# University Graduates' Employability Skills Preparedness in Kenyan Economic Sectors

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## Abstract

The fast expansion of Kenyan universities has only focused on raising student numbers rather than improving the quality of education and research. These challenges are raising doubts on the quality of graduates produced by the Kenyan universities and by extension the level of their preparedness in their employability skills. The first objective investigated how graduates' quality compared amongst various universities in Kenya. second was to find out how university graduates from different sectors in Kenya compare in terms of employability skills and the third was to investigate the link between graduate quality and employability skills. Literature review was on quality of education globally, in Africa, regionally and locally while the conceptual framework on quality of graduates and work preparedness was developed to guide the study. In this study, university graduates were defined as the individuals who held a bachelor's degree for one to five years and were in employment. The study used descriptive and exploratory designs to conduct qualitative analysis. The target population was 420 graduate employees and 46 supervisors/managers of the COYA 2013 companies who were given a 5 Likert Scale questionnaire ranging from 1 strongly disagree to 5 strongly agree. A survey of 5 public and 5 private universities was conducted to interrogate the university side of the research to get an all-inclusive perspective of this study. Characteristics of the study variables were analyzed using SPSS and the relationship between variables was tested using Pearson's correlation analysis. The study results show that service and education (M = 4.5), finance (4.2), Agriculture (4.0), manufacturing (3.9), ICT (3.5), Regulatory (3.5), Communication (3.1), Hotel (3.0), insurance (2.9) and transport (2.0). It shows that service, education and finance required more employability skills than other sectors. There was a positive link (p value 0.000) between present job competence, job confidence, job involvement and employability skills of graduates. The study recommends that universities should in the industry in developing a curriculum that satisfies the university, graduates and labour market requirements. The research added new knowledge on quality of graduates and employability skills developed a conceptual framework to guide the study and conceptualize the variable of the study.

**Keywords:** Employability, economic sectors, graduates quality, University Graduates and conceptual framework.

## Background of the study

### Employability skills

Employability is the ability of the student to get a job after graduation and it is concerned with student's attributes which empower the student as a critical life-long learner.

The employability index determines whether the student job within a specific period after graduating from the university. Yorke and Knight ( 2004) define employability as  a set of achievements, skills, understanding, problem solving, teamwork, competence,  confidence, involvement, communication skills and personal attributes that make a graduate more likely to gain employment and be successful in their chosen occupations which benefits them, the workforce, the community and the economy. Employability elements differ from one job to another job though the basic outcome remains the same. These elements make an employee useful and desirable at the workplace. In the dynamic world, employees need to be adaptable and multi skilled with employability skills needed in the labour market (Helyer, 2007). Study by Weligamage (2009) on graduates' employability skills in the developed countries concluded that universities globally should identify a set of skills that will best serve the future labour markets and align higher education programs to meet those needs. Weligamage documented that with the current dynamic business environment there should be emphasis on the importance education and employment focusing on both the skills and practical experience of the graduates.

Further, Harvey and Knight (2005) posit that in order to enhance competitive advantage for graduates' employment, students need to develop skills in addition to the acquisition of knowledge from specific subjects. He documents that Higher Education Institutions (HEIs) need to identify ways of incorporating these requirements.  For the graduates to be employable, they should have knowledge skills, time management skills, learning skills, team work, problem solving skills, understanding workplace,  thinking skills, personal attributes and practical skills that they are able to apply and meet the employer's needs. Employer needs survey is critical in any country to match industry needs and the training programs (Yorke & Knight, 2003). Harvey *et* al., (1996) conducted a survey on developed countries and concluded that most employers identified most common employability skills as:  time management, self-understanding, learning, teamwork, leadership, problem solving, working, diversity, understanding skills and risk management skills. Personality, self-confident, attitudes, job involvement, were the most preferred attributes by the employers (Weligamage, 2006; Vidal, 2010; Hanlie &

Yuzhuo, 2009; Mehta *et* al., 2011). This study used these attributes to measure employability of graduates produced from Kenyan universities. All stakeholders including students, graduates, employers, the government and university administrators should be involved into finding out the skill requirements to close this gap (Harvey, 2005). It is important therefore, to measure employees' performance using Role-Based Performance Scales (RBPS) that consider job, career, innovation, team participation and organizational citizenship as suggested by Erez *et* al. (2005). Furthermore, a balanced score card can also be used as it gives the view of the employees performance against agreed set indicators to be measured. In addition, Performance appraisals and productivity tests are often used to assess employee performance in organizations. Harvey (2002) developed a model of employability and emphasized teamwork between Higher education institutions, graduates, employers, employment developers to produce employable graduates for the employment market. Harvey emphasizes the importance of teamwork between all the stakeholders to support of higher education in producing quality output for the global market. He documents that employability model consists of the graduate's development attributes that includes: employability attributes, work experience, self-promotion, career management skills and willingness to learn. However, he notes that, employability development opportunities are also affected by the subject discipline of the graduate to some extent. According to Helyer (2007 pp. 1-2) " employability is clearly a complex mixture of elements; these elements may differ from job to job but the basic outcome is the same –they make a person useful, and therefore, desirable employee. In a rapidly changing society it is also clear that employees need to be adaptable and multi-faceted. It is unlikely that 21stcentury workers will hold one position, or even one occupation, for their working lives. They work for longer than previous generations and perhaps in changing circumstances.  There is need for re-invention which requires a receptive and self-aware person and employability skills need to be honed and enhanced by employees and students". Helyer posits that, increasing government agenda are linking Higher education qualifications with profitability and productivity in United Kingdom (UK).

According to Elias and Purcell (2004), graduates should be well prepared as they do a wider range of jobs today as a result of the changing technology, economic restructuring, and related demand due to changes in the labour market. The study emphasizes on development of graduates skill and knowledge at the degree level as it is required by both the graduates and the employer. In addition, the main skills required in the labour market are problem solving, decision making, interactive knowledge, leadership, handling new information, ability to acquire new knowledge, coordinating activities, prioritizing, teamwork, communication, technology, imitativeness and enterprise skills (Harvey, 2001). These variables have been adapted in this study as they also include personal attribute of the employee.  The Kenyan employer demands an employee who is fully trained and with knowledge in the areas of their job market. They are less favorable to employing graduates they have to retrain. Hence, graduates that are needed by employers or industry are those who can independently can handle tasks, are, creative, innovative and can set and achieve goals. Although employers are dissatisfied with university graduates in Kenya, universities often operate without involvement and feedback from the employers and the society.  Thus, there is a need to address this disconnect between the training graduates receive from the universities and the labour market demands (GoK, 2006).

**How employability skills were measured in this study**

Employability skills in this research were measured by analyzing intellectual ability, decision making skills, interactive knowledge, ability to use new knowledge creatively, leadership skills, ability to coordinate activities and prioritizing activities by the graduate employees working with the COYA (2013) companies.  There are other variables found in the literature but were not tested and are recommended for further research.  The results indicated that graduates' mean score in the measured employability skills were ranging from 3.56 to 3.92 which mean that they had not excelled in this area. Graduates showed poor coordinating activities and prioritizing activities. Employability skills by service, education, finance, agriculture, manufacturing, ICT, regulatory, communication, hotel, insurance, and transport economic sectors were analyzed to compare different sectors in terms of employability skills. According to this research, transport, insurance, hotel and communication required less employability skills. More details are given in chapter four on table 4.8 and figure 4.27 Principal Component Analysis (PCA).

# SUGGESTED ''7- VARIABLE MODEL'' FOR MEASURING EMPLOYABILITY SKILLS OF UNIVERSITY GRADUATES
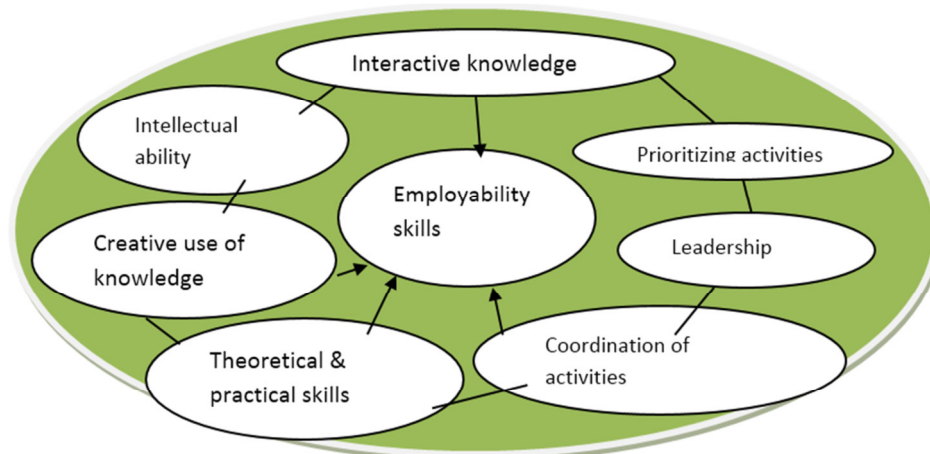


Source: Rintari, 2017

## Economic sectors in Kenya

The economic sectors considered in this study are service, education, finance, agriculture, manufacturing, ICT, regulatory, communication, hotel, insurance and transport. Graduates with interactive knowledge, intellectual activity, and creative use of knowledge, theoretical and practical skills, ability to coordinate activities, show good leadership and prioritize activities will be preferred in the Kenyan economic business sectors.

## Statement of the Problem

The fast expansion of Kenyan universities has only focused on raising student numbers rather than improving the quality of education and research. This raises doubt on whether universities are preparing graduates adequately to work in the Kenyan economic sectors, yet these sectors contribute to economic growth.

## Objectives

i)     To investigate how graduates' quality compared amongst various universities in Kenya.
ii)     To find out how university graduates from different sectors in Kenya compare in terms of employability skills.
iii)    To determine the link between graduate quality and employability skills.

## Methodology

The study design was both descriptive and exploratory. Data was collected from 46 of the 53 COYA 2013 companies which were selected by simple random. A return rate of 41 companies was received (87.2 %) The primary data was collected using structured and unstructured questionnaires on a Likert scale of 1-5, strongly disagree, disagree, neutral, agree and strongly agree. The questionnaires were administered to the managers of the COYA companies and to 413 graduate employees who had worked between 1-5 years after completing the university. Data characteristics were analyzed using SPSS and results were presented in charts and tables.

## Findings

It is evident that there was variability and lack of consistency in the public universities as shown by box plot below, their median scores were higher some and lower in others. From these findings the private universities had a higher consistent median score than public universities. The disparity is clear from the chart where both the 'narrowing' and 'consistency' factors are displayed. It can be argued that there is an indication that some public universities were weak on consistent on quality. From these findings, the private universities have a higher mean score of quality of their graduates meaning that their quality is better than that of some public universities.

**Figure 1.0 Box plot for comparing graduates among various universities is shown below**.
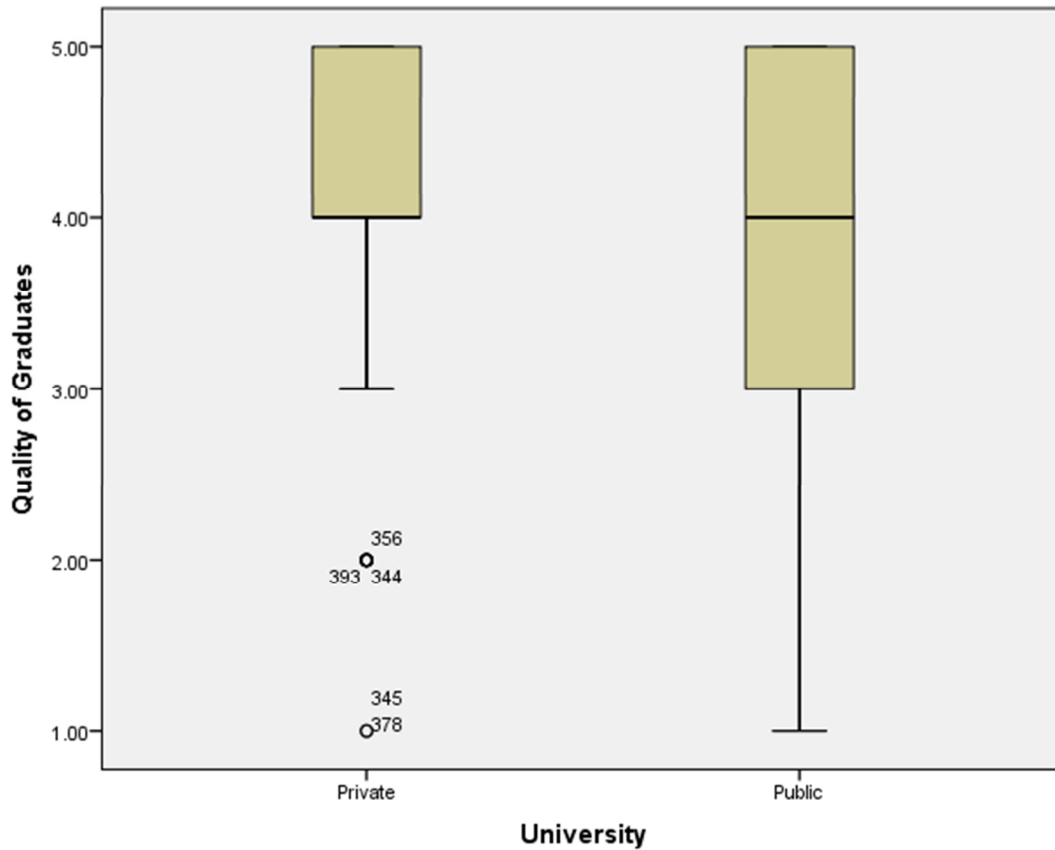


**Figure 1.0 Box plot above for comparing graduates in various universities**

Figure 2.0 below shows the relationship between graduates in different sectors and their employability skills.
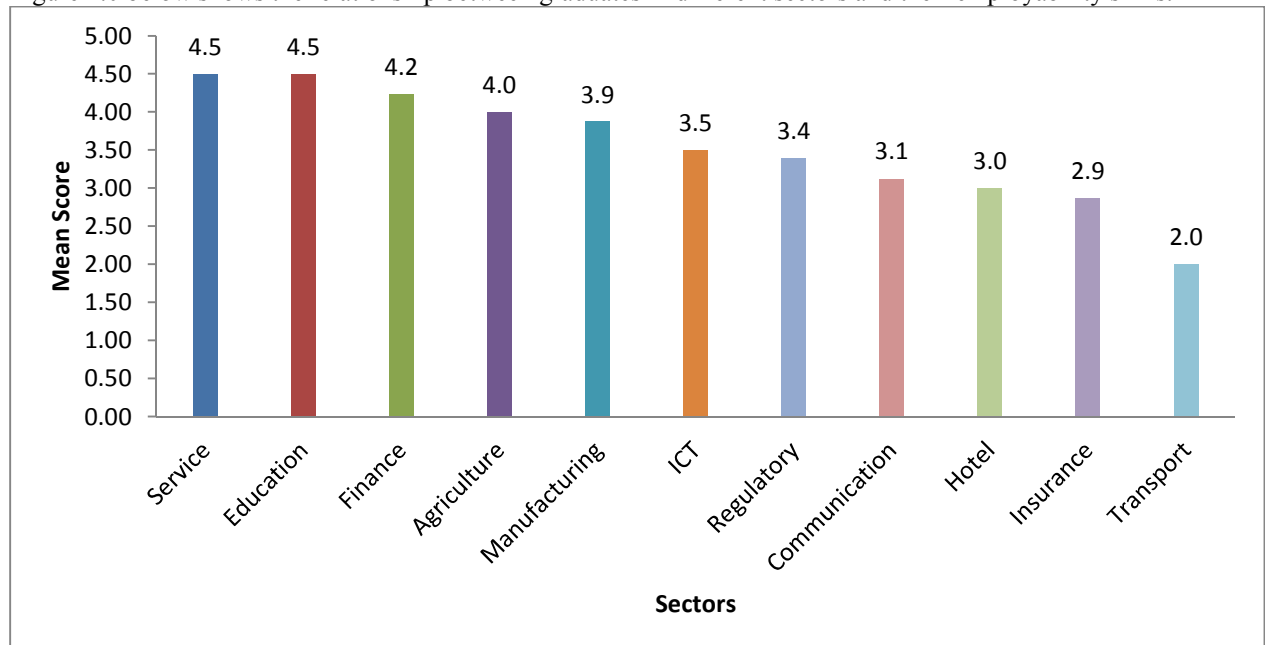


**Figure 2 Relationship between graduates in different sectors and their employability skills.**

**Employability skills by economic sectors**
The second objective of this research was to find out how university graduates from different sectors in Kenya compare in terms of employability skills. The results of this study show that the education (4.5), service (4.5)

and finance sectors (4.2) required more employability skills as indicated by the employer. The results indicated that manufacturing had a mean score of 3.9, ICT 3.5 and regulatory 3.4. Additionally, these study findings indicate that insurance and transport needed less employability skills. This implies that for insurance (m=2.9) and transport (m=2.0) do not need a lot of expertise to work in these sectors. In addition, the table below shows a p value of 0.027 <0.05 indicating that there was a significant difference in employability skills of graduates between different economic sectors.

Table 1.0 below presents a comparison of employability skills by economic sectors.

|  | Sum of Squares | Df | Mean Square | F | p value |
|---|---|---|---|---|---|
| Between Groups | 14.160 | 10 | 1.416 | 2.477 | .027 |
| Within Groups | 17.152 | 30 | .572 |  |  |
| **Total** | **31.312** | **40** |  |  |  |

**Link between graduates employability skills and work preparedness.**

Objective three investigated the link between graduate quality and employability skills. A partial correlation was done comparing the scores for employability and other work preparedness skills. The findings show that employability skills was positively correlated with present job competence, job confidence and job involvement at p value <0.05, with correlation coefficient of 0.596, 0.572 and 0.605. Regression analysis was undertaken to determine the determinants of employability skills, the models was found to be significant. The table shows regression analysis on determinants of employability skills. The details are presented here below.

|  |  | Employability Skills | Present Job Competence | Job Confidence | Job Involvement |
|---|---|---|---|---|---|
| **Employability Skills** | Pearson Correlation | 1 | .596[**] | .572[**] | .605[**] |
|  | P value |  | .000 | .000 | .000 |
|  | N | 41 | 41 | 40 | 41 |
| **Present Job Competence** | Pearson Correlation | .596[**] | 1 | .741[**] | .797[**] |
|  | P Value | *.000* |  | .000 | .000 |
|  | N | 41 | 41 | 40 | 41 |
| **Job Confidence** | Pearson Correlation | .572[**] | .741[**] | 1 | .872[**] |
|  | P value | *.000* | .000 |  | .000 |
|  | N | 40 | 40 | 40 | 40 |
| **Job Involvement** | Pearson Correlation | .605[**] | .797[**] | .872[**] | 1 |
|  | P value | *.000* | *.000* | .000 |  |
|  | N | 41 | 41 | 40 | 41 |

Pearson's correction analysis

The table above shows Pearson's correlation analysis that was done to check the link between employability skills and present job competence, job confidence and job involvement. Employability skills was positively correlated (r= .595) to present job competence, job confidence (r = .572) and job involvement (r = .605). Present job competence is positively correlated (r = .596) to employability skill, job confidence (r =.741) and job involvement (r = .797). The findings of this analysis also show that job confidence is positively and strongly (r =.872) correlated to job involvement. Job involvement has a positive strong link to job competence (r = .797) and job confidence (r = .797)

These findings indicate a strong correlation indicated by a p-value 0.000 showing that with an increase in employability skills also present job competence, job confidence and job involvement increases positively. In addition, it shows that when each of these variables increases employability skills positively increase. Further the findings imply that work preparedness of the graduate increase with an increase in their job competence, job confidence, and job involvement and employability skills. This correlation was significant at the 0.01 level (2 tailed).

**Link between graduates employability skills and work preparedness.**

Objective three investigated the link between graduate employability skills and the work preparedness. A partial correlation was done comparing the scores for employability and other work preparedness skills. The findings show that employability skills was positively correlated with present job competence, job confidence and job involvement at p value <0.05, with correlation coefficient of 0.596, 0.572 and 0.605. Regression analysis was undertaken to determine the determinants of employability skills and the models was found to be significant. This means that to improve work preparedness of graduates employability skills should also be increased and improved.

Table below shows regression analysis on determinants of employability skills. The details are presented here below.

| | | Employability Skills | Present Job Competence | Job Confidence | Job Involvement |
|---|---|---|---|---|---|
| **Employability Skills** | Pearson Correlation | 1 | .596[**] | .572[**] | .605[**] |
| | P value | | .000 | .000 | .000 |
| | N | 41 | 41 | 40 | 41 |
| **Present Job Competence** | Pearson Correlation | .596[**] | 1 | .741[**] | .797[**] |
| | P Value | *.000* | | .000 | .000 |
| | N | 41 | 41 | 40 | 41 |
| **Job Confidence** | Pearson Correlation | .572[**] | .741[**] | 1 | .872[**] |
| | P value | *.000* | .000 | | .000 |
| | N | 40 | 40 | 40 | 40 |
| **Job Involvement** | Pearson Correlation | .605[**] | .797[**] | .872[**] | 1 |
| | P value | *.000* | *.000* | .000 | |
| | N | 41 | 41 | 40 | 41 |

The table above shows Pearson's correlation analysis that was done to check the link between employability skills and present job competence, job confidence and job involvement. Employability skills was positively correlated (r= .595) to present job competence, job confidence (r = .572) and job involvement (r = .605). Present job competence is positively correlated (r = .596) to employability skill, job confidence (r =.741) and job involvement (r = .797). The findings of this analysis also show that job confidence is positively and strongly (r =.872) correlated to job involvement. Job involvement has a positive strong link to job competence (r = .797) and job confidence (r = .797)

These findings indicate a strong correlation indicated by a p-value 0.000 showing that with an increase in employability skills also present job competence, job confidence and job involvement increases positively. In addition it shows that when each of these variable increases employability skills positively increase. Further the findings imply that work preparedness of the graduate increase with an increase in their job competence, job confidence, and job involvement and employability skills. This correlation was significant at the 0.01 level (2 tailed).

Moreover, to investigate the link between graduates employability skills and work preparedness, a partial correlation was done comparing the scores for employability and work preparedness skills. This means that to improve work preparedness of graduates employability skills should also be increased and improved.

**Conclusions**

The conclusions were done by using each objective as shown here bellow.

**Objective 1**

Objective one showed that there is no significant difference between graduates quality from public and private universities indicated by a p-value (0.142) which is more than 0.05. The hypothesis Ho failed to be rejected but there was no evidence to accept alternative hypothesis. Further the research findings show that private universities were consistent in quality than public universities as indicated by the box plot on page 4 where both the 'narrowing' and 'consistency' factors were displayed. From these findings it can be implied that some public universities are in producing quality graduates. However a mean score of 1-5 shows inconsistency of the public universities while private universities have a mean score of 3-5 showing consistency in graduates quality.

**Objective 2**

Additionally, objective two sought to find out how university graduates from different sectors in Kenya compare in terms of employability skills. The study results showed the following means. Service and education (M = 4.5), finance (4.2), Agriculture (4.0), manufacturing (3.9), ICT (3.5), Regulatory (3.5), Communication (3.1), Hotel (3.0), insurance (2.9) and transport (2.0). It shows that service, education and finance required more employability skills than other sectors. Further the employers indicated that transport, hotels and insurance sectors did not require any employability skills. It can be argued that these sectors do not need any expertise or specialization and the sectors not necessarily employ graduates. The tested hypothesis showed a p-value of 0.27 indicating no significant difference in employability skills of university graduates from different sectors in Kenya therefore, the null hypothesis failed to be rejected.

**Objective 3**

Objective three investigated the link between graduates employability skills and work preparedness. As seen from these findings, an increase in employability skills increases work preparedness as the two of them are positively correlated. The hypothesis tested showed that there was a positive link (p value 0.000) between present job competence, job confidence, job involvement and employability skills. It can be argued that an increase in employability skills also increases job confidence, job involvement, and job competence. A

coefficient of 0.596, 0.572, and 0.605 respectively shows a strong relationship.

**Beneficiaries of the research.**
From the results of this study, different consumers stand to benefit such: the university developers, higher education institutions, lecturers, students, graduates and economic sector players. It will help the industry players to liaise with the universities and other higher education institutions to develop curricula which will prepare the students adequately for the labour market. The graduates will benefit from being well prepared by the universities

**Recommendations**
It will be prudent to emphasize the role of employability skills from primary, secondary, middle level colleges and universities to achieve skill oriented teaching in the Kenyan education system. The current system should be changed from tests orientation to capture talents and skill of each leaner. In addition, introduce more practical exams in centers of learning in the area of interest for candidates rather than concentrating on theoretical test results to measure success.

The curricula should be changed to include more practical applications by students, more internships, and incubation centers in each university as well as role modeling. Industry players have to work closely with higher education institutions to offer practical experiences to students in their areas of interest.

It is important for the ministry of education to encourage more research on the current trend of jobs in the market so that universities are advised accordingly. More technical schools with practical aspect of teaching can be incorporated to the higher learning sectors as part of the university to encourage on job training sessions.

Involving all stakeholders like government, sponsors, students, universities, lecturers and economic sector managers will be critical in the success of skill development. Reducing the many numbers of Kenyan higher education centers of learning to concentrate more on researched and practical skills would be more quality oriented and beneficial.

The seven variable model of: interactive knowledge, setting priorities, leadership skills, coordination of activities, creative knowledge, practical and theoretical skills, use of intellectual ability will contribute to employability skills. This will aid in developing and growing the Kenyan economic sectors.

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