreneurship and uptake of technology. Artisans need to be trained to have an entrepreneurial attitude, measured by their opportunity recognition, risk cognition, start-up skills and networking. Entrepreneurial abilities are reflected by technology absorption, opportunity start-up and human capital. An entrepreneurial attitude is a distinctive strategy and implies process innovation, product innovation, high growth, risk capital and internationalisation. This research paper critically views prior learning as a link to entrepreneurship and employment by presenting analysed data collected over a three-month period from *Jua Kali* artisans operating in the Eastlands of Nairobi, Kenya. The analysed data presents *Jua Kali* artisans' business management skills and how it affects their Performance. This research paper is a critical view of prior learning as the missing link to entrepreneurship and employment creation in a changing world.

Keywords: Prior Learning, Informal Sector, Technical Vocation Education and Training, Entrepreneurship, Employment

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## **Introduction**

With more jobs being created in the informal sector due to its expansion coupled with the fast-growing technological landscape. There is need to provide artisans with reskilling and upskilling pathways towards new employment. Identification of skills gaps, development and honing of these skills by government and other skills providers by embracing Recognition of Prior Learning (RPL) will improve artisan's skills since most of them have acquired their skills through apprenticeship in the informal sector. Entrepreneurship and IT skills are often ignored by skills providers and yet they are crucial and necessary in the growth of the informal sector businesses. This research is a critique of prior learning as a link to entrepreneurship and employment.

### **1. Background to the Study**

People are learning constantly wherever they find themselves thus they accumulate knowledge skills and competencies throughout their lives beyond the formal learning settings such as vocational learning institutions, schools, and universities. There is need to establish assessment systems of what people have learnt outside educational systems, the modern working environment requires lifelong learning in different contexts and diverse situations (Boahin, 2018: 26-33). Internationally, there is a concern about youth unemployment and the need to enhance skills training among the youth to enhance their employability (Niall, 1997). The ILO (2020;1-12) has raised this concern and asked the international community to come up with policies aiming at generating decent work opportunities for all with an emphasis in facilitating the transition from education and training to work for young people. In most cases learning is deemed to take place in formal settings and environments, but there is also a lot of learning taking place in informal setups (Magidi and Mahiya, 2021:5-12). There are people who cannot put their acquired learning into full use because they are unable to prove their capabilities easily to others especially those who work in the informal sector. Workers in the informal sector neither have income nor the time to afford training, their potential in productive capacity is reduced (Bardak and Rosso, 2019). Recognition of informal and non-formal learning does not create human capital, but recognition helps the stock of human capital to be more visible and valuable to the wider society. Recognition provides validation of competencies which in turn facilitate entry to formal learning, it provides greater visibility and value of the outcomes and competencies of people in the labour market. It makes it easier for workers and employers to match skills to jobs (Braňka,2016;18-26). Recognition involves identification and documentation, ascertaining/establishing what someone knows or can do, validation and finally certification. There is evidence that there is a skill-mismatch and skills gap in many countries (Jayaram, et al, 2017:55-75). However very little has been done in the case of Kenya to identify the skill mismatches and the skill gaps regarding the requirements of industries.

#### **1.1. The SDGs and Technical Vocational Education**

One path to gain skills is through Vocational Education and training (TVET). Vocational education through TVET is understood as training for skills development relating to a variety of fields, for instance, for services and production. TVET can take place at secondary, post-secondary and tertiary as part of lifelong learning as asserted by UNESCO-UNEVOC (2020:12-41). Under the millennium development goals (MDGs), the world achieved tremendous progress. However, some MDGs have not been achieved and hence the emergence of Sustainable Development Goals (SDGs). The informal sector encompasses a diverse and huge phenomenon in a variety of forms across many economies, it constitutes 90% of SMEs

worldwide. It is a major characteristic of labour markets worldwide employing millions of people in conditions of informality (ILO, 2021). Many of the SDGs can be achieved through SDG number 4 (quality education) and SDG number 8 (decent work and economic growth) through quality education (Srinivas, 2021). The technical and vocational education can address the issue of skills shortage to achieve the SDGs. With right policies and skill strategies, TVET can be a means of transmitting the right mind-set and attitude among TVET trainees (ILO, 2021).

## **1.2. Technical and Vocational Education and Training in the Times of COVID-19**

Technical and Vocational Education and Training (TVET) was affected during the COVID-19 pandemic, 1.2 billion students were affected by school closures, they had to take classes remotely (Hoftijzer et al, 2020). However, the learning alternatives which were explored, could not replace the face-to-face classes. Given that TVET emphasizes on work-based learning and acquisition of practical skills. Learning outside the classroom was affected by lack of access to electricity, internet connectivity, devices, or media, learning platforms and the ill preparation of instructors and student for remote learning (ILO and World Bank, 2021). The TVET students remote learning got complicated since TVET learning focuses on practical skills and work-readiness which made remote learning particularly challenging. Practical learning requires learning-by-doing, in school-based workshops and laboratories or through hands-on experience at the workplace (Hoftijzer et al, 2020). During the pandemic, the digital divide between rural and urban areas was noticed, learners living in remote areas did not benefit from remote learning due to connectivity issues and lack of devices. Effective distance learning platforms and quality of pedagogical resources to support remote learning and instruction were lacking in TVET institutions especially deploying them in a national scale. TVET instructors were not prepared for remote instruction due to lack of preparedness besides low digital skills (ILO and World Bank, 2021). The sudden swift from face-to-face learning to online learning and the noticed inconsistencies in access to distance learning modules have the likely hood of deepening inequalities among learners in terms of access and quality of training.

## **1.3. Impact of Covid 19 on the Informal Sector**

Due to the containment measures put in place by various governments to reduce the spread of COVID 19, about 2 billion workers and business owners in the informal economy stopped working as working remotely was not an option. At the same time, they were faced with the dilemma of dying from hunger or from the virus (ILO, 2020a). It is estimated that by April 2020 close to 1.1 billion workers in the informal sector lived in countries that had a full lockdown and an additional 304 million in countries that had a partial lockdown. These workers represent 67% of informal sector employment. With full, partial, and weak measures to control the spread of covid 19, estimates show that 76% of employment in the informal sector worldwide was significantly affected by the lockdown measures (ILO, 2020a).

The covid 19 pandemic affected small craftsmen such as mechanic, carpenters, fabricators etc who constitute 40% of total informal employment worldwide, but more than two thirds in developing countries (ILO, 2020b). Measures by some governments to support income and sustain economic fabric were out of reach for business owners and worker in the informal sector. Without social protection, legal recognition, provision of stimulus packages or business subsidies, tax breaks and other income protection measures, the informal sector was severely affected by the pandemic. The informal economy plays a great role in skills training for many young people, whom it is the only way to acquire relevant skills for the world of work (ILO,

2020b). The covid 19 pandemic slowed the informal sector economy growth and the acquisition of skills.

## **2. The Informal Sector and Skills Training**

The informal sector is directly and indirectly addressed in the Structural Development Goal number eight which addresses “*sustained inclusive and sustainable economic growth full and productive employment and decent work for all*”. It is estimated that half of the world’s population lives in poverty (US\$2 a day). In many places having a job does not guarantee one the ability to escape poverty, many people work in substandard working conditions which often are related to poverty, inequality, and discrimination (ILO, 2020c). Growth of employment in the informal sector is dependent on rates in territorial, cross-industry and intersectoral employee mobility between formal and informal sectors which affect the sustainable development of the economy and the labour market. The study of territorial and dynamic features of employment in the informal sector of regional labour markets is very important, because the growth of the informal sector has an impact on the productivity, living standards, income and tax revenues and leads to the growth of the informal sector employment (Karpushkina et al, 2021). The informal sector constitutes about 80% of the total workforce in Kenya (Okungu and McIntyre, 2019), the Mercy corps estimate the informal sector to constitute 83.6 % (14.9 million workers) of the working population (Mercy corps, 2019). One of the main activities taking place in the informal sector in Kenya is skills training.

### **2.1 Recognition of Prior Learning (RPL)**

Many people are disadvantaged in the absence of recognised qualifications in getting decent jobs, accessing further education, even though they may have necessary skills and knowledge. Recognition of prior learning (RPL) can help skilled people who don’t have any recognition for their skills acquire formal qualifications that match their skills and knowledge. Once skilled people are certified for their skills and knowledge, they can improve their employability, social inclusion, and self-esteem. Increasing the prospect for inclusion in the labour market helps employers access skilled personnel and the government have better assurances of competitiveness, economic growth, social inclusion, and equity, many countries have implemented RPL systems (Ashwani, 2015). Without recognized qualifications, many young people face serious disadvantages regarding finding decent jobs, migrating to other regions, and accessing further education. Most formal education systems do not recognize nonformal and informal learning. Lack of recognition of skills acquired through nonformal and informal means hinders human capital development and leads to its under-utilization.

Prior Learning (RPL), also known as Prior Learning Assessment and Recognition (PLAR) is a process used to identify, assess, and certify RPL candidate’s knowledge, skills and competencies acquired in non-formal or informal learning, such as work or life experiences, against prescribed standards or learning outcomes (Republic of Kenya, 2020). Most countries are recognizing that learning is continuous, it does not take place in the classroom alone but in sector wide and sector deep both in formal, informal, and non-formal settings. The concept of RPL is defined differently in different countries due to the differences in usage and strategies of implementation (ILO,2018). From the beginning of the current millennium, both in developing and developed countries Recognition of Prior Learning (RPL) has been receiving renewed attention. Due to globalization and migration, there is increased need for mechanisms for recognition of qualifications across borders. There is an increased emphasis on lifelong learning, as more and more people desire to upgrade their skills set for relevance. Attention to

the informal economy has given rise to renewed interest in RPL and its potential to help in the move towards formalization (ILO, 2018).

Recognition of prior learning (RPL) is the process used in identifying, assessing, and certifying a candidate's knowledge, skills and competencies acquired in a non-formal or informal learning, such as from work or life experiences against prescribed standards or learning outcomes (Republic of Kenya, 2020). Recognition of prior learning is multi-contextual, mobility, entry into a learning institution for further learning, personal development, advancement in the workplace credit award to a qualification and self-esteem. People who fit in the RPL are; retirees, people in the informal sector, youth out of school, educated people, asylum seekers, and people who have never been to school. Recognition of Prior Learning process considers one's existing work experience, existing qualifications, and life skills experience. Underpinning the RPL is the concept of lifelong learning which is active, voluntary, ongoing, and self-motivated pursuit of knowledge to develop oneself to be able to solve problems in life and employment (ILO, 2015).

## **2.2 Unemployment in Kenya**

Kenya has made some notable progress in poverty reduction in the last two decades, more needs to be done. The reduction of poverty levels from 52.3 % in 1997/98 to 36.1 % in 2015/16 is commendable, these poverty levels are still too high, more efforts are needed to reduce it further. The poverty rate among Kenyan youth is estimated at 29.1% (Kippra, 2020;1-3). The United Nations defines youth as the age-group between fifteen and twenty-four inclusive, which is the mostly used definition in employment statistics. Youth is also understood as the transition from dependence of childhood to adulthood independence. Youth in relation to education and employment is a person leaving compulsory education and finding his first job. An unemployed person is one who has not worked for one hour during the short reference period and is available for and actively seeking work (UN,2020; ILO, 2020:18-78).

Kenya's population below the age of 35 years is estimated at 75%, which is an asset if trained in skills (KNBS, 2019). Kenya's unemployment rate is estimated at 22.2% for those in the age group between 15 and 24 years (UN, 2017). From the MoEST- National Education Sector Plan (2015), 89% of all those entering the labour market have no formal training and hence lack skills, this constitutes 1.2 million youth who enter the labour market without any formal training or skills.

## **2.3 Recognition of Prior Learning (RPL) in Kenya**

In Kenya there are concerns about skills mismatch between the skills youth acquire and labour requirements which make it difficult for the young people to succeed in the world of work. The National Industrial Training Authority (NITA) has been conducting RPL assessment since 1959, under certain local and overseas training schemes for artisan trade tests, craft, and technician certificate courses, identified leadership courses and various apprenticeships for workers already engaged in Industry. This policy is expected to enable the national coordination and harmonization of RPL activities focusing on research, support, awareness and publicity, advocacy, and the mainstreaming of RPL in the Kenyan Education and Training Legal Framework.

The Kenya National Qualifications Authority (KNQA) as an institution is established under the Kenya National Qualifications Framework Act No. 22 of 2014. Section 5 (1) and Section

8 (1) of the KNQF Act. This authority is tasked with the co-ordination, supervision, development of policies on national qualifications at the same time develop a system for assessment of national qualifications. The authority is also tasked with the recognition of attainment of competencies including skills, knowledge, attitudes, and values, promote the recognition of national qualifications internationally. Prior learning is a response to equitable education and training system that facilitates access, mobility, progression, and fair chances to the disadvantaged, discouraged and traditionally marginalized groups.

Many young people in Kenya end their formal education prematurely and end up lacking foundational skills necessary to succeed on the job. Only 17.97% of Kenya Certificate of Secondary Education (KCSE) graduates proceed to universities and 82.03% join Technical Vocation and Training (TVET) institutions and the informal sector as apprentices. In 2019 a total of 689,007 candidates sat the KCSE and out of this number only 18% (125,463) attained a grade C+ and above and thus secured placement in universities as government-sponsored students. The remaining 563,544 (82%) were eligible for placement in TVET institutions to pursue diploma, craft certificates and Artisan Certificate levels. In 2020, a total of 737,527 candidates sat the KCSE examination, 142,540 (19.3%) attained the minimum university entry grade of C+ of which 128,073(17.4%) were placed to join public universities and 6,617(0.9%) TVETA institutions. The remaining 602,837 (81.7%) were not placed (Oduor, 2021), it is normally assumed that they will join artisan and craft courses. However, TVET courses do not attract many students, the majority join the informal sector directly and acquire skills through apprenticeship. Historically, most Kenyans desire to join universities so that they attain qualifications that will enable them secure white-collar jobs rather than join TVET institutions (Momanyi and Riechi, 2017).

The government of Kenya allocated kshs 300 million in the year 2018/2019 for loans to TVET applicants to apply and get allocated for courses of their choices in TVET institutions in Kenya. In the year 2019 only 6,199 applicants expressed interest in getting a TVET loan from the Higher Education Loans Board (HELB). The uptake of this allocation is very low, only 10% is allocated each year meaning that a whopping kshs 270 million remains unused (Ainea, 2019). Graduates from high school prefer to join the informal sector to gain skills through apprenticeship, it is estimated that 90% do not proceed to university nor join TVET institutions but join the informal sector directly.

#### **2.4 Technical and Vocational Education and Training Authority (TVETA)**

Technical and Vocational Education and Training Authority (TVETA) has developed Prior Learning Assessment and Recognition (PLAR) standards and guidelines. These guidelines will now allow individuals, especially the uncertified artisans in the *Jua Kali* sector to gain recognition of their prior learning skills and experience. Most of the artisans in the informal sector have acquired and perfected various skills through apprenticeship and ‘learning on the job’ without pursuing any formal training in a learning institution. This means that they do not have certificates that can enable them to seek employment in the formal sector or even register companies. However, now with the development of PLAR standards and guidelines, the skilled labour in the informal sector will be brought into the mainstream labour market (Republic of Kenya, 2020).

## **2.5 Adaptation of TVET in Changing Times**

UNESCO (2002) refers to TVET as those aspects of the training in addition to general education that involve the study of technologies and related sciences to acquire practical skills, attitudes understating, and knowledge related to various occupations in the economic and social life. Way back in 2013, the ILO, UNESCO, the European Union, and the African Union policymakers recommended that all countries should establish RPL (ILO, 2015). Studies from many developing countries with a high school dropout rate, have shown that majority of young people, acquire workplace skills by informal means rather than through formal means. It is reported that, the gross enrolment ratio for upper secondary education in low-income countries is 29 per cent, of which only five per cent represent technical and vocational education (ILO, 2015).

The sweeping social changes taking place across the world caused by unprecedented economic and social changes and the glowing influence of the effects of globalization is creating a new picture of the current and future world. There is a demand for a shift from quantifying economic returns as a criterion for success to emphasis on securing productive decent work for all (OED, 2016). Since the last decade of the 20<sup>th</sup> Century, there has been numerous and diversified initiatives to develop education in almost all countries. Most countries have come up with rigorous reforms and major developments at all levels of education (ILO, 2013). The United Nations has adopted several global education initiatives to help develop societies and economies, among the initiatives is the Education For All (EFA), sustainable development goals (SGDs) and the Education for Sustainable Development (ESD). The UN has contributed to the development of Private-Public Partnerships (PPP) and the Life-Long Career Guidance for all (LLCG). There are two main forms of education that have a particular role to play in this context: Technical Vocational Education and Training (TVET) and Entrepreneurship Education (EPE) (UN, 2020).

## **2.6 Skills in the Informal Sector**

Skills can be acquired through different pathways depending on the level of education, vocational training or apprenticeship. The global human capital landscape is becoming more complex and evolving more rapidly, partly because of the new wave of technological innovations and the uncertainty surrounding the transition from education to employment (World Economic Forum, 2016). Skills training is a necessary requirement for globalization and for the technological change needed to enhance technical training to keep step with the course of demands for highly skilled people (European Commission, 2017). Skills are malleable; they can be developed through practice and reinforced through daily experiences, it is possible to change to other skills or acquire others over the course of a lifetime (OECD, 2016).

The fourth industrial revolution is sweeping the world and we are on the verge of the 5<sup>th</sup> industrial revolution. Reports show a mismatch between skills sought by employers and those the youth have even though there is an increased access to education (World Bank, 2016). Young people are disadvantaged for they are not being equipped with skills relevant to the private sector nor entrepreneurial skills. The modern age jobs require complex problem solving as core skill by global trends. It is estimated that beyond the year 2020 about 40% of the world economy will be supported by digital platforms (AfB, 2018).

To unlock the potential of the informal apprenticeships, there is need to update the master trainer’s skills to be able to improve their training. Master trainers lack information, capacity and incentives that are necessary to adapt to new workplace practices. This leads to apprentices learning obsolete workplace practices. There is need to recognise informal apprenticeships by the formal training systems. Due to lack of recognition, informal apprenticeships offer limited labour market mobility. This challenge can be solved by integrating informal apprenticeships into formal training system by allowing for the re-engagement of skills with further education and training (World Bank, 2020).

The informal sector in Kenya employs approximately 80% of the total workforce, 60% are youth between the age of 18 and 35 years. Of this, 50% are women (Republic of Kenya, 2017; Murunga et al, 2021). The formal sector cannot absorb the increasing number of job seekers. Therefore, it has emerged as an alternative source of employment to the increasing number of young people moving from educational institutions. The total workforce is estimated to be 14.9 million workers of the working population (Mercy Corps, 2019). One of the main activities taking place in the informal sector in Kenya is skills training. The informal sector expanded by 6% creating 14.5 million jobs in 2020 down from 13.3 million jobs in 2013. Almost two thirds of these jobs were created in the rural areas (KNBS, 2018). Many basic education graduates and dropouts enter jobs that have very little prospects. If training is offered, at an affordable and effective rate it can offer away out (World Bank, 2020).

### 3. Data Analysis

Besides technical skills, artisans need a variety of interpersonal skills among them people, communication, and conceptual skills. There is need to unlock the potential of the informal apprenticeships which is more urgent now than ever before. One of the main objectives of the research was to establish the business management skills of carpenters, plumbers, mechanics, welders, painters, and electricians by interviewing to establish their business management skills. The aim was to establish whether the artisans had business plans, kept business records, had KRA pins, gave branded receipts to their customers, branded their businesses, and had bank accounts for their businesses. A total of 481 artisans were interviewed for the research using an interview schedule.

From the Kenya Labour Market Information System (klmis) survey of 2019, it was noted that 53% of those engaged in the informal sector are men while 47% are women. The men work in trade, repairs, and manufacturing while women are mainly in the provision of food services and salons. The most preferred skills by employers in order of preference were financial skills, record keeping, marketing skills, managerial skills, Technical (job specific skills, customer care, ICT skills, Communication skills and life skills. The data captured covers all the ten ranked skills.

Table 1. Skills Most Preferred by Employers in the Informal Sector

Rank	Skill
1	Financial skills
2	Record keeping
3	Marketing skills
4	Managerial skills
5	Technical (job specific) skills
6	Customer care

7	ICT skills
8	Communication skills
9	Life skills

Adapted from the Labour Demand/Informal Sector Skills and Occupations Survey (2019) by the Kenya labour information system survey (klmis).

Table 1. Skills preferred by employers in the informal sector in order of preference.

Data from the research was analysed based on the means through which the artisans gained their skills and is summarised in table 3.2 below.

Table 2. How the *Jua Kali* Artisans Gained Their Skills

Means through which artisans gained their skills	Not certified for their skills	Certified for their skills
Through apprenticeship	415	0
By attending TVET Institution	61	61
Trained by former employer	5	0

Source: data obtained from administration of research instrument (Nov 2020-April 2021).

Table 2. Means through which the artisans gained their skills and certification for the skills.

The artisans who acquired their skills by attending TVET institutions are certified for their skills whereas those who gained their skills informally are not certified for the skills they have. Attending a technical institution is synonymous with gaining skills and getting certified for the skills. Gaining skills in the informal sector through apprenticeship is synonymous with gaining skills with no certification.

Table 3. Summary of Business Management Skills by Artisans

Manifestation of Business management skills by artisans	Gained their skills in a TVET institution		Gained skills in the informal sector through apprenticeship	
	Frequency	%	Frequency	%
Have business plans	2	4.2	0	0.0
Keep business records	1	2.1	1	2.1
Have KRA pin for business	3	6	1	2.1
Give branded receipts	3	6	2	4.2
Have bank a/c for business	3	6	1	2.1
Business is branded	3	6	3	6

Source: data obtained from administration of research instrument (Nov 2020-April 2021).

Table 3. Data in frequencies and percentages on the *Jua Kali* artisan's business management skills.

#### 4. Comparison Between Artisans Who Gained Skills Formally and Those Who Gained Them Informally

A Comparison was made between *Jua Kali* artisans who gained their skills by attending a TVET institution and those who acquired their skills through apprenticeship to establish which group is better than the other in business management skills. Data obtained is summarised in table 3.4 below.

Table 4. Summary of Artisans Who Own Businesses, Work as Casuals and Those Who Are Trainers.

	No. of artisans
Artisans under training	112
Artisans working as casuals	77
Artisans who own businesses	251
Artisans who were trainers	128

Source: data obtained from administration of research instrument (Nov 2020 to April 2021)

Table 4. Artisan's engagement in the informal sector as business owners, trainers, and casuals.

Out of 251 artisans who owned businesses, only 48 had gained their skills by attending a TVET institution. Through random sampling, 48 other artisans were selected from those who gained their skills through apprenticeship. Using a hypothesis testing using a Z- statistic, a test was carried out to determine who between the two sets of artisans was better in business management practices.

**H<sub>0</sub>**, there is no significant difference in percentages in business management practices between artisans who gained their skills through apprenticeship and those who gained their skills by attending a TVET institution., i.e.

$$p_1 = p_2$$

**H<sub>1</sub>**, there is a significant difference in percentages business management practices between artisans who gained their skills through apprenticeship and those artisans who gained their skills by attending a TVET institution., i.e.

$$p_1 = \frac{4.2 + 2.1 + 6 + 6 + 6 + 6}{6} = 5.05\%$$

$$p_2 = \frac{0.0 + 2.1 + 2.1 + 4.2 + 2.1 + 6}{6} = 2.75\%$$

Using the Z statistic for difference in proportions,

$$Z = \frac{p_1 - p_2}{\sqrt{p_c(1 - p_c)\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

Where.

$$p_c = \frac{p_1 + p_2}{n_1 + n_2}$$

In this case.

$$p_c = \frac{5.05 + 2.75}{6 + 6} = 0.19$$

$$Z_c = \frac{5.05 - 2.75}{\sqrt{0.19(1 - 0.19)\left(\frac{1}{6} + \frac{1}{6}\right)}} = \frac{2.3}{\sqrt{0.19 \times 0.81 \times 0.33}} = 10$$

At 1% level of significance the tabulated Z value Z<sub>T</sub> is 2.58

There is no significant difference between the null hypothesis and the alternative hypothesis. There is no significant difference between the *Jua Kali* artisans who gained their skills by attending a TVET institution and those who gained their skills through apprenticeship. The means through which the artisans gained their skills does not influence their business management practices.

#### **4.1 Summary of the Findings**

The research found out that those artisans who spent more time in the informal sector were well established than those who had spent a short time. There is a vibrant skills training scheme in the informal sector through the apprenticeship programme. The entry path for most artisans is through apprenticeship to gain skills, working as casual to gain some income to buy business implements for the business and starting one's own business. This process takes an average of five years.

There are more artisans (86.28%) who gained their skills through apprenticeship. Only 12.68% of the artisans gained their skills by attending a TVET institution and 1.04% were trained by their former employers in the formal sector. Most artisans preferred training by apprenticeship than by attending a TVET institution because it was more practical as compared to the theoretical approach used by TVET institutions. The mode of payment is friendly as the owners of business enterprises allow the new apprentices to pay in instalments or do work equivalent to a certain amount of money.

#### **Conclusion**

In response to skill training concerns, education policy makers and individual TVET institutions should acknowledge the growing trend where most of those who join the informal sector prefer to gain their skills through apprenticeship than attend a TVET institution. The old method of relying on TVET institutions as a measure of imparting relevant skills and certification of those who gain these skills is no longer sufficient. A competency framework is necessary, whereby there is emphasis on certification of the large number of artisans who are not certified for their skills in the informal sector. The important thing should not be where or how an artisan gained his skills but rather his competence to perform certain specific tasks. Sensitisation and mounting reskill trainings should draw artisans to upgrade their skills and learn entrepreneurial and IT skills which most lack because they are neither emphasized in TVET institutions nor in the informal sector apprenticeships. If prior knowledge is inaccurate, instructors should be retrained especially those already training through apprenticeship to improve both their technical and pedagogical skills. Recognition of prior knowledge is noble, but its implementation is the problem.

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