

# A Historical Perspective, Skill Development in the Informal Sector in Kenya: Policy Gaps, Challenges and the Way Forward

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*This research paper was presented during ATINER's 18<sup>th</sup> Annual International Conference on Education, (16-19 May 2016), Athens, Greece.*

## Abstract

The Government of Kenya recognizes the importance of education and training in national development. It is for this reason that since the country becoming politically independent in 1963, the Government has developed relevant legal and policy frameworks for the provision of quality and equitable education. Despite all these efforts, large skill gaps exist which is an impediment to economic growth. The policy formulation to a large extent has not addressed the skills development problem in relation to self-employment. Increasing enrolment at all levels has been the hallmark of performance of the education system, under the international call to implement Education for All (EFA). The education system has increasingly turned out a large number of school leavers at all levels. Many of these graduates lack skills to obtain gainful employment in the formal sector. Skills shortages affect the Small and Medium Enterprises (SMEs) which are driving the creation of jobs. This issue has not been addressed adequately by national policies on education and training. This paper explores skills shortage and skills gap in the informal sector as separate and distinct phenomena, discusses the weaknesses of the Kenya Government policies on skills development. It also explores theories that support skills development and transfer and makes relevant recommendations towards the improvement of skills development in Kenya.

**Keywords:** Skills gap, Skills gap analysis, Informal sector, Skills training, Skills transfer

## 1.0 INTRODUCTION

A survey of skill gaps in the informal sector in Kenya will reveal the skill gaps that exist, a strategy to fill in the gaps may lead to economic development. The benefit of skills to the economy is well-acknowledged. Becker (1964, 1993) popularised the concept of human capital, noting that there is overwhelming evidence that connects human capital investment through education and training leads to rising personal income. The term "skill" has different meanings to different people; when discussing "skill", economists, sociologists and psychologists often appear to be talking about different things, even though they each ascribe high importance to it (Green, 2011). Green further states that in neoclassical economics, "skill" and being healthy are the main ingredients of human capital.

According to Cockburn (1983), Attewell (1990), Wacjman (1991) and Steinberg (1990), sociology's contribution to the understanding of the concept of skill is the recognition that skill can be socially constructed. Skill is so important for economic progress; we have to be sure what we mean by it by a careful and sufficiently broad definition to support a consistent analysis and a common dialogue. Narrow notions betray particular preferences, and intellectual tussles can themselves reflect conflicting interests (Green, 2011). A critical skill is one that is required to complete a task successfully. A noncritical skill can enable completion of a task more quickly or efficiently, or at less cost than would otherwise (Antonucci and Domenico, 2012).

Kenya's labour market is one that is characterized by dynamics in terms of the skills required in the labour market, the same reason that most young people are locked out of gainful employment. Most of Kenya's institutions of higher learning equip the students with theoretical knowledge and fail to understand that the demands of the job market are changing with time (Kaane, 2014). Skills can be acquired through different pathways depending on the level of education. Therefore, skill is a personal quality which is Productive, Expandable and Social (Green, 2011).

According to Grugulis (2003a, 2004) and Cockburn (1983), there are three perspectives of skill: the skill that resides in the man himself, accumulated over time, the skill demanded by the job, which may or may not match the skill in the worker, and the political definition of skill: that which a group of workers or a trade union can successfully defend against the challenge of employers. Clarke (1992) observes that training creates skills, which have different values for the worker who owns, sells, employs and attempts to conserve them.

Grugulis (2003) points out that every participant in the employment relationship has not been matched by a widespread adoption of high skills routes to competitiveness. Skill is widely regarded as a focus for analytical research and as a core object for policy interventions in the modern global high-technology era (Green, 2011). Different skill levels have large economic effects for individuals, employers, regions and whole national

economies (Chan and Moehler, 2007). Leitch (2006) calls for a shift towards demand led skills provision. The values of individuals' skills diverge from their productive contribution of value to society (Green, 2011). Skill is one of the main ingredients of human capital, human capital is the value of a person's stream of current and future prospective earnings, and there is overwhelming evidence that connects human capital investment through training and education with rising personal income (Becker 1964; Mincer, 1974). Education and training are investments in the accumulation of skill/human capital. According to Sison (2003), the resources dedicated to education and training is considered investment in human capital formation. Education may be conceived as a set of services that could ultimately be broken down into teaching and learning, either in organised institutions or less formal unorganised environments (Schultz, 1963), it applies to vocational and professional training (Sison, 2003). Knowledge is part of capital; it satisfies a human need, wants and desires (Machlup, 1980). Education and training are the most important investments in human capital (Becker, 1993)

Walther, (2013) observes that studies on existing formal training systems in developing countries have clearly demonstrated that the training policy and provision is mostly failing to meet the needs of young people in informal employment. 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.

Before independence, the colonial government neglected secondary and higher education for Africans (Sifuna and Otiende, 2009). The Kenyan government after independence embarked on expanding education to train the needed workforce using the manpower approach. This model produced the needed manpower which went beyond the industrial development in the economic sector between 1965 and 1980's in Kenya. The manpower model did not focus on non-formal, informal vocational skills in its educational orientation. The Presidential Committee on Unemployment (Wanjigi Committee, Republic of Kenya 1983) highlighted the role of the informal sector on Kenya's economy and suggested the establishment of an inter-ministerial body charged with the responsibility of developing the informal sector. It was expected that this committee will undertake feasibility studies to help in identifying various informal sector activities that have high employment creation (Wanyama and Koskey, 2013)

## **2.0 SKILL GAP**

Skill is widely regarded as a focus for analytical research and as a core object for policy interventions. It is one of those social science words in common parlance with many meanings such as ability, competence, knack, aptitude and talent. A substantive body of evidence shows that different skill levels have large economic effects for individual, employers, regions and whole national economies (Green, 2013).

Skills gap is the perceived mismatch between the needs of employers for skilled talent and the skills possessed by the available workforce; it is also referred to as a compensation gap, whereas others call it a training gap (EMSI, 2013). The most obvious effect of a local skills gap is that local industries can't perform at their full potential. As noted by the EMSI (2013), from a macroeconomic perspective, the impact of skills shortage depends on the degree to which the gap reflects efficiency or an output constraint.

A skills gap analysis is a systematic review of the skills held by individuals by performing a skills gap analysis to identify all the skills required by an individual to carry out their job role effectively (Duggan, 2013). QFinance (2009) states that a skills gap analysis should be able to identify the critical and non-critical skills required to achieve a higher standard of work by comparing the list of required skills with the actual skills possessed by the individual. The skills gap has been a constant source of conversation and debate (ACT, 2011). According to the EMSI (2013), the phrase skills gap is used in the public arena very loosely with varying degrees of understanding of what a gap in skills actually means. The difference between the skills needed for a job versus those skills possessed by a prospective worker.

Acemoglu and Autor (2011) point out that a skill is a worker's endowment of capabilities for performing various tasks. They further state that skill as an endowment is a stock, which may be either exogenously given or acquired through schooling and other investments. They emphasise that workers apply their skill endowments to tasks in exchange for wages. Skills are applied to tasks to produce output; skills on their own do not directly produce output. Spencer and Spencer (1993), define competency as internal characteristic of an individual that produces effective and superior performance.

The skill gap analysis could be a useful instrument to assess competences (Holzer, 1997). Kenya faces a more complex skills challenge, the situation is further complicated by the presence of the informal sector, which needs skills and is also the largest skills training ground through its informal apprenticeship (Ferej et al, 2012).

### **2.1 Skill Gap Analysis**

Economic Modelling Specialists International (2013) defines skill gap as the perceived mismatch between the needs of employers for skilled talent and the skills possessed by the available workforce. According to ACT, (2011) the phrase skills gap, is used in the public arena very loosely with varying degrees of understanding of

what a “gap” in “skills” actually means. A skills gap measures the difference between the skills needed for a job versus those skills possessed by a prospective worker. The importance of having a more precise measure of skill and resulting skills gaps cannot be understated (ACT, 2011). The gap analysis is a tool used to assess the difference (gap) between the actual state and a future goal state. Therefore, the skill gap analysis is used to identify the skills that an individual needs, but he sometime hasn't, to carry out his or her job or to perform certain tasks effectively (Antonucci and Domenico, 2012).

Policies that appear most effective over a long time in raising prosperity and reducing inequality are those that cultivate the skills of successive generations (Autor, 2014). The skill gap analysis can be a valuable tool; it allows an employee to identify what improvements he will need to make in order to advance in his career. Performing a skill gap analysis gives to an individual an opportunity to assess his professional development needs. To perform a skill gap analysis, the first step is to identify all the skills required by each individual to execute his work. It should then be possible to identify the critical and noncritical skills that are needed to carry out a role effectively.

A skill gap analysis can be used to produce personal developments and training plans for individuals, or to support appraisals. It can also be used in firms to identify which staff members have most knowledge of particular aspects of the business, as well as those with skill gaps. Furthermore, it can aid recruitment through identifying candidates whose skills better match those needed to function effectively in a particular role (Antonucci and Domenico, 2012). It will be important to conduct a skill gap analysis for the informal sector, to help formulate a policy on skills needs for the informal sector. A skill gap analysis can be done on a continual basis or one off.

### 3.0 INFORMAL SECTOR

Despite all attempts to classify the concept informal sector from both a theoretical perspective, the fundamental question remains largely unanswered; can the informal sector make a significant contribution to development or is it by nature a subordinate form of production offering a few opportunities for growth and development (World Bank, 2006). Historically, the informal sector emerged on the margins of the formal industrial systems, and, in education terms, it could be said that those who found themselves obliged to be self-employed were often those whom the formal school system had rejected, either through lack of school space, finance or ability (McGrath et al, 1995).

In other words, the formal education system had helped to form the informal sector only in this sense, excluding those who then turned to self-employment (DFID, 1994). The informal sector first entered economic development literature in the early 1970s (ILO, 1972), it was earlier discovered in Kenya and earlier in Ghana, this sector was described as including small household enterprises that operated largely outside the purview of government regulatory tax authorities (Bangassar, 2000).

According to Hosier (1987), The informal sector was originally conceived of as the traditional counterpart to the modern industrial sector, despite all attempts to clarify the concept from both theoretical and empirical perspectives, he asks whether the informal sector can make a significant contribution to development or it is by nature a subordinate form of production offering few opportunities for growth and development

The informal sector is characterized by ease of entry, reliance on indigenous resources, family ownership, small scale operation, labour intensive technology, skills acquired outside the formal school system, operating outside government regulation and competitive markets (ILO, 1972; Mazumder, 1976). The large size of this sector has forced government to acknowledge its existence to the national economies and the welfare of those it employs (ILO, 2002c, Schneider, 2002). Osirim (1994) used the word micro-enterprises for the informal sector.

The *Jua Kali* sector is a sub-sector of the informal sector and *Jua Kali* artisans are people who buy goods and add value to them before selling (Momanyi, 2008). It is a real economy, made up of micro-and small activities, which generates employment (Walther, 2011). The artisans are involved in a variety of manufacturing and repair activities and in productive services such as metal, carpentry, handicraft, hairdressing or photography.

The informal sector has proven prolific in creating jobs and incomes, cultivating entrepreneurs and absorbing the large numbers of youth entering the regional workforce each year (World Bank, 2008). According to Roubaud and Razafindrakoto (2007), the informal sector is a global phenomenon and is found in developing and industrialized countries worldwide (Becker 2004, OECD 2009). Skills training can create more opportunities for those working in the informal sector. According to (Hussmanns, 2004), the interest in the two concepts employment in the informal sector and informal employment has driven efforts to define and measure the informal economy.

#### 3.1 Informal Sector in Kenya

According to the World Bank (2006), Kenya's informal sector operates on a small-scale, locally and at a subsistence level with few employees. Consequently, there is a tremendous increase in the activities and involvement of the population in this sector, largely due to a rise in unemployment among the young people.

Kenya's informal sector is large and dynamic. About 95 % of the countries' businesses and entrepreneur are found in the informal sector, but only 37% of the employment for the urban population; hence there is low level of skill (Amenya, 2007).

Similarly, in Kenya, the informal sector is quite large, it is estimated at 34.3% and accounts for 77% of employment statistics. Over 60% of those working in the informal sector are aged between 18-35 years, (Ouma et al 2007). The First Small & Medium Enterprises (SME) baseline survey in 1993 established that there were approximately 910,000 SMEs employing up to 2 million people. The second SME baseline survey in 1995, estimated 708,000 SMEs employing up to 1.2 million people, further, the contribution of the SME sector to the country's Gross Domestic Product (GDP) increased from 13.8% in 1993 to over 18% in 1999 (Republic of Kenya, 2005). Currently, its contribution to the GDP stands at over 25% (Republic of Kenya, 2012).

The informal sector in Kenya consists of varied and dynamic small-scale activities characterized by low productivity and income. The majority of firms in the informal sector are Micro and Small Enterprises, often referred to in the acronym MSEs. Due to the scarcity of jobs in the formal sector and also because job seekers are less likely to have the right education and skills to enter the formal job market, women have been migrating to urban areas not so much to find a formal sector job but instead to enter the urban informal economy (Kaane, 2011).

Sustained and labour force growth and accelerating rural-urban migration have created pressure for job creation, at the same time; the urban population has almost tripled, since 1985 (Adams, 2008). Lack of job creation in the formal sector has led majority of people seeking employment to create their own jobs in small household enterprises in the informal sector (Adams, 2008). Various sources indicate that the informal sector is larger in sub-Saharan Africa (ILO 2002c; OECD, 2009). According to Haan (2006), reports indicate that about half of the informal sector workers have either no education or a primary education and less than five percent have a post - secondary education.

Because of the crucial role played by the informal sector in terms of employment, it was given formal recognition in 1988 by the creation of the ministry of Technical Training and applied Technology to regulate it (Nyakaan, 1997). Studies on existing formal training systems in developing countries clearly demonstrate that training policy and provision is mostly failing to meet the needs of young people in informal employment (Walther, 2013).

### ***3.2 A historical Perspective of Skill Development policy in Kenya***

Skills development in Kenya is important for economic development; poverty alleviation and social inclusion in order to achieve Education for All (EFA) and the targets of Millennium Development Goals (MDGs). Session paper 10 of 1956 envisaged Growth in numbers of skilled, trained and experienced manpower, the paper envisioned provision of quality education and training at all levels. At the same time the Kenyan Government committed itself to eradicate ignorance, poverty and disease. Thus, education system has increasingly turned out large number of school leavers at all levels who are not able to obtain gainful employment in the formal sector and thus end up in the informal sector (Momanyi, 2008).

At independence, the Kenyan education was based on racial segregation, the Europeans and Asians were considered superior than the Africans. There were schools for Europeans, Asians and Africans. In this arrangement; Africans received an inferior form of education, which was elementary, they were trained as masons, carpenters and armature architects (Momanyi, 2008). In other words, Africans were seen as people who would do menial work for the Europeans. After independence, many policy documents have been written to address the employment crisis. To a large extent they have not succeeded, there is apathy to take up vocational training as envisaged in current government documents and as a result there is a skill development crisis, on one hand vocational education is seen as inferior, an inherited mind set from colonial times and the government's over emphasis on theoretical rather than practical skills (Kaane, 2014).

One of the ways of solving the unemployment problem was to create jobs through skills training. The major strategy of the government then was to ensure Universal Primary Education (UPE), to achieve this objective; basic education was altered as early as 1984. Oketch (1993) states that the government's intended focus was a much greater emphasis, one of them being practical skills as an orientation to self-employment. Kenya's First Education Commission saw the need to reform education so that it would become a means of establishing social equity (Rharade, 1997) and training the highly skilled staff that Kenya needed.

The Manpower Needs Approach to skills training reached its climax in the 1970s. The National Committee on Educational Objectives and Policies (Republic of Kenya, 1976) recommended vocationalisation of education at secondary school level. Since the introduction of the 8-4-4 system of education in 1985 the aim has been to produce graduates who could employ themselves after school. The policy of the Kenyan Government was that each secondary school must offer at least one technical and vocational subject alongside academic subjects (Republic of Kenya, 1984). The technical and vocational subjects according to Okaka (2001) are: agriculture; woodwork; metalwork; power mechanics; electricity; drawing and design; building construction; home science;

business education (accounts, commerce, typing and office practice); art and design and music.

Recent policy initiatives by the Kenyan government have focused on the attainment of Universal Primary Education (UPE), enrolment has improved after the introduction of free primary education (Momanyi, 2008), but skills development lags behind. The *Jua Kali* sector can be an asset to the economy if training in skills is emphasized and according to UNESCO (1996), the use of human material for industrialization demands its education in science and training in skills. It is widely acknowledged that one of the activities taking place within the informal sector is apprenticeship training (Yambo, 1991; UNESCO, 2006).

With the high turnout of graduates at all levels, the focus has turned from formal education to vocational education, it has come to a realisation that the economic targets set by the Kenyan government can't be achieved without certain skills, this is clearly stated in the vision 2030 (Republic of Kenya, 2010). There is need for skill formation in the informal sector; the government policy has been to introduce vocational education within the formal education system, which has failed. Technical and vocational institutions as options are not preferred due to their lack of practical skills.

The Presidential Working Party on Education and Manpower Training for the Next Decade and Beyond (1988) envisaged technical and vocational education in Kenya with specific emphasis on a foundation on vocational and entrepreneurial skills. In the 1979-83-development plan, the government identified three factors as contributors of school leaver unemployment; Rate of school leavers output, the unrealistic ambitions among school leavers for higher job placements and inappropriate skills among school leavers for medium range jobs (Republic of Kenya, 1979). The 1983, Presidential Committee on Unemployment (Wanjigi Committee, Republic of Kenya 1983), highlighted the role of the informal sector on Kenya's economy and suggested the establishment of an inter-ministerial body charged with the responsibility of developing the informal sector, it was projected that this body will undertake feasibility studies to help in identifying various informal sector activities that have high employment creation.

The motivation to focus on education reform since independence has not lead to the implementation of all recommendations from the commissions set up. The educational reforms have not served Kenyans adequately. For instance, the 8-4-4 system of education introduced in 1985;has not served Kenyans in technical and vocational subjects and skills as it was intended. Kenyans are still calling for change to the education system to be relevant to the needs of Kenyans. Youth unemployment is still rampant due to lack of skills and academic orientation geared to white collars jobs. The Africanisation and National goals of education (GOK, 1964), only served to replace whites with Africans to occupy positions left behind, thus the policies that the education reform was intended are not fulfilled.

#### **4.0 VOCATIONAL EDUCATION POLICY**

Atchoarena and Delluc (2001) identifies Vocational Education as that education which leads participants to acquire practical skills; the know-how and understanding, which is necessary for employment in a particular occupation, trade or group of occupations. One of Kenya's first policy documents, the Sessional paper number 10 of 1965 intended to change the Kenyan education to include practical skills for orientation to self-employment (Republic of Kenya, 1965). By introducing of the 8-4-4 system of education in 1985, the government introduced vocational education at secondary school level. However this policy has not helped improve skills in the informal sector. In Kenya this kind of education is referred generally as Technical, Vocational, and Entrepreneurship Training (TVET) (Republic of Kenya, 2008).TVET is envisaged by the Kenya government to contribute to sustainable development and is recognised as a priority area of development intervention, as indicated Economic Recovery Strategy Programme (ERS) for wealth and employment creation: 2003-2007 (Republic of Kenya, 2003a), and Kenya Vision 2030 (Republic of Kenya, 2007).

The performance of business organizations in a knowledge-based economy depends on ensuring that all categories of employees possess current and up-to-date knowledge and skills (OCDE, 2002). Policy on skills enhancement in the informal sector should be formulated after as skill gap analysis has been done to establish the missing skills.

#### **4.2 Theoretical Underpinnings for a Vocational Pedagogy**

There is need for a theory for a vocational pedagogy, to provide a clear framework for understanding and appreciating vocational education (Sally Dicketts as quoted by Lucas, Spencer and Claxton, 2012). There is need to understand how best to engage particular learners to undertake the particular kind of learning on which they are to achieve the desired vocational outcomes. According to Lucas, Spencer and Claxton (2012), serious consideration of pedagogy is largely missing in vocational education and the learners are the losers. In Kenya, a vocational pedagogy is missing; vocational education is equated to formal education.

#### **4.3 Different Types of Vocational Education**

According to Button (2008), vocational training provides students with job skills, vocational training programs

prepare students for hands-on work rather than academic work. Accordingly, there are several types of vocational training; trade schools, aesthetic schools, office administration schools, mandatory training, and continuing education. They can further be classified into three major groups; people, physical materials and symbols Lucas, Spencer and Claxton (2012). In order to improve skills development, which is affected by under-funding, which leads to inadequate facilities and focus on theoretical instruction, there should be emphasis on practical skills (Momanyi, 2008).

#### **4.3.1 Outcomes of Vocational Education**

Routine expertise, Resourcefulness, Functional literacies, Craftsmanship, Business-like attitudes and wider skills (Lucas, Spencer and Claxton, 2012). Therefore these six clear outcomes fulfil the overall of working competence in the informal sector, all training programmes geared to the informal sector should have these outcomes in mind.

#### **4.3.2 Effective Ways of Teaching Vocational Education**

Vocational education needs to be taught in the context of practical problem-solving. The best vocational learning approach is broadly hands-on, practical, experiential and real-world problem solving. It involves feedback, questioning, application and reflection (Lucas, Spencer and Claxton 2012).

### **5.0 MANPOWER REQUIREMENTS APPROACH**

Since independence, Kenya has reformed its education system based on, the manpower requirements, rate of return on education and cost benefit analysis approaches (Namaswa, 1989). The manpower requirements approach is the analysis of the market needs of the country in human resources, Stakeholders examine human resource needs of a country available in the past, present and forecast for the future. Manpower approach is the analysis of the market needs of the country in human resources. Stakeholders examine human resource needs of a country available in the past, present and forecast for the future. This approach considers the development of human resources through the educational system as an important requirement for economic growth (Wanyama and Koskei, 2013). Levi (1970) opines that despite the fact that the manpower requirements model is concerned with manpower requirements, it deals only with the formal educational system ignoring apprenticeship programmes, on-the-job training and the like are ignored, which is a serious omission.

#### **5.1 Social Demand Approach**

The social demand model is the sum total of individual demand for education at a given place, time under prevailing social economic and political conditions, it emanates from public demand for education thus quality and quantity of education, it is a popular demand for education (Namaswa, 1989). The popular demand for education is more concerned with the consumption function of education rather than the investment, education is viewed as a service like other services and goods (Wanyama and Koskei, 2013). The social demand approach undermines skills training; it lays more emphasis on the consumption function of education than skills training.

#### **5.2 Rate of Return on Investment Approach**

According to Solow (1964), the rate of return one of the notions underlying modern work in human capital, educational expenditures are similar to other investments. In education, costs are incurred in the form of use of current resources in the expectation of future returns. Thus the return from education investment can be quantified. Investment decision theory and one of its central tools; the rate of return, can be applied to the problem of determining an optimal allocation of resources to education in general and within the educational sector in particular.

According to this theory then, there are benefits that accrue to the individual and the state that made an investment decision; the accrued benefits are greater when many people because of their training in skills contribute to the country's development. However, a state may decide not to invest based on the costs involved even though the benefits can be estimated. Again it may be argued that the accrued benefits may be more to the individual than the state, thus the introduction of cost sharing at higher levels of education in Kenya. The investment accrues over a long period of time; a short term investment may not work, skills training has a long term effect which is not noticeable over a short period of time, the problem is how to measure capital and how to define the period of production (Solow, 1964).

### **6.0 COERCIVE METHOD TO REFORM EDUCATION**

The Kenyan Government since independence has mostly used power coercive methods to reform education, there has been no consultation before implementation of any education reform. Havelock and Hubberman (1993) have noted that the Government equates education reform to problem solving which is wrong and yields nothing. The political elites interfere with education planning and reforms, they use education reform to meet their political objectives and not to enhance skills training.

### **6.1 The Colonial Mind-set on Education**

In Kenya during the colonial Period, Africans received an inferior education which prepared them for manual work. Thus Africans were meant to work for the whites and Asians (Lidundu, 1996). Sheffield, (1990) argues that the Asians were given education for middle level work such as artisans, trades & vocation. The Europeans were given specialized education system for leadership. Colonial authorities overlooked higher education for Africans; they neglected secondary and higher education for Africans. After independence, Africans detested vocation training; they deemed it to be inferior and wanted an education that will help them get white-collar jobs. This mindset prevails up to date, vocational education as a means of skills enhancement is looked down upon.

## **7.0 THEORIES ON SKILLS DEVELOPMENT AND ADAPTATION**

There are a number of theories that support skills development and adaptation. Most of these theories have a psychological basis and supported by economics.

### **7.1 Assimilation and Accommodation**

Jean Piaget's (1952) study on the development of children's minds concluded that children learn to adapt information and skills. He divided adaptation into two parts; assimilation and accommodation. According to him, assimilation occurs when an individual takes on new information or skills, but does not shift his mindset sufficiently. The individual tries to force the new skills to fit the mindset he already has. On the other hand, accommodation involves expanding a pre-existing mindset in order to make sufficient room for new skills. While Piaget looks specifically at children, this skill assimilation and accommodation is an ongoing process and can be applied to skills adaptation and accommodation in the informal sector. Accordingly, adaptation only then leads to a stable system when there is equilibrium between accommodation and assimilation (Piaget 1975, 1989).

### **7.2 Cognitive Apprenticeship**

Cognitive apprenticeship theory is the process where a master of a skill teaches that skill to an apprentice. This theory holds that masters of a skill often fail to take into account the implicit processes involved in carrying out complex skills when they are teaching novices (Collins, Brown, & Newman, 1987). According to this theory, there are three learning phases that people undergo as they develop new skills (Anderson, 1983; Fitts & Posner, 1967). The first phase is the cognitive phase occurs when a person creates a mental image of the skill he wants to learn, he divides the skill into smaller parts and identifies each part. The second phase is the associative phase; it involves practicing the different parts of the skill and then joining them together. The third phase is the autonomous phase; the learner's skill is honed and perfected until it is executed at an expert level (Anderson, 2000).

### **7.3 Skill Acquisition and Transfer**

There are many challenges in skill acquisition and transfer, one of the challenges is generalisability specifically, there are many factors that are considered to determine whether a skill will be generalizable beyond the conditions of training, the nature of the task under consideration and the nature of the training programme are taken into account. Consideration is then given to the effect on learning rate of performing a task that involves component skills with varying practice histories (ACT, 2011)

## **8.0 LEARNING THEORIES FOR THE INFORMAL SECTOR**

Individual learning theories are critical in understanding the individual learning and hence the knowledge transfers that takes place in the non-formal learning environment which is ideal for the informal sector.

### **8.1 Theory of Constructivism**

It presupposes that a learner actively constructs a new set of ideas of concepts based on the past and current knowledge (Middleton and Goldberg, 1998). This means that one's experiences and present knowledge is critical in making decisions in a real-world. It therefore calls for personalized learning with internalization of concepts, competences, rules and principles as applicable in a context. When applied to skills development in the informal sector, the artisans learn new skills on top of the skills they already have thus making them multi-skilled.

### **8.2 Theory of Experiential Learning**

Kolb (1984) has described this theory to be the most descriptive model of adult learning process. The theory of experiential learning is marked with four important stages; concretization of experience, reflection, derivation (conceptualization) of abstract rules to describe the experience and construction of the next possible occurrence of the experience (Middleton and Goldberg, 1998). This theory then is applicable to skills enhancement in the informal sector as it is relevant to non-formal education as a means of imparting skills to *Jua Kali* artisans in the informal sector.

### **8.3 Theory of Situated Learning**

Situated learning theory underscores the fact that learning does not take place in a classroom alone; it can also take place at any functional areas like place of work or under any special arrangement. This theory therefore contrasts with the abstract and out of context classroom learning that is relevant to formal education. The underlying tenets of this theory are the activity, context and culture where learning is taking place. It has been described to be unintentional rather than deliberate learning, generally considered to be legitimate peripheral participation (Lave and Wenger, 1991).

### **Conclusion**

To enhance skills in the informal sector, a skill gap analysis is necessary to establish which skills are missing. The other recommendation is that learning and skill development theories should be adopted to guide skill development in the informal sector. *Jua Kali* artisans have to be multi-skilled; they have to learn all the interrelated skills that will help them perform in the informal sector. The skills gap analysis will help to strategize on a lifelong learning; to learn and accommodate new skills that emerge.

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