Solving Unemployment in Kenya by Integrating Education, Training and Market

Dr. Peter N. Khakina

Department of Science, Technology and Engineering, Kibabii University, Bungoma Kenya

ABSTRACT

Africa's youth unemployment rate is estimated to grow from 10.7% as in 2020 to 42% in 2030 with the current education and training. According to the National Council for Population and Development, Youth (15 – 34 year old), who form 35 percent of the Kenyan population, had the highest unemployment rate of 67 percent in 2017. The major cause of unemployment is various types of mismatches. The general objective of the study was to find out the mismatch between skill acquisition at the university and the absorption at the job market. A sample of 50 students from science and mathematics related courses who had completed industrial attachment was used for the study. Another 100 degree graduates were asked what they were doing after graduation. Seventy five percent (75%) of those who went for attachment confirmed a mismatch of what they learn at the university and what is at the industry. Sixty five percent (65%) of the graduates were in a vertical education mismatch employment and 35% were still searching for employment. Generally, it was observed that there is a mismatch between education, training and the market. There is need to prioritise the implementation of training programmes based on the demand in terms of study level and field of study, an update of curricula by integrating the lacking soft, digital and job search skills, a settlement of a collaborative network between employers and training institutions, an implementation of mentoring programmes and an investment of enterprises in the adequate training of youth as social responsibility.

Keywords: Competence, Foundation, Mismatch, Substructure, Superstructure, unemployment

INTRODUCTION

Africa's youth unemployment rate is estimated to grow from 10.7% as in 2020 to 42% in 2030 with the current education and training (Kaki et al, 2022). Kenya in 2017 recorded 39.1% unemployment rate (Farah & Ali, 2018). However the real state of the youth in the labour market is characterised by the high level of informal and small jobs, wherein they suffer from under-employment and a lack of decent working conditions. According to Policy Brief No. 56 June 2017 by the National Council for Population and Development, there is Youth Bulge in Kenya and Youth who form 35 % of the Kenyan population, have the highest unemployment rate of 67%. Every year, over one million young people enter into the labour market without any skills, some having either dropped out of school or completed school and not enrolled in any college.

Quality education and training of a people is a key factor of growth and a country's economic development. Perhaps a quality education is seen as the key to a country's success, all forces must be oriented towards the connection between 'input' – spending dedicated to education and 'output' – profiles created by education

always taking into account labour market demands. Quality education is expected to have a positive impact on increasing the employment rate, thus reducing social needs for assistance and social assistance and various programs which are the burden of passive labour market policies (Ziber, 2020). As regards society, education accounts for one of the largest public expenditures, and the return is only achieved when individuals are well matched to their jobs (Moro-Egido, 2020). The higher education expansion coincided with a significant increase in public investments in education and has raised several questions concerning its implications for the labour market. One of the consequences potentially brought forth by this expansion pertains to a mismatch between the skill supply and skill demand on the labour market (Cabus & Somers, 2018).

Labour markets are currently in a phase of cyclical recovery and undergoing structural transformation due to globalisation, demographic trends, advancing digital technologies and automation and changes in labour market institutions (Brunello & Wruuck, 2019). The labour market is looking at productivity of the employee. Job-related skills are more important in finding a labour market match than occupations or fields of education (Berȩsewicz et al, 2023). Unemployment in Kenya is a growing challenge that requires long term sustainable solution. Kenya as a growing economy in the world must focus on developing her human capacity through professional development courses and programs. The educational institutions should consider conducting more researches on skills gap to be able to align their training curriculums with the demands of the labour market in both formal and informal sectors (Meta, 2022). One of the major courses of unemployment or underemployment is mismatches.

TYPES OF MISMATCHES

Educational Mismatch

Educational mismatch arises in the form of over education or under education. Over education occurs where workers have more education than is required for their jobs, while under education occurs where the workers have less education than is required for their jobs (Uzair-ul-Hassan & Noreen, 2013). Under the Educational Mismatch we may have horizontal or vertical mismatch (Albert et al, 2023). Field-of-study mismatch or horizontal mismatch occurs when university graduates, trained in a particular field, work in another field at their formal qualification level. We find a higher likelihood of horizontal mismatch among graduates of Chemistry, Mathematics, Physics, Pharmacy, and Languages and Literature (Salas-Velasco, 2021). It may be hypothesized that horizontal mismatch is more likely among those graduates in degree fields that provide more general skills and less likely among those from degree fields providing more occupation-specific skills. The likelihood of horizontal mismatch is among other things determined by the extent to which employees possess general skills as opposed to occupation-specific skills, and, it appears to be more frequently present among older workers. Compared to well-matched employees, horizontally mismatched workers generally incur a wage penalty, are less satisfied with their jobs, and are more likely to regret their study programme (Somers et al 2019). Vertical mismatch is where one gets a job that he/she is over educated. Degrees such as Business Studies, and Management and Economics Studies increase the probability of being vertically mismatched (Salas-Velasco, 2021).

Skill Mismatch

Skills refer to both cognitive and non-cognitive abilities and to abilities that are specific to a particular job, occupation or sector (technical skills). Cognitive skills refer to the ability to understand complex ideas, adapt effectively to the environment, learn from experience, engage in various forms of reasoning and overcome obstacles by taking thought. They include literacy, numeracy and the ability to solve abstract problems. Non-cognitive skills are characteristics across multiple domains (social, emotional, behavioural) not included under cognitive skills, such as work habits, behavioural traits and physical characteristics.

Finally, technical skills are combinations of cognitive and non – cognitive skills used to accomplish specific tasks. These combinations could also include manual skills. While skills are multi-dimensional, their measurement often focuses on selected dimensions, mainly due to data limitations. Skills mismatch implies discrepancy between the skills of job candidates or employed workers and job requirements (Maltseva, 2019). At the macro level, skill mismatch refers to the gap between the (aggregate) supply and demand for skills, typically with reference to a specific geographical unit (region, country or country group), and to the fact that observed matches between available workers and available jobs offered by firms in terms of skills and/or qualifications are sub-optimal. Skill mismatch at the micro level occurs when workers have a level of skills that is different from what is required for their job. Types of mismatches are identified based on three criteria: quality of mismatch (surplus vs. shortage), reporting party (employer vs. worker/candidate), and type of skills (cognitive vs. technical).

Qualification Mismatch

Over-qualification is holding a qualification which is above that required to gain entry to the job being done (Sutherland, 2012). In Kenya, there is artisan, Craft, Diploma and Degree Qualifications. The current trend is to adopt Competency Based Education Training (CBET) where skill acquisition is insisted. Unless well designed, CBET may bring about qualification mismatch.

MISMATCH BETWEEN EDUCATION, TRAINING AND MARKET

The need for quality training offered by Technical and Vocational Education and Training (TVET) institutions and the production of graduates who meet the needs of the workplace has been growing in Kenya, Africa and internationally (Wanyeki et al, 2018). The mismatch between the supply of human capital and the demand for labour gained renewed attention following the global financial crisis of 2007-2008. The financial crisis resulted in a substantial increase in the number of unemployed workers in developed economies. At the same time, thousands of open vacancies remained unfilled. This phenomenon is often ascribed to a mismatch or imbalance between education (or skill) supply and education (or skill) demand in the labour market. During recessions, the mismatch discussion is usually focussed on how an excess supply of labour forces highly educated workers to accept jobs below their level of education. Highly educated workers thereby crowd out less educated workers from their jobs (Somers, 2020). Mismatch may arise for several reasons, some of them inherently linked to the functioning of the labour market, others being more likely to derive from an inadequate or insufficient training at school and on the job (Asai et al, 2020). There is severe imbalance between the demand and supply sides and calls for active participation of different stakeholders, including the private sector, to address the problem (Gooptu et al, 2023).

Integrating education, training and the market can be done the way a building is designed and constructed. A building is divided into the substructure and superstructure. The substructure is mainly the foundation of the building. The superstructure consists of the floors and the roof as shown in Fig. 1. When designing the building, the roof is first designed, followed by the floors then finally the foundation is designed. The design starts from the top downwards. When it comes to the construction, the foundation is constructed first, followed by the floors then finally the roof. The construction is bottom upwards. The building outline is determined by the roof geometry (Koźniewski & Banaszak, 2020).

In the design of a building model, education can be equated to the foundation, the training equated to the floors and the market equated to the roof. Therefore, during the curriculum design, the market place should be the first to be studied and designed. Once the needs of the market have been identified, then the floor, which is the training can be designed and finally the foundation designed, which is the basic education.
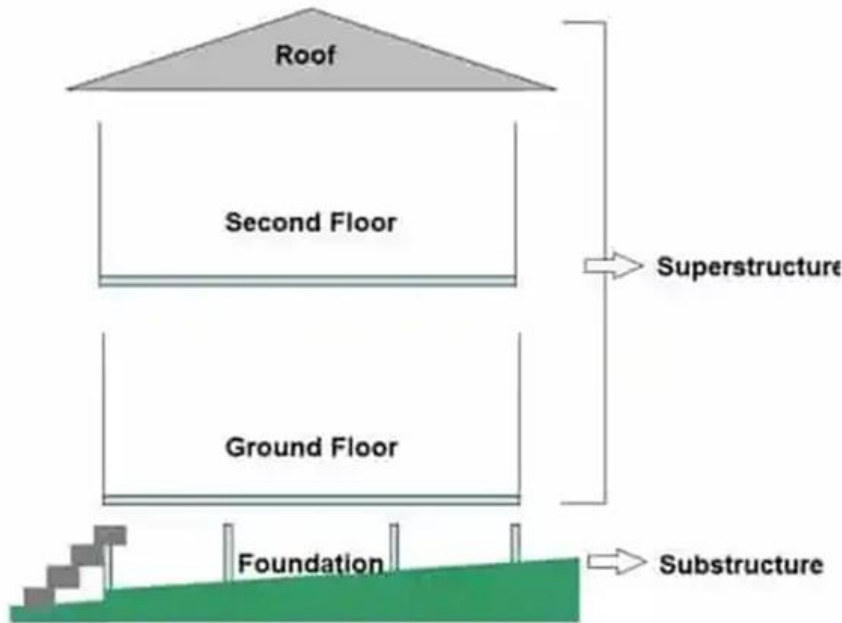
Fig. 1: Substructure and superstructure of a building (theconstructor.org)

METHOD

Content analysis was used to collect data from student reports after industrial attachment. The section of challenges in the reports of 50 students randomly sampled from those who had completed industrial attachment in 2021, 2022 and 2023 in the department of Science, Technology and Engineering at Kibabii University were analysed. A survey across Bungoma County was done to find out where the graduates with Bachelor's Degrees are employed after graduation. This was done in supermarkets, M-Pesa shops, hotels, fuel stations, bodaboda industry and streets. Those working in those places were randomly asked their education levels up to a total of 100 who were found to have had a degree qualification. Percentages in the various segments in terms of type of jobs and if there was a mismatch were tabulated and the findings presented in a table or in terms of a percentage of the total sample.

RESULTS AND DISCUSSION FROM A SURVEY TO DETERMINE MISMATCHES

Results

One of the challenges cited by students after industrial attachment is that there is a total mismatch between what they learn at the university and what is done in the industry especially in science and mathematics related courses. After the industrial attachment, which is either done in the after third or fourth year of study some students get confused and discouraged after finding out the reality of their training and want is required at the market place, which is the industry. While some industries encourage girls to do courses related to engineering, some other industries are reluctant to attach girls because of tendencies of sexual harassment. This makes some girls to opt to do post graduate diploma in education so that they become teachers and forget about the industry. There is an emerging trend where Engineering Departments have started education courses because it appears employment whether underemployment is still found in teaching. The trend is that many students are opting to do education because there is still some hope of employment there.

From the study, it was observed as shown in Table 2 that some graduates who have done science or engineering courses end up being maids, selling in supermarkets, working in M-Pesa small kiosks and some

end up being bodaboda (motorbike riders). This is a proof of vertical mismatch of the graduates. Thousands of graduates are seen lining up during recruitment of security officers as a sign of the high-rate unemployment and underemployment. In some places, industries which are market places are closing down. New industries that are coming up require new technology for operation and some lack qualified staff to work there.

Table 1: A Survey done between June, 2023 and May, 2024 in Bungoma County, Kenya to find out the type of jobs done by graduates after completion of the university.

Job	Number	Percentage (%)
Supermarket attendants	18	18
Hotel waiters	12	12
Maids	9	9
Mpesa shops	10	10
Boda boda riders	12	12
Fuel stations	4	4
Just there still looking for a job	35	35
TOTAL	100	100

Discussion

Unemployment and underemployment are common in developing countries because of lack of innovations and industrialization using the modern technology. The new technology requires a lot of digital skills. Universities and TVET institutions in Kenya are trying to introduce digital skills at the level of training but that is a late stage. Most developed countries introduce digital skills from basic education level. Education Communication Technology (ECT) is embraced from pre-primary level where most teaching and learning is through Power Point Presentation (PPT), which enhances understanding of complex concepts at any level. In developing countries, students opt to just memorize the complex concepts and reproduce them during exams just to pass. At the end, the graduates are unable to be innovative or cannot suit in the market place that requires the use of modern technology.

It is important to integrate Education, Training and the needs of the Market place. The starting point in designing any curriculum at any level should be the needs at the market place. In Kenya, there is Competence Based Curriculum (CBC) at basic education level and CBET at training level but there is no direct linkage to the market place where those acquired skills will be required. Before the 8-4-4 System of Education in Kenya, the System that was there encouraged specialization after form four and others could direct go to Technical Schools and be specifically be trained for the industry. To solve the unemployment and underemployment challenge, there is need to study the trends and needs of the market place to identify the needs and the numbers required. This is after identifying the available market places and those required to meet the needs of the society. After identifying the required skills for the market and the numbers required, curricula for various levels of training to acquire the needed skills should be designed. Then the curriculum for basic education should be designed based on the curriculum for training. This will see the introduction of digital skills at the earlier levels of basic education.

CONCLUSION

There is need to prioritise the implementation of training programmes based on the demand in terms of study level and field of study, an update of curricula by integrating the lacking soft, digital and job search skills, a settlement of a collaborative network between employers and training institutions, an implementation of mentoring programmes, and an investment of enterprises in the adequate training of

youth as social responsibility. Integrating Education, Training and the market place will contribute to solving the challenge of mismatch, the required skills are produced as per numbers required and more market places are established based on the ever-increasing needs of the society that will in the long run solve the unemployment challenge in Kenya. One of the possible ways to achieve the integration is to borrow a leaf from how a building is designed and constructed.

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