

**CURRICULUM IMPLICATIONS OF SERVICE SECTOR EMPLOYERS'  
RATING AND PERCEPTIONS OF THE EMPLOYABILITY OF  
UNIVERSITY GRADUATES IN KENYA**

**BY  
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## DECLARATION

### Declaration by the Candidate

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**DEDICATION**

I DEDICATE THIS THESIS, WITH ALL MY LOVE,  
TO THE MOST IMPORTANT PEOPLE IN MY LIFE

MY DARLING WIFE

**GRACE NYABOKE NYANDIEKA-NYANDUSI**

OUR BELOVED CHILDREN

**JEMIMAH KEMUNTO NYANDUSI**

**GEORGE COLLINS ORWARU NYANDUSI**

**MARTHA MOKEIRA NYANDUSI**

**GLORIA REBECCA NYANDUSI**

**MARVEL MORAA NYANDUSI**

OUR JOY-BRINGING GRANDSON

**KINGLSEY HARRY ORWARU**

MY DEAR MOM

**PRISCILLAH ONKWARE MOTTANYA**

TO THE MEMORY OF MY DEPARTED DEAR DAD

**DICKSON MOTTANYA NYAKONDO**

**You pushed me. You pulled me. You prayed for me.**

**Persistently. Painstakingly.**

**Here is the consequence of your efforts.**

**This is the substance of your love.**

**PRAISE BE TO THE LORD ALMIGHTY**

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## ABSTRACT

This study was premised on a perceived mismatch between university education and the world of work that abounds in the literature. The purpose of the study was to interrogate this mismatch by investigating service sector employers' rating and perceptions of employability of university graduates and determine the implications on university curricula. The objectives of this study were: to document service sector employers' preferences when recruiting entry-level university graduates; to compute a statistical relationship between employers' rating of the desirability of specific employability attributes and competencies in their organizations and the rating of the graduate employees' actual employability attributes and competencies; to appraise the involvement of the service sector in university education; and to ascertain the implications of the employers' rating and perceptions of the employability of university graduates on curricula. The study was conducted in Nairobi. It was guided by the needs assessment and the backward design theoretical frameworks in adopting an embedded mixed methods research design. A study population of 369 respondents, three interviewees, and 20 documents was arrived at through systematic and purposive sampling. A questionnaire, an interview guide and a document analysis guide were used to collect data from the respondents, interviewees, and documents respectively. Quantitative data were analyzed either descriptively using frequencies, percentages and means, or inferentially using the t-test, while qualitative data were subjected to thematic analysis. The findings from both the quantitative and qualitative data revealed that: the most preferred minimum entry-level qualification by service sector employers was a bachelor's degree (40.5%) irrespective of the discipline; the commonly used recruitment procedure was advertisement-application-interview-recruitment process (55.4%); many employers (60.7%) did not have a particular preference of the university from which they recruited employees; employers desire a mix of 'soft skills' and 'hard skills' with a preference for soft skills; employers rated the hard skills higher than the soft skills; there was significant discrepancy ( $p\text{-value} .000 < \alpha 0.05$ ) between the expected employability attributes and the actual employability attributes; there was low involvement of the service sector in university education; and that employability skills are best developed through a holistic curriculum. It was concluded that there existed an employability skills deficit. The recommendations were that: universities should conceptualize and institutionalize their employability development frameworks through curricula; universities should initiate conversation on the roles of earlier stages of education in developing employability skills; and regulatory agencies should promote and enforce university-industry collaboration to make university education relevant to the world of work. This study's novel contribution to knowledge is the Holistic Graduate Identity Curriculum (HoGIC) model.

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**ABBREVIATIONS AND ACRONYMS**

<b>CHE:</b>	Commission for Higher Education
<b>CUE:</b>	Commission for University Education
<b>EDAG:</b>	Employability Document Analysis Guide
<b>EKII:</b>	Employability Key Informant Interviewee
<b>EKIIG:</b>	Employability Key Informant Interview Guide
<b>ERPEQUE:</b>	Employers' Rating and Perceptions of Employability Questionnaire
<b>FKE:</b>	Federation of Kenya Employers
<b>HEI:</b>	Higher Education Institution(s)
<b>ILO:</b>	International Labour Organization
<b>IUCEA:</b>	Inter-University Council of East Africa
<b>KEPSA:</b>	Kenya Private Sector Alliance
<b>KICD:</b>	Kenya Institute of Curriculum Development
<b>KNCCI:</b>	Kenya National Chamber of Commerce and Industry
<b>UIC:</b>	University-Industry collaboration
<b>UNESCO:</b>	United Nations Education, Science and Cultural Organization

## CHAPTER ONE

### INTRODUCTION AND BACKGROUND TO THE STUDY

#### 1.0 Introduction

Graduate employability is deemed a critical indicator of the quality and relevance of university education. Yet, in both scholarly and non-scholarly discourse, aspersions are often cast on the employability of university graduates in Kenya. The commonly repeated criticism is that there is a serious mis-match between what universities teach and the expectations of the world of work. Such criticism is too generic to provide any tangible foundation upon which to initiate and design specific interventions aimed at enhancing the employability of university graduates in Kenya. This study therefore delved into the specifics of the problem.

#### 1.1 Background to the Problem

The link between education and development has been fairly well established worldwide. Education, which is the primary vehicle for human resource development, is regarded as a highly profitable investment. To quote the late Mwalimu Julius Nyerere, former President of Tanzania, there is “no investment in the economy more important than in education”. This is especially the case for tertiary education. It is now widely accepted that investments in university and other tertiary education generally guarantee higher individual and social returns than investments in other sectors (McCowan, 2016a; Odhiambo, 2018).

It is such thinking that has led to the rapid expansion in higher education that is being witnessed worldwide. Kenya is no exception. The literature on university enrolment and development indicates progressive exponential growth in the university sector in Kenya since independence to date. At independence, there was only one university

college, a constituent of the University of East Africa, Kenya. The university college morphed into the University of Nairobi in 1970, with an enrolment of 3438 students. By the 2021/2022 academic year, the number of universities in Kenya had grown to sixty-five (65) with an estimated enrolment of 562,000 students (Commission for Higher Education, 2003; Kamer, 2023; Kithinji, 2023; Nganga, 2016).

While these statistics leave no question as to the quantitative expansion of university education in Kenya, the all-important question is whether there has been a corresponding qualitative growth in the country's university education system. To answer this question, we must first delimit the concept "quality" as it is applied in education. Quality is conceived as the 'fitness for purpose' of an educational program. It is measured in terms of how well an educational program/system achieves its set goals. One of the most effective ways of determining the quality of an educational program is by establishing its relevance to the needs of both the learner and his/her society (Brahmakasikara, Achwarin and Phongsatha, 2017; Otunga, 2010). This idea of quality through relevance will guide this study.

The question of educational relevance is as old as education itself. It is such a recurrent and pertinent question that it is construed by many over the centuries as a problem (Albrecht and Karabenic, 2017). Educators are continuously grappling with the problem of developing and maintaining curricular that are relevant to their countries' present and emerging needs. This problem exists at every level of education in virtually every country. Kenya is not an exception. This study sought to investigate the problem of educational relevance at the university level in Kenya.

Education at any level is not static, simply because society is not, and can never be, static. This is why the goals, content, and process(es) of education have to be

continually updated in order to ensure relevance to the contemporary situation. Herein lies the problem. Educational changes hardly ever match the changes in the broader society within which educational systems operate. The implication here is that there is almost always a mismatch between what the education system offers on one hand, and what society needs on the other (Bennett, 2019; Kithinji, 2023; McCowan, 2016a; Odhiambo, 2018).

This mismatch assumes greater enormity in the twenty first century because the nature of knowledge and knowing has changed and continues to change drastically and rapidly. This therefore means that traditional curriculum designs and delivery methods are no longer applicable (Kasozi 2003; Commission for Higher Education (CHE), (2003). This has direct and profound implication for higher (University) education. As Kasozi (2003) observes:

A major global trend impacting on higher education is the rapid creation and decay of knowledge is created almost every day, making previous assumption obsolete... The rapid creating and transmission of knowledge has reduced the lifespan of curricular, especially higher education curricular. Education systems must constantly update what they teach if they are to respond to the global market (p. 21).

This fluidity in the creation, transmission and management of knowledge is most apparent in the twenty first century workplace. The workplace is becoming increasingly complex due to shifts in job definition, employee multi-tasking, flexible work patterns, team-working, ICT, and other aspects of globalization and change (Bennett 2019; McCowan, 2016a; Mainga, Daniel & Alamil, 2022; Tejan & Sabil, 2019).

As Harvey, Moon, and Geall (1997) observe, there is a continuing diversification and redefinition of graduate employment. This diversification “is indicative of a growing

tendency for graduates ‘to grow jobs’ within the organizational structure beyond fairly narrowly designated sets of tasks, to entirely new roles that respond to or anticipate constant changes in the world of work.”

In such a scenario, it is crucial that university graduates be as proactive and responsive as possible to meet and overcome the present and emerging challenges of such an unpredictable labour market. This necessitates a complete shift in the design and delivery of university curricular:

Traditional University education has been concerned with knowledge, analysis and judgment. In a rapidly changing world, the categories and classifications derived from the past may not be enough; there is also need to develop skills of design in its broadest sense: new concepts, new ways of doing things. Such design needs creativity (De Bono, 2005, para.1)

To produce graduates who will claim the twenty first century and leave a legacy for posterity, university education must engender creativity. This creativity can be best manifested in transformative curricular that lay a firm foundation for life-long learning and adequately equip graduates with skills that enhance employability (Brahmakasikara, Achwarin and Phongsatha, 2017; Harvey, 1999; Prewitt, 2016). This imperative is captured aptly by the Commission of the European Community (2006) thus:

In order to overcome the persistent mismatches between graduate qualifications and the needs of the labour market, university programs should be structured to enhance directly the employability of graduates and to offer broad support to the workplace more generally. Universities should offer innovative curricular, teaching methods, training/retraining programs, which include broader employment-related skills along with the more discipline-specific skills (p.6).

While this discourse on the employability of university graduates will be explored further in subsequent sections, it is important to observe here, there is abundant evidence from across the globe that employers deem university curricula as the prime

arena for preparing individuals to navigate increasingly competitive and uncertain environments (Commission for Higher Education (CHE), 2003; Mainga, Daniel and Alamil, 2022; Tejan and Sabil, 2019). Such volatile environments both intersect and transcend the world of work.

The question is: are universities anywhere and especially in Kenya up to this task? Seeking an answer to this questions is what informed and inspired this study.

## **1.2 Statement of the Problem**

Universities globally are at a crossroads. On the one hand, there is the challenge of massive quantitative expansion occasioned by an explosion in the population seeking access to university education. On the other hand, there is the challenge of ensuring quality through the provision of curricula that are relevant to the needs of this population and society in general. Furthermore, these needs are constantly and rapidly changing due to globalization and the explosion of knowledge.

There is an overwhelming notion in contemporary Higher Education Literature that there is a problem in Higher Education. The problem is that there is a huge gap between institutional programmes and the needs of enterprises (Commission of the European Communities, 2006; CHE, 2003; DeBono, 2005; Gibbons, 1998; Gokulsing, 2013; Harvey, Locke and Morey, 2002; Kithinji, 2023; Koyi, Kiprono and Manyali, 2020; Mainga, Daniel and Alamil, 2022; McCowan, 2016a; Odhiambo, 2018; Okebukola, 2006; Republic of Kenya, 2006; Tejan and Sabil, 2019; UNESCO, 1998; Vesuri, 2004; Weinert, 1999; Weligamage, 2009; World Bank, 2002). There is growing consensus that one of the most important indicators used to evaluate relevance and quality in higher education is the employability or labour market performance of graduates (Belt, Drake & Chapman, 2010; Bowers-Brown & Harvey,

2004; Brown & Drew, 2005; Ehile, 2013; Harvey & Knight, 2003; Mainga, Daniel, and Alamil, 2022; Prewitt, 2016; Tejan and Sabil, 2019). However, this employability is yet to be achieved because there is “a mismatch between skills offered by universities and the demands of the labour market” (UNESCO, 2006). A study conducted by the Inter-University Council for East Africa (IUCEA) found out that over half of all the graduates in East Africa (Kenya, Uganda, Tanzania, Rwanda, and Burundi) are inadequately prepared for employment (McCowan, 2016a; Ng’ang’a, 2014).

In the same vein, the ‘universities, employability and inclusive development’ project commissioned by the British Council and conducted between 2013 and 2016 in four African countries, Ghana, Kenya, Nigeria and South Africa, illuminates this problem. The project’s final report, titled *Universities, employability and inclusive development: Repositioning higher education in Ghana, Kenya, Nigeria, and South Africa*, makes this instructive observation:

African newspapers are replete with stories of the hardships graduates face in finding employment, and employer dissatisfaction with the graduates seeking employment, especially the poor preparedness for the workplace: a frequent descriptor is that they are ‘half-baked’. These narratives are repeated so frequently that the problems of employability have become common knowledge in society (McCowan, 2016a, p.12).

This study is premised on this perceived mismatch between university education and the world of work. By seeking answers from selected service sector employers in Nairobi, the study sought to address two related concerns: one, how employers in Kenya perceive and rate the employability of university graduates, and two, the implications of these perceptions and ratings on university curricula in Kenya.

### **1.3 Purpose and Objectives of the study**

The purpose of this study was to investigate employers' rating and perceptions of the employability of university graduates, and to determine the implications of these rating and perceptions on university curricula in Kenya.

In this regard, the following research objectives guided the study:

1. To document service sector employers' preferences when recruiting entry-level university graduate employees
2. To compute a statistical relationship between employers' rating and perceptions of the desirability of specific employability attributes and competencies in their organizations and their rating and perceptions of their graduate employees' actual workplace attributes and competencies
3. To appraise the involvement of the service sector in university education in Kenya
4. To ascertain the implications of the employers' rating and perceptions of the employability of university graduates on university curricula in Kenya

To attain these objectives, and in line with the mixed methods orientation, this study employed five research questions and one null hypothesis. Each research question and the hypothesis correspond to a specific objective as indicated below:

#### ***Research questions***

1. Which degrees, institutions and recruitment channels do service sector employers prefer when selecting university graduates for entry level positions in Kenya? (corresponding with objective 1)
2. Which employability attributes do service sector employers expect in graduate employees? (corresponding with objective 2)

3. What is the employers' rating of the actual employability attributes of their graduate employees? (corresponding with objective 3)
4. What are the perceptions of the employers on the involvement or participation of the service sector in university education in Kenya with a view to enhancing employability? (corresponding with objective 3)
5. What are the implications of the employers' rating and perceptions of the employability of university graduates on university curricula? (corresponding with objective 4)

### ***Hypothesis***

There is no significant difference between service sector employers' rating of the desirability of specific employability attributes and competencies and the employers' actual rating of these attributes and competencies in their graduate employees. (Corresponding with objective 2)

### **1.4 Justification of the Study**

The evidence that there is a problem of relevance in university education abounds in higher education literature globally. Several studies and other publications from Europe, the Americas, Asia and the Pacific are unanimous that there is a mismatch between university education and employment, and that this mismatch is best perceived by the employers themselves (Belt, Drake, & Chapman, 2010; Bennet, 2019; Cook, 2022; Gorlich, Stepanok, and Al-Hussami, 2013; ILO, 2013; Lackovic, 2019; Mainga, Daniel and Alamil, 2022; World Bank, 2021). Closer home in Africa, the same conclusion abounds in literature from Botswana (Pheko and Molefhe, 2016), Cameroon (Mbebeb, 2013), Nigeria (Adedeji and Oyebade, 2016; Chiaha and Agu, 2013), Ghana (Ananga, Adzahlie-Mensah and Tamanja, 2016); Liberia (Dabiri,

2013); Morocco (Tejan and Sabil, 2019); South Africa (Walker and Fongwa, 2016), Mauritius (Gokulsing, 2013), Zambia (Munsanje, 2013), Tanzania (Kalufya and Mwakajinga, 2016) and Uganda (Tagulwa, Owino, Muwonge & Kaahwa, 2023).

Despite this well documented mismatch between university education and employment, “there is a lack of substantial research from the employers’ perspective on specific employability skills gaps and how these can be best achieved before graduation” (Fair, 2013, p. 7). This situation obtains quite significantly in Africa. As a recent study on universities, employability and inclusive development in selected African countries, including Kenya, points out, while “problems of employability have become common knowledge” across Africa, “there is very little in the way of research or even reliable basic information on the topic”. The study further observes that “there is little research evidence relating to graduate destinations, the attributes of graduate recruits, or interventions in universities to improve employability and their effectiveness” (McCowan, 2016a, p. 12). The interventions in universities to improve employability would of course fall in the realm of curriculum design and delivery. Thus this observation amplified by McCowan (2016a) is essentially an indicator of a deficiency in university curriculum development in so far employability is concerned. It is this deficiency that the present study sought to address.

As pointed out earlier, there is a lot of non-empirical information indicating the mismatch between universities and the labour market in Kenya (Ligami, 2016; McCowan, 2016a; Munda, 2018; Ndayala, 2018; Nyamai, 2018; Oigo, 2019; Wasunna, 2018; Yusuf, 2016). In comparison to the non-empirical literature focusing on the mismatch, empirical literature on the nature of the mismatch, and therefore highlighting the employability of university graduates is proportionately less

available. It has been correctly observed that in Kenya, “the overall body of literature on higher education is of a fair size, but only a small part of this provides rigorous evidence relating to employability” (McCowan, 2016a, p.12). Indeed, the literature available in the course of this study indicates that most of the empirical studies on higher education are concentrated either on equality, equity and related issues (Bello & Chumba, 2016; Mulongo, 2013) or on university planning, management and development (Mbirithi, 2013; Oanda & Jowi, 2012). These studies do not deal with employability of university graduates, which was the focus of the present study.

Other available studies mentioned employability as an indicator of relevance in university education although they did not go into an in-depth exploration of the same (Omolo, 2012; Tumuti, Wanderi and Langat-Thoruwa, 2013). A number of studies specifically explored the relevance of university education to employment from the perspective of graduate employability (Awiti, Orwa, Mbuvi and Karumba, 2019; Bogonko, 2018; Federation of Kenya Employers (FKE), 2018; Kalei, 2014; Kamau & Waudu, 2012; Munyoki and Ndemo, 2017; Oanda and Sifuna, 2016; Odhiambo, 2018; Onyango, Kunyanga, Karanja, and Wahome, 2018; Ponge, 2013; Rintari, 2017; Tumuti, Mule, Gecaga and Manguriu, 2013).

However, among all these studies, only Awiti, et al. (2019), Bogonko (2018), FKE (2018), Kalei (2014), Kamau & Waudu (2012), Oanda and Sifuna, 2016, Onyango, et al. (2018), Ponge (2013) and Rintari (2017) specifically address, in varying degrees, the issue of employers’ perceptions and rating of university graduates’ employability. The scope, conduct and findings of each of these studies are explored in detail in chapter two, section 2.7 of this study. Nonetheless, only three studies, Awiti, et al. (2019), FKE (2018) and Oanda and Sifuna (2016) are similar to the present study in

terms of approach and scope. These studies investigate the employability of university graduates in Kenya by seeking the perspectives and experiences of employers. This approach resonates with the present study which sought to determine employers' perceptions and rating of the employability of university graduates in Kenya. The distinction between all these studies and the present study, as explained in chapter two, is that this one goes further to investigate the employers' responses' implications on the university curriculum.

There is therefore a considerable gap in the knowledge of how service sector employers in Kenya perceive and rate the employability of university graduates, and on the implications of these perceptions and ratings on university curricula. The present study sought to contribute towards filling this gap.

### **1.5 Significance of the Study**

It is therefore envisaged that this study will be of great significance to various stakeholders. For university curriculum leaders, the findings of this study will be used to evaluate the discrepancies inherent in current university curricular and to make appropriate improvements so as to enhance the employability of university graduates. The Ministry of Education and allied agencies will use the findings and/or recommendations of this study in the revision and/or formulation of appropriate policies in the area of higher, adult and life-long education, while university students and their sponsors will use the findings of this study to advocate for appropriate reforms in university education. On their part, employers will use the recommendations of this study to work towards the forging of closer links between them and the universities. Furthermore, employers will use the findings of this study to enhance their in-house training programs to cater for the discrepancies inherent in

university education in preparing graduates for employment. Finally, Education and Human Resources Development scholars will use this study as a basis for further study by way of disputation, or replication, or otherwise.

### **1.6 Scope of the Study**

This study sought to find out employers' rating and perceptions of the employability of university graduates. The employers referred to here are those in the service sector. This sector was selected because it is the largest provider of employment to fresh university graduates in Kenya (KIPPRA, 2013). The study covered service sector firms/organizations in Nairobi. These firms fall under the followings sectors: Business and professional services, communication services (including ICT), constructions and related engineering services, distribution services, educational services, environmental services, financial services, health related and social services, tourism and travel related services, recreational, cultural and sporting services, and transport services. The researcher chose Nairobi due to the fact that it is Kenya's largest and most cosmopolitan commercial and industrial center.

The study focused on the employers' expectations of university graduates in entry-level positions, the employers' actual rating of these graduates' employability attributes and competencies, and the employers' general perceptions on the employability of university graduates in Kenya. The study also explored the employers' perceptions of the relationship between the service sector and university education in Kenya. ultimately, this study sought to identify the implications of the service sector employers' rating and perceptions of the employability of university graduates on university curricula in Kenya.

This study was based on pragmatism as an ontological and epistemological foundation. In line with pragmatism, the study adopted a mixed methods research paradigm with a two pronged research design involving both a cross-sectional survey design and a concurrent triangulation design. The study employed a questionnaire, an interview guide, and a document analysis guide as the instruments for data collection and generation.

### **1.7 Limitations of the Study**

This study encountered two major limitations, one theoretical and the other methodological. The theoretical limitation stemmed out of the lean corpus of Kenyan empirical literature that relates employability to university curricula. The import of this is that there is no established theory or model of employability in Kenya on which to base a study such as this. The mitigation for this limitation was that the study relied heavily on theories and models from other parts of the world. Since both employability and university curricula are relatively global and generic conceptions, the reliance on global theoretical frameworks did not render this study irrelevant for the Kenyan context.

Methodologically, the researcher was not able to obtain a comprehensive classified list of service sector firms/organizations for sampling. This means that though it would have been logical to categorize all the employers involved in this study into specific sub-sectors, this was not possible. Nevertheless, the relatively large number of employers selected through systematic random sampling assured representativeness. This therefore means that the findings, conclusions, and recommendations of this study are generalizable.

### **1.8 Basic Assumptions of the Study**

The basic assumption of this study is that university curricula in Kenya are relevant to the expectations of employers and that this relevance is exemplified by high employability competencies exhibited by university graduates at the workplace.

### **1.9 Theoretical Framework**

The most commonly applied theories in studies to do with the relationship between education and the world of work or labour market are either the human capital theory or the job market signaling theory (Cai, 2012). However, both these theories lend themselves more fittingly to studies that have a labour market or business orientation (Baron and McCormack, 2024). The present study, though admittedly addressing labour market concerns, is situated in the curriculum studies space, since its ultimate aim is to determine the university curricula implications of employers rating and perceptions of university graduates in Kenya.

It follows then that this study may be best understood through curriculum related theoretical models. The study was therefore underpinned by two curriculum oriented theoretical models, the Needs Assessment model and the Backward Design model.

#### ***Needs Assessment***

The general consensus among curriculum scholars is that one of the most effective ways of determining relevance between curricula and prevalent societal conditions is by use of Needs Assessment (Altschuld and Kumar, 2010; Altschuld and Watk, 2014; Kaufmann, 2019; Lee, 2019; Swart, 2021) Curriculum scholars and organizations place needs assessment at the beginning of any curriculum development initiative.

Ralph Tyler, whose curriculum development model is widely regarded as the prototype for subsequent models, alludes to the importance of needs assessment. He

asserts that there are three sources of objectives for a curriculum: the needs of learners; the needs of the society; and suggestions from subject specialists (Tyler, 1949). Tyler's contemporary, Hilda Taba (1962), is more explicit in her model. She places 'Diagnosis of needs' as the first step in the model. Oliva (1992) suggests a seventeen step curriculum development model. The first two steps of the model, 'specify the general needs of the learners' and 'specify the needs of society', are needs assessment procedures. Shiundu and Omulando (1992) place 'situational analysis', a variant of needs assessment, at the beginning of the curriculum development process. Syomwene, Yungungu, & Nyandusi (2017), in their Twelve-steps Curriculum Development Process model, identify 'Context Analysis' as the first step in curriculum development. According to them, it is through Context Analysis that "curriculum planners assess the prevailing circumstances and needs. This can be accomplished through research to assess the societal and learners' needs that the new program should address" (Syomwene, Yungungu, & Nyandusi, 2017, p. 25). The Kenya Institute of Curriculum Development positions needs assessment as the initial stage of its curriculum development cycle (KICD, n.d.).

The most often cited definition of needs assessment is by Suarez (1991, p.433):

Needs assessment is an information gathering and analysis process which results in the identifications of the needs of individuals groups, institutions, communities, or societies. It is the intent of needs assessment to identify areas in which deficits exist or desired performance has not been attained. The results of needs assessment are then used for further action such as planning or remediation to improve the situation.

There are a variety of conceptions of needs assessment basing on the definition of 'need'. This study adopted Kaufmann's (2000) definition of 'need' as a 'gap in results.' This definition contends that needs are areas in which actual status is less than targeted status. Needs assessment based on this definition entails a process of

ascertaining the targeted status, followed by an investigation to determine the current status relative to the target status, and finally comparing the two to discover discrepancies, identify needs, and recommend or institute remedial measures. This process is also known as discrepancy analysis and it is used in curriculum evaluation to determine the gap between ‘what is’ and ‘what ought to be’ (Altschuld and Kumar, 2010; Altschuld and Watk, 2014; Kaufmann, 2000; Kaufman 2019; Lee, 2019; Swart, 2021).

Needs exist at three distinct yet correlated levels: the mega level, the macro level, and the micro level. The mega level refers to societal needs; the macro level refers to organizational needs, while the micro level refers to individual needs (Kaufmann 2000). In order to comprehensively assess the needs at all these levels, Kaufmann suggests a ‘mega planning’ approach which combines ‘hard data’ and ‘soft data’. Hard data, in his conceptualization, are comprised of empirical ratings of performance which illuminate the discrepancy between what is and what ought to be; on the other hand, soft data are the perceptions of the participants about the existing conditions. It is this mega planning approach of needs assessment that has informed the present study’s focus on the employers’ *rating* and *perceptions* of the employability of university graduates.

Watkins, West-Meiers, and Visser (2012) outline six benefits of needs assessment as a tool for decision-making:

*Needs assessments can be a systematic process to guide decision making.* Decision making at whatever level in an organization influences processes and procedures. Thus needs assessment helps illuminate specific needs and gaps in an organization’s procedures and programs, including the resources that may be lacking. As a result,

needs assessment helps identify problems and enhance the efficiency of an organization by providing step-by-step guidelines for ameliorating practice and improving performance.

*Needs assessments can provide justification for decisions before they are made.*

Needs assessments help to identify: (a) the existing gaps, thus defining the needs; (b) the order of priority of the needs; (c) the rationale for selecting and applying one or more interventions meant to address these needs, and (d) the criteria for assessing these interventions. Thus needs assessments ensure the accountability of the decisions made, hence justifying why they were made.

*Needs assessments can be scalable for any size of project, time frame, or budget.*

Needs assessments can be customized to fit any size of project, any time frame, and any budget. There is no one-size-fits-all model of needs assessment. This therefore means that needs assessment should of necessity be contextualized in terms of planning and execution. It also means that needs assessment can be either expanded or compressed in terms of time and scope as the situation necessitates.

*Needs assessments can offer a replicable model that can be applied by novices or*

*experts.* Needs assessment models can be replicated over and over again and can be systematically improved over time. Notwithstanding the scalability discussed above, the basic framework for needs assessments provides a flexible structure that can be repeated over time and in variety of settings. This makes it easy to adapt and customize needs assessment models.

*Needs assessments can provide a systemic perspective for decision makers.*

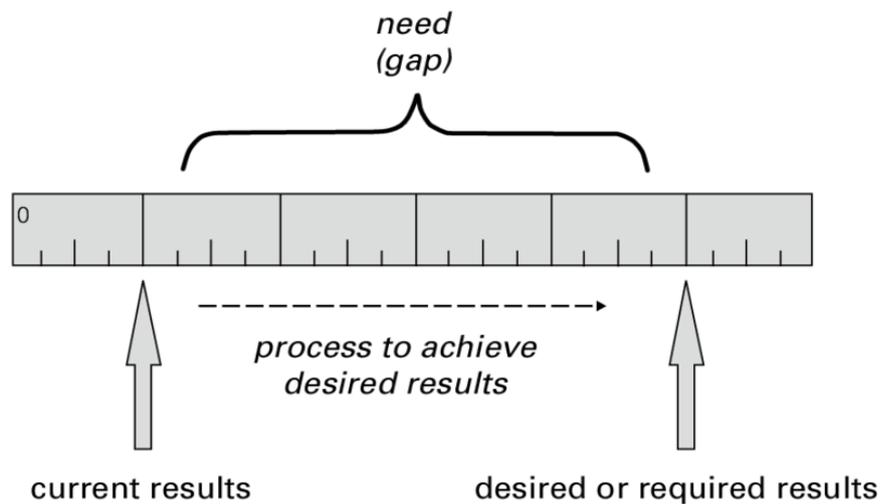
Organizations are essentially systems composed of subsystems, and operating within larger systems. Thus the identification of needs in one subsystem would invariably

point out gaps in others, while interventions in one subsystem would have ramifications in others. In this study, for instance, the needs or gaps identified by employers have implications on the university curriculum.

*Needs assessment can allow for interdisciplinary solutions to complex problems.* Discrepancies in organizations are rarely as a result of single causes. Logically therefore, remedial approaches are multifaceted. This necessitates an interdisciplinary and multi-pronged approach where decisions are arrived at from various perspectives and persuasions. In resonance with this, the present study was philosophically underpinned by pragmatism and operationalized using a mixed methods approach.

In sum, needs assessment is a critical tool in organizational development which may be employed at any level and at any time in the lifespan of the organization. As Watkins et al. (2012, p.27) observe, needs assessment can be done “*proactively* to identify opportunities to improve performance, *reactively* in response to the consequences of less-than-desirable results, or *continuously* as an integrated component of an ongoing improvement program”.

The present study, at least in its initial phase, is reactive. It sought to establish the gap between the desired level of graduate employability (desired status) and the actual level of the graduate employability (current status) as perceived by the employers. To do this, the study adopted the needs assessment framework model in figure 1.1:



**Fig. 1.1: Relating needs to discrepancies between what is (current status) and what should be (desired status)**

Source: Watkins, Meiers, and Visser (2012)

It is important to note that in this model, the wider the gap, the lesser the relevance of the education program to the stated expectations, and vice versa. In the present study, the need (gap) between actual graduate employability status and the desired graduate employability status was determined, then the implications of the gap so determined were identified.

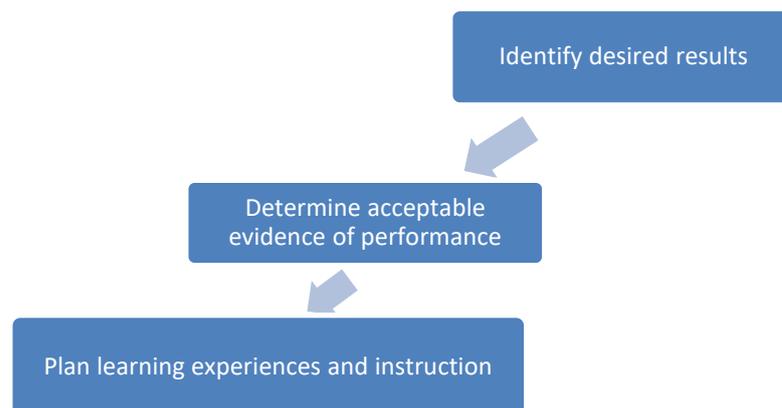
### ***Backward Design model***

The needs assessment model discussed above is essentially a way of identifying and documenting gaps in curriculum (Hannum and Hansen, 1989). It rarely goes into the realm of identifying and implementing solutions aimed at closing the apparent gaps. For the curriculum development process to be conclusive, the needs assessment model requires a complementary model that focuses on filling the identified gap(s).

One such model is the Backward Design model, which is the brainchild of Grant Wiggins and Jay McTighe, who postulate that the most effective curriculum design should be 'backward'. In a backward design, "one starts with the end—the desired

results (goals or standards)—and then derives the curriculum from the evidence of learning (performances) called for by the standard and the teaching needed to equip students to perform” (Wiggins and McTighe, 2005, p.8).

The Backward Design presents a three-stage sequence for curriculum design. The stages are: identifying desired results, determining acceptable evidence of performance, and planning learning experiences and instruction. These stages are shown in figure 1.2:



**Fig. 1.2: The Backward Design Process**

### *Identifying desired results*

This first step of the Backward design is actually a needs assessment procedure. It is hinged on three fundamental questions: (i) What should the learners know, understand, and be able to do? (ii) What is worthy of understanding? (iii) What enduring understandings are desired? (Wiggins and McTighe, 2005). This initial step corresponds with Ralph Tyler’s famous classical first question: What educational purposes should the school seek to attain? (Tyler 1949). This question points to desired outcomes of the curriculum. Such outcomes need to be carefully identified and deliberately highlighted. This is done through a cogent statement of objectives. Stating objectives is beginning with the end. Objectives are therefore both the ‘end-point’ and the ‘starting-point’ of the curriculum enterprise. This study sought to

determine the employability attributes and competencies that employers desire in their graduate employees.

*Determining acceptable evidence of performance*

Wiggins and McTighe (2005, p.12) urge curriculum planners and teachers “to first think like an assessor before designing specific units and lessons, and thus to consider up front how they will determine whether students have attained the desired understandings.” While this second step is an ‘assessment stage’, the emphasis of the assessment is not retention and recall of facts and concepts, as is the case in many traditional curriculum settings. Rather, the emphasis is on understanding of the facts and concepts, and applying them in performance of tasks and projects. While this study did not directly dwell on this second step, the discussion on the curriculum implications of the employers’ rating and perceptions of the employability of their graduate employees alludes to such assessment of performance.

*Planning learning experiences and instruction*

The ultimate mark in curriculum is learning. While learning is limitless and spontaneous, in a planned and structured curriculum setting such as a university, learning that leads to desired results is a result of specific and deliberate curriculum design and instructional approaches. Step three of the backward design is concerned with the actual learning in an instructional setting.

Wiggins and McTighe (2005, p.13) suggest five key questions that must be considered at this stage:

- What enabling knowledge (facts, concepts, and principles) and skills (procedures) will students need to perform effectively and achieve desired results?

- What activities will equip students with the needed knowledge and skills?
- What will need to be taught and coached, and how should it best be taught, in light of performance?
- What materials and resources are best suited to accomplish these goals?
- Is the overall design coherent and effective?

In this study, the discussion on curriculum implications is guided in part by some of these questions.

The two theoretical models adopted for this study, the needs assessment model and the backward design model, are complementary in so far as the purposes of this study are concerned. On one hand, the needs assessment model helped to illuminate the gap between the employers' expectations of the employability of their graduate employees; on the other hand, the backward design model guided the interrogation of the implications of the gap so determined on university curricula. The end result of this process was the conceptualization of the Holistic Graduate Identity Curriculum (HoGIC) model presented in Chapter five.

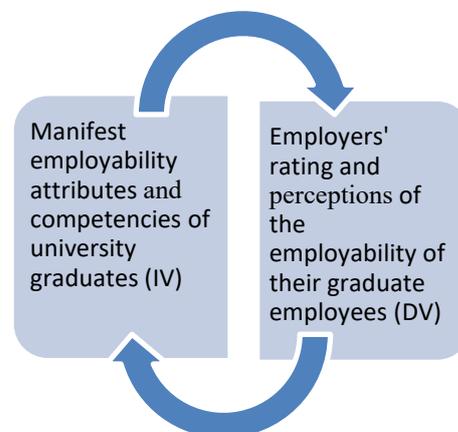
### **1.10 Variables of the Study and the Conceptual Framework**

It is common in educational research to ascribe interactive relationships to two variables: an independent variable (IV), also known as an input or a predictor variable, and a dependent variable (DV), also known as an outcome or a criterion variable (Cohen, Manion & Morrison, 2017).

This study therefore had three key variables: the independent variable, the dependent variable, and a mediator variable. The independent variable for this study was university graduates' employability. The dependent variable was employers' rating

and perceptions of their employees' employability. The mediator variable was university curricula.

The relationship between the independent variable and the dependent variable in this study is complementary and symbiotic. On one hand, the manifest employability attributes and competencies of university graduates influence their employers' rating and perceptions. On the other hand, employers' rating and perceptions of the employability of their graduate employees influence the conceptualization and development of employability in the university, hence enhancing the employability of university graduates. This symbiotic relationship is illustrated in figure 1.3:



**Fig. 1.3: Employability variable symbiosis**

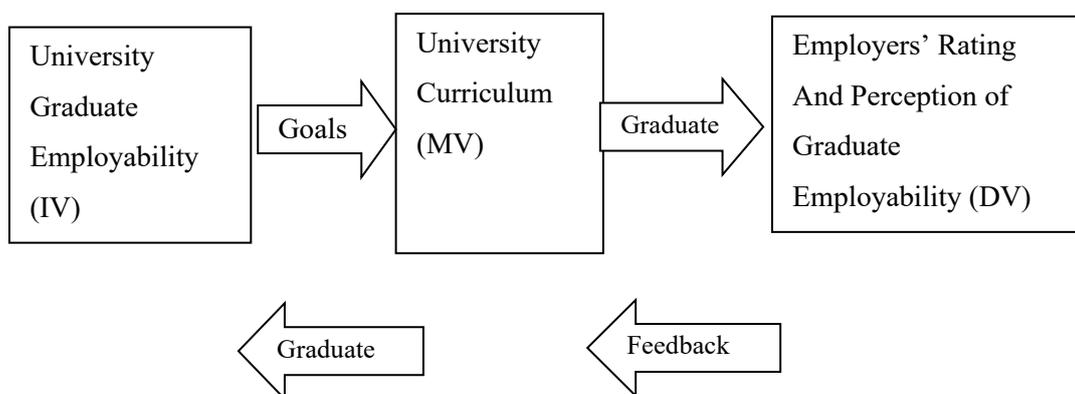
Note: The arrows in the diagram denote influence

Source: Author

While independent and dependent variables are the 'default' variables in educational research, there exist other variables that interact with either or both variables. Some of these other variables include intervening variables, control variables, extraneous variables, confounding variables, moderator (or moderating) variables, and mediator

(or mediating variables). Defining and discussing each of these variable types is outside the scope of this study. In the present study, besides the IV and the DV, one other variable was discernible: the mediator variable (MV).

A mediator variable is one that defines and explains the relationship between the independent variable and the dependent variable; that is, it provides an explanation of how, and to some extent, why the two variables are related. A mediator variable is an intermediate variable in the causal sequence between an independent variable and the dependent variable. It is typically the variable through which the independent variable acts to influence the dependent variable (Bhandari, 2021; Glen, 2018; Holland, Shore and Cortina, 2016; Memon, Jun-Hwa, Ramaya and Ting, 2018). In this conceptualization, the interaction between the independent, mediator, and dependent variables is often non-linear and multi-directional. This is because, as Cohen, Manion and Morrison (2017) observe, in many instances in educational research, the direction of causality is usually unclear; thus, an independent variable may, in turn, become a dependent variable and the reverse is true. Such non-linearity and multi-directionality is apparent figure 1.4 below which illustrates the relationship between the three variables.



**Fig.1.4: Conceptual framework of relationship between employability variables**

The relationship portrayed in fig. 1.4 is primarily between the independent variable, university graduate employability, and the dependent variable, employers' rating and perceptions of graduate employability. This relationship is mediated by university curriculum. In this conceptualization, university graduate employability has a dual connotation: one, as a concept; that is, the idea of graduate employability; and two, as a product; that is, the identity of a graduate.

The dual connotation of the graduate employability necessitates a dual relationship sequence between the variables as indicated in fig.1. In the first sequence, graduate employability *as a concept* forms the basis for the goals or purpose of the university curriculum, which in turn produces a graduate whose employability will be rated and perceived by the employer. The reverse sequence of this relationship is that employers' rating and perceptions of the actual employability of their graduate employees provides feedback to the university curriculum, which then processes this feedback to produce a graduate whose identity is characterized by enhanced employability. This reverse sequence is in line with the Backward Design model discussed in section 1.9. In sum, the relationship between graduate employability and employers' rating and perceptions of graduate employability is mediated by university curricula. This is captured in the purpose of this study, which was to investigate employers' perceptions and rating of the employability of university graduates, and to determine the implications of these perceptions and ratings on university curricula in Kenya.

## **1.11 Operational Definition of Terms**

### ***Competencies***

Competencies are the personal and professional attributes through which an employee lives up to the demands and expectations of his or her work. Competencies are the responsibilities, abilities, strengths and dispositions that characterize an employee in the course of discharging his/her duties in a given workplace.

### ***Curriculum***

In this study, curriculum is all the programs and activities that shape or are meant to shape the intellectual, personal, social, and productive learning experiences of a student over the duration of their stay at the university.

### ***Curriculum relevance***

For this study, the definition of curriculum relevance is adopted, with slight modification, from UNESCO's glossary of curriculum terminology. It refers to the applicability and appropriateness of a given curriculum to the needs, interests, aspirations and expectations of learners and the society in general at a particular point in time, and the responsiveness of the curriculum to the continuously changing realities of everyday life and the world of work. In this study therefore, *curriculum relevance* and *curriculum responsiveness* are deemed to be synonymous.

### ***Employability***

Employability is generically conceived as the entire corpus of a university graduate's attributes, which consist of the knowledge, skills, attitudes, competencies and dispositions that may qualify them for one or more positions of employment, including self-employment, and which would help them to remain progressively productive and valuable in all the personal, social, and economic spheres of their life.

***Employers***

These are those officers in the service sector in Kenya who are authorized by their respective firms/organizations to make and implement decisions regarding hiring, firing, promotion, training, and general job appraisal of all or a section of the firm's employees. In most cases, these are Human Resources Managers.

***Entry level***

The employment position that a university graduate qualifies for immediately after graduation. This has to do with the classification of positions according to rank. Ordinarily, entry level positions are in the lowest rank that a graduate can occupy in an organization.

***Graduate***

In this study, a graduate is any individual who has undergone and satisfactorily completed an undergraduate course of study in any discipline from a recognized university.

***Graduate attributes***

These are the qualities, understandings, skills, capabilities and dispositions that are characteristic of an individual who has graduated from a university. As a composite, graduate attributes make up *graduate identity* or *graduateness*.

***Graduate employee***

In this study, a graduate employee is identified as a university graduate (as defined above) who secures an entry level employment position immediately after graduation.

### ***Perceptions***

Refer to views and opinions of employers based on professional experience and judgment. In this case, perceptions refer to the opinions of the service sector employers on the employability of their university graduate employees. In this study, the employers' perceptions were measured using a five point Likert-type slanting scale, descending from Very high, to High, to Average, to Low, to Very Low.

### ***Preference***

This is the employers' choice between alternatives when selecting candidates for employment. Preference in this study was considered in relation to both the entry-level qualification of university graduates and the university from which the job-candidate graduated.

### ***Rating***

In this study, rating refers to an employers' ranking of an employability attribute exhibited by an employee. The ranking was done on a five point Likert-type slanting scale, descending from Very high, to High, to Average, to Low, to Very low.

### ***Service sector***

This refers to both commercial and non-profit organizations whose stock-in-trade is to provide specific services to their clientele. Such organizations fall into various sub-sectors. Some of these sub-sectors include: Education and training; financial services; insurance; hospitality; tourism; information and communication technology; transport; health; mass media; security; entertainment; and non-governmental and community based organizations

### ***University***

This is a formal institution of learning authorized to offer undergraduate courses across disciplines and specializations. The literature also refers to ‘higher education institution’ (HEI) or ‘higher education provider’ (HEP), terms which include specialized institutions such as ‘the corporate university’ and others that do not fit the conventional definition of a university as used in this study. For the purpose of this study, any reference to a HEI/HEP is deemed to mean a university.

### ***University Education***

This refers to undergraduate curricula in all the disciplines offered by universities in Kenya. Another term commonly used in the literature is ‘higher education’ and it is commonly applied in a broader sense than the term university education as used in this study. For clarity and consistency in this study, university education and higher education are used synonymously.

### ***World of work/workplace***

In this study, world of work generally refers to any space in which an individual is engaged in a productive occupation or vocation that benefits him or her primarily through earning wages or making a profit while benefitting the wider society through the production of goods or the provision of services. The world of work encompasses both formal employment and self-employment. World of work is used synonymously with workplace in this study.

### **1.12 Organization of the rest of the Study**

The rest of this study is organized as follows: Chapter two, in which a review of literature related to this study is done; Chapter three, which delineates the research design and methodology that this study adopted; Chapter four, where this study's data are presented, analyzed, and discussed; and Chapter five, which presents the conclusions, recommendations, and suggestions for further research.

## CHAPTER TWO

### REVIEW OF RELATED LITERATURE

#### **2.0 Introduction**

This chapter is intended to bring to the fore, by way of a critical review of relevant literature, pertinent issues and emerging trends in university education, employability, and the relationship between universities and employers. The literature reviewed here was both theoretical and empirical and it was gleaned from various sources including government documents, books, periodicals, seminar paper, conference reports, on-line sources, and empirical research reports.

#### **2.1 The functions of university education**

In order to discuss the functions of university education, it is necessary to go back in time and trace the arguments that have shaped the concept of a university. One of the earliest and most famous commentators on university education is Cardinal John Henry Newman who was the Rector of the Catholic University in Dublin in the 1850s. Newman advanced a generic definition of a university as a school of universal learning. Specifically, he conceived a university as:

The place to which a thousand schools make contributions; in which the intellect may safely range and speculate, sure to find its equal in some antagonist activity, and its judge in the tribunal of truth. It is a place where inquiry is pushed forward and discoveries verified and perfected, and rashness rendered innocuous and error exposed by the collision of mind with mind and knowledge with knowledge. (cited in National Institute for Newman Studies, 2007, p.16)

To Newman therefore, “the true and adequate end of intellectual training and of a university is not learning or acquirement, but rather is thought or reason exercised upon knowledge, or what may be called philosophy” (cited in Tillman, 1990, p.19)

Newman's ideas about the place and purpose of a university resonate with those of an earlier thinker, Wilhelm von Humboldt, founder of the University of Berlin, now renamed Humboldt University in Germany. Humboldt, who is actually credited as being the originator of 'the idea of a university', held that the function of a university was to advance knowledge by original and critical investigation rather than the mere transmission of culture and the teaching of skills. Humboldt vigorously advocated for the autonomy of the university so that its research and teaching functions would be based on an unbiased search for truth, free from ideological, cultural, economic, and political pressures (Anderson, 2010). Both Newman and Humboldt therefore championed "a liberal education in its broadest sense, a focus on the person more than the skills, universities containing the broad range of human knowledge, and a general sense of anti-utilitarianism" (Lucey, 2014).

Over the years, but especially in the last decade of the 20<sup>th</sup> century and now in the 21<sup>st</sup> century, Humboldt's and Newman's ideas of a university have elicited criticism that they are elitist, focusing inwards to what McCowan (2015) has termed the intrinsic value of university education. The contention continues to be that an intrinsic focus is irrelevant to the new and emerging pressures that confront the 21<sup>st</sup> century university. These pressures are many and varied, but they are all about what Harvey (2000), Moll (2005) and Wedekind and Mutereko (2016) term responsiveness. Responsiveness of a university refers to a multi-dimensional accountability to students, faculty, employers, the wider economy, society as a whole, and the natural environment, with the ultimate aim being the "enhancement of the quality of life" (Gibbons, 1998, p.2).

It has been suggested that responsiveness in university education has four dimensions: *economic responsiveness* – which considers the expectations of employers and the

needs of the wider economy; *cultural responsiveness* – which addresses ethnic, cultural, religious and other diversities; *disciplinary responsiveness* – which takes into account the needs and interests of the various discipline communities that generate new knowledge through research and practice; and *student responsiveness* – which serves the needs and interests of the student in the university (Moll, 2005). To this list may be added a fifth dimension: *environmental responsiveness* – which would be about how university education prepares for and responds to the vagaries of the natural environment. These five dimensions of responsiveness may well be viewed as the framework for defining the functions of a university. In sum then, the university has five functions: the economic function, the cultural function, the knowledge (disciplinary) function, the individual development function, and the environmental function.

The contention has been that, in the Humboldtian and Newman ideal, the university serves only the knowledge and individual development function, to the detriment of the other three functions. As has been pointed out, this is an intrinsic focus. There is increasing pressure for universities to have an extrinsic focus; that is, to adopt an instrumental value so as to be relevant. Yet there is a caution that ‘instrumentalism’ is narrow hence actually constrictive to university education (Harvey, 2000). The fear here is that if “the kinds of enquiry undertaken in universities ... are tied to specific, pre-defined forms of instrumental benefit (either in their motivations or in the parameters of their outcomes) then that enquiry is undermined and impoverished” (McCowan, 2015, p.277). There is therefore need for balance between the intrinsic and the instrumental when determining the worth of university education. To this end, the argument is that instrumentalization of university education should only be pursued as a corollary of the university’s intrinsic value. Thus, “the instrumental value

of universities should exist alongside and emerging from its intrinsic value, rather than replacing it” (McCowan, 2015, p.282).

This comprehensive view of the function of university education was articulated at the World Conference on Higher Education organized by UNESCO in 1998. In the *World declaration on higher education for the 21<sup>st</sup> century: vision and action* which emanated from the conference, the participants proclaimed, in article 1(a), that one of the missions and functions of higher education was to:

Educate highly qualified graduates and responsible citizens able to meet the needs of all sectors of human activity, by offering relevant qualifications, including professional training, which combine high-level knowledge and skills, using courses and content continually tailored to meet the present and future needs of society (UNESCO, 1998, p.21).

However, the argument about maintaining the intrinsic while espousing the instrumental seems to be largely theoretical and confined to academia. The drivers of the discourse(s) on relevance in university education are occupants of spaces of power outside of the universities. Majorly, these are governments and employers. Their perspective of relevance in university education is not only overtly instrumental; it often narrows down to only the economic responsiveness of the university curriculum (Prewitt, 2016). Standing at the edge of the 20<sup>th</sup> century and looking into the future, Michael Gibbons made an observation in this regard:

This view of university relevance, judged primarily in relation to their contribution to economic development, constitutes a major shift in perspective and values from the perspective presented to an earlier age by the likes of von Humboldt and Newman. To accommodate the new paradigm, clearly some adaptation – whether in terms of the university’s relations to the surrounding society, its institutional goals, or core values – is going to be necessary. However, because national economic development is a complex and multifaceted phenomenon, dependent among other things upon history (e.g., previous economic performance) as well as current socio-political factors (e.g., demography, infrastructure, etc.) the range of adaptations may be expected to reflect the local context and,

therefore, to vary widely across countries and over time (Gibbons, 1998, p.2)

This thinking is clearly manifested in nascent university settings, such as in Africa. Since independence, the African discourse on university education has focused on shifting the paradigm from sophistication to vocationalization (Hinchliffe, 1987). This paradigm shift has been premised on the conviction that the African university must be perceived differently, in terms of its purposes and functions, from the European university (Hinchliffe, 1987). However, it has been argued that vocationalization of university education -- a concept which in current discourse is referred to as 'employability' and which is discussed in detail later on in this chapter - - needs to be done circumspectly lest it erodes the broader purpose for which universities exist.

The concept of employability as defined by employers and the government gives rise to the question: should employability serve as the main basis that shapes the direction of universities? Higher education institutions are expected to produce a competent workforce for industries, but it can be argued that a university's purpose must not be defined solely by the expectations of employers, but also by the aspirations of the nation (UNESCO, 2012, p.27)

Such thinking seems to have been valid even as way back as 1973 as it is reflected in a workshop convened that year on African Higher Education. In this workshop, the participants undertook to formulate a new philosophy for higher, particularly university, education for Africa (Hinchliffe, 1987). At this workshop, the appropriate roles of a truly African University were stipulated as follows:

- a) Pursuit, promotion and dissemination of knowledge with an emphasis on practical knowledge, locally oriented.
- b) Research: with an emphasis on research into local problems affecting the immediate community.

- c) Provision of intellectual leadership: not only the production of knowledge but also its wide diffusion for meaningful programmes of economic and social development.
- d) Manpower development: including the participation in training middle level manpower and the shift in degree programmes away from the purely academic to the practical and professional.
- e) Promoting social and economic modernization; through examples and activities outside the university including extension work with small scale traders, artisans and farmers.
- f) Promoting intercontinental unity and international understanding; through providing the foundation to reinforce the positive image of Africa (Hinchliffe, 1987, 36-37).

These ideals for the African university are reflected in national discourses on university education. Universities in Africa are advised to pay attention to ‘powerful signals’ emanating especially from the state (the main financier and regulator of university education) and the market (the main consumer of university products). According to Prewitt (2016) these signals cannot be ignored, though to some degree they may be negotiated.

The dominant signals being sent are summarized in terms of accountability: instrumental uses, impacts, performance metrics, return on investment, ranking systems, and the like. This vocabulary, gathering momentum in today’s economic and political circles, has little sympathy with, and at times treats with disdain, much beloved late 18<sup>th</sup> century metaphors, when scholars spoke confidently of knowledge for its own sake; of ivory towers; secluded from commerce and politics; of autonomy; institutionalized as the fundamental principles of free inquiry and academic freedom (Prewitt, 2016, p.111)

In Kenya, such discourse has evolved in the form of formal statements of purpose and objectives of university education. A significantly overriding theme in these discourses is the relevance of university education to the individual and the society. A specific concern has been the applicability hence relevance of university education and training to the world of work. Some examples of this formal discourse will be presented here.

In 1981, the Presidential Working Party on a Second University in Kenya advanced a rather comprehensive view of a university:

A university must be viewed as a place where intellectualism is cultivated, a place where training of rational men and women of good character, with creative minds and strong convictions, as well as critical reasoning abilities, is pursued, and an institution where the general culture of human society including ideas concerning the world, the universe, and man, are developed, promoted and radiated. It must also pay attention to those virtues which make claim on the intellectual life of society and cultivate public awareness of its role in society. It should give the individual student a clear and conscious view of his own opinion and eloquence in expressing them. In summary then, an educated person coming out of the university should be one who has mastered specialized skills and who also seeks to know the significance of what he does. He should not only know how to make a better living, but also know how to lead a better life (Republic of Kenya, 1981, p.32).

This view of a university was given a more specific perspective in 1988 by the Presidential Working Party on Education and Manpower Training for the next Decade and Beyond. The report of this working party resulted in Sessional Paper No. 6 of 1988. This sessional paper argues that university education should be responsive to national development needs. The sessional paper outlines the specific objectives of university education as follows:

- a) To develop, advance, preserve and disseminate knowledge to stimulate intellectual life.

- b) To promote cultural development and the highest ideals and values of society.
- c) To train and prepare the high level manpower needed for development.
- d) To promote, through research and consultancy, knowledge, skills and services to the community by helping solve problems facing society.
- e) To assist the government in achieving its planned development of higher education (Republic of Kenya, 1988, p.30).

In 1999, the Commission of Inquiry into the Education System of Kenya, commonly referred to as the Koech Commission, produced a report which proposed a Totally Integrated Quality Education and Training (TIQET) system. While this report did not get fully implemented, it is worthwhile to consider its perspectives on university education here. The commission observed that:

As a result of the rapidly changing global market, university level training of a workforce that is relevant and suitable for the contemporary market has become a major challenge. The unstable global market and the dynamic nature of the current international socio-economic factors, dictate the adoption of effective short and long-term strategies in designing academic programs. This calls for university training which equip graduates with marketable multi-functional skills and imbues them with the capacity for teamwork, innovation and critical thinking (Republic of Kenya, 1999, p. 186)

The Koech commission also proposed the following objectives for university education:

- 1) To develop in students and scholars the ability to think independently, critically and creatively.
- 2) To draft, develop, advance, preserve and disseminate knowledge and desirable values and to stimulate intellectual life.

- 3) To educate and train the high level human capital needed for accelerated development through industrialization of the economy.
- 4) To nurture the internalization of universal knowledge, including key technological advances, with a view to harnessing these for National development.
- 5) To provide through basic and applied research, knowledge, skills and services that help solve problems facing the society.
- 6) To help create a society in which both merit, based on diverse talents and equity in development are recognized and nurtured.
- 7) To inculcate entrepreneurial skills among the graduates, thereby enabling them to create employment for themselves and for others (Republic of Kenya, 1999, p. 174).

In 2002, the Government of Kenya produced a National Development Plan for the years 2002-2008. Once again the issue of university education was addressed. For this plan period, the government stated that “priority actions will be enhancing access, raising quality and relevance, enhancing efficiency and effectiveness and promoting research and development” (Republic of Kenya, 2002, p. 59).

These issues were revisited in the Sessional Paper no 1 of 2005 titled ‘A policy Framework of Education, Training and Research’. In this sessional paper, the government committed itself to “pay attention to issues of relevance and responsiveness to the market and national priorities” (Republic of Kenya, 2005), p.47).

In 2006, the Public Universities Inspection Board released a report titled “Transformation of Higher Education and Training in Kenya to secure Kenya’s

development in the Knowledge Economy’ (Republic of Kenya, 2006). This report echoes the various sentiments that have been cited in the preceding paragraphs. In addressing the issue of the need for relevant skills and competencies for university graduates, the report asserts that “it is important to equip and strengthen human capital with the required knowledge, skills, attitudes and the values that will enable the labour force to exploit the nation’s natural and manmade resources productively” (Republic of Kenya, 2006, p.251).

In a keynote address during a Stakeholders Workshop on Enhancing Quality in Higher Education in Kenya in 2008, the then Secretary of the Inter-University Council for East Africa, Professor Chacha Nyaigotti-Chacha argued that one of the key goals of university education is “the development of good curriculum and programmes that are in an outcome-based format and knowledge production that is responsive to societal interests and needs” (Nyaigotti-Chacha, 2008, p.23). This assertion underpins the continuing concern for relevance in university education. In the following section, this paper will discuss the concept of relevance and especially what it means to Kenya.

## **2.2 The Dynamics of Relevance in University Education**

The phrase ‘dynamics of relevance’ was popularized by Michael Gibbons in a 1998 World Bank publication titled ‘Higher Education Relevance in the 21<sup>st</sup> Century. The term refers to the fact that “relevance is not a static concept but rather a functional one; one that is intended to be adopted to a particular, but evolving, techno-economic environment” (Gibbons, 1998, p 10)

This notion of fluidity in the conceptualization of relevance in university education is aptly and quite comprehensively discussed by Vesuri (2004) in the final UNESCO E-

Forum Report on the Relevance of Higher education. In his argument, Vesuri refers to Guy Neaves's argument that:

As a concept, relevance does not constitute an objective phenomenon. What is relevant is largely a matter of who defines it. And those defining it will naturally do so in their own perceived interests as they understand it at a particular moment. In short, it is also ephemeral, a passing thing, symbolic of world in a state of flux.

Nevertheless, the literature on relevance in university education seems to arrive at a general consensus on the fact that relevance refers to the fit or the match between what higher education institutions do and what society expects of them (Baron & McComarck, 2024; Bennet 2018; Nalami & Waswa, 2023; Republic of Kenya, 2020).

A paper on higher education relevance in the 21<sup>st</sup> century aptly captures this notion:

In all countries, whether developed or developing, the culture of accountability is going to become more and more firmly established. Not only will higher education in the 21<sup>st</sup> century have to become relevant, but also that relevance will be judged in terms of outputs, the contribution that higher education makes to national economic performance and, through that, to the enhancement of the quality of life. Though arguments of varying weight and coherence that point out the limitations of this pragmatic approach may be expected to come from all sides, it is further assumed, here, that no other rationale or justification will carry equivalent weight. Relevance is going to become something that will need to be demonstrated, not just once but on an ongoing basis. (Gibbons, 1998, pp. 1-2)

This demonstration of relevance is captured more concisely by Otunga (2010, p.13) when she defines curriculum relevance as “the learning in which students learn to apply knowledge, concepts, and/or skills to solve real-world problems.” She goes further to say that this learning should be both contextual and interdisciplinary. This notion of curriculum relevance is indicative of the conceptual and structural shifts in the world of work. These shifts have occasioned glaring quantitative and qualitative mismatches between labour supply and demands. The essence of these shifts is in the fast and ever changing nature of knowledge and the move towards knowing (Barnett, 2000).

In appreciation of the fluidity in the creation and dissemination of knowledge, there have been proposals for a university model that anticipates rather than reacts to change. This university has been referred to as ‘a proactive university’ (UNESCO, 1995). Such a university should be: A place where high quality training would be provided, a place in which entry will only depend on the intellectual merit of the individual, a community fully devoted to the search, creation and dissemination of knowledge, a learning environment only founded in quality and knowledge, a place where updating and continuous improvement of knowledge is promoted, a community in which cooperation with industry and the service sectors is encouraged and actively supported, a place where the most relevant local, regional, national and international problems and solutions are identified, analyzed, and discussed within an environment of critical learning, a place where governments and other public institutions can address the search for reliable scientific information, a community whose members, committing fully themselves to the principles of academic freedom, devote themselves to the search for truth, to the defense and promotion of human rights, to democracy, social justice and tolerance within their own community and all over the world and a well placed institution in the world context, adapted to the pace of contemporary life, to the different characteristics of every region and of every country (UNESCO, 1995, pp. 288-334).

A similar view had been propounded earlier in the Dearing report on Higher education in the UK. Here, higher education is viewed as having four main purposes:

- i. To inspire and enable individuals to develop their capabilities to the highest potential levels throughout life, so that they grow intellectually, are well

equipped for work, can contribute effectively to society and achieve personal fulfillment;

- ii. To increase knowledge and understanding for their own sake and to foster their application to the benefit of the economy and society;
- iii. To serve the needs of an adaptable, sustainable, knowledge-based economy at local, regional and national levels;
- iv. To play a major role in shaping a democratic, civilized, inclusive society (NCIHE, 1997, para 5.11)

Such a university model would ensure relevance on a broad spectrum. While appreciating this broad conception of relevance, this study narrows its scope to the relevance of university education to employment in Kenya.

The relevance of university education to employment in Kenya may be discussed from two perspectives. The first perspective is that of the mismatch between the quantitative supply of university graduates and the demands of the occupations. The second perspective is that of the mismatch between the competencies that university graduates bring to the workplace and the actual competencies that are expected and desired in the workplace.

In the first perspective there is a growing concern that there is “a fundamental mismatch between [the] production and utilization of human resources” (Republic of Kenya, 2006, p.250). This mismatch is manifested in the high rates of unemployment of university graduates. It has been observed by the Public Universities Inspection Board that “many university graduates are either unemployed or underemployed while some are employed in jobs for which they have not been trained” (Republic of Kenya 2006, p 265). The board further observes that:

The relative imbalance between the number of graduates seeking employment and those that the economy is able to absorb is one measure of the relevance of education and training. The imbalance arises from inadequate knowledge about future labour market conditions, which induces candidate to choose fields of study which do not have future market potential. It also arises from excess of qualified graduates over the available employment opportunities (Republic of Kenya, 2006, p 265)

The remedy to such a scenario lies primarily in a deliberate effort by policy makers in university education to identify and target areas with current and/or potential high employment opportunities. This will enable graduates to fit into the available vacancies in the job market.

The second perspective of relevance in university education is a more profound one. It is the notion that universities in Kenya produce graduates who do not possess the basic requisite competencies for employment. The Public Universities Inspection Board, in its report on the Transformation of Higher Education and Training in Kenya, observes that “University education has been perceived and often criticized as being irrelevant and failing to produce the skills, competencies and know-how needed by employers” (Republic of Kenya, 2006, p.287). On a similar note, a Ministry of Education task force, the Taskforce on the Re-Alignment of the Education Sector to the Constitution of Kenya 2010, in its report, *Towards a globally competitive quality education for sustainable development*, noted that “there is a mismatch between what universities teach and the demands of industries in both standards and skills” (Republic of Kenya, 2012, p.84). Consequently, the taskforce emphasized the imperative of universities in Kenya to produce globally competitive graduates. The task force reported an exponential increase in university enrollment from 82,000 in 2003 to 180,617 in 2010, and stressed that as university education expands to admit more and more students, the universities are obligated to maintain quality in their

programs by ensuring that relevance and employability are continuously addressed and enhanced (Republic of Kenya 2012).

Apart from government pronouncements on the perceived mismatch between universities and the world of work in Kenya, the mismatch has also been explored in empirical studies (Bogonko, 2018; Kalei, 2014; Kamau & Waudu, 2012; Munyoki and Ndemo, 2018; Oanda & Sifuna, 2016; Ponge, 2013; Rintari, 2017; Tumuti et al, 2013). These studies are discussed in section 2.7 of this chapter. As McCowan (2016a) points out, the perceived mismatch is also quite widely reported in the mass media (see for instance Aineah, 2017; Boomsma, 2017; Earnest, 2014; Ligami, 2016; Munda, 2018; Ndayala, 2018; Ng'ang'a, 2014; Nyamai, 2018; Nyanchwani, 2017; Oigo, 2019; Wamari, 2010; Wasunna, 2018; Wanzala, 2017; Wesangula, 2014; Yusuf, 2016). The consistent conclusion in this variety of literature is that university education is not, and needs to be, relevant to the needs of the world of work and society in general.

This perception of relevance is anchored in the concept of employability. Employability may be generically conceived as the entire corpus of a university graduate's attributes, which consist of the knowledge, skills, attitudes, competencies and dispositions that may qualify them for one or more positions of employment, including self-employment, and which would help them to remain progressively productive and valuable in all the personal, social, and economic spheres of their life. Globally, the mandate of enhancing employability seems to be vested mainly in universities and other related institutions of higher learning. Indeed, it has been argued that "a major responsibility for the smooth integration of graduates into

professional life, and hence into society, lies with Higher Education institutions” (Pukelis, et.al., 2007 cited in Lowden, Hall, Elliot and Lewin, 2011, p.7).

Employability is increasingly being viewed as a critical indicator of educational relevance due to the characteristics of the 21<sup>st</sup> century.

The 21<sup>st</sup> century is a period of rapid social, economic, scientific and technological changes. Knowledge is becoming obsolescent at a speed that has no parallel in history and skills requirements for the workforce are changing rapidly. What one knows today will not necessarily be applicable tomorrow because of the rapidly changing circumstances of the knowledge society. What is needed for each graduate is the ability to learn and discuss the changes in the society and adapt accordingly. The working conditions are also changing, requiring mobility from one job to another and location of where the work is done and available (Republic of Kenya, 2006, p 289)

It is for this kind of world that universities should prepare their graduates. For any university to proclaim the relevance of its programs, its graduates should possess the following competencies which, incidentally, are also graduate employability attributes: The ability to learn and master the act of continuous, life-long learning, the ability to think critically and analytically, and to handle and synthesize knowledge from different disciplines and sources, a broad and general knowledge on humanities, arts, sciences and technologies, and the able to interrogate the ethical and moral dilemmas of modern development, a deep appreciation of the rich cultural and religious diversity at national and international levels, broad and in-depth knowledge in a specific discipline or profession, which serves as the platform for further learning, literacy and mastery of ICT operations/applications, effective communication skills, entrepreneurial outlook the ability to seize upon opportunities to be productive, and to perceive possibilities that exist, be a risk-taker, ready to tread frontiers of what is not visible at the present, dream and make things happen (Republic of Kenya, 2006).

To be able to produce such a candidate, a university's curriculum must be characterized by what Otunga (2010) calls elements of curriculum relevance. These elements are: A holistic curriculum, which develops the learners' intellectual, social, physical, emotional, aesthetic, spiritual, vocational and moral domains. Relevant curriculum should empower students to reach their maximum potential and attain person excellence; An inclusive curriculum, which should be non-discriminatory. The curriculum should cater for the "normal" brackets of learners as well as the special and/or marginalized groups. It should espouse cultural, racial, generational, intellectual and gender diversity; The curriculum should promote human rights, democracy justice and the role of law such a curriculum would empower the learner with the capacity to identify and competently deal with socialites such as corruption, nepotism and impunity; A curriculum which focuses on achievement of national development goals; A curriculum which takes into account the available support resources; A curriculum which prepares the learners for both the local environment as well as the international/global arena; A curriculum which takes on broad contemporary and emerging issues and problems in life.

A critical analysis of these elements leads to the conclusion that a relevant curriculum is a compressive curriculum. Thus for university education to be relevant to the world of work, curricula must be designed which will comprehensively address all the critical areas of graduate competence and therefore graduate employability.

### **2.3 Employability: The Agenda and the Debate**

It is now close to three decades since the 1997 Dearing report famously thrust employability into the limelight of higher education discourse in the United Kingdom and beyond. The Dearing report advocated a re-designing of university curricula with

a view of developing employability skills among students and preparing them for lifelong learning (NCIHE, 1997). This re-orientation toward employability is now the focal point in most policy and practice discussions across the world. In many instances, employability has been and is being used as a performance indicator for university education. The emphasis on employability set off a debate that began with a broad consensus on the definition of employability and then diverged into different views of the value of employability in the higher education enterprise.

What is employability? While definitions and conceptions of employability abound in the literature, there is the view that “employability is little more than a ‘buzzword’ that is more often used than properly understood” (McQuaid and Lindsay, 2005, p.197). To many people, employability is simply about getting a job. However, there is so much more to employability than gaining employment. Yorke & Knight (2004) define employability as a set of achievements – skills, understandings and personal attributes – that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy. Further, the authors define employability more comprehensively as the capability to move self-sufficiently within the labour market to realise potential through sustainable employment. Hinchcliffe (2004) defines employability as having a set of skills, knowledge, understanding and personal attributes that make a person more likely to choose and secure occupations in which they can be satisfied and successful. Employability may therefore be viewed as an individual’s capacity for securing and retaining a fulfilling job. But this is a simplistic view which does not cover the entire spectrum of employability as will be argued further in the course of this review.

According to Moon (2004) employability is a lifelong issue and nobody is ever perfectly employable. This means that there will always be aspects of a person's employability that would benefit from improvement (Moon, 2004). Lees (2002) argues that employment and employability are different. He distinguishes the two terms as follows: Being employed means having a job, being employable means having the qualities needed to maintain employment and progress in the workplace and beyond.

Employability is also taken to be a set of achievements related to skills, understanding and personal attributes that make graduates more likely to gain employment and be successful in their chosen careers, which benefits themselves, the workforce, the community as well as the country's economy (Moreau & Leathwood, 2006). Employability may be defined either from the individual's perspective or from institutional perspectives (Harvey, 2001).

On a broad spectrum, the concept of employability is multi-dimensional, defined at the individual level as one's capabilities of entering, remaining, and growing in a given occupation; at the employers' level as human resource requirements for fulfilling indicated roles and duties in a defined job; and at the societal level as a system facilitator between education, the labour market, and the socio-economic reality of a given population (Kaufman, Oakley-Brown, Watkins, & Leigh, 2003). More specifically, various definitions and conceptualizations of employability have been advanced by employment related organizations and individual scholars. A variety of definitions is presented below:

The Confederation of British Industry (CBI) defines employability as "the possession by an individual of the qualities and competencies required to meet the changing

needs of employers and customers and thereby to realize his/her aspirations and potential in work” (CBI, 1999, p.1). More recently, the CBI in collaboration with the National Union of Students (NUS) defined employability as “a set of attributes, skills and knowledge that all labour market participants should possess to ensure they have the capability of being effective in their workplace – to the benefit of themselves, their employer, and the wider economy” (CBI/NUS, 2011).

The Treasury of the United Kingdom views employability as “the development of skilled and adaptable workforces in which all those capable of work are encouraged to develop the skills, knowledge, technology and adaptability to enable them to enter and remain in employment throughout their working lives” (Her Majesty’s Treasury, 1997, p.1), while the Canadian Labour Force Development Board (1994, p.viii) defines employability as “the relative capacity of an individual to achieve meaningful employment given the interaction of personal circumstances and the labour market.” On the other hand, the Australian Chamber of Commerce conceptualizes employability as a set of skills which support an individual’s ability to perform in the workplace. These skills are also known as transferable skills. Such skills are learned in one context and can be applied and further developed in other contexts and roles.

A broader conception of employability is presented by Hillage and Pollard (1998) who assert that employability is:

the capability to move self-sufficiently within the labour market to realize potential through sustainable employment. For the individual, employability depends on the knowledge, skills, attitudes they possess, the way they use those assets and present them to employers and the context (e.g. personal circumstances and labour market environment) within which they seek work (Hillage and Pollard, 1998, p.12)

This definition is echoed by McQuaid and Lindsay (2005, p.200) who view employability as “an individual’s ability to gain initial employment, move between roles in the same organization, obtain new employment if required and (ideally) secure suitable and sufficiently fulfilling work”. More succinctly, Nwaoga and Omeke (2012) cited in Dabiri (2013, p. 41) opine that “[an] individual’s employability asset comprises their knowledge (i.e. what they know), skills (what they do with what they know), and attitudes (how they do it)”.

### **2.3.1 The employability agenda**

All the definitions of employability presented above imply, as Darkwa and Adu-Gyamfi (2013) observe, that employability is the possession of attributes and competencies that are required to enable individuals to enter and maintain productive and fulfilling employment throughout their lifetime. These attributes and competencies have been assigned various terminologies which all refer to essentially the same thing. Some of these terminologies include ‘soft skills’, ‘generic skills’, ‘core competencies’, key skills/competencies’, ‘employability skills’, ‘work related skills’, ‘transferable skills’, ‘underpinning skills’ and ‘employability attributes’. It is important to point out that in the discourse on employability there is a distinct dichotomy between ‘hard skills’ and ‘soft skills’. According to Robles (2012) hard skills are the academic skills and experience from which emanate the technical expertise, knowledge of concepts, principles, methods, procedures and techniques needed for performing jobs while soft skills are the personal attributes that define an individual’s approach towards work and life problems. The possession of both hard and soft skills is increasingly important in defining the employability of a university graduate.

However, it has been argued that the proliferation of definitions of employability is merely quantitative. The aggregate of all these definitions indicates “an understanding of what qualities, characteristics, skills and knowledge constitute employability both in general, and specifically for graduates” (Lowden, Hall, Eliot & Lewin, 2011, p.vi).

With this in mind:

It is arguable that specific definitions are less important than an agreed focus on approaches to promote such transferable skills and fostering attributes that will enable graduates to find appropriate employment, progress in their work and thus facilitate the success of their organizations and contribute to society and the economy (Lowden, Hall, Eliot & Lewin, 2011, p.vi).

Indeed, despite the diversity in terminology, there is remarkable consensus on what constitutes a composite employability profile. This profile is often presented in the form of a list of competencies that employers desire in an employee. The Quality Assurance Agency for Higher Education in the United Kingdom (QAA, 2012) has published a comprehensive list of attributes, behaviors, and skills that universities should deliberately develop in their students. While this list was specifically meant to give guidance on the design of enterprise and entrepreneurship education curricula in UK universities, it is, as Catcheside (2012) argues, a foundational list for any discourse on employability. This list is reproduced below:

In terms of employability attributes, the student should be able to: Recognize and achieve goals and ambitions, especially in response to challenges (Goals and ambitions); Enhance self-confidence and belief through practice of enterprising skills and behaviors (self-confidence); Demonstrate perseverance, resilience and determination to achieve goals, especially within challenging situations (perseverance); Recognize that they are in control of their own destiny (internal locus of control) and use this understanding effectively within enterprising situations; Take

action and learn from both action and active experimentation (action orientation); Innovate and offer creative solutions to challenges and complex problems (innovation and creativity).

In terms of behaviors, the student should be able to demonstrate: The ability to seek out, be alert to, and identify opportunities (opportunity recognition); Creative and innovative approaches to problem solving (problem solving); The initiative to act on perceived opportunities while considering risk factors (taking a risk); Independent responsibility for managing projects (managing autonomously); The ability to reflect and persevere in challenging environments in the pursuit of achieving desired outcomes or goals (personal awareness); Use of social skills to build trust, relationships and networks and to communicate ideas and information effectively (networking and communication).

In terms of skills, the student should be able to demonstrate the ability to: Take creative approaches that are evidenced through multiple solutions and reflective processes (creativity and innovation); Persuade others through informed opinion and negotiate support for ideas (persuasion and negotiation); Manage a range of enterprise projects and situations appropriately, for example by proposing alternatives or taking a holistic approach (management and leadership); Evaluate issues and make decisions in situations of ambiguity, uncertainty, and risk (decision making); Use networking skills effectively, for example to build or validate ideas or to build support for ideas with potential colleagues and/or stakeholders (networking); Recognize patterns and opportunities in complex situations and environments (opportunity awareness); Model and propose business opportunities that take account of financial implications, legal implications and issues of intellectual property (financial and business literacy).

These attributes, behaviors and skills are generic. However, it is instructive to note that a variety of institutions and organizations commonly define employability based on pre-determined sets of competencies that are very close to the list above. A perusal of the literature points to a trend across the world where universities, employers, and policy generating bodies have agreed on an ‘employability agenda’. The agenda is to identify and to catalogue employability skills (or employability competencies and attributes), use this catalogue as the framework for defining graduate employability, then profile the employability of university graduates on the basis of this framework. In this trend, the employability agenda is therefore a ‘skills’ agenda (Bennet, 2018; Catcheside, 2012; McQuaid and Lindsay, 2005; Rowe and Zegwaard, 2017) A variety of examples of this trend from various institutions and countries across the world trend serve to illustrate this agenda.

The United Kingdom Commission for Employment and Skills (UKCES) in a report titled *The Employability Challenge* defines employability as “the skills almost everyone needs to do almost every job”. The report then proceeds to list such skills:

- A foundation of positive approach: being ready to participate, make suggestions, accept new ideas and constructive criticism, and take responsibility for outcomes. This foundation supports three ‘functional skills’:
  - i) using numbers effectively – measuring, recording measurements, calculating, estimating quantities, relating numbers to the job;
  - ii) using language effectively – writing clearly and in a way appropriate to the context, ordering facts and concepts logically;
  - iii) using Information technology (IT) effectively – operating a computer both using basic systems and also learning other applications and using telephones and other technology to communicate

- These functional skills are exercised in the context of four ‘personal skills’: i) self-management – punctuality and time management, fitting dress and behavior to the context, overcoming challenges and asking for help when necessary; ii) thinking and solving problems – creativity, reflecting on and learning from own actions, prioritizing, analyzing situations, and developing solutions; iii) working together and communicating – co-operating, being assertive, persuading, being responsible to others, speaking clearly to individuals and groups, and listening for a response; iv) understanding the business – understanding how the individual job fits into the organization as a whole, recognizing the needs of stakeholders (customers and service users, for example), judging risks, innovating, and contributing to the whole organization (UKCES, 2009, pp. 10-11).

In 2007, the Confederation of British Industry (CBI) presented the following employability skills profile: Positive attitude, self-management, team working, business and customer awareness, problem solving, communication and literacy, application of numeracy and application of information technology (CBI, 2007). The CBI, in collaboration with the National Union of Students, updated this profile in 2011. The new employability skills profile now includes: business and customer awareness, problem solving, communication and literacy, application of numeracy, application of information technology, innovativeness, creativity, collaboration, risk-taking, openness to new ideas, a ‘can do’ approach and readiness to take part and contribute (CBI/NUS, 2011)

The University of Birmingham lists the following employability skills on its website: Communication (oral and written), teamwork, problem solving, initiative and

enterprise, planning and organization, self-management, learning, technology, self-awareness, self-promotion, exploring and creating opportunities, action planning, networking, decision making, negotiation, political awareness, coping with uncertainty, development focused, self-confidence, imagination and creativity, adaptability and flexibility, willingness to learn, independence /autonomy, ability to work under pressure, numeracy, attention to detail, time management and ability to take responsibility (retrieved from <https://intranet.birmingham.ac.uk/as/employability/careers/documents/public/what-is-employability.pdf>)

The University of Exeter advises its students on the “skills that employers want”. These are: Communication and interpersonal skills, problem solving skills, using your initiative and being self-motivated, working under pressure and to deadlines, organizational skills, teamworking, ability to learn and adapt, numeracy, valuing diversity and difference, and negotiation skills (retrieved from <https://www.exeter.ac.uk/ambassadors/HESTEM/resources/general/STEMNET%20employability%20guide.pdf>)

The University of Kent poses a question: “what are the main employability skills?” and provides the answer thus: Written communication, verbal communication, flexibility, persuading, teamwork, leadership, planning and organizing, investigating, analysis and problem solving, numeracy, computing skills and developing professionalism (retrieved from <https://www.kent.ac.uk/careers/sk/WhatAreSkills.htm>)

The University of Warwick asserts that “employability skills include”: Self-management, team working, business and customer awareness, problem solving, communication and literacy, application of numeracy and application of information

technology (retrieved from <https://www2.warwick.ac.uk/services/careers/getahead/employability.pdf>)

In the Canadian province of Ontario, the Ministry of Training, Colleges and Universities demands that every graduate from any accredited college in the province must “demonstrate essential employability skills in the following six areas: communication, numeracy, critical thinking and problem solving, information management, interpersonal skills, and personal skills” (Fair, 2013, p.9). Still in Canada, a more comprehensive list titled “Employability skills 2000+” published by The Conference Board of Canada highlights the skills an individual needs to enter, stay in, and progress in the world of work. The skills are also applicable beyond the workplace in a range of daily activities. The skills are: communication skills, information management skills, the ability to use numbers, the ability to think and solve problems, the demonstration of positive attitudes and behaviours, responsibility, adaptability, the ability to learn continuously, the ability to work safely, the ability to work with others, and willingness and capacity to participate in projects and tasks (Conference board of Canada, 2000)

In the United States of America, the Alabama Cooperative Extension System (ACES) categorize employability skills into three: a) basic academic skills like reading, writing, science, mathematics, oral communication and listening; b) higher order thinking skills such as learning, reasoning, thinking creatively, decision making, problem solving; and, c) personal qualities which include responsibility, self-confidence, self-control, social skills, honesty, integrity, adaptability and flexibility, working is a team, punctuality and efficiency, self-direction, a good work attitude, good grooming, cooperation, self-motivation, and self-management (Robinson, 2000).

In Australia, the Business Council of Australia (BCA) and the Australian Chamber of Commerce and Industry (ACCI) jointly undertook a research project titled *Employability skills for the future* in 2001. In the final report of the project, published by the Australian Government Department of Education, Science and Training (DEST), they outline an employability skills framework which identifies eight employability skills: communication skills, teamwork skills, problem solving skills, initiative and enterprise skills, planning and organizing skills, self-management skills, learning skills and technology skills (DEST, 2002).

Similarly, the Malaysian Qualifications Agency (MQA) outlines eight skill domains that are necessary for students to ensure employability. These are: knowledge in the areas studied, social skills and responsibility, values, attitudes and professionalism, communication skills, leadership and teamwork, scientific problem solving skills, entrepreneurial and management skills, lifelong learning skills and information management (MQA, 2006 cited in Rasul, Rauf & Mansor, 2013).

In Singapore, the Workforce Development Agency (WDA) developed an employability guide which lists the following ten employability skills that workers can transfer and apply across industries and jobs: workplace literacy and numeracy, information and communication technology, problem solving and decision making, initiative and enterprise, communication and relationship management, lifelong learning, global mindset, self-management, workplace-related life skills, and health and workplace safety (WDA, 2006).

In Hong Kong, the abilities of fresh graduates needed by employers include: work attitude, interpersonal skills, analytical and problem solving skills, English language

proficiency, numerical competence, Information Technology literacy, management skills, and Chinese language proficiency (Noakes, 2004).

In Japan, the employable personal qualities required by Japanese employers are categorized into personal skills, personal attitudes and personal traits as follows: a) Personal skills: communication skills, personal presentation, Information Technology (IT) and computer skills, problem-solving skills, leadership skills, visioning skills, goal-setting skills, self-assessment skills; b) personal attitudes: responsibility, optimism, curiosity, ambition, desire for challenge, cooperation, and vitality; c) personal traits: initiative, sensitivity, flexibility, individuality, sincerity, creativity, a balanced personality, and an entrepreneurial mind (Nguyen et al., 2005).

In Nigeria, the employability skills mostly required by Nigerian employers are: communication skills, self-management skills, ethics, teamwork skills, problem solving skills, planning and organizing skills, learning skills, initiative and enterprise skills, and technological skills (Chiaha and Agu, 2013).

In 2010 a Flash Eurobarometer study on employers' perception of graduate employability was conducted upon request by the European Commission Directorate-General for Education and Culture. The study surveyed 7,036 companies in the following 31 European countries: Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Germany, Estonia, Greece, Spain, France, Iceland, Ireland, France, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden, United Kingdom, Turkey, and Norway. The survey results indicate the following skills and capabilities as being most required for graduate employees: teamworking skills, sector-specific skills, communication skills, computer skills, ability to adapt to and act in new

situations, good reading/writing skills, planning and organizational skills, decision-making skills, good with numbers, and foreign language skills (Flash Eurobarometer, 2010).

In New Zealand, the government's careers service lists the skills that employers are looking for thus: a positive attitude, communication skills, teamwork, self-management skills, a willingness to learn, thinking skills which include problem solving and decision making, and resilience (CareersNZ, 2018).

While the catalogues of employability skills presented above seem to be in vogue, there is a growing body of criticism that questions the efficacy of this strategy in engendering authentic employability. There are those who view these employability skills lists as being narrow and superficial, masking the true essence and complexity of the employability construct (Baron and McCormack, 2024; Bennett, 2019; Kalfa and Taksa, 2015; McIlveen, 2018; McQuaid and Lindsay, 2005). This view is one of the major points of divergence in the employability debate that is presented in detail in section 2.3.2. below.

In response to the criticism leveled against 'narrow' employability skills list, there has been a paradigm shift toward lists that characterize employability more holistically. The new paradigm moves "considerably beyond lists of what graduates should know (knowledge) and be able to do (skills), and include a wide range of personal attributes and characteristics," where "the question becomes not simply about encouraging the acquisition of skills, but rather in helping students to transition from the identity of a student towards that of a graduate worker and citizen" (Artess, Hooley, & Mellors-Bourne, 2017, p.7).

For example, in 2017, the Higher Education Academy published a list of *graduate attributes* (emphasis added) that “describe a range of skills, attributes, attitudes, and behaviours that have a relevance to the workplace, but also frequently relevance to other contexts such as higher education, family life, or citizenship”. These graduate attributes are: aspiration, autonomy, career management, communication skills, creativity, critical thinking skills, customer awareness, digital literacy, efficiency, emotional intelligence, enterprise and entrepreneurship, ethics, flexibility and adaptability, giving and receiving feedback, independent thinking, initiative and self-direction, inter-personal skills, language skills (particularly second language skills), multi-tasking, numeracy, opportunity awareness, positive attitude, presentation skills, problem solving, professional knowledge, research skills, resilience, self-management, social intelligence, team-working, time management, willingness (and capability) to learn, work ethic, and writing skills (Artess, Hooley & Mellors-Bourne, 2017, p.17).

A study on graduate employability in Asia conducted by the United Nations Education, Scientific and Cultural Organization (UNESCO, 2012) indicated that the employability attributes that are generally preferred in Asia are: communication skills, logical, analytical, and problem solving skills, personality, confidence and integrity, flexibility and adaptability, innovation and creativity, and team spirit.

Similarly, a study on universities and employability in South Africa revealed that a university graduate is expected to exhibit the following employability attributes: an entrepreneurial culture, oral and written communication skills, practical business awareness, computer/IT skills, interpersonal skills, subject knowledge, the motivation and willingness to learn, critical thinking, creativity, problem solving, responsibility,

planning and organizing skills, leadership, the ability to work effectively in a racially and culturally diverse team, integrity and ethics, and numeracy (Walker and Fongwa, 2016)

In Kenya, the Public Universities Inspection Board released a report on the Transformation of Higher Education and Training in Kenya in 2006. In this report, the Board outlined the following graduate employability attributes: the ability to learn and master the act of continuous, life-long learning; the ability to think critically and analytically, and to handle and synthesize knowledge from different disciplines and sources; be well-grounded in a broad and general knowledge on humanities, arts, sciences and technologies; be able to interrogate the ethical and moral dilemmas of modern development; a deep appreciation of the rich cultural and religious diversity at national and international levels; broad and in-depth knowledge in a specific discipline or profession, which serves as the platform for further learning; literacy and mastery of ICT operations/applications; effective communication skills; entrepreneurial outlook -- the ability to seize upon opportunities to be productive, and to perceive possibilities that exist; be a risk-taker, ready to tread frontiers of what is not visible at the present, dream and make things happen (Republic of Kenya, 2006).

A reading of the preceding paragraphs would quickly reveal that even as a broader conceptualization of employability, in contradistinction to the skills agenda, is sought, the language of 'skills' invariably, and probably unwittingly, shows up in the discourse. This prevalence of the skills-talk is symptomatic of the 'instrumental reason' that characterizes current discourse on employability. In a widely acclaimed critique of the Dearing report of 1997, which, as pointed out earlier, was the precursor of the current employability debate, Blake, Smith and Standish (1998, p.56) lament

that “Skills-talk, the tendency to call all manner of human knacks, abilities, competencies, capacities, qualities and virtues alike ‘skills’, is everywhere in current educational writing.” Skills are not what or even who a person is (identity); rather, they are what a person can do (ability). Blake, Smith and Standish (1998) also assert that “a skill is something you can lack, or have, without it saying anything significant about you” (p.59), and contend that “to have a skill ... is to have something you can choose to exercise or not, or something which you can choose to exercise for bad rather than for good” (p.58). They then conclude that “skills are just something which, in that significant modern phrase, we ‘take on board’, superficially and without full personal commitment” (p.60).

The present study resonates with this thinking and therefore eschews the conceptualization of employability from a skills perspective. Rather, the study adopts a graduate identity perspective of employability. Graduate identity is composed of multiple graduate attributes which are influenced and reinforced, either positively or negatively, by the graduate’s occupational, social, economic, political and natural environment. From the catalogues presented in this section as well as the wider literature on employability, the following graduate employability attributes seem to recur and were therefore deemed significant for the purpose of this study: specialized/professional/vocational competence, oral communication competence, written communication competence, mathematical competence, digital competence, critical thinking and problem solving, self-drive, the ability to work in a team, integrity, responsibility, adaptability, the willingness to learn continuously, creativity and innovation, commitment to work, interpersonal intelligence, time management, leadership, Appropriate dressing and personal grooming, and planning and

organizational competence. These graduate employability attributes are discussed in detail in section 2.3.2 and analyzed in chapter four of this study.

### **2.3.2 The employability debate**

While the employability agenda dominates the discourse on the relevance of university education in the 21<sup>st</sup> century, there have been, and continue to be considerable questions about and critiques of this agenda. It is prudent to explore these questions and critiques because “the anatomy of the arguments for and implications of the employability agenda must be understood clearly, whether we decide to reject it on grounds firmer than ingrained conservatism, or to embrace it without niggling guilt” (McCowan, 2015, p.273). In a broad review of the literature on employability between 2012 and 2016, Artess et al. (2017, p. 16) highlight some of the arguments that underpin these critiques:

- Employability is poorly defined and that as such it becomes a meaningless buzzword that justifies a wide range of activities
- The emphasis on employability reduces the space for academic integrity and autonomy as it puts academics in the service of particular kinds of outcomes with which they may not agree
- The focus on employability asks higher education providers (universities) to take on a responsibility for vocational training which is more appropriately situated with employers
- Employability is an ideological tool which is used to justify the status quo and induct students into the capitalist hegemony

- Employability only reflects the needs of employers (often filtered through policymakers and higher education providers) and ignores the needs of students and graduates
- The stress on employability plays into a discourse of the student as a consumer of higher education who is entitled to demand a particular financial and employment outcome from their studies.

While these arguments may be contestable, it is noteworthy that they stem out of a broader debate on the place and purpose of university education in relation to both the individual (referring to the individual student in a university, the individual graduate of a university, the individual university as an institution, and the individual organization as an employer) and the society (referring to the totality of the individual's social, cultural, economic, political and physical milieu). The debate is essentially “between the idea of university education as something that is very abstract and theoretical to the idea that a university education must be immediately practical and useable” (Gerth, n.d.). This debate has existed for nearly as long as universities have existed, but has recently assumed greater urgency due to the new and emerging realities that confront universities all over the world. These new realities have been discussed in considerable detail earlier on in this chapter (see sections 2.1 ‘The functions of university education’ and 2.2 ‘the dynamics of relevance in university education’).

To fully appreciate the necessity for and the multi-dimensionality of the debate on employability as an indicator of university curriculum relevance, we need to situate this discourse in Barnett's conceptualization of a “supercomplex world” which is “a world subject to infinite interpretability” and which is the “world for which

universities are having to prepare their students” (Barnett, 2000, p.6). A supercomplex world is characterized, initially, by a *situation of complexity*, then, aggregately and ultimately, by a *situation* (or situations) *of supercomplexity*.

According to Barnett (2000, p.6), “a situation of complexity exists where one is faced with a surfeit of data, knowledge or theoretical frames *within* one’s immediate situation”. He explains this by giving the example of a medical doctor who, in the course of his professional duties, has to deal with multiple new drugs appearing on the market, keep abreast with new forms of surgery or new equipment and instrumentation. At the same time, the doctor has to be accountable to the hospital management (or even *be* part of the management), deal with patients’ queries and comments, and perform a myriad other tasks related to the job.

A situation of supercomplexity arises when the same doctor, apart from discharging his/her already complex professional duties, has to occupy and act in a variety of other equally important and necessary social, cultural, economic spaces, for instance as a parent, a role model, and a bread-winner. Supercomplexity is thus a multiplication of spaces, or, as Barnett calls them, frames of reference for the individual.

In short, professional life is increasingly becoming a matter not just of handling overwhelming data and theories *within* a given frame of reference (a situation of complexity) but also a matter of handling multiple frames of understanding, of action, and of self-identity. The fundamental frameworks by which we might understand the world are multiplying and are often in conflict. Of the multiplication of frameworks, there shall be no end. It is this multiplication of frameworks that I term *supercomplexity*. (Barnett, 2000, p.6)

This situation of supercomplexity has inevitably invaded the university curriculum such that the university is “no longer a site of knowledge as such but, rather, a site of knowledge possibilities”. In such a scenario “the association of the university with

Knowledge – with a capital ‘K’ – has to be abandoned. Instead, we should think of the university as engaged in *knowledge processes* in different *knowledge settings*, exploiting *knowledge possibilities*” (Barnett, 2000, p.21). The university curriculum thus becomes an arena for contestation about which knowledge is of most worth, and in which therefore some or all of these questions proliferate:

- Is a course to be constructed around contemplative knowledge, that so-and so is the case; or around knowing-in-action; or around understanding-through-communication; or around critical action; or around action learning?
- Are the ‘skills’ to be domain-specific or are they to be generic, transferable – so it is hoped -- across situations and knowledge frameworks?
- Is the knowing in question to be acquired through a deep embedding in a tradition or is it to offer an overarching ‘metaknowing’ such that one has the capacity to approach a domain with energizing and fruitful strategies?
- Is knowing a matter of understanding large conceptual schemes or it is a matter of determining the strategies that will carry one forward effectively in large-scale endeavours (through ‘policy studies’)?
- Is knowing essentially epistemological or ontological in character: is it cognitive or has it much more to do with one’s state of being-in-the-world?  
(Barnett, 2000, p.34)

These are profound curriculum questions. Though they would be typically voiced in a university setting rather than in a company or policy maker’s boardroom, they are the questions that, wittingly or unwittingly, drive the protagonists in the debate on universities and employability. These protagonists include, but are not limited to, universities, university students, university graduates, employers, and policy makers.

For our purposes here, universities, graduates, and employers are the primary stakeholders in this debate.

The perspectives of these three stakeholder groups on the relevance of education in developing or enhancing the employability of graduates are quite divergent. A study conducted by the United Nations Education, Scientific and Cultural Organization (UNESCO) on graduate employability in Asia, revealed these divergent views. UNESCO (2012, p.3) reports that: “graduates generally believed their education and skills were sufficient.” On their part, “universities considered their students to be well prepared for the transition to the workplace.” On the contrary, “the employers concluded that new graduates lacked the vital skills for employment.”

While this divergence of opinions between universities (including their graduates) and employers is hardly surprising, – it is, after all, the premise upon which the present study is based – it points to a fundamental point of contention that is at the heart of the current debates on university education and its relationship with employability. The question is: “should employability be the primary basis that shapes the direction of universities?” Asked differently, “is a university’s purpose to be defined solely by the expectations of the employers?” (UNESCO, 2012, p.3). This question, in various forms, dominates current employability discourse. Whatever its form, its essence is a trichotomy proposed by Catcheside (2012). Catcheside opines that in the employability debates there is a thesis (universities are not about markets, business and student employability), an anti-thesis (oh yes they are), and a synthesis that we shall discuss in due course. This trichotomy will shape the discussion for the rest of this section.

The employability debate is a political discourse. It is a discourse of who wields ‘the power’ of determining what constitutes employability and how *that* employability may be developed. This discourse is typically characterized by disputation between two entrenched protagonists: job market players, who hold the view that the university *is* a purveyor of employability as per the wishes employers, and academic purists in the universities, who eschew the ‘anti-intellectual’ narrative of employability and therefore the subordination of the university to wishes of employers. There is, in recent times, a growing ‘voice of integration’, that seeks to reconcile the positions of both protagonists and forge a commonality of purpose and process, a *praxis* as it were, in university education and its relevance to the universe. In this political setting, this study subscribes to the voice of integration.

Though this voice of integration is certainly being *heard*, at least in academic circles, it is still yet to be *listened* to, especially by the job market players. The significance of this is that reconciling the two positions remains mostly a theoretical enterprise. The current political reality is that it is the job market players; that is, employers, who wield the power in the employability debate, and they drive the employability agenda which, as pointed out earlier, is essentially a ‘skills’ agenda. As Hinchliffe (2005) points out, “in case anyone has doubts about the relevance of skills to graduate employability in the eyes of employers they need only to read any set of graduate job adverts” (p.6). Since university graduates wish to be employed, and the universities themselves wish to shore up their graduate-destinations ratings, academics find themselves, grudgingly most certainly, in the service of employers, perpetuating the employers’ narrative of employability. It is this reality that has led to the suggestion among many employers and policy makers that universities “need to transform their curricula and pedagogies in the service of employability” (McGrath, 2009, p.6), or at

the very least universities should “alter the curricula to close the gap and ensure that their products and the knowledge created benefits the individual, prospective employers and the broader economy” (Pheko and Molefhe, 2016, p.6). This school of thought focuses on the supply of ‘job ready’ individual graduates into the job market. This has been labeled ‘supply side’ thinking (Frankham, 2017; McIlveen, 2018).

In such a scenario, it becomes necessary to conceptualize Catcheside’s trichotomy. In this reconceptualization, there is a thesis (universities are about producing graduates who have skills and competencies which fit into the employability definitions of employers), an anti-thesis (oh no they are not! They are about developing an all-rounded human being), and a synthesis (producing employable graduates and developing all-rounded human beings is actually one and the same thing). This thesis has been discussed in detail in section 2.3.1: ‘the employability agenda’. We will now discuss the anti-thesis and the synthesis.

A useful starting point for the argument(s) against the ‘skills agenda’ would be the concise assertion by the United Nations Education, Scientific and Cultural Organization that university education “should not be directed only towards meeting the needs and requirements of employers; as ‘industry ready’ is not synonymous with ‘society ready’” (UNESCO, 2012, p.28). In this assertion, producing a graduate who is ‘society ready’ is the goal towards which universities should aspire. To achieve this goal, universities should promote “comprehensive excellence” in their graduates (UNESCO, 2012).

Comprehensive excellence in a graduate is achieved when the definition and development of “employability goes well beyond the simplistic notion of key skills, and is evidenced in the application of a mix of personal qualities and beliefs,

understandings, skillful practices and the ability to reflect productively on experience” (Yorke, 2006, p.13). It is noteworthy that in this perception of employability, ‘understandings’ and ‘skillful practices’ replace the more commonly used ‘knowledge’ and ‘skills’ because the former “signal the importance of a rich appreciation of the relevant field(s) and of the ability to operate in situations of complexity and ambiguity.” The end result in this conception of employability is “a capable person”, a ‘society ready’ individual, who “can work effectively on unfamiliar problems in unfamiliar contexts as well as on familiar problems in familiar contexts (which is really a matter of routine)” (Yorke, 2006. P.13). The accent here seems to be on what the graduate is able to do. Thus:

Employability is not just about getting a job. Conversely, just because a student is in a vocational course does not mean that somehow employability is automatic. Employability is more than about developing attributes, techniques or experiences just to enable a student to get a job, or progress within a current career. It is about learning and the emphasis is less on ‘employ’ and more on ‘ability’. In essence, the emphasis is on developing critical, reflective abilities with a view to empowering and enhancing the learner (Harvey, 2003, p.3)

Such arguments that are antithetical of the skills agenda invariably refer to the thesis – employability is about graduates’ skills in relation to the job market – in order to advance their counter-argument. What is instructive in the counter-arguments is that they do not dismiss the skills agenda; rather, they characterize it as narrow or hollow, focusing on the job-readiness of an individual graduate rather than on the situation of supercomplexity which defines that individual’s milieu. There is a feeling that:

the concept of employability – particularly as applied within many supply-side labour market policies – has been ‘hollowed out’ in many current theoretical and policy discussions. In many cases, the interactivity supposedly at the center of the concept appears to have been replaced by a singular focus on the individual and what might be termed their ‘employability skills’. The employability skills or individual assets possessed by job-seekers, and the extent to which

they tie in with the immediate needs of employers, have come to define many policy-makers' identification of skills gaps and understanding of the concept of employability (McQuaid and Lindsay, 2005, p.205)

The interactivity referred to here is based on a broader and holistic conception of employability. In this broader conception, employability involves “an interaction between the individual and the other actors and conditions in the labour market” (McQuaid and Lindsay, 2005, p.202). Thus, as Pheko and Molefhe (2016) point out, employability is “a complex mosaic – involving the employed, the unemployed, current employees, future employees, governments, employers (both current and future), sponsors, and the general labour market” (p. 5). This seems to reflect a much earlier, but nonetheless valid, assertion by Kleinman and West (1998) that employability is “the outcome of a complex of different factors, located in the labour market, in schools, in the recruitment procedures of businesses, and the economic policies implemented by the government” (p.174).

On the premise of broadening the understanding of employability, there have been attempts to conceptualize frameworks that take into consideration both individual factors and labour market conditions. This is evident in a broad perspective model developed by McQuaid and Lindsay (2005) which contains three interrelated components which influence employability: *Individual factors* which include attributes (e.g. basic social skills), competencies (e.g. motivation and confidence), transferable skills (e.g. literacy, numeracy, problem solving, communication, adaptability and team-working skills), qualifications and educational attainment; *Personal circumstances* that relate to the individual's social and household circumstances (e.g. family and caring responsibilities, access to resources); and *External factors* that cover labour demand conditions (e.g. macroeconomic factors,

vacancy characteristics, recruitment factors) and enabling support factors (e.g. accessibility to public services and job matching technologies).

Similarly, Rothwell and Arnold (2007) as cited in Lowden, Hall, Elliot and Lewin (2011, p. 4) propose a broad contextual approach for understanding employability based on interrelated components: the student's academic performance and engagement in his/her studies; the student's confidence in his/her skills and abilities; the student's ambition; the student's perception of the strength of the university's brand; the reputation the student's university has within his/her field of study; the status and credibility of the student's field of study; the student's awareness of opportunities in the external labour market; the student's perception of the state of the external labour market; and the external labour market's demand for peoples in the student's subject field.

A critical analysis of most of these broad conceptions of employability reveals that, ultimately, the onus remains on the universities to enact the employability agenda.

This scenario is aptly explained thus:

While a shared responsibility between the multiple stakeholders in the employability mix is acknowledged, institutions of higher learning are generally viewed as critical stakeholders since they are: (1) a direct bridge to the world of work; (2) fundamental for talent identification (e.g. through selecting students for appropriate programs and courses); and (3) instrumental for talent development (through the specific training and development programs) (Pheko and Molefhe, 2016, p.5).

This kind of thinking is apparently self-contradicting. It seems to advocate for that which it advocates against. In arguing against the skills agenda *while* asserting the centrality of the university as the developer or generator of employability, such discourse propagates instrumentalism in university education (Harvey, 2000). Instrumentalism is usually manifested in instrumental learning, where the students are

typically prepared for careers in appropriate industries or professions. Such instrumental learning is “extremely narrow and intended primarily to secure a qualification or a job rather than reflect an holistic [sic] learning experience”. Evidently, in this case, the anti-thesis reverts to the thesis.

There is therefore need for a truly broad and holistic conception of employability which espouses all the arguments advanced above and goes further as it seeks to ensure the notion of comprehensive excellence as discussed in preceding paragraphs of this chapter. What is critical to note here is that in essence, in the aforementioned trichotomy, the thesis advances a narrow conception of employability; the anti-thesis advances a broad conception of employability; while the synthesis advances a holistic conception of employability. However, as the previous paragraph shows, the lines between such categorizations, while clearly distinct in definition, get blurred in actual disputation.

The assertion here therefore is that a broad conception of employability *is* a holistic conception. In other words, the anti-thesis and the synthesis merge, but not in contradistinction to the thesis. Rather, the thesis is sub-summed in the anti-thesis, and the resultant claim is the synthesis. The synthesized conception is *both* broad and holistic. In this conception, university education “should not only be measured in terms of the employment rate of graduates but should also be measured by the extent to which [it] has addressed all of its purposes” (UNESCO, 2012, p.28). This is critical because:

When higher education institutions are confined to meeting the demands of employers, this neglects the important role of universities in nurturing the characteristics that help graduates to function across all aspects of life after they graduate (the concept of “graduateness”). In other words, individuals must not only be geared towards serving the work sector, but must also develop the

skills that allow them to benefit their family, community, and the nation (UNESCO, 2012, p.28).

In the supercomplexity that characterizes the world today, and even more so in the future, employability should of necessity be understood as a multi-dimensional construct whose definition and assessment should consider as many and as varied aspects of life as possible. With this emerging reality, some have even questioned the validity of the concept ‘employability’, suggesting that the emerging broader paradigm necessitates new and broader vocabulary. The new vocabulary should “move away from the discussion of employability as a list of skills and attributes towards a subtler discussion of ‘identity’” where the focus is on “helping students to transition from the identity of a student towards that of a graduate worker and citizen” (Artess, Hooley and Mellors-Bourne, 2017, p.7). As such, the concept ‘graduateness’ has been proposed as a suitable and more valid replacement to employability (UNESCO, 2012).

Graduateness may be a more useful concept than employability as the former includes a range of competencies that go beyond the skills needed for the workplace. While employability implies that graduates possess the qualities required by organizations, graduateness implies that graduates have the attributes that are important for an effective functioning society (UNESCO, 2012, p.29).

In this conceptualization, graduateness is deemed to be a broader lens with which to view or even define graduate identity. It is important to note that when understood this way, graduateness does not substitute employability (where employability refers to the knowledge, skills, and attitudes that predispose a graduate to gaining and keeping employment); rather, it subsumes employability. In essence therefore graduateness is employability plus much more. This essence is clarified thus:

Graduateness covers more than just ‘core skills’, ‘key skills’, or ‘personal transferable skills’, and encompasses knowledge,

understanding, dispositions, attitudes and values. Graduateness implies that a graduate has the required attributes that prepare them to contribute to society, not just to prepare them to conform to the expectations of employers (UNESCO, 2012, p.29).

This view of graduateness being an overarching concept which includes employability has been contested (Glover, Law and Youngman, 2002; Steur, Jansen and Hofman, 2016). According to Glover et al. (2002), graduateness and employability do not refer to the same thing or even a similar concept. They aver that while graduateness is a state after the completion of a course, employability is an assessment of the economic worth of a student at the time of completing the course. This differentiation between graduateness and employability is more explicit in the assertion that they “are indeed two separate concepts in higher education, and they should be treated as such when investigating the generic outcomes of university education” (Steur et al., 2016, p.7-8).

In this differentiation, “graduateness is the effect a higher education qualification has on an individual’s skills, knowledge and attitudes”, while “employability is the acquisition of general transferable skills which, once gathered, requires assimilation into national and international employment” (Steur, et al., 2016, p.7). Proponents of this differentiation view employability as a competitor of graduateness, and they argue that any effort to enhance a graduates’ employability may actually jeopardize the development of their graduateness (Chetty, 2012; Coetzee et al., 2012; Glover et al., 2002; Steur et al., 2016).

This argument is problematic and self-contradictory. It is based on the assumption, as has been shown, of a distinction between employability and graduateness. Yet in attempting to highlight this distinction, subscribers of the graduateness school of thought contradict each other when some assert that “the concept of graduateness is a full-size set of criteria *which subsumes the concept of employability*” (emphasis

supplied) (Rahman and Shuib, 2011, p.185) while others insist that the two concepts are separate, different and actually antagonistic in practice (Steuer et al., 2016).

Yet even those who dichotomize between employability and gradueness, with gradueness occupying the pride of place in the dichotomy, contradict themselves by characterizing gradueness using the vocabulary of employability. Advocates of gradueness argue that it is an indicator of the intellectual development of an individual (Steuer et al, 2016) yet they define gradueness as “intellectual ability grounded in *both discipline and functioning knowledge*” (emphasis supplied) (Coetzee, Botha, Eccles, Holtzhausen and Nienbar, 2012, p.2). This amalgamation of theory (discipline) and practice (functioning) is a core concept of the employability school of thought (see for instance Bennett, 2019; Harvey, 2003; Kleinman and West, 1998; McQuaid and Lindsay, 2005; Pheko and Molefhe, 2016; Stoten, 2018; and Yorke, 2006), so there is really no distinction here.

The contradiction is more apparent when advocates of gradueness attempt to draw a profile of gradueness. A number of illustrations will suffice here. It has been suggested that there are three domains of gradueness: reflective thinking – which refers to higher thinking abilities, including meta-cognitive thinking; scholarship – which refers to a set of knowledge, skills and attitudes that is associated with research in practice; and moral citizenship – which refers to the idea of students as global citizens, including highlighting students’ moral development (Steuer et al., 2016, p.9). Though the language of these domains is relatively abstract, the similarity with employability vocabulary is noticeable.

There are more concrete illustrations of the similarity or sameness in vocabulary between the characterization of gradueness and that of employability. One such

illustration is the claim that “a graduate with graduateness” possesses certain general attributes including:

- Critical and creative thinking
- Preparedness to serve others
- Personal transferable skills: (a) managing tasks and solving problems (analytical and conceptual thinking, gathering information to assist problem solving and decision making); (b) working with others (understanding how others perceive themselves and the needs of others, and building positive relationships); (c) communication (oral and written); and (d) self-awareness (taking responsibility for one’s own learning and development, dealing with pressures and emotions, and showing sense of purpose) (UNESCO, 2012, p.29)

Another illustration is the assertion that “graduates are expected to possess certain general attributes after completing the experience of higher education” These attributes are:

- Critical and creative thinking characterized by the ability to see things objectively
- Preparedness to serve members of the community other than workplaces
- Personal transferable skills which are grouped under four headings: i) managing tasks and solving problems; ii) working with others; iii) communication; and iv) self awareness
- Cognitive learning (which includes verbal skills, quantitative skills, substantive knowledge, rationality, intellectual tolerance, aesthetic sensibility,

creativeness, wisdom and life-long learning), emotional and moral development, and practical competence (Rahman and Shuib, 2011, p. 185)

Yet another illustration is the definition of graduateness by the University of South Africa (UNISA) in relation to its own graduates, though this could be generalized, with appropriate context-relevant modifications, to all other graduates. According to the university, in its learner support web page titled 'Graduateness', UNISA graduates:

- Are independent, resilient, responsible and caring citizens who are able to fulfil and serve in multiple roles in their immediate and future local, national and global communities
- Have a critical understanding of their location on the African continent with its histories, challenges, and potential in relation to globally diverse contexts
- Are able to critically analyze and evaluate the credibility and usefulness of information and data from multiple sources in a globalized world with its ever increasing information and data flows and competing worldviews
- Know how to apply their discipline-specific knowledges competently, ethically and creatively to solve real-life problems
- Are critically aware of their own learning and developmental needs and future potential

Perhaps the most telling illustration in this regard is the answer McCowan (2015) gives to his own question: 'should universities promote employability?' in an article by the same title. He asserts that:

Universities, therefore, should promote employability – but only a particular version of it: one consistent with – or emerging from – the aims of critical reflection and moral action. In this way, the notion of

employability might seem to collapse onto what has been termed ‘graduateness’ – that is to say, one of the qualities of a person emerging from the experience of university is that she can gain and function effectively in employment, but that this attribute does not dominate all others, and subordinate itself to the graduate’s other roles as a citizen of a polity or as a human being part of a web of relationships, near and far (McCowan, 2015, p.283).

These illustrations serve to dispel the perception of distinction between the characteristics of a graduate ‘with graduateness’ and those of a graduate ‘with employability’. A comparison of any or all of these illustrations of graduateness with the illustrations of employability presented earlier in this chapter reveals that the desired graduate attributes are essentially the same in both concepts. Therefore, as far as this study is concerned, any perception of difference between employability and graduateness remains just that: a perception. This study posits that employability and graduateness are conceptual rather than contesting viewpoints of the same construct. This construct is what this study defines as employability. To repeat, employability is the entire corpus of a university graduate’s attributes, which consist of the knowledge, skills, attitudes, competencies and dispositions that may qualify them for one or more positions of employment, including self-employment, and which would help them to remain progressively productive and valuable in all the personal, social, and economic spheres of their life.

This definition of employability has two aspects: one, graduate identity and two, a proposition of what may result from the graduate identity. The first aspect is fairly straight-forward and has been dealt with at length in the preceding pages. Suffice it to say that graduate identity is a comprehensive composite of attributes that cover the personal, social, and vocational abilities, competencies and dispositions of an individual graduate. For the purpose of this study, nineteen graduate attributes were crystallized from the foregoing discussion and the wider literature on employability.

The list of these attributes has been presented at the end of section 2.3.1 above. Each attribute is now discussed in the following paragraphs.

### ***Specialized/professional/vocational competence***

This refers to the specific knowledge of concepts, principles, methods, procedures and techniques, or simply the expertise required to perform specific tasks in a given occupation or profession. The basis of this competence is taken to be disciplinary knowledge. Hence the development of this competence – which is also commonly referred to as ‘job-specific skills’ or ‘technical skills’ – has been traditionally assumed to be the function of universities through the teaching of job-specific, or vocational, or, in the current vocabulary, ‘market-relevant’ courses (Barnett, 2000; Blake 1998). However, this assumption has been disputed. For instance, McCowan (2015) argues that “for most lines of work, job-specific skills – and knowledge of an applied, practical rather than a general, theoretical nature – can best, or perhaps can only, be learned from the employer, and in the workplace (p.280). In any case, there is a significant shift among employers, especially in the service sector, towards considering non-technical, ‘soft’ attributes as more essential than the technical ones. Even in the traditional professions, such as medicine, law, engineering and teaching, while academic knowledge or technical competence is critical, an equally high premium is placed on the generic graduate attributes (Baharun & Suleiman, 2009; Chithra, 2013; Harvey, 2000; Watts, 2006).

### ***Oral communication competence***

This denotes the ability and capacity of an individual to articulate ideas and opinions verbally to the extent that the message they intend to pass across will be understood by the recipients. This is a universal attribute which is vital in practically every sphere

of a graduate's life. Oral communication can be either informal, such as real-time, face-to-face person to person or group conversations, or telephone and other online conversations; or formal, such as real-time formal presentations (with or without the aid of technology), formal video presentations, formal group conversations and interviews (Crosling and Ward, 2002; Nawaz, 2013). Another component of this attribute is the ability to negotiate, which entails the quality of expressing one's own feelings and opinions while respecting the feelings and opinions of others in order to achieve a 'win-win' outcome (STEMNET, 2017).

Oral communication competence, also referred to as 'speaking skills', presupposes, among other things, proficiency in the language being spoken. Yet proficiency in a language alone cannot guarantee oral communication competence. Two critical components of this competence, alongside language, are culture and context (Crosling and Ward, 2002). This competence is actually developed and nurtured both in and out of school, but it is refined progressively through the successive levels of education, the culmination being in the university. In virtually every university program, there is some course whose intention is to either develop or enhance the communication competence of the student (Clokic and Fourie, 2016).

### ***Written communication competence***

Closely related to oral communication competence is the ability and capacity of an individual to relay information in writing in a clear, concise and coherent manner so that the recipient can understand the message. Written communication competence is gauged through the ability to produce all or any of the following: memos, letters, technical reports, speeches, briefings, press releases, emails, newspaper articles, website content and other pieces of writing (Harvey, 2003; Lees, 2002). Just like in

oral communication competence, the ability to negotiate is an integral characteristic of written communication competence. The components of this competence include language (both linguistic and grammatical correctness), audience (who the message is intended for – culture is a concomitant here), conventions (for instance, what is the stipulated format of the particular piece of writing), and others. Just like oral communication, written communication is developed progressively throughout all levels of the education system culminating in the university (Clokie and Fourie, 2016).

### ***Mathematical competence***

Also referred to as ‘numerical competence’ or ‘numeracy’, mathematical competence is the ability and agility to use mathematical concepts, principles and procedures to obtain meaningful information, present and support evidence, or to demonstrate a point (STEMNET, 2017). Mathematical competence is manifested in various ways including: an understanding and application of the language and concepts of mathematics especially the basic mathematical operations: addition, subtraction, multiplication and division, the ability to use statistical software, data analysis and interpretation, calculating and interpreting percentages, decimals and fractions, working with ratios and proportions, understanding basic finance, and analytical thinking (Othman, Buntat, Sulaiman, Salleh & Herawan, 2010) . Mathematical competence is a critical attribute for graduate employability. Indeed, it has been observed that “poor numeracy skills tend to limit any graduate’s acquisition of employment, irrespective of their degree subject” (Durrani and Tariq (2012, p. 419).

While it is obvious that mathematical competence is important and therefore expected and required in employment settings, it is also true that the same competence, albeit in

varying degrees, is required in all other facets of an individual's life. Mathematical competence is progressively developed and nurtured principally in the earlier levels of schooling – early childhood education, primary education and secondary education. At the undergraduate level, students whose degree programs do not have a science, technology, engineering and mathematics (STEM) orientation get to study only one or two mathematics courses, especially in statistics.

### ***Digital competence***

Digital competence or 'digital literacy' is a new terminology in the literature. The older terminology refers to 'computer literacy' or 'ICT competence'. Though the latter terminology is more commonly used especially in curriculum and instructional technology discourse, the former is adopted for this study because is deemed to be broader and more futuristic. Digital competence may be defined as the effective and efficient use of digital technology, communicative tools and/or networks to access, manage, integrate, evaluate, create, and disseminate information in order to function progressively and productively in a knowledge society (International ICT Literacy Panel, 2002). This competence entails ICT or computer literacy, information literacy, media literacy, and communication and collaboration using digital media (McLoughlin, 2011).

An international study on computer and information literacy conducted by the International Association for the Evaluation of Educational Achievement (IEA) conceptualized digital competence (though in the report the terminology used is 'computer and information literacy') as having two strands. One strand has to do with "collecting and managing information," hence its focus is on "the receptive and organizational elements of information processing and management." This strand has

three components: “knowing about and understanding computer use”; “accessing and evaluating information” which denotes “the processes that enable a person to find, retrieve, and make judgments about the relevance, integrity, and usefulness of computer based information”; and “managing information” which is “the capacity of an individual to adopt and adapt classification and organization schemes to arrange and store information” (Fraillon, Ainley, Schulz, Friedman and Gebhardt, 2014, p. 34).

The other strand of digital competence deals with “producing and exchanging information.” Its focus is on the use of computers (digital media) as “tools for thinking, creating, and communicating.” This strand has four components: “transforming information” which indicates “the use of computers to change how information is presented so that it is clearer for specific audiences and purposes”; “creating information” which signifies “the use of computers to design and generate information products for specific purposes and audiences”; “sharing information” which refers to “the use of computers to communicate and exchange information with others”; and “using information safely and securely” which denotes an individual’s capacity and level of “understanding legal and ethical issues of computer based communication” (Fraillon, et al., 2014, p. 35).

Digital competence is an attribute whose utility permeates all facets of life. An individual’s digital competence ensures their ability to “participate effectively at home, at school, in the workplace, and in the society” (Fraillon, et al., 2014, p. 18). This is due to the fact that “a digitally literate person is one who is a critical and discerning user of digital communication tools with the knowledge, skills, and understanding to choose appropriate formats, tools, and media to represent meaning”

(McLoughlin, 2011, p.475). Digital competence is not just functional and technical. It has a high cognitive aspect which involves “critical thinking about how digital tools relate to social, cultural, and political contexts” (McLoughlin, 2011, p.475). This cognitive aspect is especially critical in this age of mobile telephones and the proliferation social media platforms, developments which need to be considered in any discussion of digital competence. Indeed there is a realization that “digital competence as a key foundation of life-long learning” has “extended beyond functional ICT skills to embrace the critical, collaborative, creative use of new technologies for employability and societal inclusion” (Ainley, Schulz and Fraillon, 2016, p.15).

Digital competence is not an innate attribute. It is learned formally in school and informally at home and other informal learning spaces. In the formal arena, there is a push to integrate computer and digital literacy throughout the curriculum at every level of education, although this is yet to be fully actualized especially in Kenya (Keoro, Yungungu and Nyandusi, 2014). Due to its self-sufficient nature as a practical knowledge area, digital literacy, or at least many aspects of it, can be self-learned by individuals who have the interest and motivation.

### ***Critical thinking and problem solving ability***

The ability to think critically and solve problems is a vital characteristic of all successful individuals in both professional and personal life. In fact, it had been predicted that by the year 2020, complex problem solving (with critical thinking as an implied concomitant) would be one of the core graduate attributes in the world of work (World Economic Forum, 2016). Critical thinking has been defined as “the intellectually disciplined process of actively and skillfully conceptualizing, applying,

analyzing, synthesizing and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action” (Scriven and Paul, 1987, para 1). From this definition, critical thinking is a cognitive process which culminates in the ‘action’ that is problem solving. It follows then that problem solving is the process of discovering or identifying or anticipating a problem and seeking its solution *through* critical thinking. Critical thinking and problem solving are thus integral components of a processes, whose ultimate goal is the formulation of appropriate and effective solutions to current and future problems that either an individual or a group may encounter. This process may be viewed as a continuum, with critical thinking initiating the process and problem solving concluding it.

When viewed this way, critical thinking – as the normative label for this continuum – has two components: thinking and acting. These two components are clarified thus:

(1) A set of information and belief generating and processing skills and (2) the habit, based on intellectual commitment, of using those skills to guide behavior. It is thus to be contrasted with (1) the mere acquisition and retention of information alone, because it involves a particular way in which information is sought and treated; (2) the mere possession of a set of skills, because it involves the continual use of them; and (3) the mere use of those skills (“as an exercise”) without acceptance of their results (Scriven and Paul, 1987, para. 3).

As a process, the critical thinking-problem solving continuum is characterized by at least seven sub-processes that an individual should engage in: (i) clarifying thinking about and understanding the problem by raising vital questions which are formulated

clearly and precisely, (ii) challenging assumptions about or related to the problem by gathering and assessing relevant information and using abstract ideas to interpret such information effectively, (iii) examining evidence and rationale by so as to arrive at well-reasoned conclusions about and solutions to the problem, which are then tested to verify or reassure that they are appropriate, (iv) remaining open-minded so as to explore and consider multiple and alternative perspectives and systems of thought, as well as recognizing and assessing one's own assumptions, (v) considering the implications and consequences of the identified solutions, (vi) communicating effectively and collaborating with other interested parties so as to implement the solution(s) deemed appropriate and acceptable to many if not all, (vii) looking back and learning from the entire experience through evaluating the solution(s) and the process of arriving at and implementing the solution(s). (Oliver & de St Jorre, 2018; Paul and Elder, 2016; STEMNET, 2017)

While these sub-processes may be viewed as generic tools of critical thinking applicable in any problem solving situation, there is contention as to whether critical thinking is generic and transferable. It has been argued that critical thinking thrives in specificity rather than generality, and it is therefore not as readily transferable as is commonly believed. Critical thinking pedagogues argue for the centrality of content; that is, knowledge, and context in any critical thinking endeavor (Ashman, 2019; Drvcourt, 2016; Kaminske, 2019). Thus critical thinking should not be taught – and cannot be learned – in an abstract way, devoid of factual content. The argument here then is that any pedagogy for critical thinking should not assume that critical thinking is “something that can occur in a void, removed from knowledge” (Drvcourt, 2016, para. 7), because “the processes of thinking are intertwined with the content of

thought (domain knowledge),” which explains why “students are able to think critically in one subject area, but not in another” (Drvcourt, 2016, para.4). In sum,

to remind students to just think critically in general is pointless. Asking them to look at an issue from multiple viewpoints is all fine and well, but if they don’t have a lot of background knowledge on the issue, they can’t really think about it from multiple viewpoints. All you will get is surface level thinking. No insights or depth. The solution to this is more knowledge. A knowledge rich curriculum will improve the quality of critical thinking. (Drvcourt, 2016, para. 6)

This “knowledge rich curriculum”, together with the requisite tools for critical thinking and problem solving, should be offered at all levels of education so as to engender a progressive fine-tuning of the critical thinking abilities of the student. The university then becomes the ultimate refinery of critical thinking and problem solving, rather than its initial processor.

### *Self-drive*

Also referred to as autonomy, self-drive is an individual’s quality of generating own ideas and personally processing the transformation of these ideas into reality. Self-drive is an intrinsic attribute which manifests an individual’s internal locus of control (Nyandusi, 2001). The internal locus of control is a composite of an individual’s self-concept – how the individual views and appreciates oneself, especially the appreciation of one’s strengths and weaknesses; self-confidence – an individual’s feeling of trust in one’s abilities, qualities and judgment including, and especially, trust in one’s ability to endure and overcome challenges and setbacks; personal initiative – an individual’s innovativeness and the quality of pioneering ideas and actions; self-efficacy – an individual’s belief in one’s capacity to accomplish certain tasks or play certain roles effectively and efficiently, and in one’s ability to influence and even control the events that affect one’s life; and self-management – an

individual's personal discipline and regulating of one's emotions, passions, and motivations. This includes the ability to take responsibility for one's behavior and the ability to plan for and organize one's time and use of resources (Bandura, 1994; Glossary of Education Reform, 2013; University of Leeds Careers Centre, n.d.).

Self-drive is characterized by: an individual's strong intrinsic motivation to both initiate and accomplish specific tasks; the ability to work under pressure of deadlines or multiple concurrent tasks and accomplish them without succumbing to stress; the quality of determining and managing one's own schedules, the quality of being decisive and proactive; the quality of taking calculated risks without being reckless; the disposition of doing what needs to be done without being prompted by others; the quality of being persistent and resilient; and, especially in a typical employment setting, the quality of performing one's duty without or with minimum supervision (Duszinsky, 2020; Glossary of Education Reform, 2013; STEMNET, 2017; University of Leeds Career centre, n.d.)

Self-drive is an innate attribute and thus may not be directly taught at home, in institutions of learning, or even in the workplace. But an individual's self-drive is malleable and can therefore be enhanced in these learning spaces. This may be accomplished through: exposing individuals to frequent and progressively complex problem solving opportunities, educating individuals to formulate goals, giving positive feedback to individuals who accomplish tasks successfully, peer and role modeling, and encouraging self-assessment (Bandura, 1994; Hinton, 2019; Sewell & St. George, 2000).

### ***The ability to work in a team***

More commonly referred to as ‘teamwork’, this denotes an individual’s disposition to and competence in working harmoniously with other individuals from diverse philosophical, disciplinary, cultural, geographic, social, and economic backgrounds to accomplish a common task or achieve a shared goal. This can be during conversations, projects, meetings, or any other collaborative activities (Indeed, 2019; STEMNET, 2017, Wagner, 2010). The ability to work in a team work is a generic competence and one of the most sought for essential employability attributes by employers. Yet the relevance and significance of this attribute transcends employment or the world of work. It is applicable and required in every aspect of an individual’s life where working with others is the norm.

An individual’s ability to work in a team is indicated by: the willingness and ability to share ideas, information and opinions with teammates or colleagues in a clear, efficient and respectable way; understanding one’s role in the team and be responsible for discharging it, as well as understanding the role of each other team member and respecting and supporting it; welcoming collaboration and cooperation – working together with other individuals to leverage on the diversity of skills, disposition, knowledge, strengths and experience to accomplish team tasks. This entails, where necessary, compromise and adjustment of one’s position, as well as welcoming and accepting constructive criticism; being accountable by accepting and taking responsibility for own and team mistakes and seeking their solutions; exhibiting honesty and transparency by being truthful about one’s tasks, fears and failures and acting in a transparent manner so as to build team-trust; Acknowledging, appreciating and understanding teammates emotions and motives – that is, empathizing with teammates; being flexible enough to accept a variety and diversity of tasks, and to see

an opportunity to learn in every novel situation; exuding positive energy and acting as a morale booster for the team; being aware of team dynamics at all times, especially sources of conflict and how to resolve conflicts in the team including. This includes understanding how one's action or inaction may impact on individual team members or the entire team; committing oneself to the team, believing and investing in the team goal(s), the processes to attain the goals, the team members, and the team structures; going beyond the common call of duty to accomplish tasks or execute roles that will ensure that the team or any one or more of its members are in good stead to reach the shared goals (Duszinsky, 2020; Indeed, 2019; International Careers Institute (ICI), 2016; STEMNET, 2017; Wagner, 2010).

The ability to work in a team can be developed both in and out of formal learning institutions. However, aspersions have been cast on whether the formal curricula in all levels of the education system, but more especially at the university level, as currently designed, can authentically develop and nurture this attribute because, “sadly, teamwork and collaboration are not commonly found in school” (Glaze, 2014, para.1). This is because “the achievement culture of the academy tends to be strongly individualized” as opposed to the workplace, where “cooperation is taken – usually – for granted” and “teamwork, to be sure, is a buzz word” (Hinchliffe, 2004, p.9). It is no wonder then that the discourse on developing ‘teamworking skills’ is significantly skewed toward the non-formal curricula – what is commonly called extra-curricular or, more appropriately, co-curricular activities – as the more feasible pathway to developing teamwork abilities (Robescu & Manea, 2015). Nonetheless, the ability to work in a team can and should also be developed and nurtured in and through the formal curriculum (Marasi, 2019; Marchetti, 2018)

### *Integrity*

Integrity refers to an individual's quality of holding and exhibiting strong ethical and moral principles, and being honest and honorable at all times in all places irrespective of who is or is not watching, and regardless of the consequences. Integrity is a fundamental human virtue which is expected and required of every individual in virtually every culture. Thus integrity is an essential attribute in every sphere of an individual's life. Yet integrity is in short supply and therefore is much sought after. As a matter of fact, actions and interactions by human individuals are characterized more by the lack of integrity than by the portrayal of integrity. This is because integrity is not an innate quality of human beings; rather, it is developed through socialization and acculturation (Forbes, 2000; Price-Mitchell, 2015). Socialization and acculturation, in this context, refer to the broad process of education. The reception, perception and application of the proceeds of such education vary from one individual to the other, hence the variance in the integrity of different individuals.

An individual of integrity would typically exhibit most or all of the following attributes: honesty, trustworthiness, dependability, loyalty, fairness and justice, loyalty, respect, humility, generosity, graciousness, responsibility, diligence, patience, and kindness. Such an individual exhibits moral uprightness and high ethical values. These are attributes that define a holistically virtuous person in a family, in an institution of learning, in the workplace, among friends, and in the wider society (ICI, 2016; Indeed, 2019; Price-Mitchell, 2015).

Since integrity is derived from education – and education here refers to the totality of a human individual's experiences from all spheres of life, not just from formal institutions of learning – the question is how best can it be developed and nurtured?

Answering this question in its broadest sense here would take us beyond the scope of this study. The focus here then will be on the development and nurturing of integrity within the formal education system. There is general consensus that by the time an individual is twenty years old, the extent of their integrity for the most part has been established (Forbes, 2000). The implication here is that the onus of developing integrity in individuals rests mostly on the earlier stages of formal education – early childhood education, primary education and secondary education. Here, students acquire integrity “values and behaviors from adult role models and peers, and in particular, through an understanding of the principles of academic integrity” (Price-Mitchell, 2015, para. 4).

Nonetheless, universities cannot assume that by the time they receive undergraduate learners from the secondary schools the integrity of such learners is already established so they can do nothing about it (Forbes, 2000). Human beings have the capacity to learn, unlearn, and relearn, so a university can and should deliberately seek to refine the integrity of its students. This may be achieved generically through character modeling, institutional structures and processes that embody integrity and the inculcation or reinforcement of the values and principles of academic integrity and social responsibility, and specifically through the learning of philosophy and ethics in the students’ knowledge areas (Wong, Lim, & Quinlan, 2016). This is crucial because “when students learn integrity in academic settings, it helps them to apply similar principles to other aspects of their lives” (Price-Mitchell, 2015, para. 4).

### ***Responsibility***

Responsibility is the obligation of an individual to satisfactorily perform a role, duty, or task that is either assigned or ascribed to him or her, and to be answerable for the

performance. Responsibility is thus the sum of an individual's choices and decisions concerning that which is expected of them, whether at home, or in school, or in the workplace, or in the wider community (Armstrong, 2016). A corollary of responsibility is accountability, which is a responsible person's willingness and readiness to accept the consequences of his or her actions. In other words, a person who assumes responsibility automatically becomes accountable for his or her performance. Responsibility is therefore an absolute individual attribute which cannot be delegated. Where an individual is assisted to perform his duties through delegation, the responsibility for the performance of that duty lies with that individual and never with those that assisted.

A responsible person is therefore an autonomous individual. This is someone who is able to discharge their roles and duties effectively with little or no guidance or supervision because they are accountable or answerable for their performance, both to self and to others. A responsible person is a self-driven person who is results-oriented and will keep looking for ways to improve performance so as to achieve better results (Armstrong, 2016).

Responsible persons will typically exhibit the following aptitudes and characteristics: the ability to set goals and identify priorities for self and, where necessary, others; the capacity to develop a set of personal, and where applicable, group responsibilities and performance targets; the competence to evaluate both personal and group effectiveness in achieving defined targets; the competence to plan and manage time well; the ability to balance between personal and professional life; being accountable for one's actions, and where applicable, the actions of one's group or team; adherence to the ethic of collective responsibility; being socially responsive and responsible,

hence contributing to the community; taking care of personal and corporate resources and equipment; being consistent, dependable and reliable; being a person of integrity; admitting mistakes and being willing to learn from the mistakes; diligence and enthusiasm in the performance of duty (Armstrong, 2016; Enlumen, 2020; Indeed, 2025).

Responsibility is a life skill which should ideally be taught from an early age, both at home and at school. In terms of responsibility, adult behavior is more often than not a manifestation of both formal and informal childhood upbringing and socialization. Responsibility may not therefore be taught, in a university class for instance, but responsible behavior should and is normally enforced and reinforced through rules, regulations and expectations of students' conduct. Whatever the space and level of education – whether at home, in school, in the workplace, or wherever else – there are certain fundamentals to fostering and nurturing responsibility: Expose individuals to responsibility from as early an age as possible (in the workplace, this would mean as soon as they join the organization); model responsible behavior (responsible adults/superiors nurture responsible children/juniors); assign responsibility to the individual (this should be done gradually and developmentally) and expect accountability for the same; positively reinforce responsible behavior; avoid habitually rewarding responsible behavior (the motivation for responsibility should as much as possible be intrinsic rather than extrinsic); provide opportunities for experiential learning about consequences of one's actions; give guidance on performance of duties so that responsibility does not become a burden due to lack of knowledge (Friedman, 2019; Kelly, 2007; Keyser, 2018; Tusculum University, 2011)

Probably the greatest lesson that an individual can learn from any and every educational space is that “no one is responsible for your life but you” (Tusculum University, 2011, para.2).

### *Adaptability*

Adaptability, also referred to as ‘flexibility’, ‘coping skills’ or even ‘cope-ability’, is “a key skill of the future” (Frith, 2016). This reference to the future is deliberate and appropriate; adaptability is essentially a response to what happens a moment after the present. The future is as unpredictable, uncertain and unknowable as it is ‘super-complex’ and ever-changing (Barnett, 2000). Yet the individual is expected and has to anticipate, fit into, and thrive in this future. The most appropriate and essential tool for doing so is adaptability, which is the ability and willingness to respond quickly and positively to new information, changing conditions or circumstances, and unforeseen challenges at work and in life as a whole. Some of these challenges include new ‘knowledges’ and new ways of knowing, new technologies, new kinds of competition, new processes, new roles and responsibilities and new and more complex ways of relating and interacting (Conference Board of Canada, 2000; Duszynski, 2020; University of Leeds Careers Center, n.d.).

It has been argued that when considering adaptability, employers, and indeed all situations in life, require individuals who are adaptive, adaptable, and transformative. *Adaptive* recruits are those who can rapidly fit into the workplace culture and perform their duties efficiently and effectively to add value to the organization; *Adaptable* people are those who are ever willing and ready to learn so as to improve their knowledge and skills, and who can use their abilities and skills to evolve the organization; and *transformative* employees are those who can use their knowledge,

skills and abilities to anticipate and lead change, and who are imaginative, creative and innovative (Harvey, Moon and Geall, 1997).

In the literature on employability, adaptability as a graduate attribute tends to subsume the other commonly stated attributes. For instance, it is commonly held that someone is adaptable if they possess and can use the following skills: communication skills, interpersonal skills, critical and strategic thinking skills, problem-solving skills, life-long learning skills, teamwork skills, organizational skills, and research skills (Doyle, 2019; Indeed, 2020). While these attributes are generic, a number of specific individual characteristics have been identified as being critical and essential for the composition of an adaptability profile. These include: Exuding a positive attitude toward change and novelty; Having and maintaining an ‘anticipatory mind-set’; Observing and monitoring changes in one’s environment; Having a ‘growth mind-set’ and the willingness to learn; Acknowledging and accepting the inevitability of change; Coping with ambiguity and complexity; Being able and ready to collaborate with others in an environment of change and novelty; Communicating effectively with others about change and novelty; Being flexible and having a ‘malleable self-concept’ – the belief that an individual can and should adjust if and when it is necessary; Being a critical thinker who challenges and can discard entrenched *status quo* assumptions; Being a creative or lateral thinker who is innovative and transformative (Doyle, 2019; Duszynski, 2020; Indeed, 2020).

Adaptability is an innate attribute, but a person “can learn how to be more adaptive” and therefore “can achieve much higher performance” (Haward, 2018, p.57). While learning adaptability is ideally an experiential exercise for every individual that of necessity transcends all learning spaces – home, school, workplace or elsewhere –

formal educators in schools and in higher education are advised do the following to foster adaptability: Focus on inter/multi/trans-disciplinary learning so as to prepare students to “live at the intersections” of life; Encourage resilience in students. Resilience refers to one’s ability to handle and bounce back from adversity; Promote self-regulation – this teaches students how to manage their emotions, thoughts and behavior when faced with challenging situations; Dispel the fear of failure – create safe learning environments where learners feel comfortable asking questions, taking risks, and making mistakes; Encourage continuous learning so as help them learn and develop new capabilities and competencies constantly (Adaptability, 2019)

Further, these educational institutions would do well to heed this admittedly aged yet still very valid advice from renowned futurist Alvin Toffler:

The range of subject matter should be broad enough so that apart from dealing with the “known” (i.e. highly probable) elements of the super-industrial future, some provision would be made for dealing with the unknown, the unexpected, the possible. We might do this by designing “contingency curricula” – educational programs aimed at training people to handle problems that not only do not exist now, but which may, in fact, never materialize. (Toffler, 1972, p.412)

Such ‘contingency curricula’ would adequately and appropriately prepare the student and ultimately the graduate to anticipate and respond to the ever-shifting realities of contemporary and future life. The accent in such curricula should be on anticipation rather than response because, as Harvey (2003) says, being able to respond to change is essential, but being able to anticipate change is critical. The design and provision of such curricula is imperative and urgent:

For education the lesson is clear: its prime objective must be to increase the individual’s “cope-ability” – the speed and economy with which he can adapt to continual change. And the faster the rate of change, the more attention must be devoted to discerning the pattern of future events. (Toffler, 1972. P. 403)

### *The willingness to learn continuously*

Learning is the quality of understanding new knowledge and skills, and adjusting one's behavior in order to apply these knowledge and skills effectively in appropriate contexts. The willingness to learn continuously denotes an individual's disposition, tendency and commitment to learn so as to enhance or improve one's knowledge, skills and abilities frequently and continuously (Babos, Lubyova & Studena, 2015; Indeed, 2019). This has three aspects: willingness to learn, which has to do with an individual's attitude toward and motivation for learning – that is, liking and wanting to learn; ability to learn, which has to do with an individual's strategies, techniques, skills and methods of learning – that is, how an individual learns; and continuity of learning, which has to do with both the frequency and the scope of learning – that is, how often and how much does an individual deliberately set out to learn.

Learning is arguably the most fundamental of all human competencies. Every individual is what he or she is because of all they have learned over the course of their life. Essential as learning is to the very existence of each individual, in recent times it has become more critical because the super-complexity that characterizes contemporary and, predictably, future life. This super-complexity places individuals, especially university graduates (who were traditionally deemed or deem themselves 'learned' and therefore more or less equipped to 'face life'), in a condition of chronic knowledge deficit which is can only be managed (as opposed to remedied) by life-long and life-wide learning. This condition exerts pressure on individuals and necessitates an adjusted "capacity of individuals to deal with new types of problems at work and in life, and to cope with changes towards complexity." In such a scenario, "this capacity and its enhancement is closely linked with the ability and willingness of individuals to learn and to enhance skills through the whole span of their life" (Babos,

Lubyova, Studena, 2015, p.2). The ability and willingness to learn continuously is an imperative that was articulated several decades ago thus: “tomorrow’s illiterate will not be the man who can’t read; he will be the man who has not learned how to learn (Toffler, 1972, p.414).

The willingness to learn continuously should always be distinguished from the innate, sub-conscious ability of any and every living human being to understand and therefore adjust to the immediate environment. Rather, for our purposes here, this learning refers to a conscious and deliberate effort of an individual to gain new knowledge and change behavior. This effort requires the application of specific competencies, the cultivation and development of which is typically a function of formal education. There is a strong contention in some quarters that “the objective of education is learning, not teaching” and that “there are many different ways of learning; teaching is only one of them” (Knowledge@Wharton, 2008). These many ways include: independent study, informal interactions, action, trial and error, apprenticeship, play, and experience. These many different ways of learning should be accessed by students in the formal learning institutions:

In the educational process, students should be offered a wide variety of ways to learn, among which they could choose or with which they could experiment. They do not have to learn different things the same way. They should learn at an early stage that stage of ‘schooling’ that learning how to learn is largely their responsibility – with the help they seek but that is not imposed on them. (Knowledge@Wharton, 2008, para.17)

This assertion seems to echo the classical wisdom of celebrated Irish poet and playwright Oscar Wilde who once said “education is an admirable thing, but it is well to remember from time to time that nothing that is worth learning can be taught.” Nonetheless, whichever pathway an individual uses to learn, there are certain qualities that signal the individual’s ability and willingness to learn and to do so continuously:

Attention – staying focused on a task over a period of time despite distractions or having multiple tasks to perform at once; Memory – the ability to recall information, whether recent (short-term memory) or from the past (long-term memory); Auditory and visual processing – the ability to interpret information received through sound and sight; Comprehension – the ability to understand concepts, methods, tasks, and materials; The ability to recognizing patterns of events; Critical thinking and problem solving abilities; The ability to assess personal strengths and identify areas for development; Setting personal goals; The ability to use a variety of media to learn; Being willing and ready to learn in any setting, on and off the job; Being prepared to invest time and effort in learning new skills; Identifying and accessing learning sources and opportunities; Acknowledging the need to learn in order to accommodate change and novelty; Research competence (ICI, 2016; Indeed, 2019).

### ***Creativity and innovation***

Creativity and innovation are employability buzz words that are commonly misunderstood. More often than not, they are used as synonyms, which they are not. They are closely related yet distinct concepts. Creativity is “the ability to produce novel and useful ideas that are not only original and make a unique contribution to the field, but also serve some purpose or fulfill a need” (Lai, Yarbrow, DiCerrbo and De Geest, 2018, p.3), or the disposition to be original or inventive and to apply lateral thinking – which is the ability to perceive patterns that are not obvious (Lees, 2002). On the other hand, innovation is “the successful application of creativity within an organization. Innovation requires implementing a creative idea and bringing it to fruition” (Lai et al., 2018, p.6). Creativity is therefore “a precursor of innovation” (Rampersad and Patel, 2014, p.3). As Kingsley (2020) asserts, “it is creative thinking

which assists a person to come up with new and brilliant ideas,” while innovation “is the process of bringing those ideas to life” (para.2).

Taken together, creativity and innovation are among the most important attributes everyone needs in order to thrive in practically all facets of life. With enhanced creativity and innovation, one sees potential instead of problems, opportunities instead of obstacles, and a chance to create solutions in the face of challenges (Smith, 2019). Yet creativity and innovation seem to be rare attributes, especially among university graduates (Rampersad and Patel, 2014). This should be surprising since, as shall be discussed later on, creativity is actually an ability that everybody is born with (Kingsley, 2020; Seelig, 2012). The explanation for this discrepancy is anthropological and historical.

Virtually all education systems in the world are a carry-over of the industrial revolution of the 18<sup>th</sup> century. Here schools and their curricula were designed to train students to be effective and efficient factory workers who followed instructions without question and discharged their assigned duties without imagination. Such workers were expected to be productive, not creative. Unfortunately, not much has changed in present day schools. As a result, for most individuals, their natural creativity has been buried by formal education (Kingsley, 2020). Close to five decades ago, Alvin Toffler painted a grim picture of the contemporary education system which remains valid even today:

What passes for education today, even in our “best” schools and colleges, is a hopeless anachronism. Parents look to education to fit their children for life in the future. Teachers warn that lack of an education will cripple a child’s chances in the world of tomorrow. Government ministries, churches, the mass media – all exhort young people to stay in school, insisting that now, as never before, one’s future is almost wholly dependent upon education.

Yet for all this rhetoric about the future, our schools face backward toward a dying system, rather than forward to the emerging new society. Their vast energies are applied to cranking out Industrial Men – people tooled for survival in a system that will be dead before they are. (Toffler, 1972, p.398-399)

The onus then is on formal education systems, of which the university is at the centre, to re-engineer their curricula so as to accentuate and enhance the innate creativity and, as a corollary, the innovativeness of each of their students. In this way, instead of cranking out a mere industrial worker, they will produce a holistic graduate. In terms of creativity and innovativeness, such a graduate would possess the following characteristics: imagination, a positive attitude to novelty, curiosity and inquisitiveness, resilience – accepting and learning from failure, patience, both critical and lateral thinking, the courage to contravene convention, originality, reflectiveness, and the ability and willingness to learn continuously.

In order to either develop or enhance these attributes, Turak (2011) makes a number of observations which would act as a useful framework for formal education providers who wish to consider facilitating the learning of creativity and innovation:

- Lateral thinking is the essence of creativity. Most education focuses on providing *answers* in a linear step-by-step way; however, asking radically different *questions* in a non-linear way is the key to creativity.
- Convention and tradition stifle creativity. Becoming creative is an *unlearning* rather than a *learning* process – a humbling, mind-blowing experience where old, long-held assumptions and canons are discarded for novel and even risky ideas and experiments.

- Creativity is necessity driven and experiential. A person does not *learn* to be creative; rather, a person must *become* creative through experience and circumstances.
- Creativity blossoms and flourishes within communities of practice. The fastest way to become creative is to hang around creative people.
- Creativity is highly correlated with self-knowledge (which entails self-concept and therefore self-esteem). An individual who has confidence in his or her ability to think and act will do exactly that: think and act.
- Creativity is a risk-taking enterprise. The single biggest reason why most individuals never live up to their creative potential is because they fear the risk of being wrong or making mistakes. Yet it is precisely through mistakes and even failure that great ideas which lead to ground-breaking innovations are conceived.

As has been pointed out, creativity is a natural ability that occurs, albeit in varying degrees, in all human beings. Nonetheless, as Tina Seelig, the Executive Director of the Stanford University Technology Ventures Program, explains, it is possible and prudent to enhance one's creativity:

We are all naturally creative and, like every other skill, some people have more natural talent than others. However, everyone can increase his or her creativity, just as everyone can increase his or her musical or athletic ability, with appropriate training and focused practice. We can all learn tools and techniques that enhance creativity, and build environments that foster innovation. (Tina Seelig quoted in Smith, 2019, para.11)

Innovation too can be taught and learned, but just like creativity, the realization of the full innovative potential of an individual depends on a culture that values, encourages and facilitates creative thinking and innovative enterprise (Evans, 2016; Smith, 2019). This means that both creativity and innovation, while being personal attributes, are

fully realized due to both intrinsic factors – the individual’s in-born creative abilities, dispositions and motivation, and extrinsic factors – the culture and environment around the individual, which includes the education system, the family and community culture, workplace policies and culture, and government and other regulatory policies.

### ***Commitment to work***

Commitment to work, or having a strong work ethic, is ‘a must-have’ trait for any individual engaged in any kind of work (Cote, 2019). This is because an individual who is committed to work operates on the “principle that hard work is intrinsically virtuous or worthy of reward” (Jenkins, 2017, para.6). Such an individual approaches any work with a positive attitude of determination and dedication to work, and will therefore be dependable, productive and valuable in whatever he or she does. It is no wonder then that employers rank commitment to work very highly among their preferred employability attributes (Cote, 2019; ICI, 2016; Indeed 2020).

While it may not be so easy to determine an individual’s ‘commitment to work; or ‘work ethic’ at the on-set of a given job or task, such determination becomes quite easy over the duration of a task. Commitment to work entails the following characteristics: Having a strong passion for accomplishment and success in whatever one does; Showing interest and enthusiasm in the job or task at hand; Setting and pursuing work performance targets; A disposition toward continuous performance improvement; Respect for the organization’s policies, structures, and property; Awareness of the dynamics of the world of work; Cooperating in a pleasant and respectful manner with clients, co-workers, and superiors; Accepting responsibility for one’s decisions and actions; Having a passion for quality and excellence in all

endeavors; Punctuality and time management; Adherence to professional/occupational ethics; Honesty and integrity; Loyalty towards or a strong sense of belonging to and ownership of an organization; Going and doing beyond that which is expected or stipulated (Harvey, 2003; ICI, 2016; Indeed, 2020).

Commitment to work and having a strong work ethic is not something that someone is just born with. It is behavior that is progressively honed over the life-span of an individual through intentional and unintentional learning experiences from childhood onwards, both in formal and informal educational settings (Cote, 2019). In whichever space such learning takes place, the fostering of a strong work ethic or commitment to work would entail the following: Setting clear expectations for individuals; Modeling the work ethic for the individuals; Teaching the individual responsibility and accountability and providing opportunities for manifesting responsible behavior; Fostering the individual's sense of belonging in and ownership of the family, school, or organization; Teaching the individual self-discipline; Teaching the individual time-management; Reinforcing behavior that manifests diligence and resilience; Promoting a culture of honesty and trust in and around the individual; Developing a strong collaborative environment; Developing and enacting a transparent system of commensurate reward for work done (Cote, 2019; Jenkins, 2017; Lucas, 2017)

### ***Interpersonal intelligence***

Sometimes referred to as social intelligence, social skills, interpersonal skills, people skills, being people-smart, or even the generic life skills or soft skills, interpersonal intelligence is one of Howard Gardner's 'multiple intelligences'. It refers to the ability and disposition of an individual to interact and relate meaningfully and effectively with other people in all avenues of life at all times (Gardner, 1983). Since inter-person

interaction is inevitable and essential for every individual, “it is no exaggeration to say that interpersonal skills are the foundation for success in life.” This is because “people with strong interpersonal skills tend to be able to work well with other people, including in teams or groups, formally and informally.” Moreover, such people “communicate effectively with others, whether family, friends, colleagues, customers, or clients.” As a result, those with high interpersonal intelligence enjoy “better relationships at home and at work” (SkillsYouNeed, 2017, para.2).

Interpersonal intelligence is exhibited by individuals who have:

- Communication competence – this refers to an individual’s effective verbal, non-verbal and listening skills. It also includes written communication skills. Communication may be between two or more people and it may be in either formal or informal settings (Clokie and Fourie, 2016).
- Social etiquette – this is acceptable and expected personal behavior in public settings or interpersonal settings. Some behavior, such as acknowledging the presence of others and keeping time, may be universal, but in most cases social etiquette is contextually determined, so an individual needs to learn and respect the norms, values and expectations of the society in which he or she is operating so as to fit in and relate effectively. Social etiquette therefore relies on and reflects an individual’s *social awareness* (Mayne, 2019).
- Cultural intelligence – also known as cultural quotient (CQ), this is the ability and disposition of an individual to relate and work effectively with people from different and diverse cultures and the capacity to cross boundaries, whether physically or conceptually, and prosper in ‘other’ cultures (Farell,

2019). Culture in this sense could be ethnic, generational, professional or otherwise.

- Emotional intelligence (EI) – also known as emotional quotient (EQ), this is the ability to understand and manage one’s own emotions, to acknowledge and understand the emotions of the people around them, and to work around this emotional mix so as to relate effectively with others. Emotional intelligence is a function of, among other factors, an individual’s self-awareness, self-regulation, and empathy for others, which includes patience and tolerance (Goleman, 1995).
- Conflict resolution competence – this is the ability and skill of an individual to initiate and facilitate an amicable and peaceful ending of a dispute or conflict between two or more people. To be effective at conflict resolution, an individual may need to learn and develop basic arbitration and mediation skills (American Management Association, 2020)
- Teamwork competence – as has been discussed in previous paragraphs, this is an individual’s disposition to and competence in working harmoniously with other individuals to accomplish a common task or achieve a shared goal. This also includes team building, which is the process of bringing together a number of individual, disparate contributors to a common task to form a cohesive team (Heathfield, 2020; Wagner, 2010).
- Negotiation competence – the ability to discuss and settle an issue with one or more people through reaching a compromise while avoiding argument or dispute. Negotiation is driven by the principles of fairness, seeking mutual benefit or satisfaction, and maintaining a relationship (SkillsYouNeed, 2020).

- Persuasion competence – the ability of an individual to deliberately and successfully influence one or more people to change an attitude, opinion or behavior through verbal or written communication (Cleverism, 2020)
- Networking competence – the ability and propensity of an individual “to develop and maintain long-term personal and professional relationships with others for the purpose of mutual benefit in their work or career” (de Janasz and Forret, 2008, p.630) and in their personal lives.

Like most ‘soft skills’, interpersonal intelligence “cannot be taught, by definition, but can certainly be learnt and developed (not by demonstration but by participation)” (Hetemaj, 2017, para.5). Nonetheless, in a formal learning situation, teachers who wish to foster interpersonal intelligence in their students can do so by: Having regular and highly interactive class meetings; Creating group projects where each student participates in an assigned group; Availing opportunities for each student to present their class assignments; Offering students opportunities to ‘teach’ their peers; Embedding community service activities into the formal learning experience; Organizing surveys and polls that extend beyond the formal classroom; Encouraging students to participate in co-curricular activities that are rich in inter-personal interaction (Mellisa, 2020).

### ***Time management***

Time management is closely related to planning and organizational competence (which shall be discussed later on), but it is distinctly critical as a graduate attribute required in all facets of an individual’s life. Time management is the ability of an individual to plan and utilize time effectively, efficiently and productively. Proper time management is highly valued by employers. Yet it is not only employers who

value time management; whether at home, in school, or anywhere else, time management is a highly ranked and absolutely expected attribute. For the individual, good time management has the following benefits: greater productivity and efficiency, a better professional reputation, less stress, increased opportunities for both personal and professional advancement, a healthy life-work balance, and greater opportunities to achieve important life and career goals (Mindtools, 2020).

An individual who manages time well typically exhibits these characteristics: Setting realistic goals; Task analysis and prioritization; Planning of short term and long term schedules; Flexibility in routine fixtures – anticipating and catering for sudden distractions and interruptions to schedules; Punctuality; Work-load management – not accepting to take on too much or even too little work; Staying and remaining calm under work-pressure; Stress management; Avoiding procrastination and completing tasks ahead of deadlines; Delegation of tasks and duties; Collaborating with others to work on the same tasks so as to meet deadlines; Taking time to rest if and when necessary (Doyle, 2019; Indeed, 2020; Kukreja, 2020).

Much as time management is essential and critical to individuals and organizations, many people do not know how to manage their time properly. While this is a common complaint against students (Kent, 2018), it is also the common case for ‘higher schooled’ individuals – university graduates for instance – who have to deal with multiple frames of reference (Barnett, 2000) that both intersect and transcend the home, work, and community divides. Planning for and allocating time to each and every frame of reference that competes with the others for the individual’s attention is a complicated and often frustrating exercise.

Time management skills can be and are taught to those who wish to learn them. Some of the specific teachable time management traits include: How to develop and adhere to daily and weekly schedules; How to develop and keep long term plans; How to set priorities; How to deal with and avoid procrastination; How to keep one's workspace organized; How to build flexibility into schedules; How to deal with distractions and interruptions; How to delegate duties and tasks; How to focus and concentrate on one task at a time (Doyle, 2019; Indeed, 2020; Kent, 2018; Kukreja, 2020).

### ***Leadership***

Leadership is the ability and disposition to influence others to envision a common goal and the act of motivating them to work together to attain the goal. Leadership is a highly sought after attribute for all people, but more especially for university graduates, both in the workplace and in society as a whole (Indeed, 2020). Leadership as an act should be distinguished from leadership as a position. There are many individuals who occupy positions of leadership yet they are bereft of the qualities and traits of leadership (Doh, 2003).

Leadership is not 'a skill' *per se*; rather, it is "a set of traits, skills and behaviors which relies on character, integrity, attitude and self-awareness (Holmes, n.d.). Thus leadership is combination of competencies and traits working together. The most commonly identified competencies and traits that characterize leadership include: a strong motivation and self-drive, a positive attitude, accountability and transparency, the courage to take calculated risks, effective communication competence, empathy, adaptability and flexibility, the ability to set goals and articulate a vision, a passion for achievement and success, humility, patience, critical thinking and problem solving competence, resilience, the ability to reflect on and evaluate the performance of

oneself and others, the ability to teach and mentor, being calm under pressure, the willingness to learn and having a growth mind-set, creativity and innovativeness, acknowledging, respecting and, if applicable, rewarding others' contributions and efforts, the ability to manage people and to build and sustain a team, inter-personal intelligence, effective time management, strategic planning and organizational competence (Allio, 2005; Harvey, 2003; Indeed, 2020; Wagner, 2010).

Leaders – that is, individuals who exhibit leadership rather than those who simply occupy positions of leadership – are not born; they are made (Childress, 2017). The leadership competencies and traits listed above are a combination of innate abilities and learned competencies, a combination which an individual consciously and deliberately develops and refines either individually or with the support of other individuals and/or institutions. The development and refinement of an individual's leadership quality is a learning process that is dependent on two factors: one, the individual's 'appetite to be a leader' which is the motivation, courage and commitment to learn and become a leader; and two, the environment within which the individual operates, which may either enhance or suppress the individual's leadership quality (Allio, 2005; Childress, 2017).

Contrary to popular practice especially in the corporate world, leadership cannot be taught; it can only be learned. Nonetheless, in the corporate world there is a proliferation of courses or executive seminars which 'teach leadership' and which are 'must-attend' events for those who wish to rise to positions of leadership (Childress, 2017). Further, the corporate world laments that the education system at all levels does not 'teach leadership' and consistently urges formal education providers to re-design their curricula so as 'train leaders'. Yet "most leadership training initiatives

fail to produce leaders. Typical programs teach leadership theory, concepts and principles; they promote leadership literacy, but not leadership competence” (Allio, 2005, p.1071). This is superficial education. In it, learners get to know about leadership, but they do not learn leadership, for “leadership must go beyond cognitions to actions” (Doh, 2003, p.1).

The implication here is that leadership “is simply not a craft that schools can teach” (Allio, 2005, p.1072) because “leadership education, like leadership itself, must rely on heuristic approaches such as mentoring, coaching, patterning, and trial and error experience” (Doh, 2003, p.1). Such education most suitably takes place in what Allio (2005, p.1072) calls “the harsh crucible of organizational experience.” Whether this experience is at home, in school, at the workplace, or in any other social organization, the reality is that individuals become leaders through practice, “by performing deliberate acts of leadership” (Allio, 2005, p.1071).

### ***Appropriate dressing and personal grooming***

Appropriate dressing and personal grooming form the first impression about an individual and are therefore critical factors that determine how the individual will be viewed and treated by others. Appropriate dressing and personal grooming is “a way of expressing respect for the situation and the people in it” (Goman, 2012, para.7). There are three primary goals of appropriate dressing and personal grooming: one, to feel comfortable and good about oneself, hence enhancing self-confidence and esteem; two, to make others comfortable being around you, hence enhancing your dignity and respectability; and three, to be safe and secure when performing specific tasks which may require specific ways of dressing and grooming so as to avoid damage or injury (McKay, 2018; Thurmond, n.d.).

While the definition of appropriateness in dressing and personal grooming may vary according to context, there is some sort of consensus that the following constitute a generic code of appropriate dressing and personal grooming: Adhering to the dress and grooming code of the individual's profession/occupation; Wearing clean clothes (at least *to work*, even if the work may make them dirty); Wearing well-fitting and comfortable clothes and shoes; Wearing polished or clean shoes; Being culturally sensitive in dressing and personal grooming; Avoiding faddish styles and 'loud' colors; Taking care of personal hygiene, including a clean body and fresh breath; Wearing subtle make-up (if, where and when necessary), but as much as possible maintaining a near-natural look; Avoiding tattoos and any other body art, including piercings, unless they 'add value' to one's professional/occupational appearance; Wearing subtle perfume; Keeping hair clean, neat and well groomed; Keeping nails clean and well-trimmed; Wearing simple, conservative jewelry if and when necessary.

A useful rule of thumb in dressing and grooming is that an individual should dress and groom him or herself in such a way that the employer, or the colleague, or the client, in interacting with him or her, will focus on his or her ability and competence, rather than on his or her clothes and/or body. This applies to nearly all the jobs that would ordinarily attract or require a university graduate (Kumar, 2019, McKay, 2018; Thurmond, n.d.). It also applies to most non-intimate social relationships that a graduate may engage in.

Appropriate dressing and personal grooming is typically taught to an individual from very early ages at home and at the early childhood education level. The lessons are then reinforced, mostly through rules and regulations and the resulting reward or punishment – codes of conduct – as the individual progresses through the subsequent

levels of education, including the university, and ultimately in the workplace and other formal social spaces, for example the church. In informal or less structured social spaces, dressing and personal grooming are reinforced positively or negatively through such acts as either inclusion or exclusion, or either commendation or condemnation.

### ***Planning and organizational competence***

Also referred to as planning and organizing skills, these are two closely related graduate attributes that are essential for both individual and corporate success. Planning is the ability and disposition of an individual (or an organization) to envision a desired future, set goals and targets to actualize that desire, and develop strategies to attain the goals and accomplish the targets while anticipating and putting in place ways of mitigating potential challenges that may complicate or even sabotage the realization of the vision. On the other hand, organizational competence, or simply organizing, refers to the capacity of an individual or organization to harness and use time, energy, mental capacity, physical space, people, and other relevant resources effectively and efficiently in order to achieve a desired outcome (Duszynski, 2020). Planning precedes organization, and organization emanates from planning. Planning is the thinking, while organization is the action.

Individuals with planning and organizational competence are efficient and effective in whatever they do (Duszynski, 2020). Such individuals are highly valued in all spheres of life, but this is more pronounced in the world of work. This could be because in any organization, planning and organization play at least six essential purposes: one, planning and organization facilitate the setting and attainment of organizational goals; two, planning and organization ensure economy in the operations of an organization;

three, planning and organization provide for future contingency; four, planning and organization facilitate optimum utilization of resources; five, planning and organization provide a basis for initiating and undertaking other managerial functions; six; planning and organization coordinate the activities of an organization; and seven, planning and organization provide for the delegation of authority and duties (Duszynski, 2020, Porteous, 2020; Moneymatters, n.d.).

An individual's planning and organizational competence is manifested in the following characteristics:

- Time management skills – accurately estimating the time and effort required to complete a task; distinguishing between personal (private) and organizational (official) time and so maintaining a healthy work-life balance; developing schedules and timetables with clear and specific milestones and deadlines; maintaining adequate preparation time for scheduled activities and events; workload management.
- Cognitive and personal organization skills – critical and creative thinking and problem solving; setting goals; task analysis, which is the process of identifying critical tasks and arranging them in logical order; establishing priorities systematically on the basis of importance and urgency; effective communication competence; attention to detail, monitoring and evaluating performance and results against set standards; the willingness and capacity to undertake research.
- Physical space organization – ensuring that the office and/or workplace is clean, neatly arranged, and safe to work or be in; proper records management; taking good care of workplace facilities, equipment and infrastructure

including initiating timely repair, renovation or replacement; assessing the appropriateness of facilities, equipment and infrastructure and, where necessary, initiating their modification and improvement

- People organization skills – the ability to create a team and maintain teamwork; promoting the psychological and social welfare of self and others; understanding and respecting organizational structures and being aware of organizational politics; exhibiting interpersonal intelligence; delegating authority or tasks where necessary; promoting healthy relationships between the individual or the organization and the wider community.
- Planning skills – developing strategic plans for short, medium and long terms; developing systems and structures; using technology and extant models to aid in planning; identifying the resources needed to achieve the stated goals and determining where and how to find them; anticipating potential problems and developing contingency plans (Duszynski, 2020; ICI, 2016; Lees, 2002; MacIntosh, n.d.; Moneymatters, n.d.; Porteous, 2020; Schmitz, 2015; University of Strathclyde, n.d.).

These characteristics are transferable across different contexts. An individual can apply them at home, at work, at leisure or anywhere else (Duszynski, 2020). The basic ability to plan and organize is something that each individual has from childhood, albeit in varying degree from the next individual (University of Bradford, 2020). However, as a child grows, this basic organizational ability becomes increasingly confounded by the supercomplexity in the world – that is, the demand on the individual's attention, time, intelligence and energy by multiple competing and at times conflicting frames of reference (Barnett, 2000). Such supercomplexity necessitates a conscious and deliberate effort, by both the individual and his or her

mentors and educators – especially parents/guardians and teachers, to enhance the individual’s planning and organizational competence.

Whether at home or in school or in whichever learning space, enhancing an individual’s planning and organizational competence entails developing in the individual the following abilities and concepts: The ability to prioritize based on the concepts of needs versus wants, urgency, and importance; The ability to maintain a neat and well-arranged working space – this could be a kitchen, a bedroom, a study table, a classroom or any other such space – during and especially after a task; The concept of organization through sorting and categorization and the practical application of the concept; The concept of time planning and management through the ability to design time tables, daily schedules, to-do lists, work-plans, and checklists; The concept of long-term planning through the capacity to design a family, school, church, or workplace calendar of events, or almanac, or strategic plan; The concept of task analysis; The ability to establish a routine; The concept of strategic multi-tasking through part-time work or participation in co-curricular activities (Porteous, 2020; University of Bradford, 2020).

These nineteen attributes balance the personal, intellectual, social and productive dimensions that compose a graduate identity. They are therefore holistic and universal. As Catcheside (2012) opines,

These are characteristics that any education establishment should be seeking to encourage and create among all its students. They are the characteristics of a mature, well balanced intelligence. They aren’t just the marks of someone who would be a good employee. They are the marks of a good democrat, a good parent, a person who is capable of happiness and contributing to the happiness of others.

The second aspect of our definition of employability is propositional. It proposes that graduate identity – the possession of the graduate attributes we have discussed – *may*

qualify a graduate for and sustain them in employment (this includes self-employment) and that these attributes *would* help them to remain progressively productive and valuable in all the personal, social, and economic spheres of their life. The propositional tone here is informed by the realities of the supercomplex world into which today's (and tomorrow's) university student will graduate.

Graduate employability, even in its broadest configuration, cannot on its own guarantee that a graduate will secure and grow in a given job, or that the graduate will be successful in other spheres of life (at least in the normative sense of success). Rather, employability is only a pre-disposing condition for an individual's accomplishments and progress. In reality, employability is invariably influenced by a multiplicity of other conditions, some which are even conflicting, in an individual graduate's social, political, economic and even natural environment. For instance, in terms of securing employment, the employability of a graduate would only help the graduate if the economy can actually absorb such a graduate into employment in terms of availability of job vacancies. So this has nothing to do with the graduate or their employability; rather, it has to do with the existing economic environment. In turn, the economic environment in a country may be influenced by a multiplicity of factors including politics, natural phenomena, international relations and many others.

There are two closely related implications emanating from this scenario. The first implication is that, from the foregoing discussions, it is evident that the university cannot be the sole arena for developing graduate employability. This is because ensuring employability "involves not only providing the right kinds of skills, but also having in place a range of macro-economic and employment market conditions, not to mention social norms and personal freedoms, thereby requiring concerted action from

governments and civil society” (McCowan, 2016c, p.103). Similarly, it has been argued that universities have to respond to “wider social priorities, government policies, local community needs, student needs, environmental factors, and future scenarios, among others” (Wedekind and Mutereko, 2016). All these factors ultimately impact on the development of employability within and without the university and as such the institution(s) or organization(s) related to each of the factors should play an active role in developing and nurturing graduate employability. As way back as 1998, the United Kingdom’s National Institute of Adult Continuing Education (NIACE) posited that “employability is better understood as a social construct” and should therefore be “a responsibility shared more equally between”:

- Individuals who must be responsible for accepting the consequences of choices they make;
- Businesses which, in employing a workforce and serving customers, inculcate particular values and attitudes as well as shaping behaviours (in many senses, what makes ‘employability’ is determined by employers).
- Public bodies (schools, colleges, universities, local and national government agencies) which have a duty to secure the employability of all citizens (Lowden, Hall, Eliot and Lewin, 2011, p.4).

This position is amplified and clarified by Tristan McCowan, Professor of International Education at the Institute of Education, University College, London, in a paper titled ‘Should universities promote employability?’ His argument is that employability can and should be developed in multiple arenas including, but not limited to, the university. Here is a long but worthwhile quote highlighting this position:

If we consider the list of generic attributes associated with employability – written and oral communication, critical thinking, team working, problem solving, and so forth – we can see that none of these are exclusively the domain of higher education. All of these qualities can and should be developed during school, and indeed other spheres of life. That is not to say that some at least of them cannot also be developed in university, but it is quite wrong to attribute any failings in these areas necessarily with a failing of the university. Unfortunately, the simple fact that university comes chronologically before the primary phase of full time employment leads people to the belief that it is the major or even the only influence on employability. (McCowan, 2015, p.280)

Developing graduate employability should therefore be a concerted effort involving all key stakeholders – universities (including the students), employers, governments, Civil Society and Non-governmental organizations – in preparing every graduate for both employment (including self-employment) and the totality of being a citizen of the world (Bennett, 2019; Hinchliffe and Jolly, 2010; UNESCO, 2012).

The second implication is an often overlooked one, though it is very critical to the development of employability. University education is a sub-system in the wider system of education. In this system, in the current Kenyan context, there is the early childhood education sub-system, the primary education sub-system, the secondary education sub-system, the teacher education sub-system, the technical, industrial and vocational education and training (TIVET) subsystem and of course the university education sub-system among others. While from a strictly curriculum systems approach there is no hierarchy among these sub-systems, logical curriculum progression and continuity dictates that the university is the ‘final’ producer of graduates of the education system (it will be argued, and rightly so, that TIVET institutions also play this role, but TIVET is outside the scope of this study). Yet the university receives products of the earlier levels of learning, prepares them for the periods required for their respective programs of study, and then sends them into ‘the

world'. By the time the university receives students, they have been in the formal school system for at least 15 years, by which time each student has a considerably developed individual identity replete with distinct attributes, competencies and dispositions.

It is therefore only logical to surmise that the employability of a university graduate is, at least in part as has been argued in the preceding paragraphs, actually an indicator of their cumulative educational experience since joining the formal school system, rather than their four or so years' experience in university. In this regard, UNESCO (2012, p.28) advises thus:

The task of producing graduates who are prepared for the many challenges of the real world cannot be left only to higher education institutions, but is the responsibility of the entire continuum of the education system, including the primary, secondary and post-secondary education stages. All education institutions must together discharge the role of developing individuals who contribute to their society.

Nonetheless, the literature on employability ascribes the ultimate task of developing employability to universities. The rationale for this is well documented in the literature and has been discussed here (McCowan 2015, 2016; Pheko and Molefhe, 2016). Stefan Collini, in his book *What are universities for?* opines that the ultimate purpose of universities “involves extending human understanding through open-ended enquiry” (Collini, 2012, p.92). This is a concise yet deeply loaded statement (see McCowan (2015) for a discussion on the implication of Collini's statement).

It will suffice here to point out that the university extends human understanding through its twin processes of knowledge production (research, or 'open-ended enquiry) and knowledge dissemination (teaching and community service). In any university, these processes are, or at least should be, porous, meaning they receive

inputs from and give outputs to the university's environment. This environment includes, as has been discussed above, all other sub-systems in the education system, and all social, cultural, economic, political and natural/physical circumstances that impact the university in some way. This centripetal relationship between the university and its environment (Barnett, 2000) justifies the centrality of the university in the enterprise of developing employability. This centrality is the reason this study focused on the university curriculum.

## **2.4 Employability Development Models in University Education**

The discourse on employability over time has led to the evolution of multiple employability development models. As far as these many models go, Romgens, Scoupe and Beusaert (2019) have distinguished between models premised on workplace conceptualizations of employability and those premised on higher education (hence curriculum-related) conceptualizations of employability. While these models seem to overlap in many aspects, the purpose and scope of the present study dictates that the discussion here focuses on the curriculum related models of employability. The most commonly cited of such models in the literature are: the USEM model, the DOTS model, the SOAR model, and the Key to Employability (CareerEDGE) model.

### ***The USEM Model of employability***

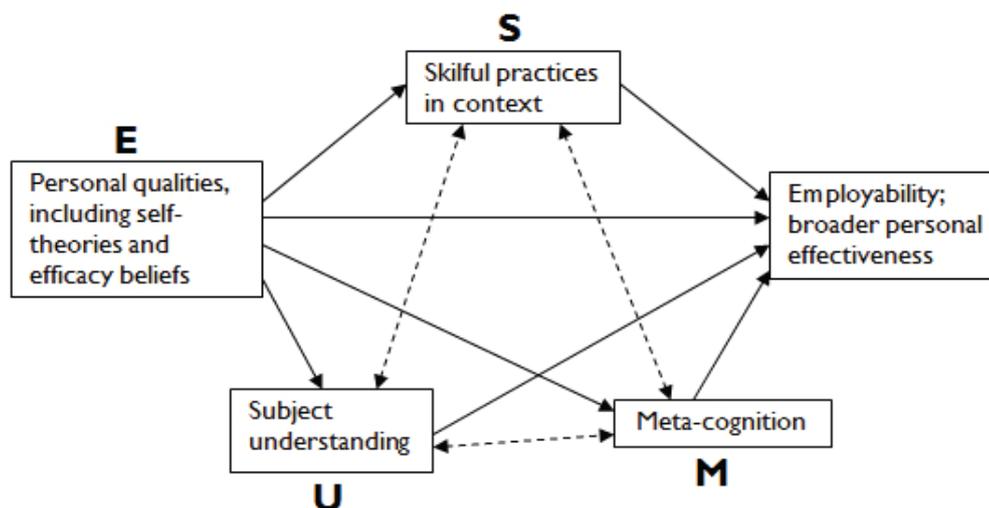
The USEM model of employability, developed by Peter Knight and Mantz Yorke in 2002 in the United Kingdom, is one of the most commonly referred to models in the field. USEM is an acronym for four inter-related components of employability: Understanding, Skills, Efficacy beliefs and Metacognition. The 'U' for understanding refers to understanding specific disciplinary content and, more generally, understanding 'how the world works' and having the ability to transfer disciplinary

knowledge to a variety of contexts. The ‘S’ for skills or skillful practices denotes a student’s skills for practice, or procedural competence, which may be discipline-related or generic in nature. The ‘E’ for efficacy beliefs comprises a student’s perception of their intelligence and their confidence in their own abilities – self efficacy – in a variety of circumstances. The ‘M’ for Meta-cognition encompasses self-awareness regarding the student’s learning and the capacity to reflect on, in and for action (Knight and Yorke, 2002).

The USEM model is premised on the appreciation that “employability is a complex construct” that comprises of “disciplinary understanding and skills developed as a consequence of participation in higher education” and “graduates’ generic attainments” (Knight and Yorke, 2002, p.263). In university education, emphasis and attention seems to be on the student’s (and ultimately graduate’s) disciplinary understanding and skills, to the exclusion or denigration of the personal aspects of the student, “which includes the portmanteau of self-belief, or the self-theories, that the student brings to higher education” (Knight and Yorke, 2002, p.263).

The USEM model attempts to correct this discrepancy by advocating the mainstreaming of personal qualities in the curriculum for employability. It is thus a model “in which self-theories – and, by extension, personal qualities – color everything the student (and subsequently the graduate) does” (Knight and Yorke, 2002, p.265). The argument here is therefore that an individual’s subject understanding, skills and metacognition, and their cumulative impact on the employability of the individual, are anchored in and influenced by that individual’s personal qualities which include self-theories and efficacy beliefs – the ‘E’ in the

USEM acronym. This network of interconnections between the variables of the USEM model is illustrated in Figure 2.1.



**Fig. 2.1 The USEM Model of Employability (Knight and Yorke, 2002, p. 265)**

According to Knight and Yorke (2002), there are four ways of enhancing employability. These are through work experience, entrepreneurship modules, careers advice and portfolios, and profiles and records of achievement. Employers generally prefer to hire individuals with workplace experience, especially those who can show what they have learned from it. This can be achieved through effective enrichment strategies in the curriculum incorporating entrepreneurship modules that have an impact on learning by stimulating complex learning. In addition, university careers services staff should have an input into program design and delivery so as to enhance employability development in the curriculum. Students should use portfolios to reflect on their achievements, collecting and presenting supportive evidence, identifying and then acting on priorities for development.

Despite the common reference to the USEM model in employability literature, there have been a number of criticisms leveled against it (Romgens et al., 2019; Sumanasiri,

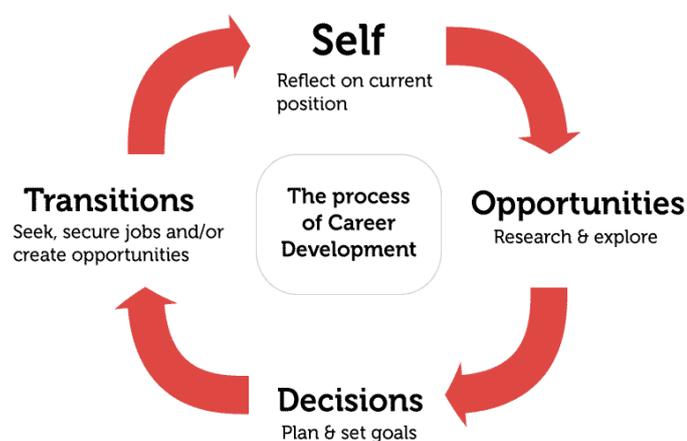
Yajid, and Khatibi, 2015). The two most common criticisms are: the model does not sufficiently take into account Scoupe and Beusaert, a student's individual characteristics, such as personality and identity, and the model is complicated and lacks clarity hence it is difficult to apply and understand in that "it does not assist in explaining to non-experts in the field, particularly to students themselves and their parents, exactly what is meant by employability" (Dacre Pool and Sewel, 2007, p.279).

### ***The DOTS model of employability***

Originally conceived as a concept for careers education, the DOTS framework was developed and presented by Bill Law and A.G. Watts in their book, *Schools, Careers and Community: A study of some approaches to career education in schools*, published in 1977. In 2006, A.G. Watts contributed an article to the Higher Education Academy 'Learning and Employability' series in which he related career development learning to employability, and in effect presented the DOTS framework as an employability development model. Each letter in the DOTS model represents one of four key components which together enhance an individual graduate's employability. These components, arranged in their logical order, are: Self-awareness, Opportunity awareness, Decision making skills and Transition learning (Law and Watts, 1977; 2003; Watts, 2006). This logical order produces the acronym SODT which is rather awkward, hence the preference for and popularity of the acronym DOTS, which, though it juggles the logical sequence, is convenient (Young, 2019).

*Self-Awareness* entails a student's acknowledgement and understanding of their own abilities, skills, values and motivations. It helps the individual to identify their personality type, strengths and weaknesses and areas for further development. Self-

awareness assists the individual to develop a self-reflective stance in current and emerging situations. *Opportunity awareness* refers to knowing what work opportunities exist and how to access them. This entails researching to gain knowledge of general trends of employment and employability, understanding the requirements of graduate recruiters, and identifying the specific career opportunities related to the student's own discipline. *Decision making* entails relating self-awareness to knowledge of different opportunities so as to choose career paths and make other life choices. This involves awareness and understanding of the methods of decision-making, developing prioritization skills, and accepting and taking responsibility for the impact and outcomes of one's own choices. *Transition learning* refers to learning opportunities that lead a student to identify and apply effective opportunity search or creation strategies, to identify challenges and obstacles to adapting successfully to new environments and the strategies for addressing them, to apply and link academic learning to workplace practice, and to develop and use 'soft skills' to help them join and navigate the world of work and life in general (Law and Watts, 1977; 2003; Watts, 2006; Young, 2019). The graphic presentation of this model is illustrated in figure 2.4:



**Fig. 2.4: The DOTS model (Law and Watts, 1977)**

According to Dacre Pool and Sewell (2007), the value of the DOTS Model lies in its simplicity as it allows individuals to organize a great deal of the complexity of career development learning into a manageable framework. However, critics of this model argue that it is over-reliant on a mechanistic matching of person and environment, and therefore underplays other critical issues such as social and political contexts. Another criticism is that there is an implication that failure to secure a self-fulfilling occupation can be presented as the fault of the unsuccessful individual. In addition, the elements of DOTS are considered to be static and that they contain no aspects of growth (Dacre Pool and Sewel, 2007; Kumar, 2015; Sumanasiri, et al., 2015).

### ***The SOAR model of employability***

The SOAR model of employability was designed by Arti Kumar in 2007. The model is a “re-interpreted, expanded and updated variant of the DOTS model” (Kumar, 2015, p.10). SOAR is an acronym, where ‘S’ stands for Self-awareness, ‘O’ for Opportunity awareness, ‘A’ for Aspirations, and ‘R’ for Results. This acronym depicts the logical sequence of development as opposed to the illogical sequence implied in the DOTS acronym. Furthermore, the acronym positions the individual student – *self* – at the heart of the employability development enterprise. The SOAR model is thus “an inter-disciplinary, learner centered process of holistic, humanistic, personalized development” that integrates personal, academic and career learning (Kumar, 2015, p.3). The acronym SOAR lends itself to a verb, SOARing, which “gives a positive impression of development and progress towards a successful end result” (Kumar, 2015, p. 10).

The SOAR model animates the dynamic and recursive interrelationships between the components that compose the acronym. As already mentioned, these components are

self-awareness, opportunity awareness, aspirations, and results. *Self-awareness* is conceptualized as an individual's awareness of the characteristics that define oneself in the present, and that may define a desired future persona. *Opportunity awareness* refers to an individual's knowledge and understanding of the possibilities that exist for one's development, the demands such possibilities make on the individual and the rewards and satisfaction they offer. *Aspirations* refer to the individual's ability to make realistic choices and plans based on sound information and on the alignment of self-awareness and opportunity awareness. *Results* denote the individual's ability to review outcomes, plan and take action to implement decisions and aspirations, especially at points of transition (Kumar, 2015).

The SOAR framework as a curriculum and pedagogic model is designed to “facilitate students progressively through reflective-active, structured and supported learning.” Such learning is aimed at impressing upon the students “a greater sense of personal agency, direction and destination” which in the process empowers the students “to deal more effectively and productively with contemporary learning, work and life (Kumar, 2015, pp.3-4).

The SOAR model achieves this by enabling individuals to appreciate how their inner world of *self* engages with and is influenced by the outer world of *opportunity* and *others*. This S-O dynamic is largely responsible for the *aspirations* we generate and the *results* we achieve. Each of these dimensions is both universal and personal, and it is inter-connected within the wider framework. It is in understanding the combinations, permutations, intersections, and constructive alignment of these four dimensions that synergy is created in student self-development (Kumar, 2015, p.4).

A number of assumptions underpin the SOAR model. These include: Students are unique individuals full of potential; The world is full of opportunities, but access to these is unevenly distributed and differentially available to individuals; There is no pre-determined ‘opportunity’ that suits an individual in every way, and conversely

there may be many choices that are suitable and possible; How students draw on their potential to seize different opportunities depends mainly on their motivation, ability, and personality (MAP); To interact with the world in an effective way and make informed choices, students need to enhance self-awareness and self-efficacy in relation to external reference points such as teachers' expectations and employers' requirements; Focusing attention on each stage of the SOAR process as an optimistic inquiry and 'subjective reality' can make it 'appreciate in value'. A strong sense of self gives students a way of holistic potential, a means to filter out unsuitable choices and to focus on those that fit them; This is a recurrent process in a changing world. Students will need to be flexible and review strategies as appropriate, but use their unique (and changing) profile to continually act as a guiding 'map' in their journey through life (Kumar, 2007, p.10).

These assumptions and the processes that emanate from them ensure that the SOAR model is well poised to provide solutions for many key issues in education and employability development. Specifically, the model enables students to: (i) Identify their strengths and development needs in relation to (and in alignment with) the results required by themselves, tutors and employers, (ii) Critically appreciate and promote strengths that arise from their motivation, ability and personality (self-MAPs), (iii) Explore the extent to which a self-MAP aligns with the type of MAP required for a chosen *opportunity* they aspire to (an occupation, employer-organization or self-employment), (iv) Use their self-MAPs to engage developmentally with others and with opportunities in learning, work and life, (v) Generate, clarify, test and implement aspirations through soundly informed decisions and plans, (vi) Achieve and record broader competencies, (vii) Demonstrate and evaluate results (Kumar, 2015, p.8)

While the SOAR model is, according to its author, theoretically and empirically sound having been developed through cycles of evaluative pedagogical action research (Kumar, 2015), others have pointed out that the model's credibility is yet to be established owing to the very few studies that have evaluated its application in practice (Reddan and Rauche, 2017). Closely related to this criticism is the observation that the model's effectiveness "relies on qualitative (or sometimes anecdotal) evidence that may not contain or consider the longitudinal perspective or document a direct impact on the students' employment or employability outcomes" (Pegg, Waldock, Hendy-Isaac and Lawton, 2012, p.25).

### ***The Key to Employability Model***

As a response to the criticisms against both the USEM and the DOTS models, Lorraine Dacre Pool and Peter Sewel sought to develop a model of employability which would draw together "the essential conceptual issues that underpin an understanding of the concept of employability" and provide "a clear, visual answer to the simple question of what employability is" (Dacre Pool and Sewel, 2007, p.280). They defined employability as "having a set of skills, knowledge, understanding and personal attributes that make person more likely to choose and secure occupations in which they can be satisfied and successful (Dacre Pool and Sewel, 2007, p. 280). This definition was used as a starting point from which to develop a new theoretical and practical framework for employability called the Key to Employability model. This model is more commonly referred to using the mnemonic 'CareerEDGE' which, according to the authors, was originally provided as "an aid to remember the five elements on the lower tier of the model" (p.280). These five elements are: Career development learning, Experience of work and life, Degree subject knowledge, Generic skills and Emotional intelligence.

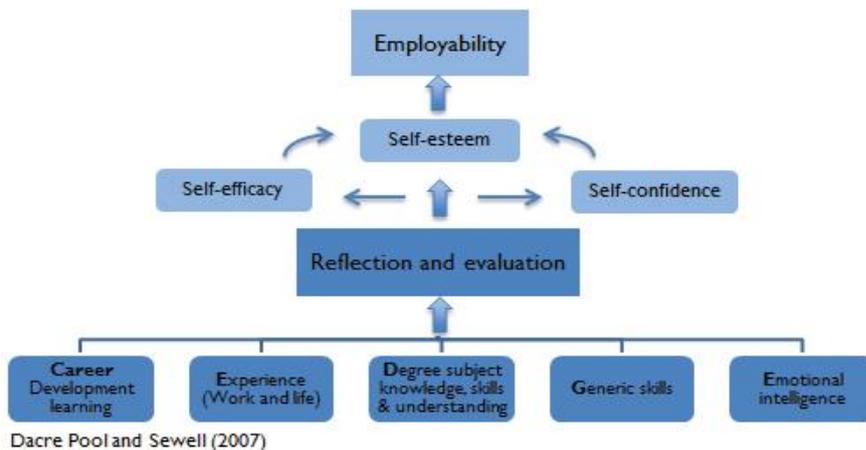
*Career development learning* entails providing a student with opportunities “to learn how best to research the job markets to see what opportunities are available, how to present themselves effectively to prospective employers, and how to make considered decisions regarding their careers” (Dacre Pool and Sewel, 2007, p.284). This career development learning includes gaining skills on job application, designing curriculum vitae, and attending interviews. *Experience* entails guiding students on how their life experience and work related experience, “arranged as part of a course, carried out on voluntary basis, or gained through part-time work, can enhance their levels of employability” (p.285).

*Degree subject knowledge, understanding and skills*, a similar element to Understanding in the USEM model, has to do with the in-depth study and consequently the mastery of a specific discipline for the dual purpose of getting qualification – a degree certificate – and having the expertise that can be applied in professional/vocational practice. *Generic skills*, also referred to as soft skill or core skills, are personal competencies and attributes which can support study, work, and life in a range of contexts. These include “imagination/creativity, adaptability/flexibility, willingness to learn, independent working/autonomy, working in a team, ability to manage others, ability to work under pressure, communication (both oral and written), attention to detail, time management, responsibility, ability to make decisions, organizational ability, and the ability to use new technologies (Dacre Pool and Sewel, 2007). *Emotional intelligence* is the capacity for acknowledging and reflecting on one’s own feelings and the feelings of others, for motivating oneself and others, and for managing own and others’ emotions. People with high emotional intelligence generally enjoy more fulfilling inter-personal relationships both at work

and in life and are more successful in their careers than those with low emotional intelligence.

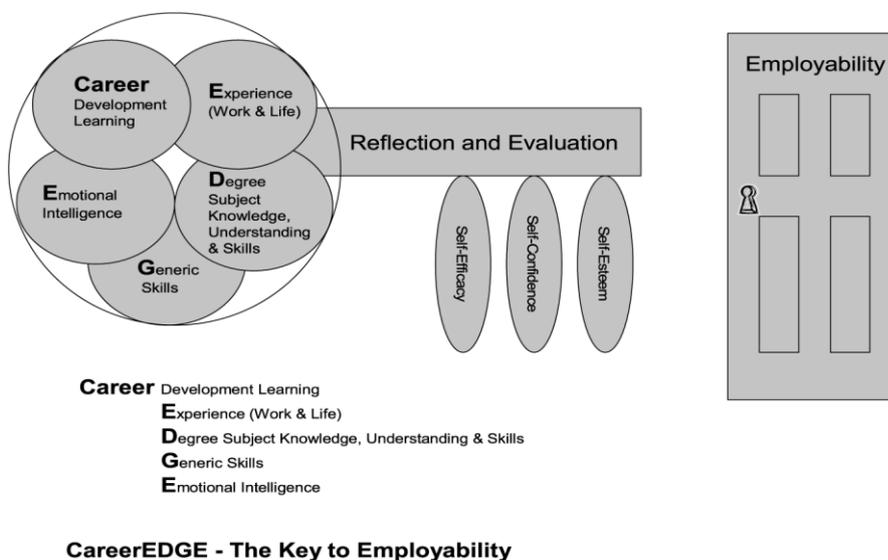
Apart from these five elements, the model has a number of other components, namely reflection, evaluation, self-efficacy, self-confidence and self-esteem, which all lead to employability. Each component of the model is absolutely essential and missing any one will considerably reduce a graduate's employability. A degree of overlap exists amongst some of the components.

There are four sequential tiers implied in this model. In the base tier, the university curriculum provides the student with opportunities and tools to access, develop and experience the CareerEDGE elements. In the second tier, the student reflects on and evaluates these experiences. This is where the student gives "full consideration of how far they have come in employability and what they may need to do in order to develop it further" (Dacre Pool and Sewel, 2007, p.287). The process of reflection and evaluation is presumed to result in the development of the third tier components of self-efficacy, self-confidence and self-esteem, which lead to the fourth and ultimate tier, employability (Dacre Pool & Sewell 2007). The initial conceptualization of the model is illustrated in Figure 2.2.



**Fig. 2.2 The Key to Employability (CareerEDGE) model (Dacre Pool and Sewel, 2007)**

The model depicted here illustrates the essential components of employability and suggests the direction of interaction between the various components. With time, a more advanced model evolved with the metaphorical image of a key. A pictorial representation of the model explains the concept of employability and indicates that it is the aggregated model components that make the key to choosing and securing occupations in which a graduate has the opportunity to achieve satisfaction and success. This model is presented in Fig. 2.3:



**Fig. 2.3 The Key to employability (CareerEDGE) model (Dacre Pool and Sewel, 2007)**

This model is quite comprehensive and it is commonly referred to in the literature. Nonetheless, it suffers from the limitation of being categorized as a snap-shot view of employability that limits its application. Moreover, as the authors themselves admit, the model is largely theoretical and there is little empirical evidence to support its applicability (Dacre Pool and Sewel, 2007; Romgens, et al., 2019; Sumanasiri, et al., 2015).

The four models of employability presented here are broad and generic propositional frameworks for employability development in the university curriculum. The nexus between curriculum and employability will be revisited in both chapter four and five.

## **2.5 The Relationship Between Universities and Employers**

Having established that universities play a pivotal role in the employability enterprise, it is logical to explore the relationship between the major protagonists in the employability narrative. It is now established that “successful and appropriate employability is a benefit for all stakeholders – graduates, employers, higher education institutions, governments, and the economy at large” (Tamrant, 2019, para.3). However, the development of this ‘successful and appropriate employability’ is assumed to be the responsibility of three major stakeholders in a ‘triple-helix’ relationship: universities collaborating with employers and the collaboration is ideally stimulated, facilitated and mediated by governments (Adesanmi, Marcinek, and Newbury, 2024; Tamrant, 2019).

A review of the literature reveals that the relationship between universities and employers or the world of work goes by a variety of names. These include: ‘academy-industry relations’ (Anderson, 2001), ‘academia-industry collaboration’ (Abuja, et al., 2019; Dasgupta, 2017; Peters and Lucietto, 2016; Sanno, Oberg, Floress-Garcia and

Jackson, 2019), ‘university-industry partnerships’ (Martin, 2000; Tamrant, 2019), ‘university-industry collaboration’ (Ankra and Al-Tabbaa, 2015; Gann, Montresor and Eisenberg, 2018), and ‘university-industry cooperation’ (Matkovic, et al., 2014). For the purpose of this study, ‘university-industry collaboration’ (UIC) was adopted.

The relationship between universities and employers (who for our purposes here represent the world of work) has both an antagonistic and a collaborative character. On one hand, the antagonism between employers and universities is evidenced in the oft stated criticism by employers that universities produce ‘half-baked’ graduates whose skills-sets do not adequately match or fit into the expectations of employers (Nganga, 2014, Tamrant, 2019). This criticism is often rebutted by especially ‘academic purists’ who denounce it as a dangerous advocacy for the increasing instrumentalization and commercialization of the academy, to the detriment of the intrinsic knowledge-purpose and academic freedom of the university (Harvey, 2000; Lowden, et al., 2011; McCowan, 2015). Moreover, even where and when academia concedes that “it would be most appropriate for all stakeholders to join together to improve graduate employability” there is indignation that “there appears to be an inordinate demand on higher education institutions to produce graduates with the profile that industry needs without sharing responsibility for that goal” (Tamrant, 2019, para.4).

On the other hand, there is a growing realization that employability involves multiple intellectual, social and personal capacities that a graduate develops both at the university and in the workplace. As a result, “the cultivation of employability skills cannot be left exclusively to universities” (Tamrant, 2019, para.20). Due to this realization, governments are now urging, even requiring, both universities and

employers to pursue possibilities of and establish effective modes of collaboration in order to survive and thrive in the supercomplex world of today and tomorrow (Ankra and Al-Tabbaa, 2015; Barnett, 2000; Sanno, et al., 2019; Tamrant, 2019).

A review of the literature indicates a significant leaning towards the collaborative characteristic of the relationship between universities and employers (Anderson, 2001; Dasgupta, 2017; Sanno, et al., 2019). This leaning is occasioned by a new epistemological paradigm in the academy: ‘performativity’. In the performativity paradigm, “knowledge is now judged not on its power to describe the world but through its use value. Knowledge has to perform, to show that it has an impact on the world” (Barnett, 2000, p.38). The performativity paradigm has necessitated that the university’s “epistemologies are sliding from being contemplative to being pragmatic in character. Its concepts, its theories and its ideas are infused with the world of action” (Barnett, 2000, p.41). This ‘world of action’ is, to a large extent, the ‘world of work’ which is typified in industry. Performativity has therefore translated knowledge, which has traditionally been the university’s stock-in-trade, from a product of the university to a raw material for industry and society at large, or, in the discourse, ‘the market’. This *market* therefore owns and drives the performativity narrative.

‘The market is always right’ is a message that stands behind performativity. But the epistemological market – like all markets – is uneven; worse, it is sometimes rigged. Putting it formally, use value is colored by exchange value. The big prizes of status and finance [for the university] are to be secured only if one is seen to have impact; and major impact requires buyers for one’s epistemological products (whether in the shape of Research Councils or corporate organizations). (Barnett, 2000, p.39)

Despite this, University-industry collaboration (UIC) continues to be a growing reality all over the world. This collaboration is characterized by both personal and

corporate formal and informal relationships between individuals or specific units in the universities and organizations, or between a university and an organization (Ankra and Al-Tabbaa, 2015). This increase in UIC is occasioned by a pragmatic realization that “employers cannot complain about graduates being ‘half-baked’ if they themselves remain outside of the education and training process” (Tamrant, 2019, para. 22). Moreover, the major players here, universities, employers (industry), and governments now acknowledge and appreciate the mutual benefits that accrue from an amicable and symbiotic relationship between universities and industry (Dasgupta, 2017). In sum then:

It is true that universities have responsibility for curriculum reform that will better prepare graduates for the increasingly complex demands of the workplace. But their success depends on other stakeholders being equally committed. Benefits to employers will be determined not only by how much universities adapt, but also by their own readiness, capacity and effort to contribute. (Tamrant, 2019, para.21)

A number of authorities have identified some of the specific benefits that accrue from UIC initiatives. These are broadly categorized into economic, institutional, and social benefits, which broad categories are broken down as explained below (Ankra and Al-Tabbaa, 2015; Matkovic, et al., 2014; Peters and Lucietto, 2016; Sanno, et al., 2019):

*The economic benefits*

For the university these include: source of funding from either public or private sources or both, Income from patents, intellectual property rights, additional income or financial benefit to individual researchers and faculty, creation of business opportunities, and contribution to local or national economic development.

For industry these include: new products and/or processes, improved products and processes, patents, prototypes, intellectual property rights, access to public grants, and

promotion of economic growth and enhancement of wealth creation. Moreover, UIC is more cost effective than similar in-house research

*The Institutional benefits*

For the university these include: development of new courses and adjustment of present ones with enhancement of content in relation to the needs of industry, improved relevance of learning outcomes through immediate feedback on adequacy of the developed curriculum, intrinsic real-life experiences for students through industrial attachment, exposure of students and faculty to practical problems/new ideas and/or to state-of-the-art technology in industry, with positive effects on the curriculum, access to a 'test-bed' for feedback on research ideas, results/interpretations for the refinement of academic ideas and theories, UICs stimulate technological advancement and /or research activities in certain key areas, acquisition of or access to up-to-date equipment, better trained graduates, eased selection and recruitment of graduates for employment, building credibility and trust for academic researchers among practitioners, stimulation of the development of spin-off ventures, and joint publications with industry.

For industry these include: keeping up-to-date with major technological developments, improved innovative ability and capacity, accelerating commercialization of technologies, provision of much needed legitimacy for industry products, access to new knowledge and leading edge technologies and/or a wide variety of multidisciplinary research expertise and research infrastructure, the opportunity to influence university research directions and new programs for industry good, access to specialized consultancy services which lead to identifying relevant problems and solving specific technical problems, product testing with independent

credibility, opportunities for staff training for continuous professional development, opportunity to access a wider international network of expertise, UICs act as catalysts that lead to other collaborative ventures, hiring of talented or highly skilled graduates, and joint publications with universities.

### *Social benefits*

For the university these include: service to the community, enhancement of the university's reputation and prestige, cultural change both in the university and its community, while for industry they include: enhancement of reputation and prestige, enhancement of the social responsibility profile, and cultural change both in the organization and its environment.

The literature on UICs indicates a variety of modes of collaboration as outlined below (Abuja, et al., 2019; Ankra and Al-Tabbaa, 2015; Gann, Montresor and Eisenberg, 2018; Matkovic, et al., 2014; Peters and Lucietto, 2016; Sanno, et al., 2019; Tamrant, 2019):

#### a) *Meetings and conferences*

- Attendance at industry sponsored meetings
- University faculty membership on company boards and other industry driven committees
- Attendance at conferences, seminars, or round tables with industry and university participation
- Conference presentations

#### b) *Consultancy and contract research*

- Consultancy work (commissioned by industry, non-involving original research)

- Contract research agreements (commissioned by industry and undertaken only by university researchers)
- University faculty offering specific consultancy services in Industry
- Bi-lateral staff exchange

c) *Funding and in-kind support for university facilities and programs*

- University campus based learning, innovation and practice centres funded by industry (business incubators, centres of excellence, technology networks and platforms, convergence laboratories, and technology centres and parks)
- Industry funding for the creation of physical facilities in the university
- In-kind support for universities from industry (equipment donations, student scholarships, teaching and research grants, opportunity to use industry facilities for teaching, research and practice, etc.)
- Sponsoring co-curricular activities in the university (sports, academic or profession-related clubs, etc)

d) *Teaching, training and curriculum development*

- Active participation of industry in university curriculum development activities such as academic planning and course design
- Universities offering life-long learning courses and specialized customized courses for industry staff in line with personal or corporate professional development and continuing education needs
- Participation of industry experts as resource-persons, executives-in-residence, part-time lecturers, or visiting lecturers in selected university courses

- University faculty participation in industry-led professional development activities
- Industry provision of credit earning on-the-job learning opportunities to students (such as industrial attachment/field experience, internship, etc.)
- Industry provision of part-time work opportunities for university students
- Postgraduate training in industry (for instance joint supervision of PhDs)
- Students' participation in industry based or industry supported projects
- Industry offering graduating students/fresh graduates opportunities to volunteer their services

e) *Joint research and innovation*

- Joint research agreements (involving research undertaken by both parties)
- Industry funding of joint research and innovation ventures
- Technology transfer (patent sale or licensing, joint ventures for the commercialization of joint research, creation of spin-off companies)
- Joint authorship of research and other publications

These modes of IUC bring to light challenges and unintended effects both in the creation, processing and dissemination of knowledge, in the production of goods and services and in the generation of income for both universities and industry (Martin, 2000). For universities, which collectively are the focus of this study, these challenges and potential drawbacks include: a possible distortion of the research and teaching mission of a university, threats to research autonomy or integrity of a university, a

possibility of abandoning long-term basic research in so as to focus on results oriented, short-term, applied research and technology transfer, a potential diversion of energy and commitment of industry-engaged university academics from their core duties and mandates, a possible imposition of limitations to the culture of open dissemination of university research and innovations due to industry's culture of confidentiality on proprietary information, probable conflicts of interest among university staff and between university and industry, and potential disputes of proprietorship of processes and products – for instance disputes over intellectual property rights, licensing, and patenting (Ankra and Al-Tabbaa, 2015; Martin, 2000, Ssebuwufu, Ludwick and Beland, 2012).

Two of these potential drawbacks, the possible distortion of the research and teaching mission of a university and the potential diversion of energy and commitment of industry-engaged university academics from their core duties and mandates are of particular concern to this study. In a university, research is a process of producing or refining knowledge which is consumed, first and foremost, for teaching and learning *in* the university (or university settings). This ideal becomes incongruous in the performativity premise of UIC, where, to repeat, knowledge shifts from being a product of the university to a raw material for industry. In this scenario, university academics sacrifice their teaching (and, concomitantly, their students' learning) for industry-driven research and such-like activities which promise them quick benefits, recognition and prestige.

It is no wonder then that while 'engagement of industry in university curriculum development' or at least 'in course or program design activities', is an ever-present catch-phrase in UIC literature, the nature of such engagement, its practical application

in terms of curriculum delivery; that is, teaching and learning, and its impact on students is rarely explored or given the attention it deserves. A systematic review of literature from all over the world on universities-industry collaboration came to this conclusion:

The impact of academic engagement in the process of UIC is almost overlooked. For example, none of the reviewed studies have addressed the consequences of this engagement on, for example, teaching and learning experience of students affiliated to universities that engaged with industry. (Ankrah and Al-Tabbaa, 2015, p. 402)

This is surprising given that arguably the surest avenue to realizing industry's vested interest in the UICs, especially in so far as employability is concerned, is the university curriculum. Thus industry needs to deliberately play a direct and significant role in the whole process of curriculum development, but especially in curriculum design, delivery and evaluation (Lowden, et al., 2011). Such a role may take any one or more of the following forms: helping teachers to keep the curriculum relevant to industry expectations by constantly updating their awareness and competences through industry sponsored continuous professional development programs; helping teaching units in the university to identify experiential work-based learning and mentorship opportunities for students that are consistent with the curriculum; actively participating in steering committees in the university to enhance curricula and student achievement; providing in-kind matching for state and private grants to the university to enhance curriculum; actively participating in joint evaluation of curriculum and its delivery in order to adequately modify or improve the curriculum; providing technical, material and financial support to the university to maintain and sustain specific curriculum projects over time; strengthening career and vocational preparation by linking the integration of academic instruction and career and vocational education to real jobs; and providing guest lecturers to share their

professional expertise with students and give credibility to the curriculum (Shewakena and Belay, 2017).

The outcomes of such engagement in curriculum development include: improved relevance of learning outcomes, enhanced content of courses and subjects in relation to the needs of industry, intrinsic real life experiences through industrial attachments and other on-the-job learning opportunities, immediate feedback from industry on a university's curriculum adequacy and relevance, design and development of new courses and adjustment or modification of existing ones in response to industry expectations, increased job satisfaction among academic staff, better prepared graduates hence enhanced graduate employability, and easier selection and recruitment of graduates (Matkovic et al., 2014; Ssebuwufu, Ludwick and Beland, 2012)

Much as UICs present a lot of promise for the enhancement of graduate employability, the actual realization of effective collaborations is still, to a large extent, a preserve of developed economies. In the literature, examples abound of how UIC has worked/is working and what its dividends are to both universities and industry in especially Europe and North America (Flynn, 2020, Sá, 2015). In Africa, not much is documented about the relationship between universities and industry. Nevertheless, the little that is documented indicates that the UIC concept and practice is catching on, although it is still in its nascent stages in most countries (McCowan, 2016a; Sá, 2015, Ssebuwufu, Ludwick and Beland, 2012). In Kenya, for instance, two unrelated studies published a year apart point to the still very low volume of empirical literature on UIC and the still relatively few instances of actual UICs. Moreover, even

where the collaboration exists, it is of an essentially basic nature (Kombo and Mwangi, 2018; McCowan, 2016a).

This apparent under-development or slow uptake of UIC in most African countries is attributed to multiple factors including: the nature and size of the national economy; the nature and size of the existing research infrastructure; the lack of efficient on-going monitoring and evaluation of the UIC; cultural differences between academia and industry – for instance the two would treat confidential and proprietary information totally differently; differences in organizational (especially administrative) structure between universities and industry firms; industry's lack of confidence in local universities; weak institutional capacity – including inadequate funding, human resources, and relevant facilities; weak or non-existent structures and systems for incentives and rewards for individuals involved in collaboration initiatives and activities; weak leadership and poor governance in especially public universities; lack of awareness and understanding of industry needs by academic staff; low level of awareness of university research capabilities by industry and other stakeholders; inadequate government policy and/or regulatory framework to facilitate, promote, and support UIC; and weak or non-existent mechanisms for communication and interaction between universities and industry (Ankrah and Al-Tabbaa, 2015; Kombo and Mwangi, 2018; Sá, 2015).

These factors may seem many, but they can all be adequately addressed by a trio of fairly straight-forward interventions, especially on the part of governments; one, government support, which would be realized in three aspects – (1) financial incentives (for instance tax incentives) for firms involved in identifiable UICs, (2) additional public funding for universities involved in UICs, especially for the purpose

of incentives and rewards for staff involved in UIC, (3) financial and technical support for capacity building and strengthening for universities as organizations and for academic staff as individuals; two, the formulation and establishment of a policy and regulatory framework to facilitate and guide UICs. Such a policy and technical regulations would not just encourage but require UIC as a mandatory component of university programs, and it would form a significant part of the criteria for university credibility, reputation and prestige indices such as course accreditation, university ranking, and graduate employability; and three, establishment of open channels of communication and interaction between universities and industry – such as government initiated round-table conferences involving both universities and industry (Kombo and Mwangi, 2018; Sá, 2015).

## **2.6 Entry-level Recruitment Of Graduates: Employers' Preferences**

One of the oldest 'constants' in the relationship between universities and employers is the recruitment of fresh university graduates. Recruitment is a deliberate and carefully planned process through which an employer attracts, selects and appoints one or more individuals who satisfy the needs and requirements of organization. In essence, then, "recruitment is the process of choosing the right person for the right job at the right time" (Tutorials point, 2016, p.5). Recruitment has two distinct components: the employer – the recruiting organization's culture, its profile, and its specific expectations for the position or job in question; and the potential employee – in this case the fresh university graduate's employability attributes. Recruitment, ultimately, is the dove-tailing of the potential employee's profile with the employer's profile (Hayton, 2018).

There are two types of recruitment: internal recruitment, where an organization seeks to fill vacant positions by sourcing individuals from within the organizations; and external recruitment, where an organization seeks to fill vacant positions by sourcing individuals from outside the organization. Internal recruitment has to do with individuals who are already employed in the same organization. External recruitment, on the other hand, has to do with either individuals who are employed in other organizations, or with individuals who are just joining the world of work; in other words, fresh graduates. The latter category of individuals is the focus of this study.

In order to attract and secure fresh graduates who will fit into the employer's profile and therefore ultimately add value to the organization, a carefully thought out recruitment strategy is necessary. The Graduate Recruitment Bureau (GRB) in the United Kingdom asserts that such a strategy is crucial because of three reasons. One, organizations must recruit graduates who match their business needs and who will add value to the organization as soon as they join it. Two, due to the annual progressive increase of the population of graduates getting into the entry-level job market, the competition for high caliber individuals is getting more intense. This is, in a sense, a talent war. Three, with the increasing incidences of graduates from a broad range of disciplines going into diverse career paths, it can be easy for an organization to miss talented individuals if it is using outdated and/or rigid recruitment methods (GRB, n.d.).

Strategic recruitment of fresh university graduates is based on certain employer preferences which, as the literature indicates, are generic across sectors and even countries (Jun, 2017; Pollard, et al., 2015; Waihenya, 2020). The most recurrent of these preferences include:

- University preferences – traditionally, employers have preferred recruiting graduates from certain specific universities. The reasons for these preferences include: one, the reputation and prestige of a university which is usually determined, from the employers perspective, through the age of the university (the older, the more established, hence the better), the university's ranking, and the university's technical content and academic rigor as perceived by the employer; two, the geographical proximity of the university to the employing organization (usually, the closer, the better); and three, the relationship, or lack of it, that the university has with the organization (most employers would prefer to recruit graduates of universities with which they have university-industry collaboration) (Jun, 2017; Pollard et al., 2015; Waihenya, 2020)

However, this tradition has come under scrutiny in recent times. Many top employers, especially in Europe, are beginning to disregard 'educational prestige' of the university in favor of the graduate attributes of the individual. In fact, many employers are adopting 'education blind' applications, where the university in which an applicant studied is hidden, to prevent probable bias on the side of recruiters (Murray, 2017).

- Subject/discipline of study – while most employers are open to employing graduates from any discipline (Harvey, 2000; Lowden et al., 2011; Pollard et al., 2017), employers in highly specialized or technical fields, for instance Engineering, medicine, IT prefer graduates with relevant specialized degrees (Murray, 2017; Pollard et al., 2015).
- Specific class of the degree – the notion that a graduate's intellectual ability is best denoted by their scores in the degree program. A first class

or second class upper division degree is therefore preferred by the employers. However, this is increasingly becoming a “tricky issue for employers” because they are “not sure whether class of degree was a reliable indicator of quality across different institutions” (Murray, 2017, p.76). As such, employers are increasingly overlooking the class of the degree and focusing more on the employability profile of the graduate.

- Other considerations – these include the applicant’s sex, ethnic and socio-cultural background, and disability (for purposes of affirmative action and equity in employment).

Closely related to the preferences are the channels that employers use to source fresh graduates for entry-level recruitment. Just like the preferences, these channels are generic. A perusal of the literature shows the following most recurrent channels for recruitment (Breugh, 2009; Dyson, 2020; GRB, n.d.; Hayton, 2018; Johnson, 2019; Jun, 2017 Pollard, et al., 2015; Tutorials point, 2016): Direct recruitment (‘factory gate recruitment’ or ‘walk-in job seekers’), advertising job vacancies on public on-line platforms such as job boards, posting job advertisements on corporate websites, posting job advertisements on social media, using employee referrals to source recruitment candidates, outsourcing recruitment to employment agencies and recruitment bureaus, holding campus career fairs and events, networking with university alumni groups, networking with campus academic departments, clubs and societies, offering employment to selected student interns, advertising in the mass media, especially newspapers, sourcing recruitment candidates from professional bodies or employer associations, networking with university careers services, and referral through social networks such as friends and family (an informal yet common and ‘powerful’ channel)

It is important to note that employers typically adopt a multi-channel approach when recruiting graduates, and that virtually all these channels funnel the short-listed candidates into an interview (whether face to face or virtual) from which the selected individuals are appointed to fill the vacant position(s) (Pollard et al., 2015).

## **2.7 Related Studies**

As mentioned in chapter one, there is a relatively small volume of empirical literature on employability from the perspective of employers in Africa in general, and in Kenya particularly. Out of the available literature that touches on this area, only a few empirical studies were deemed relatively relevant to the purpose and scope of the present study. These studies include: Awiti, et al. (2019), Bogonko (2018), FKE (2018), Kalei (2014), Kamau & Waudu (2012), Oanda and Sifuna, 2016, Onyango, et al. (2018) and Rintari (2017). Each of these studies is discussed in this section, with the ultimate aim of illuminating the gap in knowledge that the present study sought to fill. In this discussion, the studies will be arranged in chronological order.

A study titled *Hospitality industry employers expectations of employees' competencies in Nairobi hotels* was conducted by Sarah Kamau and Judith Waudu and published in 2012. The study sought to determine the expectations of hospitality industry employers on employees' competencies. The study surveyed 106 Human Resources Managers (HRMs), Heads of Departments, and employees in eight hotels in Nairobi. The instruments of data collection were questionnaires and interview guides. In its findings, the study revealed a notable and significant difference between employers' and employees' expectations of employability. The difference was most pronounced in communication skills, specific technical skills, computer skills, good work habits, customer service and self-discipline. The study came up with

a number of recommendations, the most relevant to our purposes here being two: one, that the hospitality industry should establish a framework of standards which should be effectively communicated to all employers and training providers and, two, that the industry and the training providers should forge strong linkages (Kamau and Waudo, 2012). This study focused only on the hospitality industry as opposed to the present study which focuses on the wider service sector. Moreover, the sample population of this study is 106 while in the present study, as is evident in Chapter three, the sample population was 372. Furthermore, Kamau and Waudo did not specifically address the implications of their findings on the university curriculum.

In 2014, a study titled *An analysis of Kenya's Bachelor of Commerce graduates' employability skills and the job market demands* was reported by Anne Kalei. The purpose of the study was to establish whether there were skills gaps between employers' expectations and what university graduates possess. The specific objectives of the study were: 1) to establish what employability skills the Bachelor of Commerce (BComm) graduates actually possess as they enter the job market; 2) to establish the employability skills the employers expect BComm graduates to have as they enter the job market 3) to establish whether there were skills gaps between employers' expectations and what BComm graduates had, and to determine methods of bridging the skills gap. The sample population of this study was 1000 BComm graduates and 250 employers. Data were collected through questionnaires and focus group discussions.

Kalei's study arrived at a number of findings, two of which are relevant to the present study: one that BComm graduates lacked general employability skills; and two, that there is a significant discrepancy between graduates' skills and the requirements of

the job market. The salient recommendations of the study include: 1) universities should train graduates to become entrepreneurs to promote them to become job providers rather than job seekers; 2) universities should establish partnerships with the industry and other stakeholders to align university programs with the needs of the job market and bring the practical element to the curriculum; 3) universities should establish web-based career guidance portals; and 4) All stakeholders should keep abreast of emerging new demands (Kalei, 2014). Kalei's study is quite similar to the present study except that she targets only BComm graduates, while the present study includes all university graduates.

In 2016, Ibrahim Oanda and Daniel Sifuna, working under the aegis of The British Council in a project titled *Universities, employability and inclusive development: repositioning higher education in Ghana, Kenya, Nigeria and South Africa* (British Council, 2016), presented a comprehensive study titled *Divergent narratives on graduate employability in Kenya: dysfunctional institutions or dysfunctional labor markets?* As part of the wider project, Oanda and Sifuna (2016) addressed the following research questions: 1) How do students, employers, and universities understand employability and the contribution of graduates to society? 2) How is graduate readiness for the world of work and participation in society perceived? What are students' attributes (knowledge, skills, and values) on leaving university? 3) How have universities sought to enable the development of employable graduates through the curriculum and targeted initiatives with what outcomes and why? 4) How do universities address widening participation so that access, completion and preparation for the world of work are more inclusive? 5) Which university conditions of governance, teaching and learning quality, and research and innovation support the

education of employable graduates? 6) Which contextual and policy conditions enable or restrict the education of employable graduates? (McCowan, 2016a, p.6)

This study was a survey spanning four years (from 2013 to 2016) in which Oanda and Sifuna (2016) targeted 58 employers in firms in Nairobi and across the country, and 1037 final year students in three universities (two public – University of Nairobi and Moi University, and one private – Daystar University). For the employers, face-to-face interviews were conducted, while for the students, a survey questionnaire was administered. Given the comprehensiveness of the study, many findings were arrived at. Only those relevant to the present study are presented below:

- Kenya is experiencing high levels of graduate unemployment; however, it is difficult to clearly define and explain this unemployment because no data on graduate destinations exists and the government policy on employment focuses on the youth more generally rather than university graduates in particular
- There is a manifest skills mismatch in Kenya, though there is contention about the explanation for the mismatch. On one hand, universities insist that they are doing a good job in preparing students for the world of work. They therefore blame the mismatch on “either the failure of job opportunities to expand in line with labor force growth, or failure on the part of employers to provide students with opportunities for apprenticeships or engage with universities more regularly on curriculum review” (Oanda and Sifuna, 2016, p.45). on the other hand, many employers believe that a significant number of fresh “graduates from Kenyan universities are not adequately prepared for the labour market” (Oanda and Sifuna, 2016, p. 45)

- Employers generally prefer to recruit fresh graduate employees from universities with a combination of the following institutional characteristics: institutional reputation, perception of an institution producing quality graduates (the quality of employability), successful past experience of recruiting from the university, and strong organizational links with the university. It is noteworthy that this finding indicates that “the quality of disciplinary knowledge is not as important to most employers as these factors” (Oanda and Sifuna, 2016, p.49).
- There are variations in employers’ preferences of which universities, between public and private universities, they recruit fresh graduates from. While the majority of employers seemed to prefer recruiting from public universities, a significant number also prefer to recruit from private universities. The ten most preferred universities, in order of preference, are: University of Nairobi, Kenyatta University, Moi University, Strathmore University, KCA University, Maseno University, Catholic University, Jomo Kenyatta University of Agriculture and Technology, Egerton University, and Masinde Muliro University of Science and Technology.
- “Employers perceived the quality of education and training received by graduates not just in terms of the mastery of content exhibited, but also in terms of other attributes not directly related to the subject content.” Thus the dissatisfaction of employers with the employability of graduates has to do with “a failure by the graduates to manifest a wide range of skills besides demonstrating a masterly knowledge of subject content” (Oanda and Sifuna, 2016. P.49)

- Employers perceive university graduates from Kenyan universities to be lacking positive attitudes to work, integrity and ethics.
- Curriculum review and change is a slow process in the universities and thus course content is mostly not up-to-date with the current reality in the world of work.
- Most employers indicated that they had little or no contact with the universities. Nonetheless, the findings suggest that “employers who seek specific skills and professional qualifications had a more practical incentive to engage in curriculum review with the universities” (Oanda and Sifuna, 2016, p.51).
- A number of universities have initiated specific innovations to enhance graduate employability. The study specifically pointed out the Chandaria Business Innovation and Incubation Center at Kenyatta University, the Strathmore incubation hub and the Strathmore iLab Africa Research and Innovation Center, both at Strathmore University, as examples of such innovations.

Based on these and other findings, Oanda and Sifuna (2016) made a number of recommendations, two of which are that are relevant to the present study. The first broad recommendation is that employers should actively collaborate with universities in: 1) curriculum review, 2) providing technical assistance to universities in order to enhance career guidance and career services, 3) facilitating and strengthening interaction between university students and potential employers through work-experience programs such as field visits, practicums/internships, and volunteering, 4) involving the university in labor market projections so as to enhance the availability of information especially regarding potential career pathways for the

students/graduates. The second recommendation is that universities should deliberately invest more resources in regularly obtaining systematic data on labour market skill demands so as to adjust and align curricula to match these labor market expectations.

This study is also relatively similar to the present study, but it used a much smaller sample size of respondents (58 employers), as opposed to the present study which had 364 respondents. The other difference is that Oanda and Sifuna focused on understanding the trends and causes of graduate unemployment (as an indicator of graduate employability) in Kenya, while the present study focuses on the curriculum implications of employers rating and perceptions of the employability of university graduates in Kenya.

Another study related to the present one was conducted by Nancy Rintari on *University graduates' employability skills preparedness in Kenyan economic sectors*. The objectives of this study were: to investigate how graduates' quality compared amongst various universities in Kenya, to find out how university graduates from different sectors in Kenya compare in terms of employability skills, and to determine the link between graduate quality and employability skills. The study targeted 46 company managers/supervisors and managed to get 41 respondents, and ten universities, 5 public and 5 private. Data were collected using a questionnaire. The salient findings of this study include: 1) there is no significant difference between the quality of graduates from public universities and those from private universities, 2) the service sector requires more employability skills than other sector, and 3) there is a positive link between the employability skills of graduates and their job competence, job confidence, and job involvement. Among the recommendations of

the study, two are relevant to the present study: one, that universities should engage industry in developing a curriculum that satisfies the university, the graduate, and the labor market requirements; and two, that 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 (Rintari, 2017). This study accessed a much smaller sample (41) than the present study (364). Moreover, the study was more of a comparison between universities and graduates, which is very different from the present study.

In 2018 a study by Lillian Bogonko titled *Factors affecting the employability of first degree graduating millennials* was submitted to the Chandaria School of Management at The United States International University - Africa (USIU-A). The purpose of the study was to determine the factors that are affecting the employability of first degree graduating millennials with a focus on USIU-A graduates. The research questions for the study were: 1) to what extent do non-technical skills affect employability of USIU-A graduates, 2) what is the effect of work values on the employability of USIU-A graduates, and 3) how does career readiness affect employability of USIU-A graduates. The study administered a questionnaire to 80 employers. Two broad findings of this study are relevant to the present study: one, non-technical skills are deemed by employers to be key in determining graduate employability. These include: written and oral communication, problem solving and critical thinking, creative thinking, information management, leadership skills, adaptive skills, teamwork skills, work-related disposition, and self-management; two, career readiness is vital for employability. Career readiness indicators include: effective presentation, well written curriculum vitae, a portfolio of past works, participation in career mentorship programs, and evidence of the graduates own initiative. This study

focused only on USIU-A graduates. Actually, the study recommends that “similar studies be conducted on other graduates from Kenyan universities to examine their preparedness in the job market” (Bogonko, 2018, p. 58). The present study’s focus on graduates from all Kenyan universities thus fills the gap identified by Bogonko.

Still in 2018, the Federation of Kenya Employers (FKE) published a study titled *Skills mismatch survey*. The main purpose of the study was to understand the educational mismatch between the knowledge graduates possess and market demands. The specific objectives of the study were: 1) to determine among employers the proportion of workers whose educational level is higher or lower than their job, 2) to identify hard or easy to fill vacancies among members of FKE, 3) to determine the percentage of firms identifying an inadequately educated workforce as a major constraint, 4) to determine the proportion of members who incur additional costs to retrain fresh graduates, and 5) identify the emerging skills and competencies that will become increasingly key to succeed in the fast changing world of work. The study employed a multi-methods approach in which desk research, Computer Aided Telephonic Interviews (CATI) and key informant interviews were used to generate data from 292 CATI interviewees and four key informant interviewees.

Two findings from the FKE (2018) study are relevant to the present study. One, most graduates do not have the right technical skills to perform their jobs without further training, and two, a greater proportion of fresh graduates are unprepared to take entry level jobs. On the basis of these and other findings, the study makes quite comprehensive recommendations or suggestions as the study terms them. There are suggestions to universities, to government, to employers, and to learners. For the

purpose of and due to the scope of the present study, the suggestions to students will not be included here.

The FKE suggestions to universities include: offer more practical skills to students; have more internships and industrial attachments for training and follow up on them; review curriculum to have courses relevant to industry and the job market; enhance training on technical skills; consult industry stakeholders when preparing curriculum; impart work ethics and life skills in the students; expose and educate learners on real job market expectations; teach communication skills; teach soft skills; have joint employer and tertiary institutions forums; have a direct link between university faculty and employers. The FKE suggestions to government include: initiate curriculum review to meet current labor needs; ensure reviewed curriculum is effectively implemented by tertiary institutions; provide policy guidelines which lead the sector in the right direction. The suggestions to employers include: engage the training institutions and share with them their labor requirements of graduates; take attachment and internship programs as a social responsibility for an organization; offer opportunities for students during attachment/internship period to learn more on industry related work; channel their voices through FKE in case of areas of skills mismatch in their industry.

The FKE (2018) study is quite comprehensive and relatively similar to the present study. The main difference between FKE and the present study is in the methods of data generation. Whereas FKE used essentially qualitative tools (desk research, Computer Aided Telephonic Interviews (CATI), and Key informant interviews), the present study used both quantitative (questionnaire) and qualitative (document analysis and key informant interviews). There is also the sample differential (296 for

FKE and 364 for the present study), but the variance is not as big as it was with the other studies reported above. Another difference is in the focus on curriculum.

A study by Cecilia Onyango, Catherine Kunyanga, Davis Karanja and Raphael Wahome on *employer perceptions and attitudes towards agricultural university training in Kenya* was reported in the International Journal for Innovation Education and Research in 2018. The main objective of the study was to assess the quality of agricultural graduates from Kenyan universities in terms of relevance to job market demands. The study generated data from 54 public and private organizations through personal interviews and Focus Group Discussions (FGDs). One finding of this study was relevant to the present study: the employers interviewed indicated that university graduates lack or exhibit poor interpersonal, communication, practical, and character skills. Onyango et al. (2018) made a number of recommendations, of which two are relevant to the present study. These are: one, universities should train holistic graduates who meet employers' and socio-economic development needs; and two, job market requirements should be integrated into university curricula. This study focused only on agricultural training as opposed to the present study which covered the whole spectrum of university education.

The last related study in this section is one that was published by the Aga Khan University East Africa Institute in 2019. This study, which is titled *Whole youth development in Kenya: survey of employers and employees in the formal and informal sectors to determine entry-level skills among youth (18-30years) in employment in Kenya*, was conducted by Alex Awiti, Caleb Orwa, Lucy Mbuvi, and Mary Karumba. The objectives of this study were: 1) to provide data to enable reliable assessment of entry-level skills and competencies required by employers and entrepreneurs

(demand) and capabilities possessed by youth entering the labor market (supply) across the key sectors which employ most youth; 2) to provide employers with a basis for influencing technical and vocational skills development, working in collaboration with training institutions and labor policy makers; 3) to provide TVET trainers with a better understanding of the entry level skills and capabilities demanded by the world of work, to better adapt their curricula and instructional practice; and 4) to provide a clear understanding of what role employers or the workplace could play in training and skills development.

This was a huge study that employed a mixed methods approach in which questionnaires and key informant interview guides to collect data from 9,355 employed and self-employed youth, and formal and informal sector employers across 24 out of the 47 counties of Kenya. The findings of this study were many, but only the ones relevant to the present study are included here:

- Entry level requirements for recruiting a graduate into formal sector employment in Kenya include, in order of preference: the graduate's education qualifications, soft skills, minimum work experience, attitudes and values, technical skills, age, course/program accreditation, physical wellbeing, marital status, and ethnicity
- The most common channels of recruiting graduates in the formal sector in Kenya include, in order of prevalence: referrals and social networks (family and friends), job advertisements, internal recruitment, recruitment agencies, career fairs, partnership with universities, and walk-in job seekers
- The majority of Kenyan youth (individuals aged between 18 and 30 years) work in the service sector

- The top five skills possessed by entry-level employees, as perceived by employers are: life skills, core values, social-emotional skills, basic computing skills, and technical skills.
- The skills with the most glaring mismatch between employers' expectations and entry level employees' possession are: basic communication skills, ethics and integrity, and positive attitudes to work
- The reasons for the skills mismatch include: lack of adequate preparation of youth for the job market, lack of conversations between training institutions and employers, outdated training facilities, incompetent trainers, and institutions offering programs without conducting job-market skills analysis

These findings led Awiti, et al. (2019) to make one broad recommendation targeting training institutions. The training institutions should initiate collaboration between themselves and the labor market in order to: 1) ensure progressive sectoral discussions on the needs of the industry so that the training curriculum is aligned with the industry demands, two of which are relevant to the present study; and 2) institute compulsory assessed internships/work placements as part of the curriculum to ensure graduates acquire practical skills. The main difference between this study and the present study is on their focus on curriculum. While Awiti, et al. (2019) mention curriculum as a consequence of the collaboration between training institutions and the labor market, the present study focuses on the implications of current and emergent labour market realities on the university curriculum.

## **2.8 Research Gap**

There are three common themes discernible in all the related studies presented here. One is the narrowing of employability to the employer-employee nexus. Two is the

finding that there is indeed a mismatch between the skills of entry level employees and the expectations of employers. Three is the recommendation that there should be collaboration between universities and employers in order to match graduate skills with employer expectations. These themes do not adequately address the three main considerations that motivated this study and which have been discussed earlier on in this chapter. These are: one, employability is more than just a relationship between an employee and an employer which is determined by the employee's skills-set. Rather, employability is a composite profile of a graduate's attributes which enable or predispose the graduate to be effective and successful in life, including in employment. Two, there is a mismatch between entry-level graduate attributes and the demands of the world of work (which is broader, in the conceptualization of this study, than employers), yes, but what is the nature of this mismatch? The related studies are either silent on this or they treat it very superficially. Three, what is the implication of the mismatch between graduate attributes and the world of work on university curricula? Apart from glossing over the need for collaboration between universities and employers, the related studies do not sufficiently address this issue. These then are the gaps that the present study sought to plug.

## **2.9 Chapter Summary**

This chapter has presented a review of literature on the functions of university education, the dynamics of relevance in university education, the employability agenda and debate, developing employability through university curricula, the relationship between universities and the world of work, and employers' preferences when recruiting entry-level graduate employees. Further, empirical studies conducted in Kenya which are related to the present study have also been reviewed. The literature reviewed in this chapter shows a shifting paradigm on what a university is

and what its purpose and functions are or should be, a continuing evolution of the conceptualization of employability – from a graduate’s skills-set to graduate attributes – and the proliferation of models of developing employability through university curricula, and an increasing prevalence of, or at least advocacy for, university-industry collaborations. The related literature reviewed here reveals that the discourse on employability in Kenya is still focused on the traditional and rather narrow skills-set and employer-employee-nexus paradigms, which creates the gap that the present study sought to fill.

## CHAPTER THREE

### RESEARCH DESIGN AND METHODOLOGY

#### 3.0 Introduction

The purpose of this study was to investigate employers' rating and perceptions of the employability of university graduates, and to determine the implications of these rating and perceptions on university curricula in Kenya. To achieve this purpose, the study was guided by the following objectives:

1. To document service sector employers' preferences when recruiting entry-level university graduate employees
2. To compute a statistical relationship between employers' rating and perceptions of the desirability of specific employability attributes and competencies in their organizations and their rating and perceptions of their graduate employees' actual workplace attributes and competencies
3. To appraise the involvement of the service sector in university education in Kenya
4. To ascertain the implications of the employers' rating and perceptions of the employability of university graduates on university curricula in Kenya

To attain these objectives, an appropriate, effective and efficient research design and methodology was necessary. This chapter describes the research design and the methodology. Specifically, this chapter explores the philosophical postulation upon which this study is premised then it discusses the research paradigm underpinning the study. Further, it describes the study setting, the selection of the study sample, the research instruments, the quality assurance approach for the study, the ethical and

legal protocols that guided the study, and the procedures for data collection and analysis.

### **3.1 Philosophical Postulation**

A fundamental premise in research is the search for truth and knowledge. In philosophy, truth and knowledge are metaphysical concepts. Research is therefore a philosophical enterprise. The pursuit of truth and knowledge, and whatever else would be consequential to such a pursuit, is a quest for a philosophical position, an informed world view, a thesis.

It is logical therefore that from the onset this thesis foregrounds the philosophical postulations from which the research paradigm emanated. Discourse on the search for truth and knowledge as metaphysical concepts invariably leads to a discussion of two philosophical terminologies: ontology and epistemology. The following sub-sections of this chapter discuss the ontological and epistemological stances that informed and guided this study.

#### **3.1.1 Ontology**

Ontology is the study of reality and being. It is concerned with what constitutes reality and how we can comprehend the existence of phenomena. It is a system of belief that reflects an individual's interpretation of reality or fact. Thus ontology is a way of constructing reality. It is about what *exists*, what it looks like, what components make it up and how the components interact with each other (Denzin and Lincoln, 2017; Moon and Blackman, 2014). Denzin and Lincoln (2017) sum up the conceptualization of ontology as an acknowledgement and interpretation of how things really are and how things really work. These twin questions of reality and existence have engaged philosophers and researchers for years, and there has been no consensus in answering

them. This is due to the fact that underlying these questions is a more fundamental question: is reality objective or is it subjective? Thus objectivism and subjectivism are the foundations of the two common divergent ontological traditions. Objectivism anchors the Positivist tradition (Positivism) while subjectivism anchors the Interpretivist tradition (Interpretivism).

Positivism asserts that the meaning of social phenomena exist independently from the social context. Positivists hold that there is an objective reality which can only be understood through the laws by which it is governed. According to Furlong & Marsh (2002), positivist ontology is premised on the belief that it is possible to observe and understand social phenomena without any mediation. This means that there is no dichotomy between appearance and reality. Appearance is thus the reality. Such a reality can be measured and known, and can therefore be quantified. Positivism thus deals with verifiable observations and the measurable relationships between these observations. Positivist ontology lends itself to quantitative research where researchers seek to describe phenomena rather than interpreting the meaning of phenomena.

In contradistinction to positivism, Interpretivism asserts that the meaning of social phenomena is constructed from perceptions and actions of social actors within a given context. Furlong & Marsh (2002) observe that in Interpretivist ontology, the world is only socially constructed and all knowledge that we can have about the world is subject to interpretation. This means that facts and conclusions about reality emanate from the interpretations of the participants, and meaning is derived from perceptions rather than facts. In the interpretivist perspective, social reality is produced and reinforced by participants through their actions, interactions, and interpretation.

Interpretivist ontology lends itself to qualitative research where researchers seek the meaning of social phenomena rather than just describing social phenomena.

The positivist and interpretivist stances have traditionally been viewed as an ontological duality. A researcher has to choose one or the other. In such a view, there is no possibility of some sort of middle-ground or bridge between the two stances. In social science research in general and educational research in particular, such polarized duality is immediately problematic. The assumption that positivist guided quantitative research has and can have nothing to do with interpretivist directed qualitative research and vice versa is neither tenable nor practical in research contexts, such as education, where scientific and social phenomena intermingle and overlap. This scenario is aptly captured thus:

All quantitative data is based on qualitative judgment. Numbers in and of themselves cannot be interpreted without understanding the assumptions which underlie them. The bottom line here is that quantitative and qualitative data are, at the same level, virtually inseparable. Neither exists in a vacuum nor can be [sic] considered totally devoid of the other. To ask which is “better” or more “valid” or has greater “verisimilitude” or whatever ignores the intimate connection between them. To do good research we need to use both the qualitative and the quantitative (Ochieng, 2009, p.17)

Such thinking has led to a paradigm shift, especially in the social sciences, from ontological dualism to ontological eclecticism (Furlong & Marsh, 2002; Ochieng, 2009). A simple eclectic approach to making assumptions about and conceptualizing the nature of reality would place positivism and interpretivism at either end of an ontology continuum. However, such an approach may not completely do away with the traditional tensions that have in the past characterized the positivist/interpretivist divide.

A more comprehensive and feasible approach to ontological eclecticism is to adopt a philosophical stance that espouses yet transcends both positivist and interpretivist ontological doctrines. It is commonly accepted in philosophical and research circles that Pragmatism fits this bill (Creswell and Creswell, 2018; Denzin and Lincoln, 2017; Goldkuhl, 2012; Furlong & Marsh, 2002; Morgan, 2007; Ochieng', 2009; Pihlström, 1998). Pragmatism “presents a radical departure from age-old philosophical arguments about the nature of reality and the possibility of truth” (Morgan, 2014, p.1049) because it “sidesteps the contentious issues of truth and reality and focuses instead on ‘what works’ as the truth regarding research questions under investigations” (Tashakkori and Teddlie, 2003, p.713). Pragmatism seeks to break down the dualism between positivism and interpretivism, therefore presenting an alternative philosophical postulation that is not necessarily beholden to these traditional ontological stances.

Pragmatism not only replaces arguments about the nature of reality as the essential criterion for differentiating approaches to research, it also recognizes the value of those different approaches as research communities that guide choices about how to conduct inquiry. Thus pragmatism acts as a new paradigm to replace an older way of thinking about the differences between approaches to research by treating those differences as social contexts for inquiry as a form of social action, rather than as abstract philosophical systems (Morgan, 2014, p.1049).

Action and change are pivotal to pragmatism. Pragmatism holds that “we live in a world where nothing stands still and where change is the very essence of reality” (Rescher, 1996, p.28). For pragmatists therefore, reality exists, but it is ever changing and based on the actions of those who construct it and the context in which it exists. Thus, as GoldKuhl (2012, p. 140) asserts, “the essence of pragmatist ontology is actions and change; humans acting in a world that is in a constant state of becoming”.

This 'constant state of becoming' means that reality is a work in progress, and any form of certitude fast becomes obsolete. In such a scenario, the core mandate of the pragmatist researcher is not to seek the absolute truth or reality, but to seek solutions for a variety of inevitable challenges humans encounter as a result of the fluidity of reality. Yet the pragmatist researcher should guard against reducing pragmatism to 'what works' in order to solve human challenges. Such an approach would be myopic, as it would narrow its focus on methodology and methods only.

Pragmatism is not a methodology per se. It is a doctrine of meaning, a theory of truth. It rests on the argument that the meaning of an event cannot be given in advance of experience. The focus is on the consequences and meanings of an action or event in a social situation. This concern goes beyond any given methodology or any problem solving activity (Denzin, 2012, p.81).

The focus on specification of methodology and methods, which is a defining characteristic of the positivist versus interpretivist tradition, is avoided in pragmatism. Rather, the focus is on the research problem, and the multiplicity of the approaches and strategies that may be employed in seeking or providing solutions to the problem (Creswell and Creswell, 2018).

In the light of the foregoing, Pragmatism is the underpinning ontology for this study. This reliance on pragmatism is deliberate for two reasons. One, this study addresses three major concerns in higher education that traverse the positivist/interpretivist terrain: graduate employability, which is a composite of both measurable (quantitative) and non-measurable (qualitative) attributes, skills and competencies; university curricula, characterized by both 'objective' factual content and 'subjective' experiences; and employers' rating (quantitative) and perceptions (qualitative) of the employability of university graduates.

The second reason for this study's reliance on pragmatism is evident in the stated purpose of the study. The purpose of this study was to investigate employers' rating and perceptions of the employability of university graduates, and to determine the implications of these rating and perceptions on university curricula in Kenya. Inherent in this purpose is an action-for-change sequence: to seek to generate and interpret data/information on the current state of graduate employability from the employers' perspective, and then to seek to precipitate or at least inform university curricula reviews and even reforms by drawing meanings and implications of the information generated on university curricula.

### **3.1.2 Epistemology**

While ontology deals with the assumptions one makes about the nature of reality, epistemology sets out beliefs about how one might discover knowledge about that reality (Furlong & Marsh, 2002). Epistemology is thus the branch of philosophy that deals with the nature of knowledge and truth. It is concerned with the acquisition, processing, and utilization of knowledge in a given field of study. Thus one's epistemological stance reflects their view of what can be known about reality, and how it can be known. Epistemology is concerned with "the very bases of knowledge – its nature and forms, how it can be acquired, and how [it can be] communicated to other human beings" (Cohen, Manion & Morrison, 2007).

Epistemology addresses three fundamental questions: one, what constitutes valid knowledge in a given area of study? Two, how is this knowledge acquired? Three, how should this knowledge be interpreted? (Patel, 2015). These three questions are also the central concerns of the research enterprise since, in essence, research is ultimately a process of knowledge construction and dissemination.

Many researchers discuss epistemology, just like ontology, within the rather restrictive traditional dualism of positivism versus interpretivism. This dualist tradition has been discussed quite comprehensively in the preceding sub-section. This study deviated from this tradition. A pragmatic ontology informed this study. It follows logically that a pragmatic epistemology defined and characterized the research conceptualization and process.

Pragmatic epistemology is characterized by five assumptions that underpinned this study:

1. Knowledge has a practical function as an instrument for adapting to, and if need be, manipulating and controlling reality
2. Reality is not static and immutable; rather, it is dynamic and fluid
3. Knowledge is constructed out of present reality and is relative to time, place, and purpose
4. Knowledge is not neutral. An individual's knowledge and perception of reality is invariably colored by their worldview and other contextual circumstances
5. Knowledge is relative. Reality has a variety of presentations and interpretations depending on context (Creswell, 2009; O'Leary, 2010).

In this study, the epistemological position, informed by pragmatism, was that either or both observable phenomena and subjective meanings can and do provide valid knowledge. Such knowledge forms the basis for decisions and actions oriented toward addressing the relevance of university curricula to employability. Such knowledge, as Goldkuhl (2012) observes, is multifaceted and multidimensional.

The knowledge character within pragmatism is thus not restricted to explanations (key form of positivism) and understanding (key form of interpretivism). Other knowledge forms such as prescriptive

(giving guidelines), normative (exhibiting values) and prospective (suggesting possibilities) are essential in pragmatism (Goldkuhl, 2012, p.140)

### **3.2 Research Methodology: The Mixed Methods Paradigm**

In line with the pragmatist ontological and epistemological postulations in the preceding section, this study logically adopted a mixed methods paradigm. The mixed methods paradigm is relatively ‘young’ in the chronology of methodological paradigms: from the 1950s to 1970s, the positivist paradigm (quantitative methodology) was in vogue. From the mid-1970s to 1990s, the constructivist/interpretivist paradigm (qualitative methodology) emerged as a radically opposite alternative to the quantitative paradigm. From the 1990s onwards, the mixed methods approach emerged as a ‘third paradigm’ or a ‘middle-ground approach’ in social science research (Morgan, 2007). There is a multiplicity of terms in the literature that refer to this approach. These include integrating, synthesis, quantitative and qualitative methods, multimethod, and mixed methodology. However, the most commonly used term in current research discourse is *mixed methods* (Creswell, 2009; Tashakkori and Teddlie, 2003). In line with this current trend, this study will adopt the term mixed methods.

Conceptions of mixed methods abound in the literature (Creswell, 2009; Johnson, Onwuegbizie, & Turner, 2007; Morgan, 2007; Tashakkori and Teddlie, 2003). For the purposes of this study, Creswell (2009) offers a fitting conception of mixed methods:

Mixed methods research is an approach to inquiry that combines or associates both qualitative and quantitative forms. It involves philosophical assumptions, the use of qualitative and quantitative approaches, and the mixing of both approaches in a study. Thus, it is more than simply collecting and analyzing both kinds of data; it also involves the use of both approaches in tandem so that the overall strength of a study is greater than either qualitative or quantitative research (Creswell, 2009, p.4)

Proponents of the mixed methods paradigm contrast it against the older paradigms that favour either strictly quantitative or strictly qualitative methodologies. They argue that there are many different ways of interpreting the world and undertaking research, that no single point of view can ever give the entire picture, and that there may be multiple realities (Morgan, 2014; Tashakkori & Teddlie, 2003). A mixed methods study therefore “combines qualitative and quantitative techniques and/or data analysis within different phases of the research process” (Macmillan & Schumacher, 2001, p. 542). The design “excels at bringing insights derived from diverse methods to the analysis of a given phenomena” (Kadushin, Hecht, Sasson & Saxe, 2008, p. 47).

Advocates of the mixed methods research paradigm give a variety of justifications for its use. For instance, Tashakkori and Newman (2010) outline seven reasons that justify the choice of a mixed methods research paradigm. These are: complementarity – to integrate two different but connected answers to a research question, one reached via a quantitative approach and the other via a qualitative one; completeness – to gain a greater understanding of the phenomenon under investigation by quantitative and qualitative perspectives; development – to use the first phase of a study to obtain research questions, data sources or sampling frameworks for the second phase of a study; expansion – elaborating on the information obtained in an earlier phase of the study; corroboration/confirmation – to determine the integrity of inferences obtained from a strand of a study by means of integrated methods; compensation – to compensate for the weaknesses of one method via the strengths of the other; and diversity – to compare and contrast divergent representations of the same phenomena.

The mixed methods paradigm is therefore a comprehensive methodology whose defining characteristics include: (i) Research questions that call for real-life contextual understanding and multi-level perspectives; (ii) Deliberate integration or combination of multiple methods to draw on the strengths of each method; (iii) The use of rigorous Quantitative (QUAN) methods to assess the magnitude and frequency of constructs and rigorous qualitative (QUAL) methods to explore the meaning and understanding of constructs within the same research project; (iv) A research design that clearly specifies the sequencing and priority that is given to the QUAN and QUAL elements of data collection and analysis; (v) An explicit explanation in which the QUAN and QUAL aspects of the research relate to each other, with heightened emphasis on the manner in which triangulation is used; (vi) Situating the research within defined philosophical and theoretical frameworks; and (vii) Pragmatism as the philosophical underpinning for the research (Creswell & Plano Clark, 2011; Morgan, 2009; Tashakkori & Creswell, 2007).

The seventh characteristic refers to pragmatism. According to Creswell (2009, pp10-11), pragmatism provides a philosophical basis for mixed methodology because:

- Pragmatism is not committed to any one system of philosophy and reality. This applies to mixed methods research in that inquirers draw liberally from both quantitative and qualitative assumptions when they engage in their research.
- Individual researchers have a freedom of choice. In this way, researchers are free to choose the methods, techniques, and procedures of research that best meet their needs and purposes.

- Pragmatists do not see the world as an absolute unity. In a similar way, mixed methods researchers look to many approaches for collecting and analyzing data rather than subscribing to only one way (e.g., quantitative or qualitative)
- Truth is what works at the time. It is not based on a duality between reality independent of the mind or within the mind. Thus, in mixed methods research, investigators use both quantitative and qualitative data because they work to provide the best understanding of a research problem.
- The pragmatist researchers look to *what* and *how* to research, based on the intended consequences – where they want to go with it. Mixed methods researchers need to establish a purpose for their mixing, a rationale for the reasons why quantitative and qualitative data need to be mixed in the first place.
- Pragmatists agree that research always occurs in social, historical, political, and other contexts.
- Pragmatists have believed in an external world independent of the mind as well as that lodged in the mind
- Thus, for the mixed methods researcher, pragmatism opens the door to multiple methods, different worldviews, and different assumptions, as well as different forms of data collection and analysis.

It is apparent from the foregoing that the mixed methods paradigm has two significant benefits; one, it enables cross-validation by way of triangulations; and, two, it gains complementary results by using the strengths of one method to improve the other (Denzin, 2010). The rationale for adopting the mixed methods paradigm is quite comprehensively laid out by O’Leary (2010) thus:

There are several reasons why mixed methods approaches are growing ever more common in social science research. Mixed approaches can: help you capitalize on the best of both traditions and overcome many of their shortcomings; allow for the use of both inductive and deductive reasoning; build a broader picture by adding depth and insights to ‘numbers’ through inclusion of dialogue, narratives, and pictures; add precision to ‘words’ through inclusion of numbers tallying and statistics (which can make results more generalizable); allow you to develop research protocols in stages; offer more than one way of looking at a situation; facilitate capturing varied perspectives; and allow for triangulation (O’Leary, 2010 pp.127-128)

The attributes of pragmatism as the anchor for a mixed methods approach to research resonate very well with the present study. In this study, quantitative data on employers’ rating and perceptions of the employability of their employees were collected through questionnaires, while qualitative narratives on the same were generated by interview guides. The data so generated were analyzed concurrently as explained in section 3.12. The concurrent collection, generation, and analysis of data were based on the mixed methods criteria described in section 3.2.2.

### **3.2.1 Mixed Methods and triangulation**

The concept of triangulation that both Denzin (2012) and O’Leary (2010) refer to is at the core of the mixed methods paradigm. Triangulation is a process in which several approaches are used in the study of a single phenomenon. Triangulation is important because, as Cohen, Manion and Morrison (2007, p.141) observe, relying exclusively on a single approach or method “may bias or distort the researchers picture of the particular slice of reality being investigated”. The purpose of triangulation in research is therefore to validate findings generated through the convergence of different perspectives in the study of the same phenomenon. The point at which these perspectives converge is deemed to represent the current reality of and/or about the phenomenon being studied (Creswell & Creswell, 2018).

In typical mixed methods research, triangulation occurs at all or some of the following six levels: time triangulation, space triangulation, data triangulation, theory triangulation, methodological triangulation and researcher triangulation (Cohen, Manion & Morrison, 2018; Dang, 2015). *Time Triangulation* considers the factors of change and process by utilizing either cross-sectional or longitudinal approaches to data generation. Cross-sectional designs are characterized by synchronic reliability which seeks the similarity of data generated at the same time. Conversely, longitudinal designs are characterized by diachronic reliability which seeks the stability of data generated over length of time (Cohen, Manion & Morrison, 2018). The current study tended towards synchronic reliability since the data were generated essentially at the same time.

*Space Triangulation* is a cross-cultural consideration which “attempts to overcome the parochialism of studies conducted within the same sub-culture” (Cohen, Manion & Morrison, 2007, p.142). With space triangulation in mind, this study was conducted in Nairobi City, a cosmopolitan and therefore multi-cultural setting (see section 3.3). Moreover, data were generated from disparate sub-sectors of the service industry. *Data triangulation* uses dissimilar sources of data or different data from the same source to examine the same object (Denzin, 2010). In the current study, numerical (quantitative) data and narrative (qualitative) data were used to investigate employers’ rating and perceptions of the employability of university graduates, and to determine the implications of these rating and perceptions on university curricula in Kenya.

*Theory triangulation* is characterized in the use of more than one theory to underpin a single study. The current study, as section 1.9 of chapter one shows, is underpinned by two theoretical models: the Needs Assessment model, and the backwards design

model. *Methodological triangulation* involves multiple quantitative and qualitative methods for investigating the same issue. The advantage of methodological triangulation is that the weakness of one method can be complemented by the strengths of the other (Dang, 2015; Denzin, 2012). The current study involved both quantitative and qualitative methods to address the research questions and the hypothesis. *Researcher triangulation* also known as investigator triangulation, involves multiple researchers working separately but studying the same phenomenon. The nature and scope of the current study did not provide for researcher triangulation.

### **3.2.2 Mixed Methods criteria**

Designing and employing mixed methods procedures in a study is premised on four important criteria. These criteria are: *Timing*, also known as implementation of data collection; *weighting*, also known as the priority given to quantitative and qualitative research procedures; *Mixing*, also known as integration of quantitative and qualitative data; and *theorizing* (Creswell and Creswell, 2018; Hirose and Creswell, 2023)).

*Timing* in mixed methods research refers to the implementation sequence researchers use to generate both quantitative and qualitative data. The existing alternative strategies for timing are the concurrent, where both quantitative and qualitative data are generated at the same time (QUAN↔QUAL), or the sequential, where quantitative data and qualitative data are collected in phases over a period of time. In the sequential, either quantitative data is collected first, followed by qualitative data (QUAN→QUAL), or qualitative data is collected first, followed by quantitative data (QUAL→QUAN) (Creswell, 2009; Creswell, Plano-Clark, Gutman & Hanson, 2003). This study adopted the concurrent implementation strategy (QUAN↔QUAL), where

the questionnaires (QUAN) were administered at the same time as the interviews (QUAL) were conducted.

*Weighting* is the priority a researcher gives to quantitative or qualitative procedures and data in a particular study. In weighting, the researcher has three options: one, the researcher may give equal weight to both quantitative and qualitative data (QUAN+QUAL); two, the researcher may give more weight to quantitative data and subordinate the qualitative data (QUAN+qual); three, the researcher may give more weight to qualitative data and subordinate the quantitative data (QUAL+quan) (Creswell, 2009; Creswell, Plano-Clark, Gutman & Hanson, 2003). In this study, equal weight (QUAN+QUAL) was given to both quantitative and qualitative procedures and data. In essence, both the questionnaire (QUAN) and the interview guide (QUAL) sought responses to the same items.

*Mixing* refers to the combination of quantitative and qualitative procedures and data, and the stage at which this takes place in a particular study. According to Creswell (2009), two important questions inform a researcher's mixing decision: *when* does a researcher enact the mixing in a study? And *how* does the actual mixing take place. For the first question, mixing may occur during one, some, or all of the following stages of a study: stating the research questions/hypotheses, during data collection, during data analysis, during interpretation and discussion of findings. For the second question, the nature of the mixing, there are three scenarios: one, the connecting scenario, where data analysis from one phase of research is brought together with data analysis from another phase of the same research; two, the integrating scenario, where both quantitative and qualitative procedures and data in a particular study are merged so that the implementation, analysis, and interpretation are done concurrently; and

three, the embedding scenario, where the focus is on a primary (main) form of data (say qualitative) and the secondary (supporting) form of data (say quantitative) is meant to reinforce the findings from the primary data (Creswell and Creswell, 2018). In the current study, mixing was done during the statement of objectives and their attendant research questions and hypothesis; during data collection, during data analysis and interpretation, and during the discussion of findings. The nature of the mixing was integrative, where the qualitative and quantitative procedures and processes were done concurrently.

*Theorizing* is the final criterion upon which mixed methods research designs are premised. The consideration here is whether a theoretical perspective guides the entire study, and whether this theoretical perspective is explicit or implicit in the study. The current study is guided by two theoretical perspectives: a needs assessment model, through which this study sought to determine whether a discrepancy exists between employers' expectations of the employability of university graduates and the employers' rating and perceptions of the actual employability of their university graduate employees, and the backwards design model, through which this study purposed to establish the curriculum implications of the employers' rating and perceptions of the employability of their university graduate employees. These theoretical models are comprehensively explained and illustrated in chapter one (section 1.9).

### **3.3 The Study Setting**

This study was conducted in the city of Nairobi. Nairobi is the largest and most cosmopolitan urban center in Kenya, with an estimated population of over four million people. The city serves as both the administrative and the commercial and

industrial capital of Kenya. As a result, Nairobi has the single largest concentration of university graduate employees in Kenya. Furthermore, most of the service sector firms and organizations in Kenya are headquartered in Nairobi (ROK, 2015). This means that the target population for this study was found in Nairobi. This is the reason why Nairobi was deemed to be the ideal setting for this study.

### **3.4 The Target Population**

The target population for this study comprised all employers in service sector firms/organizations in Nairobi. For the purposes of this study, an employer is specifically defined as a Human Resource Manager or any other officer who manages the human resource function in a service sector firm/organization. The service sector was relevant to this study because it is the single highest provider of wage employment and the most important source of Gross Domestic Product (GDP) growth in Kenya (Awiti, et al., 2019; Africa Development Bank, 2013; Institute of Economic Affairs, 2010; KIPPRA 2013; Republic of Kenya, 2013; Riungu, 2010; World Bank 2012).

The Service sector is delineated by the General Agreement on Trade in Services (GATS), a treaty of the World Trade Organization (WTO), to which Kenya is a signatory (Njoroge, 2008). The GATS covers all traded services except those provided by the government. These services are classified into twelve (12) broad sector clusters as follows:

1. Business services (including professional services)
2. Communication services
3. Construction and related engineering services
4. Distribution services

5. Educational services
6. Environmental services
7. Financial services
8. Health related and social services
9. Tourism and travel related services
10. Recreational, cultural and sporting services
11. Transport services
12. Other services

A comprehensive version of this list, which includes all the sub-sectors under each sector cluster, may be accessed and downloaded from the World Trade Organization website. The URL is: [http://tsdb.wto.org/Includes/docs/W120\\_e.doc](http://tsdb.wto.org/Includes/docs/W120_e.doc)

Using the comprehensive list as a guide, an online search was done in the official yellow pages of the Kenya Postel directory. The website URL is [www.yellowpageskenya.com](http://www.yellowpageskenya.com). The Kenya Postel Directory was chosen as the source of this information because it was the only source that had a comprehensive list which included both the physical location and contact details of the targeted organizations. The search results revealed that there are over 10,000 service sector organizations in Nairobi. However, it was realized that there are a number of firms which have multiple listings across the sub-sectors. For the purpose and scope of this study, 9639 organizations were identified as being in the service sector. These 9639 organizations translate to a population of 9639 employers. This was deemed to be the target population for this study.

For purposes of space and data triangulation, the study further targeted umbrella organizations to which the individual employers belong and documents that speak to

the objectives of this study. The umbrella organizations that were targeted were the Federation of Kenya Employers (FKE), the Kenya National Chamber of Commerce and Industry (KNCCI), and the Kenya Private Sector Alliance (KEPSA). From each of these organizations, an official whose duties are relevant to the purpose of this study was targeted and selected as explained in section 3.5 below.

For Document Analysis, the study targeted official policy documents and research reports authored by organizations reputed to be authorities on issues of employability. The documents were searched online and a final sample was selected as explained in section 3.5 below.

### **3.5 Sample size and Sampling procedure**

Sample size is a term used in research to refer to the number of individuals included in a given study to represent a target population. In studies such as the present one, the sample size is arrived at through mathematical formulae, the most common of which is Andrew Fischer's formula (Jung, 2014). Currently it is no longer necessary to manually employ the formula as there are many online sample size calculators based on such formulae. Some of these online calculators are presented in section 3.5.1.

Sampling procedure refers to the decision-making process that determines how the sample will be selected and processed. The sampling procedure for this study is explained in section 3.5.2.

#### **3.5.1 Sample size**

As indicated in section 3.4 above, the target population of this study was 9639 service sector employers in Nairobi, and three umbrella organizations. For the purposes of collecting quantitative data, and because all the 9639 employers could not feasibly be

included in the study, it was necessary to work with a sample population to represent the 9639. To obtain this sample population, a sample size had to be determined.

The sample size for this study was calculated using the Sample Size Calculator, a public service of The Survey System version 12.0, which is a survey research software designed by Creative Research Systems of California, USA. The calculator is available at <https://surveysystem.com/sscalc.htm#one>

The parameters used in the calculation of the sample size and the calculated sample size are indicated in table 3.1 below:

**Table 3.1: Sample size calculation**

Population	9639
Confidence level	95%
Confidence interval	5%
Calculated sample size	369

In order to confirm the validity of this calculated sample size, the same parameters were fed into two other sample size calculating engines; one, SurveyMonkey, available at <https://www.surveymonkey.com/mp/sample-size-calculator>; two, Raosoft Inc. available at [www.raosoft.com/samplesize.html?nosurvey](http://www.raosoft.com/samplesize.html?nosurvey). Both produced the same result, a sample size of 369.

In line with the mixed methods procedures and for the purpose of triangulation, it was necessary to generate qualitative data. To achieve this, one representative from each of the three umbrella organizations to which service sector employers belong (The Federation of Kenya Employers, the Kenya Private Sector Alliance, and the Kenya National Chamber of Commerce and Industry) was selected to be a Key Informant Interviewee. Thus the total study population was 372. Table 3.2 below shows the sampling frame and the sample size:

**Table 3.2: Sampling frame and Sample size**

Target population for questionnaires	9639
Target population for interviews	3
Study population for questionnaires (sample size)	369
Study population for interviews (census)	3
<b>Total study population</b>	<b>372</b>

For Document Analysis, an online search yielded 36 documents that were related to this study. From these 36 documents, a total of 20 documents were deemed to be most relevant to the study as explained in section 3.5.2. The 20 documents are listed in table 3.3.

**Table 3.3: Documents for Document Analysis**

<b>Code</b>	<b>Document</b>
D1	British Council (2016). Universities, employability and inclusive development: repositioning higher education in Ghana, Kenya, Nigeria, and South Africa.
D2	Federation of Kenya Employers (2023). Skills needs survey report.
D3	International Labour Organization (2021). Assessment of public employment services and active labour market policies in Kenya.
D4	International Labour Organization (2023). ILO youth country brief: Kenya technical report.
D5	Kenya National Qualifications Authority (2019). Kenya National Qualifications Framework.
D6	Khainga, D. & Mbiti, J. (2018). Employment distribution of youth graduates across sectors in Kenya. Kenya Institute of Public Policy Research and Analysis (KIPPRA), Discussion paper no.214
D7	Republic of Kenya (2013a). Second Medium Term Plan 2013-2017.
D8	Republic of Kenya (2013b). Sessional Paper no. 4 of 2013 on Employment policy and strategy for Kenya.
D9	Republic of Kenya (2014). Basic report of the survey on youth employment in Kenya.
D10	Republic of Kenya (2015b). National youth empowerment strategy 2015-2017: a flagship project of vision 2030 Medium Term Plan II 2013-2017.
D11	Republic of Kenya (2016). National Employment Authority Act NO. 3 of 2016.
D12	Republic of Kenya (2018a). National Education Sector Strategic Plan 2018-2022.
D13	Republic of Kenya (2018b). Third Medium Plan 2018-2022.
D14	Republic of Kenya (2019). Kenya Youth Development Policy.
D15	Republic of Kenya (2020). National Skills Development Policy.
D16	Republic of Kenya (2022). Employer Skills and Occupations Survey (ESOS) basic report.
D17	Republic of Kenya (2023). The Universities Regulations 2023.
D18	Republic of Kenya (2024). Fourth Medium Term Plan 2023-2027.
D19	Samuel Hall/British Council (2017). Youth Employment in Kenya: Literature review.
D20	World Bank (2019). Improving higher education performance in Kenya: A policy brief.

### 3.5.2 Sampling procedures

In order to obtain the study population indicated in section 3.5.1 a concurrent sampling strategy was employed. Concurrent sampling is typified by the combination of quantitative probability and qualitative purposeful sampling procedures (Creswell, 2009). In this study, two sampling techniques were utilized concurrently: one, *systematic sampling* and two, *purposive sampling*. Systematic sampling was used to select the 369 respondents from a target population of 9639 employers. Purposive sampling was used to select the three Key Informant interviewees (KII) from the identified umbrella organizations to which service sector employers belong.

Systematic sampling, a variant of simple random sampling, was used in this study to ensure that all the 9639 employers had an equal chance of being selected and included in the study. It also ensured that the selection and inclusion of any one employer in the study was not influenced by the selection of other employers in the list (Cohen, Manion and Morrison, 2007). To conduct the systematic sampling procedure, the following six steps were undertaken: defining the population, calculating the sample size, listing and numbering each individual entity in the population, calculating the sampling interval, selecting the first entity, and selecting and listing the sample.

To begin with, the target population (N) was defined as the 9639 service sector employers listed in the yellow pages of the Kenya Postel directory as explained in section 3.4 above. The population having been thus defined, the second step in the systematic sampling procedure is calculating the sample size (n). This was done using the Sample Size Calculator, a public service of The Survey System version 12.0, available at <https://surveysystem.com/sscalc.htm#one>. A sample of 369 employers was arrived at as explained in section 3.5.1 above.

The third step in the systematic sampling procedure is to list and number each of the 9639 employers. This was duly done. The next step is to determine the sampling interval. This was done by dividing the target population ( $N=9639$ ) by the sample ( $n=369$ ). This yielded a result of 26.12, which was rounded off to 26. Having determined the sampling interval, the next task was to select the first entity. This was done using a table of random numbers obtained from *A million random digits with 100,000 normal deviates* published by RAND (2001). The randomly selected number was 04805. This meant that first entity in the list of employers would be employer number 4805. This was then the starting point for selecting the 369 employers.

Apart from systematic sampling, purposive sampling was employed in this study. Purposive sampling is applied when a researcher wishes to “access ‘knowledgeable people’, i.e. those who have in-depth knowledge about particular issues, maybe by virtue of their professional role, power, access to networks, expertise or experience” (Cohen, Manion and Morrison, 2007, p. 115). Such knowledgeable people are referred to as key informants. These key informants are defined as “individuals whose role or experiences result in them having relevant information or knowledge they are willing to share with a researcher” (O’Leary, 2010).

For this study, three umbrella organizations to which service sector employers belong, the Federation of Kenya Employers, the Kenya Private Sector Alliance, and the Kenya National Chamber of Commerce and Industry, were identified as the key sources of relevant information. Each organization was visited and requested to provide the researcher access to one officer who would competently provide information on employers’ rating and perceptions of university graduates’ employability. Each of the three organizations provided one such key informant. For

the purpose of this study, the three were then designated ‘Employability Key Informant Interviewee’ (EKII) and coded as EKIIa, EKIIb and EKIIc. These three were deemed adequate so as to avoid saturation of data (O’Leary, 2010).

To obtain a sample for Document Analysis, an internet search was carried out. The scope of the search was narrowed to policy documents and research reports from the Government of Kenya and Regulatory organizations. The key search parameters were: 1) employability policies in Kenya; 2) university curriculum and employability in Kenya; and 3) university – industry linkages in Kenya. The search yielded 36 documents. These documents were then appraised using four criteria namely authenticity, credibility, representativeness, and significance (Bowen, 2009; Morgan, 2022). A final sample of 20 documents (see table 3.4) was obtained from this appraisal process.

### **3.6 Strategies of Inquiry: A Two-Pronged Research Design Approach**

This study is located in the domain of descriptive research. Descriptive research essentially describes and interprets a population, a situation or a phenomenon without manipulating the conditions within which they occur. It involves observations and measurements without experimentation. It is concerned with the what, when, where and how questions, rather than the why question (Cohen, Manion and Morisson, 2017; McMillan and Schumacher, 2014).

From this broad conceptualization of descriptive research this study sought to specify an inquiry approach that would lead to an authentic description of employers’ rating and perceptions of the employability of university graduates, and the implication of such rating and perceptions on the university curricula in Kenya. To achieve this in adherence to the pragmatic underpinnings of this study, a two pronged research

design strategy was adopted thus: one, the *cross-sectional survey design*, which is typically and traditionally associated with quantitative inquiry (Creswell and Creswell, 2018), and a concurrent mixed methods strategy, specifically the *concurrent triangulation design* (Cresswell, Plano Clark, Gutmann, & Hanson, 2003). It is important to note that while these two approaches are defined distinctively here, in the actual conduct of this study they were used concurrently and seamlessly.

### **3.6.1 Cross-sectional Survey Design**

The cross-sectional survey design typically generates data that describe characteristics, trends, perceptions, or opinions of an identified population at a particular point in time (Cohen, Manion and Morrison, 2017; Creswell and Creswell, 2018; McMillan and Schumacher, 2014; O’leary, 2010). The major purpose of the survey design, according to Mills (2024, para.1), is “to gain a greater understanding about individual or group perspectives relative to a particular concept or topic of interest”. This understanding is not only restricted to fact-finding; it may often be the basis for crucial decisions that lead to solutions to societal problems.

Survey research has distinct characteristics that make it attractive to educational research. Cohen, Manion and Morrison (2007) outline fourteen of these characteristics. According to them, a survey usually: Gathers data on a one-shot basis and hence is economical and efficient; represents a wide target population; generates numerical data; provides descriptive, inferential and explanatory information; manipulates key factors and variables to derive frequencies; gathers standardized information; ascertains correlations; presents material that is uncluttered by specific contextual factors; captures data from multiple choice, closed questions, test scores, or observation schedules; supports or refutes hypotheses about the target population;

generates accurate instruments through their piloting and revision; makes generalizations about, and observes patterns of response in, the targets of focus; gathers data which can be processed statistically; relies on large-scale data gathering from a wide population in order to enable generalizations to be made about given factors or variables (Cohen, Manion and Morrison, 2007, p.206)

Indeed, survey research design is commonly and frequently used in educational research. McMillan and Schumacher (2001) suggest that survey research is popular in educational and social science research because of three primary reasons: versatility, efficiency, and generalizability. Surveys are versatile since they can be used to investigate nearly any research problem in the social sciences. Such versatility is germane to the pragmatic orientation of this study, and, concomitantly, the mixed methods paradigm that guided the conduct of this study. McMillan and Schumacher describe this versatility thus:

Many doctoral dissertations use surveys; state departments of education use surveys to determine levels of knowledge and to ascertain needs in order to plan programs; schools use surveys to evaluate aspects of the curriculum or administrative procedures; governmental agencies use surveys to form public policy; colleges of education use surveys to evaluate their courses and programs. Much of the use of surveys is for practical purposes (p.305)

In terms of efficiency, survey research is popular “because credible information can be collected at a relatively low cost” and also “because data on many variables can be gathered without substantial increases in time or cost” (ibid). A survey can reach a large number of respondents in a relatively short time. The survey design is therefore preferred for this study because it is widely viewed as very efficient in collecting information about people’s perceptions; that is, what they think or feel about a given issue (O’leary, 2010). This resonates with the current study which sought to survey

service sector employers' perceptions and rating of the employability of university graduates.

Versatility and efficiency notwithstanding, perhaps the one aspect of survey research that makes it very attractive is generalizability or universality (Cohen, Manion and Morrison, 2007). In a survey, relatively small samples can be selected from a larger population in ways that permit generalizations to the population. "In fact, surveys are often the only means of being able to obtain a representative description of traits, beliefs, attitudes, and other characteristics of the population" (McMillan and Schumacher, 2001, p.305). Generalizability was critical in this study. Since the 10,000 listed service sector employers could not all be accessed to participate in the study, a representative sample was used as indicated in sections 3.2 and 3.3 above.

In sum, due to the foregoing discussion on versatility, efficiency and generalizability as pillars of survey research design, the design was deemed most appropriate for the present study. The justification for this decision was based on the fact that the cross-sectional survey research design could reach a large number of respondents in a relatively short time and with minimal cost. Also, the design could represent an even larger population, thus ensuring generalization. Further, the design could generate standardized, quantifiable, empirical data that can pass the test of credibility. Moreover, the design could generate qualitative data through the use of open-ended questions and interviews, hence lending itself for use in the mixed methods paradigm that guided this study.

### **3.6.2 Concurrent Triangulation Design**

The concurrent triangulation design is the most commonly used of the six major mixed methods research design models identified by scholars (Cresswell, Plano Clark,

Gutmann and Hanson, 2003; Creswell and Creswell, 2018). The five other designs are: the sequential exploratory design, the sequential explanatory design, the sequential transformative design, the concurrent nested design and the concurrent transformative design (Creswell, 2009).

The concurrent triangulation design is characterized by the concurrent collection of quantitative (QUAN) and qualitative (QUAL) data, done during a single phase of a study. This is then followed by the comparison of the two databases to determine if there is convergence, divergence, or discrepancy in the findings of the study. Concurrent triangulation is the preferred design when a researcher wishes to employ different methods in seeking “to confirm, cross-validate, or corroborate findings within a single study” (Creswell, Plano Clark, Gutmann and Hanson, 2003, p.183).

In the current study a quantitative instrument, the ‘Employability Rating and Perception Questionnaire for Employers’ (ERPEQUE) and two qualitative ones, the ‘Employability Key Informant Interview Guide’ (EKIIG) and the ‘Employability Document Analysis Guide’ (EDAG) were used to collect data. These instruments will be discussed in detail in section 3. 7.

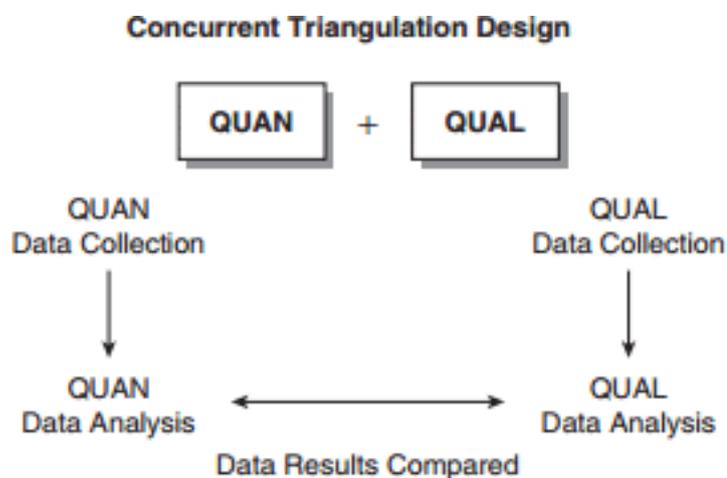
With regard to the mixed methods criteria of Timing, weighting and mixing discussed in section 3.2.2 above, Creswell (2009) explains the concurrent triangulation design procedures thus:

In this approach, the quantitative and qualitative data collection is concurrent, happening in one phase of the research study. Ideally, the weight is equal between the two methods, but often in practice, priority may be given to one or the other. The mixing during this approach, usually found in an interpretation or discussion section, is to merge the data (i.e., transform one type of data to the other type of data so that they can easily be compared) or integrate or compare the results of two databases side by side in a discussion. This side-by-side integration is often seen in published mixed methods studies in

which a discussion section first provides quantitative statistical results followed by qualitative quotes that support or disconfirm the quantitative results (Creswell, 2009, p. 213)

The current study was conducted in line with this side-by-side integration concept (Creswell, 2009). In this study, quantitative results, generated from the data collected through the questionnaire (ERPEQUE) were presented first, followed by qualitative quotes from the data collected through the Employability Key Informant Interview Guide (EKIIG) and the Employability Document Analysis Guide (EDAG). The data analysis procedure will be presented in detail in chapter 4.

This conceptualization of the concurrent triangulation design is diagrammatically presented in figure 3.1 below:



**Fig. 3.1 The Concurrent Triangulation Design (Creswell, 2009)**

### **3.7 Research Instruments**

This study adopted a dual research design approach incorporating cross-sectional survey and concurrent triangulation which determined the choice and design of the research instruments. The research instruments employed in this study were a questionnaire for the quantitative (QUAN) aspects and, for complementarity and triangulation, an interview guide and a document analysis guide for the qualitative (QUAL) aspects of the study.

### **3.7.1 The Questionnaire**

A questionnaire is a research instrument which is designed to elicit responses from each individual in the study population through standardized and uniform pre-determined questions. The questionnaire is a cheap and effective way of reaching a large population such as the one that this study targets. For any particular study, the questionnaire may be adopted and customized for use from an already existing tool, or it may be custom designed specifically for the study in question.

For the current study, a questionnaire was custom designed and named 'Employability Rating and Perception Questionnaire for Employers' (ERPEQUE). The ERPEQUE targeted the 369 sampled employers in the service sector as explained in section 3.5.1. It sought responses on these employers' rating and perceptions of the employability of the university graduates employed in their organizations. The questions were based on the objectives of this study as indicated in chapter one.

The ERPEQUE was structured to contain mainly closed-ended questions, with a few open-ended ones. The closed-ended question items were of different types. A few of them were dichotomous, intended to elicit either YES or NO answers. Some other questions were multiple choice items which provided a range of choices "designed to capture the likely range of responses to given statements" (Cohen, Manion and Morrison, 2007, p. 323). The majority of the items were structured using a rating scale, specifically the Likert five-point rating scale. The detailed questionnaire (ERPEQUE) is shown in Appendix A.

### **3.7.2 The Interview Guide**

For this study, an interview guide which targeted the three key informants purposively sampled as explained in sections 3.5.1 and 3.5.2 was designed and named

“Employability Key Informant Interview Guide” (EKIIG). The EKIIG sought responses from the interviewees on the same items that were in the ERPEQUE in line with the objectives of this study and the research questions in chapter one. Though the EKIIG was structured, there was room for further clarification and probing during the actual interviews. The detailed interview guide (EKIIG) is shown in Appendix B

### **3.7.3 The Document Analysis Guide**

For purposes of triangulation and augmentation, this study also generated data from various written documents. According to Creswell (2013), documents for analysis in qualitative studies include public publications such as newspaper articles, published research reports, public policy publications, and other forms of formal written communication from recognized authorities. For the purposes of this study, 20 documents were selected as explained in sections 3.5.1 and 3.5.2. To guide this documentary analysis process, an Employability Document Analysis Guide (EDAG) was designed and applied. The EDAG was essentially a checklist of the thematic areas emanating from the stated objectives of this study and their concomitant research questions and hypothesis. The detailed EDAG is shown in Appendix C.

### **3.8 Quality Assurance in Mixed Methods Research: Legitimation of the Study**

In purely quantitative or qualitative approaches there are always definite and distinct strategies for determining whether the instruments and procedures employed in a study adhere to certain quality conventionalities in established research traditions. The same concerns obtain in mixed methods approaches. Essentially, the argument here is that:

All studies, regardless of goals or even their paradigmatic positioning, need to consider whether: subjectivities have been managed; methods are approached with consistency; ‘true essence’

has been captured; findings have broad applicability; and, finally, whether research processes can be verified (O'Leary, 2010, p.114)

These considerations are the indicators of a study's credibility and integrity and they cut across the quantitative and qualitative divide. These indicators are referred to by well-defined terminology especially in quantitative research. Traditionally, quantitative researchers, in keeping with positivist and/or post-positivist perspectives, consider the validity, reliability, objectivity and generalizability of research instruments, procedures and results so as to determine the credibility of a given study (Cohen, Manion & Morrison, 2017; Teddlie & Tashakkori, 2003).

Qualitative researchers, on the other hand, perceive the world and reality through constructivist and interpretivist lenses. They therefore eschew the terminologies that characterize quantitative research. There is a proliferation of terminologies that are acceptable to and used by qualitative researchers in seeking to establish the credibility of research. Some of these terms include trustworthiness, neutrality, credibility, transferability, authenticity, dependability, auditability, and confirmability (Creswell and Cresswel, 2018; O'Leary, 2010; Teddlie & Tashakkori, 2003).

Mixed methods researchers, who have to straddle both the quantitative and the qualitative research spaces, are often faced with a terminology dilemma when referring to research credibility and integrity. This terminology dilemma is often manifested when mixed methods researchers assume a juxtaposition stance, where they place quantitative and qualitative terminologies side by side in order to describe and explain the credibility and integrity of a given study. A fitting illustration of this juxtaposition stance is O'Leary's (2010) credibility indicators which are essentially a checklist for ensuring the credibility and integrity of an entire study, from its conception to its conclusion. This checklist distinguishes between quantitative and

qualitative terminologies as indicators of the credibility of research processes and procedures. Table 3.4 below outlines these credibility indicators as conceptualized by O'Leary (2010).

**Table 3.4: Credibility indicators by issues and paradigm**

<b>'Positivist' indicators (Quantitative)</b>	<b>'Post-positivist' indicators (Qualitative)</b>
<b>Have subjectivities been acknowledged and managed?</b>	
<i>Objectivity</i> – conclusions based on observable phenomena; not influenced by emotions, personal prejudices, or subjectivities	<i>Neutrality</i> – subjectivities recognized and negotiated in a manner that attempts to avoid biasing results/conclusions Subjectivity with transparency – acceptance and disclosure of subjective positioning and how it might impact on the research process, including conclusions drawn
<b>Has 'true essence' been captured?</b>	
<i>Validity</i> – concerned with truth value, i.e. whether conclusions are 'correct'. Also considers whether methods, approaches, and techniques actually relate to what is being explored	<i>Authenticity</i> – concerned with truth value while recognizing that multiple truths may exist. Also concerned with describing the deep structure of experience/phenomenon in a manner that is 'true' to the experience
<b>Are methods approached with consistency?</b>	
<i>Reliability</i> – concerned with internal consistency, i.e. whether data/results collected, measured, or generated are the same under repeated trials	<i>Dependability</i> – accepts that reliability in studies of the social may not be possible, but attests that methods are systematic, well documented, and designed to account for research subjectivities
<b>Are arguments relevant and appropriate?</b>	
<i>Generalizability</i> – whether findings and/or conclusions from a sample, setting, or group are directly applicable to a larger population, a different setting, or to another group	<i>Transferability</i> – whether findings and /or conclusions from a sample, setting or group lead to lessons learned that may be germane to a larger population, a different setting, or another group
<b>Can the research be verified?</b>	
<i>Reproducibility</i> – concerned with whether results/conclusions would be supported if the same methodology was used in a different study with the same/similar context	<i>Auditability</i> – accepts the importance of the research context and therefore seeks full explication of the methods to allow others to see how and why the researchers arrived at their conclusions
<b>Have research participants been treated with integrity?</b>	
<i>Legality</i> – concerned that the research process is not in breach of the law, including any obligation to report illegal activities that researchers may come to know in the process of their research	
<i>Morality</i> – centres on the societal norms that should act to protect research participants. These norms include conscientious decision making, equity, and honesty through full disclosure	
<i>Ethicality</i> – refers to a professional 'code of practice' designed to protect the researched from unethical process, and in turn protect the researcher from legal liabilities. Key ethical considerations include informed consent, causing no harm, and a right to privacy	

Source: Zina O'Leary (2010, p. 43)

### 3.8.1 Legitimation of the study

To solve this terminology dilemma, mixed methods researchers are urged “to adopt a common nomenclature transcending the separate qualitative and quantitative orientations” (Teddlie and Tashakkori, 2003. p.12). It is on this basis that Onwuegbuzie & Johnson (2006) suggest that the appropriate nomenclature for mixed methods research validity and trustworthiness is *legitimation*. Legitimation captures a bilingual nomenclature (Teddlie & Takkashori, 2003) which comprehensively encompasses and addresses all considerations and concerns about research quality across the quantitative and qualitative continuum (Onwuegbuzie & Johnson, 2006). It is important to note here that “legitimation in mixed research, rather than being viewed as a procedure that occurs at a specific step of the mixed research process, is better conceptualized as a continuous, iterative, interactive and dynamic process (Onwuegbuzie, Johnson & Collins, 2011, p.1253).

Legitimation is therefore a departure from the traditional notion, commonly characteristic of many research theses, of narrowing concerns about quality and credibility to the validity and reliability of data collection instruments (Cohen, Manion and Morrison, 2017). In line with the pragmatist orientation and the mixed methods paradigm of this study, legitimation was adopted as the appropriate process for assuring quality and credibility in the study.

Legitimation is concerned with the inference quality of a study, and specifically with quality meta-inferences. Inference quality is a generic concept that examines the quality and validity of conclusions that emanate from the findings of a mixed methods research (Venkatesh, Brown and Sullivan, 2016). Meta-inferences are statements, narratives or conclusions about a phenomenon which are drawn from a study in which

quantitative and qualitative approaches have been integrated (Creswell, 2009; Teddlie and Tashakkori, 2003). It is the quality of meta-inferences elicited by various legitimization types that ultimately indicates the overall quality and credibility of a given study.

As a comprehensive research quality assurance process, legitimization is characterized by a typology of nine legitimization types first propounded by Onwuegbuzie and Johnson (2006). These legitimization types are: sample integration legitimization, inside – outside legitimization, weakness minimization legitimization, sequential legitimization, conversion legitimization, paradigmatic legitimization, commensurability legitimization, multiple validities legitimization and political legitimization. This typology was adopted as the legitimization framework for the current study. Table 3.5 below illustrates this framework:

**Table 3.5: Mixed methods research legitimization types indicators**

<b>LEGITIMATION TYPE AND DESCRIPTION</b>	<b>LEGITIMATION INDICATORS IN THE PRESENT STUDY</b>
<p><b>Sample integration legitimization</b> This refers to the extent to which the relationship between the QUAN and QUAL sampling designs yields quality meta-inferences (Onwuegbuzie &amp; Johnson, 2006)</p>	<ul style="list-style-type: none"> <li>• Both systematic random sampling and purposive sampling were employed concurrently (see section 3.5.2)</li> <li>• Data from the different samples were analyzed concurrently in Chapter 4.</li> <li>• Findings from the data analysis led to integrated conclusions in chapter 5</li> </ul>
<p><b>Inside – Outside legitimization</b> This denotes the degree to which the research accurately presents and utilizes the insider's (qualitative) perspective and the observer's/outsider's (quantitative) perspective to arrive at quality meta-inferences (Onwuegbuzie &amp; Johnson, 2006)</p>	<ul style="list-style-type: none"> <li>• The research conceptualization, design, data collection instruments and procedures, data analysis procedures, and the written thesis were reviewed severally by both the researcher (insider) and the supervisors (outsiders)</li> <li>• The research proposal was critiqued by a panel of scholars (outsiders) in the Department of Curriculum, Instruction and Educational Media at Moi University.</li> </ul>
<p><b>Weakness minimization legitimization</b> This refers to the extent to which the weakness of one approach can be compensated by the strengths from the other approach (Onwuegbuzie &amp; Johnson, 2006)</p>	<ul style="list-style-type: none"> <li>• The study adopted the concurrent triangulation design (see section 3.6.2)</li> <li>• Three modes of data generation were employed in this study: questionnaires (the ERPEQUE), interviews (the EKIIG), and document analysis (the EDAG). In this triangulated approach, the weaknesses of each method were minimized by the</li> </ul>

	complementary strength of the other (see section 3.7)
<p><b>Paradigmatic legitimation</b></p> <p>This is determined by a researcher's explication of the paradigm assumptions that underpin the research, and conducting the research in line with the stated assumptions. It denotes the extent to which the ontological, epistemological and methodological assumptions underlying a study are compatible with the actual conceptualization and conduct of the study (Onweugbuzie &amp; Johnson, 2006)</p>	<ul style="list-style-type: none"> <li>• The philosophical postulation of the present study is comprehensively explained in section 3.1: A pragmatism ontology and epistemology guided the conceptualization, conduct and conclusion of this study</li> <li>• In line with this pragmatism stance, a Mixed Methods Research paradigm was adopted for this study (see section 3.2)</li> </ul>
<p><b>Commensurability approximation legitimation</b></p> <p>This is determined by the extent to which a researcher makes 'Gestalt switches' between the quantitative and qualitative perspectives and integrates the two into a 'broad viewpoint' that will sufficiently illuminate the phenomenon under study so as to yield quality inferences (Johnson and Christensen, 2017)</p>	<ul style="list-style-type: none"> <li>• The concurrent data presentation, and the integrated analysis and interpretation of data in chapter 4 characterizes the 'gestalt switches' between quantitative and qualitative perspectives</li> </ul>
<p><b>Multiple validities legitimation</b></p> <p>This is the extent to which the process of legitimation of a study draws from established quantitative, qualitative, and mixed methods validity, quality, and credibility determination procedures, hence yielding high quality inferences (Onweugbuzie &amp; Johnson, 2006)</p>	<ul style="list-style-type: none"> <li>• For content and construct validity of the data collection instruments, the instruments were availed to two experts in the field of study. They reviewed the instruments and suggested modifications which were incorporated in the final instruments.</li> <li>• For internal validity or credibility of the study, the following actions and/or procedures were undertaken: <ul style="list-style-type: none"> <li>➢ Triangulation – the use of a variety approaches in the study of a single phenomenon. (see section 3.2.1)</li> <li>➢ Peer reviews – the designated supervisors of this study and other competent researchers reviewed the instruments and the written thesis, and their suggestions for improvement were incorporated</li> <li>➢ Saturation – for both the interviews and the document analysis, as much information as possible was sought up to the point where it became repetitive. This is the point of saturation.</li> </ul> </li> <li>• For external validity or transferability, careful sampling (quantitative) and "thick description" (qualitative) were undertaken.</li> <li>• For internal consistency, a pilot study was carried out as explained in Section 3.9</li> </ul>
<p><b>Political legitimation</b></p> <p>This signifies the extent to which the consumers of a mixed methods research value the meta-inferences from both the quantitative and qualitative aspects of the study (Onweugbuzie &amp; Johnson, 2006)</p>	<ul style="list-style-type: none"> <li>• This type of legitimation will be indicated at the end of this study by the value (grade) that the first consumers – the examiners – will assign to the thesis.</li> <li>• It will also be indicated upon dissemination of the study by the value that those in power in curriculum and higher education policy hierarchies will assign to the findings, conclusions and especially the recommendations of this study in terms of adopting them for action.</li> </ul>

### 3.9 Pilot Study

It is conventional that before rolling out a study to the intended population and site, a pilot test should be conducted. A pilot test is essentially an instrument try-out procedure conducted to a small sample whose characteristics are the same or at least similar to those of the actual study population. The pilot study population sample is not part of the main study sample (McMillan and Schumacher, 2014). The pilot test is meant to give the researcher feedback on the reliability of the instrument. Reliability here refers to the extent to which a research instrument yields consistent results on repeated trials. Reliability as an indicator of research quality is a quantitative measure (O'Leary, 2010). This being the case, only the quantitative component of the data generation instruments of this study; that is, the 'Employability Rating and Perception Questionnaire for Employers' (ERPEQUE), was tested for reliability through the pilot study.

There is a school of thought in research which dictates that a pilot study should be conducted using a sample size of at least twenty (20) respondents (McMillan and Schumacher, 2014). On this basis, the pilot study targeted twenty (20) service sector firms/organizations in Eldoret, Kenya. These service sector organizations were randomly selected from twenty-six (26) such organizations which are domiciled in Eldoret. Domiciled here refers to firms/organizations whose head offices, or at least whose human resource and/or recruitment offices are in Eldoret. Having selected the pilot sample, the researcher, in adherence to the research protocols developed for the main study, sought access to the study sites. However, only ten organizations granted the researcher access. Thus only ten Human Resource Managers (HRMs) participated in the pilot study. The researcher personally delivered to each HRM a copy of the

ERPEQUE and agreed with each that he would collect it after one week. All the ten duly filled ERPEQUES were collected after one week.

Since other quality measures concerning the instruments are dealt with in the legitimization of the study (see section 3.8.1), the one test that the ERPEQUE was subjected to after the pilot test was that of internal consistency. Thus the Cronbach alpha test for internal consistency was run using the Statistical Package for Social Scientists (SPSS) version 20. The Cronbach alpha is “generally the most appropriate type of reliability for survey and other questionnaires in which there is a range of possible answers for each item” (McMillan and Schumacher, 2001, p.247). The SPSS automatically calculates the Cronbach alpha coefficient at the click of a button, thus it is not necessary to indicate and explicate formula here (Cohen, Manion and Morrison, 2007). The test yielded an alpha coefficient of 0.86 which, according to Cohen, Manion and Morrison (2007, p. 506), falls in the range of “highly reliable”. The ERPEQUE was therefore adopted for use in the main study.

### **3.10 Ethical, Legal, and Moral Considerations**

Research as a field of practice is regulated by obligations of ethicality, legality and morality (Cohen, Manion and Morrison, 2017; Cresswell, 2009; McMillan and Schumacher, 2001; O’Leary, 2010). *Ethicality* has to do with the ethics that a researcher has to adhere to while undertaking a study. Ethics are the principles or codes of conduct that guide a researcher delineating what is acceptable or allowed and what isn’t during a study. *Legality* has to do with the legal requirements and protocols that have to be adhered to in conduct of research. These are normally stipulated by an authoritative body, which, in most cases, and particularly in this case, is the national government of the country in which the study is to be conducted. *Morality* refers to

the moral obligation of the researcher(s) to respect or be sensitive to the norms, values and culture of the society within which the study is to be conducted. Morality also has to do with conducting the research for the ‘public good’ of the wider society.

This study was guided by the following ethical, legal, and moral considerations and obligations:

- *Informed consent*: The researcher comprehensively explained the nature and purpose of this study to each of the selected respondents and interviewees before asking them to consent to their participation in the study. For the interviews, the researcher informed the participants that the proceedings would be recorded, but they would remain anonymous and confidential. The participants were also informed of their right to refuse to participate and/or even to withdraw from the study at any time. Each participant’s involvement was therefore out of their own volition and without any coercion or inducement or deception whatsoever.
- *Anonymity*: The researcher assured each of the participants and ensured that their identity would neither be revealed to anyone nor be discernible from the data/information given. In the case of interviewees, the participants were coded and the codes remain known only to the researcher.
- *Confidentiality*: The researcher assured each of the participants and ensured that that the information they gave would be held in strict confidence and would be used only for the purpose of this study.
- *Avoidance of harm*: The researcher made sure that the involvement of each participant in this study did not in any way expose them to any form of harm, be it physical or psychological. This was achieved by ensuring that the

participants' involvement in this study did not cause or elicit physical injury, embarrassment, anxiety, resentment or regret, nor did it in any way jeopardize their dignity, job or position at the workplace.

- *Language use:* Throughout the conduct of this study and the writing of this thesis, the researcher was ethically and morally obligated to use language that is non-offensive and that is sensitive and responsive to gender, ethnic, disability, age and cultural diversity. Further, for avoidance of any possibility of this study being misinterpreted or misconstrued, the study provides, in chapter one an operational definition of the key terms and concepts used in this study.
- *Research Authorization:* In adherence to the legal requirements of conducting research in the Republic of Kenya, a research permit was sought and obtained from the National Council of Science, Technology and Innovation (NACOSTI) which authorized the researcher to proceed to field. Once in the field, the researcher sought permission from the management of each of the service sector firms/organizations selected for this study.
- *Dissemination:* At the logical completion of this study, the researcher is legally obligated to surrender copies of this thesis to the government of the Republic of Kenya and to the Moi University Library. This will make the thesis accessible to the public. Furthermore, the procedures and findings herein will be disseminated through publication in journals and other related media, through presentation in conferences, workshops and symposia, and through the researcher's practice as a teacher of curriculum development.

### 3.11 Data Collection Procedures

As indicated in section 3.10 above, a research permit was obtained from the National Council of Science Technology and Innovation (NACOSTI). Consequently, permission was sought and obtained from the respective management office(r)s of the 369 selected service sector firms/organizations and the three umbrella bodies representing employers to undertake the study in their organizations. This process also included obtaining the telephone contacts of the actual respondents and interviewee and seeking their consent to participate in this study. Out of the 369 respondents from whom consent was sought, 364 accepted to participate in the study while five (5) declined. All the three (3) interviewees accepted to participate in the study.

Once permission and consent were thus granted, the ERPEQUE was personally delivered to the respondents in their offices. This exercise took 40 working days (Monday to Friday). Each respondent was requested to fill the ERPEQUE in five (5) working days and then it would be collected on the sixth working day. Out of the 364 respondents, 349 agreed to fill the ERPEQUE within five days, while 15 indicated they would prefer a longer period, hence we agreed on 10 working days, with collection on the eleventh working day. We also agreed with each of the respondents that they would be sent a short message service (sms) reminder on the third working day.

Six working days from the first day of administering the ERPEQUE, collection of the filled instruments began. For this task, the services of two assistants were enlisted. The task of these assistants was simply to pick the filled ERPEQUE from the respondents' offices and bring them to the researcher at the end of the day. Each of the respondents had been duly informed about this arrangement, so the assistants were

accorded the appropriate recognition and treatment. The collection of the filled ERPEQUEs ended 53 working days from the first day of administering them. By this time, 361 of the 364 ERPEQUEs were available for collection. The remaining three (3) ERPEQUEs were deemed non-responses and they were excluded from the study.

For the interviews, each of the three interviews was conducted separately at a venue and during time convenient to each interviewee. As per the convenience of each of the interviewees, two of the interviews were conducted in the respective offices of the interviewees while the third interview was conducted in a hotel of the interviewee's preference. No expense was incurred during this particular interview. The interviews were conducted using the 'Employability Key Informant Interview Guide' (EKIIG). As have already indicated in section 3.10 above, all these interviews were recorded with the consent of interviewees. All the interviews were conducted concurrently with the administration of the ERPEQUE within the aforementioned 40 working days period.

For the data generation using the 'Employability Document Analysis Guide (EDAG)', the selected documents were identified and categorized thematically in accordance with the objectives of the study, and the relevant passages were highlighted using color coding. This process was conducted concurrently with the literature review and also during the administration of the ERPEQUEs and EKIIGs.

### **3.12 Data Analysis**

Both quantitative and qualitative data/information were collected and generated in this study. The quantitative data were analyzed both descriptively and inferentially, while the qualitative information was analyzed thematically. The quantitative and qualitative data analyses were conducted concurrently and the findings were reported

comparatively within the framework of the Concurrent Triangulation design. The detailed presentation, analysis and interpretation of data is in Chapter 4 of this thesis.

Table 3.6 below presents a summary of the data analysis.

**Table 3.6: Summary of data analysis**

Objective	Data type	Type of analysis	Presentation/ Reporting
To document service sector employers' preferences when recruiting entry-level university graduate employees.	Quantitative Qualitative	Frequency Percentages Thematic analysis	Tables Narrative
To compute a statistical relationship between employers' rating and perceptions of the desirability of specific employability attributes and competencies in their organizations and their rating and perceptions of their graduate employees' actual employability attributes and competencies	Quantitative Qualitative	Frequency Percentages Means t-test Thematic analysis	Tables Narrative
To appraise the involvement of the service sector in university education in Kenya	Quantitative Qualitative	Frequency Percentages Thematic analysis	Tables Narrative
To ascertain the implications of the employers' rating and perceptions of the employability of university graduates on university curricula in Kenya.	Qualitative	Thematic analysis	Narrative

### 3.13 Chapter summary

This chapter has explained in detail the methodology and research design used in this study. The study was underpinned by a pragmatist ontological and epistemological stance which led to the adoption of a mixed methods research paradigm. Systematic random sampling and purposive sampling were employed to select the study population. The study was guided by a two-pronged research design approach appropriating the cross-sectional survey design and the concurrent triangulation design. Data for this study were collected using an 'Employability Rating and Perception Questionnaire for Employers' (ERPEQUE) for quantitative data, and an

‘Employability Key Informant Interview Guide’ (EKIIG) and an ‘Employability Document Analysis Checklist’ (EDAG) for qualitative data. These data collection instruments were duly subjected to legitimation and, for the ERPEQUE, reliability testing. The chapter has also explained the ethical, legal and moral obligations that the study considered and adhered to. There is also a description of the data collection and data analysis procedures.

## **CHAPTER FOUR**

### **DATA PRESENTATION, ANALYSIS, INTERPRETATION AND DISCUSSION**

#### **4.1 Introduction**

This chapter deals with presentation, analysis, interpretation and discussion of the research findings. The purpose of this study was to investigate service sector employers' rating and perceptions of the employability of university graduates and to determine the implications of the same on university curricula. The study objectives listed below formed the thematic categories along which the data from the ERPEQUE, EKIIG and EDAG were presented, analyzed, and discussed in this chapter:

1. To document service sector employers' preferences when recruiting entry-level university graduate employees
2. To compute a statistical relationship between employers' rating and perceptions of the desirability of specific employability attributes and competencies in their organizations and their rating and perceptions of their graduate employees' actual workplace attributes and competencies
3. To appraise the involvement of the service sector in university education in Kenya
4. To ascertain the implications of the employers' rating and perceptions of the employability of university graduates on university curricula in Kenya

Data generated for each of these objectives were presented, analyzed and discussed concurrently in line with the "side-by-side integration" approach of the Concurrent

triangulation design that was adopted in this study. This design is explained in detail in Chapter 3, section 3.6.2.

#### **4.2 Response Rate**

The selected sample population for this study comprised of 369 questionnaire respondents drawn from Human Resources Managers of service sector organizations and three (3) key informant interviewees drawn from umbrella bodies representing employers. However, out of the 369 questionnaire respondents, five declined to participate in the study while three did not return the questionnaire, thus 361 respondents actually participated in this study. This is a response rate of 97.83% which was deemed high enough to provide an accurate and reliable representation of the study population. For the key informant interviewees, all the three participated in the study, yielding a response rate of 100%.

#### **4.3 Service sector employers' preferences when recruiting entry-level university graduate employees**

In line with the first objective of this study, the first research question, 'which institutions and recruitment channels do service sector employers prefer when selecting university graduates for entry level positions in Kenya?' was posed. To answer this question, the ERPEQUE, EKIIG and EDAG sought responses on three items: the preferred minimum entry level qualifications of the graduates, the preferred recruitment channels, and the preferred universities from which to recruit graduate employees.

### 4.3.1 Minimum Entry Level Qualification

The respondents were asked to state the preferred minimum entry level qualification for university graduates joining their firm. The ERPEQUE responses are presented in Table 4.1.

**Table 4.1: Minimum entry level qualification for graduate employees**

<b>Minimum entry-Level qualifications</b>	<b>Frequency</b>	<b>Percent</b>
Bachelor's degree in any discipline	146	40.4
Bachelor's degree in a specific discipline	113	31.3
Bachelor's degree plus some postgraduate qualifications	16	4.4
Bachelor's degree plus professional qualification e.g. CPA	40	11.1
Bachelor's degree plus some relevant work experience	46	12.7
<b>Total</b>	<b>361</b>	<b>100.0</b>

The data in Table 4.1 indicates that the most preferred minimum entry-level qualification by employers is a Bachelor's degree in any discipline at 40.4 % (146), while the second most preferred, at 31.3% (113) was a Bachelor's degree in a specific discipline. The other three qualifications are not preferred by a majority of the employers.

This preference for a Bachelor's degree in any discipline was also indicated by all the three respondents to the EKIIIG. Their responses are presented below:

*Employers, especially in the service sector, are increasingly viewing a degree, any degree, as the threshold for considering an applicant for recruitment. It doesn't really matter what the specialization is. Possession of a degree says I have the ability to learn, to manage myself and grow. (EKIIa)*

*A majority of our members have no particular preference for a job specific degree when recruiting fresh university graduates. However, those who insist on a job specific degree are usually looking for employees to fill technical or highly specialized positions. (EKIIb)*

*A Bachelor's degree is just an indicator that the candidate an employer is looking for has the intelligence and exposure to adapt to the working environment. The degree gets a candidate to be shortlisted for interview. Most employers rarely dwell on the degree during the interview. They are more interested in who the candidate*

*really is and what he or she can actually deliver if employed.*  
(EKIIc)

In response to the EDAG, four documents (D1, D2, D5 & D6) directly addressed the issue of minimum entry level qualifications of graduate employees. In all these documents there is consensus that an undergraduate degree is the basic entry point into the workplace for most professional and technical occupations in the workplace. More specifically, it is asserted that employers in Kenya perceive “the quality of education and training received by graduates not just in terms of the mastery of content exhibited, but also in terms of other attributes not directly related to the subject content” (D1, p.49). This means that for employers, the accent is not on the degree specialty, but on the possession of a degree. This is congruent with the findings from the ERPEQUE and the EKIIG.

This shift toward employers’ non-preference of discipline specific bachelor’s degrees is indeed a perceptible trend across the world (Andrews and Higson, 2008; Artess, et al., 2017; Harvey, 2000; Harvey and Knight, 2003; Holmes, 2000; Karim, 2015; Lowden, et al., 2011; Nawaz, 2013; Pollard et al, 2015; Smith and Ridoutt, 2007). It is commonly being observed that “most employers see a degree as a proxy for achieving a certain level of competence that represents the minimum standard that they are seeking in a new recruit” (Lowden, et al., 2011, p.5). Harvey and Knight (2003) identify ‘knowledge of the subject or related profession’ as one of the personal attributes for employability, but they are quick to clarify thus:

Often, though, this is not seen as particularly important in its own right by employers – rather they see it as a vehicle for the development of other attributes. In some areas, such as medicine and engineering, subject knowledge is regarded important but the key is the understanding of core principles rather than specific knowledge. Given the fragmentation of disciplines, the vast amount of knowledge and information in every field and the rapid rate of

change, knowing how to find out things is more important than knowing things. (p.7)

In a study on graduates' employability in the United Kingdom, Karim (2015) comes to the conclusion that "graduate recruiters look beyond qualifications and look for qualities that prepare [graduates] to adjust to the pressures of their job in an uncertain and competitive business environment." Hence, "the recruiters seek for graduates who are motivated, flexible, pragmatic, dynamic, responsible, intellectually aggressive and able to work independently and in a team" (p. 18).

#### 4.3.2 Preferred recruitment channels for selecting university graduates

The respondents were also asked to state which recruitment channels they prefer when selecting university graduates for appointment in their firm. The responses from the ERPEQUE are presented in Table 4.2.

**Table 4.2 Preferred recruitment channel for selecting university graduates**

<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
Through the advertisement-application-interview-recruitment process	200	55.4
Job seekers come by themselves to the firm's premises	4	1.1
Through employment agencies	49	13.6
Through university careers services	12	3.3
Through the internship-recruitment process	96	26.6
<b>Total</b>	<b>361</b>	<b>100.0</b>

From table 4.2 it is evident that the most preferred recruitment channel according to employers is the advertisement-application-interview-recruitment process which is used by more than half (55.4%) of all the respondents. The second most preferred channel is the internship-recruitment process (26.6%), followed by sourcing recruits through employment agencies (13.6). The other two channels, recruiting "through university careers services" (3.3%) and recruiting 'job seekers who come by themselves to the firm's premises' (1.1%) are apparently not common used by employers. The significantly low usage of the recruitment through university careers

services channel is a telling indictment of the poor nexus between employers and universities in Kenya. Elsewhere in the world, this is a vibrant and popular channel for recruiting fresh graduates (Breugh, 2009; Pollard, et al., 2015; Rehman and Mazhar, 2016).

On this item, the EKIIG elicited the following concurring responses from the three key informant interviewees:

*Recruitment in Kenya is still rather conservative. Most employers advertise positions in mainstream media, then they go through a rigorous process of elimination through shortlisting applicants who appear for formal interviews. The successful candidate or candidates depending on the number required are then hired on the basis of performance in the interviews. (EKIIa)*

*Many employers prefer to conduct face to face interviews which lead to employment. Lately, some employers are taking the on-line interview route. Usually the jobs are advertised in newspapers or in the company websites or both. (EKIIb)*

*Different employers use different modes of recruitment depending on their needs. For our members, the variety includes the written application then interview then recruitment process, retention of outstanding students during industrial attachment, and let's be honest, referrals from the high and mighty. We are yet to fully exploit the more creative recruitment methods that are common in the developed world, although locally the telcos are going that direction. (EKIIc)*

The EDAG yielded similar findings. Three documents (D3, D11 & D16) addressed the issue of recruitment channels, and they indicated that the most commonly utilized channels for recruitment were advertisements in social media, official websites of organizations and newspapers, and recommendations from personal contacts. The salient finding from the documents is therefore that employers in Kenya mostly “offer employment promotion through advertisement of jobs” (D3, p.13).

Most of the available literature on this item is from the developed world, especially the United Kingdom, the United States of America, and Australia, and, to a lesser

degree, from parts of Asia. The literature identifies traditional channels of recruitment such as newspaper advert-application-interview, outsourcing to employment agencies, direct employment from campus to especially government positions, sourcing through internships and other placements of students in industry through work-experience programs, and ‘factory gate’ recruitment – where jobseekers go by themselves to the firm and get hired (Graduate Recruitment Board, n.d.; Karim, 2015; Rehman and Mazhar, 2016).

There are also new or emerging channels of recruitment such as organizational websites, using social media recruitment campaigns, on-line job boards, on-campus recruiting – which entails either sourcing recruits through university careers services or through campus career fairs (Breaugh, 2009; Dyson, 2020; Graduate Recruitment Bureau, n.d.; Johnson, 2019; Pollard, et al., 2015; Rehman and Mazhar, 2016). Nevertheless, the findings from both the ERPEQUE, the EKIIG, and the EDAG on this item indicate that most employers in Kenya still prefer the traditional channels of recruiting fresh university graduates for employment.

#### **4.3.3 University Graduates Preferred**

The study sought to determine the category of university graduates that the employers preferred when recruiting their entry-level graduate employees. There were four categories in this item; namely, employers who preferred recruiting public university graduates, those who would rather employ private university graduates, those who went for foreign university graduates, and those who had no particular preference when recruiting university graduates. The responses to the ERPEQUE are presented in Table 4.3.

**Table 4.3 University Graduates Preferred**

<b>University Graduates Preferred</b>	<b>Frequency</b>	<b>Percent</b>
Public university graduates	33	9.1
Private university graduates	102	28.3
Foreign university graduates	7	1.9
No particular preference	219	60.7
<b>Total</b>	<b>361</b>	<b>100.0</b>

Table 4.3 shows that the majority of the employers (60.7%) did not indicate a particular preference of the university from which they recruit their employees, meaning they recruit graduates from any university as long as the individual graduate satisfies their criteria for recruitment. On the other hand, 28.3 % of the employers stated that they preferred employing university graduates from private universities while 9.1 % prefer employing university graduates from public universities. Another 1.9% (7) prefers employing university graduates from foreign universities.

The EKIIIG elicited similar and concurring responses from all the three interviewees:

*Some employers would prefer private university graduates to public ones due to the personal confidence levels of the private university graduates, which are relatively higher than those of the public university graduates. However, it is frequently the individual profile of the interviewee rather than the university they attended that will finally convince the recruiters. (EKIIa)*

*As an employer, you are interested in the individual you wish to recruit rather than the university they attended. It is the individual being interviewed, not the university. Of course there could be biases especially depending on which university the interviewer attended, or on the general perception of a given university. Here the bigger, older public universities may to seem have an advantage. But many are the times when a candidate from a small university has outperformed those from the big universities, or a candidate from a private university has outperformed those from public universities. The reverse is also true. So really it is about the individual candidate. (EKIIb)*

*Private universities generally seem to be more in touch with what employers expect from them and they prepare their students accordingly. However, graduates from private universities are still very few, such that the labor force is largely populated with public university graduates. (EKIIc)*

This item on university preferences was addressed by only one document, D1. The finding here is that while there are perceptions of the difference between the graduates of public and private universities, “employers consider not one but a combination of institutional characteristics when recruiting graduates. The majority of employers did not specify which institutional characteristics and the majority were non-committal” (D1, p.48). This is in agreement with the findings of the ERPEQUE and the EKIIG presented above.

A corollary finding from the EDAG is that there is apparently no policy focus on the issue of university preference by employers. The one document that addressed this issue, D1, is a research report. This could be indicative of a possibility that this issue is not deemed significant at policy level in Kenya.

There is the notion that prestigious universities afford their graduates a higher chance of employment (Pollard, et al., 2015; Waihenya 2020), a counter-notion that ultimately it is the individual graduate’s attributes, irrespective of the university they attended, that matter (Karim, 2015; Murray, 2017) and a middle-ground, pragmatic notion that the preference for either university or individual is a function of many factors, including but not limited to the specific job on offer, the alma matter of the interviewer(s), the past experiences of recruiting graduates from a given university, and the existence or lack of institutional links between the university and the employing organization (Oanda and Sifuna, 2016)

Nonetheless, while certain specialized sectors, e.g. engineering and science will still look favorably on graduates from particular institutions, there is a significant leaning, which has also been portrayed by the findings from the ERPEQUE, EKIIG, and

EDAG above, toward unbiased recruitment. Murray (2017) explains that employers “are starting to introduce ‘education blind’ applications, where your school and university are hidden, to prevent any unconscious bias from creeping into the decision making process” (para.9).

#### **4.4 Employer’s Rating of Expected Specific Employability Attributes of University Graduates**

The second objective of this study was to compute a statistical relationship between employers’ rating and perceptions of the desirability of specific employability attributes and competencies in their organizations and their rating and perceptions of their graduate employees’ actual employability attributes and competencies. The first research question corresponding to this objective was: which employability attributes and competencies do service sector employers expect in graduate employees? The specific graduate attributes in question are discussed at length in Chapter two, Section 2.3.2. This item in the ERPEQUE sought not only catalogue the attributes, but also to indicate the level of expectation for each attribute.

The level of expectation was determined on a five point Likert response scale in the ERPEQUE where the responses ranged as follows: *Very Low (VL)*; *Low (L)*; *Average (A)*; *High (H)*; and *Very High (VH)*. For purposes of rating and ranking using means, the responses were assigned values as follows: VL=1; L=2; A=3; H=4; and VH=5. It follows then that the aggregated mean scores per attribute are scored thus: VL=1.0 – 1.4; L=1.5 – 2.4; A=2.5 – 3.4; H=3.5 – 4.4; and VH=4.5 – 5.0. The ERPEQUE responses to this item are presented in Table 4.4.

**Table 4.4 Employers rating of their expectations of the employability of graduates**

Graduate Attribute	VLf(%)	L f(%)	A f(%)	H f(%)	VH f(%)	TOTAL f(%)	MEAN
Specialized/professional/vocational competence	3(0.8)	10(2.8)	30(8.3)	94(26.0)	224(62.0)	361(100)	4.4571
Oral communication competence	0(0.0)	0(0.0)	15(4.2)	60(16.6)	286(79.2)	361(100)	4.7507
Written communication competence	0(0.0)	1(0.3)	16(4.4)	71(19.7)	273(75.6)	361(100)	4.7064
Mathematical competence	4(1.1)	15(4.2)	62(17.2)	99(27.4)	181(50.1)	361(100)	4.2133
Digital competence	0(0.0)	0(0.0)	26(7.2)	87(24.1)	248(68.7)	361(100)	4.6150
Critical thinking and problem solving ability	0(0.0)	2(0.6)	15(4.2)	83(23.0)	261(72.3)	361(100)	4.6704
Self-drive	0(0.0)	1(0.3)	8(2.2)	33(9.1)	319(88.4)	361(100)	4.8560
Ability to work in a team	0(0.0)	1(0.3)	17(4.7)	36(10.0)	307(85.0)	361(100)	4.7978
Integrity	0(0.0)	0(0.0)	16(4.4)	29(8.0)	316(87.5)	361(100)	4.8310
Responsibility	0(0.0)	0(0.0)	14(3.9)	28(7.8)	319(88.4)	361(100)	4.8449
Adaptability	0(0.0)	0(0.0)	12(3.3)	92(25.5)	257(71.2)	361(100)	4.6987
Willingness to learn continuously	0(0.0)	1(0.3)	16(4.4)	61(16.9)	283(78.4)	361(100)	4.7341
Creativity and innovation	0(0.0)	1(0.3)	14(3.9)	57(15.8)	289(80.1)	361(100)	4.7562
Commitment to work	0(0.0)	0(0.0)	12(3.3)	44(12.2)	305(84.5)	361(100)	4.8116
Interpersonal intelligence	0(0.0)	0(0.0)	13(3.6)	63(17.5)	285(78.9)	361(100)	4.7535
Time management	0(0.0)	0(0.0)	7(1.9)	43(11.9)	311(86.1)	361(100)	4.8421
Leadership	0(0.0)	1(0.3)	3(0.8)	41(11.4)	316(87.5)	361(100)	4.8615
Appropriate dressing and personal grooming	0(0.0)	1(0.3)	11(0.3)	85(23.5)	264(73.1)	361(100)	4.6953
Planning and organizational competence	1(0.3)	1(0.3)	16(4.4)	54(15.0)	289(80.1)	361(100)	4.7424

One notable aspect of the responses in Table 4.4 is that employers' expectation for these 19 attributes considered together is in the range of very high (aggregate mean 4.718). This means that generally these attributes are very highly valued and desired by employers. For a clearer picture of how each of the 19 attributes is valued, Table 4.5 presents a rating and ranking of the attributes in descending order.

**Table 4.5: Ranking of employers' rating of attributes expected of graduate employees**

Rank	Graduate Attribute	Mean	Range
1	Leadership	4.8615	Very high
2	Self-drive	4.8560	Very high
3	Responsibility	4.8449	Very high
4	Time management	4.8421	Very high
5	Integrity	4.8310	Very high
6	Commitment to work	4.8116	Very high
7	The ability to work in a team	4.7978	Very high
8	Creativity and innovation	4.7562	Very high
9	Interpersonal intelligence	4.7535	Very high
10	Oral communication competence	4.7507	Very high
11	Planning and organizational competence	4.7424	Very high
12	The willingness to learn continuously	4.7341	Very high
13	Written communication competence	4.7064	Very high
14	Adaptability	4.6987	Very high
15	Appropriate dressing and personal grooming	4.6953	Very high
16	Critical thinking and problem solving ability	4.6704	Very high
17	Digital competence	4.6150	Very high
18	Specialized/technical/vocational competence	4.4571	High
19	Mathematical competence	4.2133	High

While, as has already been pointed out, all the 19 attributes are greatly valued by employers, there are is a specific aspect of the rating in Table 4.5 that is worth further consideration. It is noteworthy that personal attributes such as leadership, self drive, and responsibility are rated highest by employers while competence or skill attributes such as digital competence, specialized/technical/vocational competence, and mathematical competence are rated lowest. What this indicates is that for employers, while all the attributes are important and therefore expected of every employee, personal attributes – the ‘soft skills’ – are more important than technical attributes – the ‘hard skills’.

This preference for personal attributes to technical competencies is explained thus by two of the key informant interviewees:

*An employer seeks an individual that is sure of himself, who works without or at least with minimum supervision, who takes responsibility for his actions and decisions, and who is a positive influence on colleagues at work. Technical skills are also important, yes, but one achieves more as a worker when the personal traits drive the technical skills. (EKIIb)*

*By the time I shortlist you for interview, I have a fairly good idea about your technical skills. These are normally quantifiable and therefore easily documented. Infact, they are mainly the reason you are shortlisted in the first place. During the interview, and for me to hire you, I need to know who are you as a person? How can your personality make your expertise beneficial to the organization? How will you relate with others in the organization? What I need is the person, not the papers. (EKIIc)*

The findings from the EDAG show that four documents (D1, D2, D3, & D16) address the issue of employers' rating of their expectations of employability of the graduates. All the four documents indicate that employers place a higher premium on personal and social skills than on technical skills. More specifically, there is the assertion in one document, D2, that employers mostly demanded "effective communication, critical thinking, and time management" (D2, p.23), and in another, D16, that employers consider the most important skills among technical and professional employees to be communication skills, work ethics, managerial and planning skills, reading and understanding instructions, customer handling skills, teamwork, and the ability to work independently. These employers' expectations are quite similar to those elicited by the ERPEQUE and EKIIG.

This finding that personal attributes are more preferred to technical competence is consistent with trends reported in other studies and is well documented in the literature (Bogonko, 2018; Hetemaj, 2017; Karim, 2015; Martin, Villeneuve-Smith, Marshal and McKenzie, 2008; Nganga, 2020; Onyango, et al., 2018; Wagner, 2010; Waihenya, 2020; Zaharim, Yusoff, Omar, Mohamed and Mohamed, 2009). It is apparent, from the findings of this study and the extant literature on employability that

“hard skills will get you the job, but soft skills will make you stay and excel on the job” (Hetemaj, 2017, para.1).

#### **4.5 Employers’ Rating of the Actual Employability Attributes of Their Graduate Employees**

Having established employers’ rating of desired employability attributes in university graduates, the third next logical step was to determine the service sector employers’ rating of the actual employability attributes of their graduate employees. Hence the second corresponding research question to objective two was: what is the employers’ rating of the actual employability attributes of their graduate employees?

The rating for this item was determined on a five point Likert response scale in the ERPEQUE where the responses ranged as follows: *Very Low (VL)*; *Low (L)*; *Average (A)*; *High (H)*; and *Very High (VH)*. For purposes of rating and ranking using means, the responses were assigned values as follows: VL=1; L=2; A=3; H=4; and VH=5. It follows then that the aggregated mean scores per attribute are scored thus: VL=1.0 – 1.4; L=1.5 – 2.4; A=2.5 – 3.4; H=3.5 – 4.4; and VH=4.5 – 5.0. The ERPEQUE responses to this item are presented in Table 4.4.

**Table 4.6 Employers' responses on actual employability attributes of their graduate employees**

Graduate Attribute	VL f(%)	L f(%)	A f(%)	H f(%)	VH f(%)	TOTAL f(%)	MEAN
Specialized/professional/ vocational competence	17(4.7)	104(28.8)	106(29.4)	99(27.4)	35(9.7)	361(100)	3.0859
Oral communication competence	0(0.0)	15(4.2)	132(36.6)	195(54.0)	19(5.3)	361(100)	3.6039
Written communication competence	7(1.9)	35(9.7)	163(45.2)	147(40.7)	9(2.5)	361(100)	3.3213
Mathematical competence	25(6.9)	74(20.5)	195(54.0)	64(17.7)	3(0.8)	361(100)	2.8504
Digital competence	12(3.3)	31(8.6)	130(36.0)	130(36.0)	58(16.1)	361(100)	3.5291
Critical thinking and problem solving ability	18(5.0)	85(23.5)	168(46.5)	81(22.4)	9(2.5)	361(100)	2.9391
Self-drive??	28(7.8)	156(43.2)	134(37.1)	41(11.4)	2(0.6)	361(100)	2.5374
Ability to work in a team	4(1.1)	38(10.5)	157(43.5)	141(39.1)	21(5.8)	361(100)	3.3795
Integrity	5(1.4)	40(11.1)	173(47.9)	120(33.2)	23(6.4)	361(100)	3.3213
Responsibility	11(3.0)	60(16.6)	162(44.9)	112(31.0)	16(4.4)	361(100)	3.1717
Adaptability	8(2.2)	20(5.5)	196(54.3)	122(33.8)	15(4.2)	361(100)	3.3213
Willingness to learn continuously	12(3.3)	33(9.1)	160(44.3)	122(33.8)	34(9.4)	361(100)	3.3684
Creativity and innovation	24(6.6)	112(31.0)	144(39.9)	71(19.7)	10(2.8)	361(100)	2.8089
Commitment to work	10(2.8)	35(9.7)	169(46.8)	118(32.7)	29(8.0)	361(100)	3.3352
Interpersonal intelligence	19(5.3)	153(42.4)	106(29.4)	80(22.2)	3(0.8)	361(100)	2.7091
Time management	11(3.0)	40(11.1)	146(40.4)	134(37.1)	30(8.3)	361(100)	3.3657
Leadership	11(3.0)	117(32.4)	145(40.2)	67(18.6)	21(5.8)	361(100)	2.9169
Appropriate dressing and personal grooming	3(0.8)	12(3.3)	99(27.4)	173(47.9)	74(20.5)	361(100)	3.8393
Planning and organizational competence	42(11.6)	156(43.2)	92(25.5)	58(16.1)	13(3.6)	361(100)	2.5679

An analysis of Table 4.6 reveals that employers' actual rating of their graduate employees' employability attributes yields an aggregate mean of 3.156 which falls in the range of 'Average'. Specifically, the 19 graduate attributes as rated by the employers are ranked as shown in Table 4.7 below:

**Table 4.7 Ranking of employers' actual rating of graduate employees' attributes**

<b>Rank</b>	<b>Graduate Attribute</b>	<b>Mean</b>	<b>Range</b>
1	Appropriate dressing and personal grooming	3.8393	High
2	Oral communication competence	3.6039	High
3	Digital competence	3.5291	High
4	Ability to work in a team	3.3795	Average
5	Willingness to learn continuously	3.3684	Average
6	Time management	3.3657	Average
7	Commitment to work	3.3352	Average
8	Adaptability	3.3213	Average
9	Integrity	3.3213	Average
10	Written communication competence	3.3213	Average
11	Responsibility	3.1717	Average
12	Specialized/technical/vocational competence	3.0859	Average
13	Critical thinking and problem solving ability	2.9391	Average
14	Leadership	2.9169	Average
15	Mathematical competence	2.8504	Average
16	Creativity and innovation	2.8089	Average
17	Interpersonal intelligence	2.7091	Average
18	Planning and organizational competence	2.5679	Average
19	Self-drive	2.5374	Average

The overall picture portrayed by Table 4.7 is that employers rated the actual employability attributes of their graduate employees much lower, at the aggregate range of 'average', than their expectations of these employees as indicated in Table 4.5, which yielded an aggregate range of 'very high'. Specifically, a salient revelation from Table 4.7 is that, according to employers, two of the top three attributes manifested by their graduate employees, oral communication competence and digital competence, are 'hard skill attributes' which are ranked way below 'soft personal attributes' in the expectations of employers in Table 4.5. Even the highest ranked attribute in Table 4.7, appropriate dressing and personal grooming, is arguably one that can be extrinsically enforced through organizational codes of conduct, and may therefore not be an authentic indicator of an individual's attitude and personality.

It is also noteworthy that the last three attributes in Table 4.7, interpersonal intelligence, planning and organizational competence, and self-drive are personal, 'soft' attributes that rank very highly in the list of employers' expectations presented

in Table 4.5. As a matter of fact, self-drive, which is ranked lowest in Table 4.7, is ranked second highest in Table 4.5

This apparent discrepancy between the rating of employers' expectations of employees' employability and the rating of the actual manifestation of employability by the employees as captured by the ERPEQUE is corroborated by these responses to the EKIIG:

*There is an obvious disparity between what an employer expects from a fresh graduate and what the graduate actually delivers when he gets employed. This is what we have always complained about. Universities are doing us a disservice. We recruit supposedly highly trained graduates from the universities, only for us to end up training them all over again. As we speak, the level of technological infrastructure and technical know-how in private sector firms in Kenya is way far ahead of what even the best endowed local university can boast of. (EKIIa)*

*There is no question about it. Really, what we desire is not what we get. It seems universities have perfected the art of academic spoon-feeding. Students aren't given ample opportunity to discover for themselves and beat new paths. They are content with the beaten paths. They become conformers. They have no personal initiative, nor are they intrinsically motivated to look beyond the horizons that demarcate their immediate world. These are definitely not the kind of employees we require. (EKIIb)*

*Though we sometimes recruit very exceptional graduates, generally, the performance is lower than we expect. And I don't blame the graduates. In my opinion, universities should quickly style up. (EKIIc)*

Using the EDAG, it is evident that there was very high attention given to the issue of employers' rating of the actual employability attributes of their graduate employees. Out of all the 20 documents, 18 (D1, D2, D3, D4, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D18, D19 & D20) addressed this issue. There is congruence across all the documents that there is a mis-match between the expectations of employers and the actual employability of employees. This finding is summarized by two documents thus: that "there is a disconnect between the courses offered in the

higher institutions of learning and the needs in the job market” (D14, p.10), and that “Kenyan employers are finding graduates, male and female alike, are not sufficiently prepared for the workplace” (D19, p.30), because “university students may not be acquiring appropriate skills for the labour market, or acquiring them to the required level” (D19, p.26). A concomitant finding mentioned by EKIIa and by three documents (D8, D15, & D19) is the technological mismatch between industry and training institutions.

The notion that there is a discrepancy between employers’ expectations and employees’ attributes in Kenya is also well documented in the literature (Amimo, 2012; Awiti, et al., 2019; Baron and McCormack, 2024; Bogonko, 2018; FKE, 2018); Kalei, 2014; Kamau & Waudu, 2012; Oanda and Sifuna, 2016; Onyango, et al., 2018; and Rintari, 2017). In order to interrogate the extent of this discrepancy, this study tested the relationship between the employers’ expectations and their rating of actual employee attributes. The next section (4.6) presents the results of this test.

#### **4.6 The Relationship Between Employers’ Rating of their Expectations and Their Rating of the Actual Employability Attributes of their Graduate Employees**

The second objective of this study was to ultimately compute a statistical relationship between the employers’ rating of expected specific employability attributes in the university graduates they would hire and their rating of their graduate employees’ actual employability attributes. To achieve this, a null hypothesis was formulated thus: there is no significant difference between service sector employers’ rating of expected specific employability attributes of university graduates and the employers’ actual rating of these attributes in their graduate employees.

This hypothesis was tested using a paired samples t-test in which the level of significance for the p-value was set at the conventional  $\alpha=0.05$  (Cohen, Manion and Morrison, 2007; McMillan and Schumacher, 2001). There were two sets of responses and their corresponding means for each of the 19 graduate employability attributes. One set was the *employers' rating of expected specific employability attributes of University Graduates*, which is presented in Table 4.4, while the other set was the *employers' responses on actual employability attributes of their graduate employees*, which is presented in Table 4.6. The results of the t-test are presented in Table 4.8 below.

**Table 4.8 Paired samples t-test for the relationship between employers' expectations and actual rating of graduate employees' attributes**

	Competencies	Paired Differences			M1 expected	M2 Actual	T	Df	p*
		Mean discrepancy	Std. Deviation	Std. Error Mean					
1	Self-drive	2.28809	1.06202	.05590	4.8560	2.5679	40.935	360	.000
2	Planning and organizational competence	2.20499	.93516	.04922	4.7424	2.5374	44.799	360	.000
3	Interpersonal intelligence	2.04432	.96795	.05094	4.7535	2.7091	40.128	360	.000
4	Creativity and innovation	1.94737	.99443	.05234	4.7562	2.8089	37.207	360	.000
5	Leadership	1.94460	.98163	.05166	4.8615	2.9169	37.639	360	.000
6	Critical thinking and problem solving	1.73130	.94419	.04969	4.6704	2.9391	34.839	360	.000
7	Responsibility	1.67313	.87469	.04604	4.8449	3.1717	36.344	360	.000
8	Integrity	1.50970	.81686	.04299	4.8310	3.3213	35.115	360	.000
9	Commitment to work	1.47645	.87250	.04592	4.8116	3.3352	32.152	360	.000
10	Time management	1.47645	.90684	.04773	4.8421	3.3657	30.934	360	.000
11	Ability to work in a team	1.41828	.81622	.04296	4.7978	3.3795	33.015	360	.000
12	Written communication skills	1.38504	.84571	.04451	4.7064	3.3213	31.117	360	.000
13	Specialized/technical/ vocational competence	1.37119	1.09831	.05781	4.4571	3.0859	23.721	360	.000
14	Willingness to learn continuously	1.36565	.90942	.04786	4.7341	3.3684	28.532	360	.000
15	Mathematical competence	1.36288	1.01306	.05332	4.2133	2.8504	25.561	360	.000
16	Adaptability	1.35734	.82142	.04323	4.6787	3.3213	31.396	360	.000
17	Oral communication competence	1.14681	.72881	.03836	4.7507	3.6039	29.897	360	.000
18	Digital competence	1.08587	.96370	.05072	4.6150	3.5291	21.409	360	.000
19	Appropriate dressing and Personal grooming	0.85596	.81054	.04266	4.6953	3.8393	20.065	360	.000

Note:  $*\alpha = 0.05$

Table 4.8 indicates that for each of the 19 graduate employability attributes in this study the p-value was lower than the level of significance ( $p < 0.05$ ). What this means is that there is a statistically significant difference between employers' rating of

expected specific employability attributes of University Graduates and their rating of the actual employability attributes of their graduate employees. The results of this t-test therefore do not support the null hypothesis (Cohen, Manion and Morrison, 2007).

This finding that there is a statistically significant difference between what employers expect and what they get from their university graduate employees reinforces the findings and discussion in section 4.5 above. The literature on employability from every part of the world consistently points out that this significant difference does indeed exist (Jaschik, 2015; Kaiser, 2019). In line with the Needs Assessment model that formed part of the theoretical framework of this study, this difference is the discrepancy that the present study sought to investigate and has now determined.

#### **4.7 Service Sector Employers' Involvement in University Education**

The third objective of this study was to establish, from the employers' perspective, the level and nature of involvement of the service sector in university education Kenya. This was meant to interrogate the status of University-Industry Collaboration (UIC) in Kenya. The respondents were asked to state their perception of the level of involvement of the service sector in university education and to state the frequency with which their organization was involved in various types of UIC. The results are as shown in Tables 4.9 and 4.10.

**Table 4.9 Employers' perception of the level of involvement of the service sector in university programs**

<b>Level of involvement</b>	<b>Frequency</b>	<b>Percentage</b>
Very High	3	0.83
High	10	2.77
Average	121	33.52
Low	216	59.83
Very Low	11	3.05
Total	361	100

It is apparent from the results in Table 4.9 that the majority (59.83%) of the respondents in this study perceive the involvement of the service sector in university programs to be low. Cumulatively, more respondents (62.88%) perceive such involvement to be low or very low as compared to the 37.12% who perceive such involvement to be average and above. This finding is consistent with earlier findings by other studies that point to a low incidence of UIC in Kenya (Awiti, et al., 2019; Bogonko, 2018; FKE, 2018; Kalei, 2014, Oanda and Sifuna, 2016; Onyango, et al., 2018; Rintari, 2017). The finding is also in line with the responses elicited by the EKIIG:

*There is little dialogue between universities and employers. Of course there are exceptions, but the truth is the overall trend is bleak. (EKIIa)*

*Generally, universities and employers live worlds apart. Rarely do you see any meaningful interaction between a given university and employers. This is unfortunate. Imagine the wealth that both would create for themselves and their communities if they purposefully came together. (EKI Ib)*

*In Kenya we are still behind in terms of industry collaborating with academia. This is a practice that we need to urgently embrace as a country if we wish to be innovative and productive. (EKI Ic)*

On the issue of employers' involvement in university education, the EDAG yielded findings from 18 documents (D1, D2, D3, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19, & D20). These findings from the Document Analysis are consistent with the sentiments elicited by the EKIIG and the data generated by the ERPEQUE. In all the 18 documents, there is an overt observation that there generally exists minimal, if any, involvement of employers in university education. This is indicative of the "weak linkages between industry and training institutions leading to skills mismatch in the labour market" (D18, p.43), and the fact that "minimal coordination exists between government, employers, training providers

and policy and research institutions” (D8, p.20). There is therefore a recommendation for the “creation of a strong academia-industry linkage right from curriculum formulation to the time skills are transmitted to the learners” (D6, p.27). The Government of Kenya is succinct on this issue thus: “a university shall put in place appropriate policies, infrastructure, institutional framework and other resources necessary for promoting quality teaching, research, innovation, industry linkages and community outreach” (D17, section 25, paragraph 2).

The question as to whether the onus of initiating and sustaining industry linkages is solely on the university has been addressed quite comprehensively in this study (see Chapter 2 section 2.5). Suffice it to observe here that from the document analysis, the imperative towards bridging the ‘skills gap’ that has been identified by the ERPEQUE, EKIIG and EDAG is a collective responsibility. “Employers, government, training institutions and development partners should work together to promote initiatives, practices and policies that will enhance a demand oriented approach to skills development” (D2, p.26). Such collaboration will ensure that “the skill ecosystem is relevant and responsive to the job market, employers, industry and learners” (D15, p.7). However, the common notion in the literature is that while both universities and employers should be ready and willing to collaborate, such collaboration needs an enabling environment that can only be created and sustained by governments (Aineah, 2017; Leydesdorff, 2013; Martin, 2000; Matkovic, et al., 2014; Ssebuwufu, Ludwick and Beland, 2012; Tamrant, 2019). In Kenya, there has been a deliberate effort to formalize and operationalize UIC through the Linking Academia With Industry (LIWA) initiative, though this is yet to receive full government support (Aineah, 2017; LIWA, 2020). In sum, therefore, the finding here is that in the light of low involvement of employers in university education, all the

major stakeholders in university education and employability -- universities, employers, and governments -- have a direct responsibility of ensuring the strengthening of University-Industry collaboration in order to bridge the skills gap.

Nonetheless, though UIC in Kenya is low, it is not altogether non-existent. Therefore, to further interrogate the nature of UIC in Kenya, the respondents were asked to rate the frequency of their involvement in five specific types of UIC that are common in the literature: sponsoring co-curricular and extra-curricular activities (i.e. sports, exhibitions, open days and fairs, culture weeks, pre-professional associations and clubs, conferences) in universities, offering scholarships, bursaries and other forms of financial aid and incentives to outstanding and/or needy students, collaborating with and/or funding university research and innovation activities, collaborating with universities in curriculum or course development, and offering university students opportunities for industrial attachment/ field experience or internship (Abuja, et al., 2019; Anderson, 2001; Ankra and Al Tabbaa, 2015; Oberg, Floress-Garcia and Jackson, 2019; Tamrant, 2019).

The frequency of involvement was rated on an ascending Likert scale with five options: never (**N**), rarely (**R**), sometimes (**S**), often (**O**) and always (**A**). In order to compute the mean, each of these options was weighed as follows: N=1, R=2, S=3, O=4 and A=5. The responses to this items and their computed means are recorded in table 4.10 below.

**Table 4.10 Frequency of service sector involvement in various types of University-Industry Collaboration (UIC)**

Type of UIC	N	R	S	O	A	Total	Mean
Sponsoring co-curricular and extra-curricular activities in universities	94 (26%)	78 (21.6%)	87 (24.1%)	62 (17.2%)	40 (11.1%)	361 (100%)	2.6565
Offering scholarships, bursaries, or other financial aid to outstanding or needy students	118 (32.7%)	88 (24.4%)	61 (16.9%)	47 (13.0%)	47 (13.0%)	361 (100%)	2.5014
Collaborating with and/or funding university research and innovation activities	176 (48.8%)	94 (26.0%)	54 (15.0%)	22 (6.1%)	15 (4.2%)	361 (100%)	1.9086
Collaborating with universities in curriculum or course development	160 (44.3%)	71 (19.7%)	70 (19.4%)	35 (9.7%)	25 (6.9%)	361 (100%)	2.1526
Offering students opportunities for industrial attachment, field experience, or internship	15 (4.2%)	20 (5.5%)	57 (15.8%)	88 (24.4%)	181 (50.1%)	361 (100%)	4.1080

Table 4.10 gives a clearer picture of the nature of UIC in relation to the service sector in Kenya. It is apparent from this table that these organizations prefer only some types of UIC involvement to others. Specifically, the most preferred type of UIC is offering students opportunities for industrial or field attachment or internship (mean 4.1080).

This finding is corroborated by the assertions of the Key Informant Interviewees thus:

*Most employers take in university students for attachment. I wouldn't speak authoritatively about the other types of collaboration, but I know for a fact is that there is very minimal collaboration in terms of R&D, oh, that is research and development, and curriculum design. This is something we are very keen on. (EKIIa)*

*There are instances of each of these types of collaboration, but the highest incidence is in offering opportunities for work-based learning such as attachment or field practice. (EKIIc)*

This fact that many organizations offer opportunities for attachment may not necessarily be a quality indicator of UIC in Kenya. Various studies on student attachment programs in Kenya indicate that most of such programs are merely traditional academic requirements for the universities and a cheap and convenient yet

superficial attempt at industry collaborating with academia. In essence, little value emanates from such programs as currently structured (Kamunzyu, 2010; Kathuri-Ogola, et al., 2015; Ondieki, Kimani, and Tanui, 2018). This assertion is buttressed by this observation from one of this study's Key Informant Interviewees:

*In most cases the only time many employers interact with universities is when they are requested to take in students for field attachment. But even this, to be honest, is just a ritual. There is often no clear understanding between the university and the employer on the how and the what of the whole exercise, you understand? By the way, it is also common that some of the universities even fail to supervise their own students on attachment. That is why some companies are very choosy when it comes to accepting students for attachment. (EKIIB)*

This observation is given perspective in one of the documents that were analyzed thus: “industrial attachment and internship is not anchored on a policy framework to provide it with necessary guidelines. Further, industrial attachment and internship is still confined to students but not lecturers, tutors and instructors who should also be at the center stage of industrial attachment” (D10, p.27).

It is also noteworthy that while Kenyan employers are on record decrying the ‘irrelevance’ or ‘non-responsiveness’ of university curricula to the world of work (Aineah, 2017; Boomsma, 2017; Munda, 2018, Nyanchwani, 2017; Waihenya, 2020; Wesangula, 2014), their involvement in university curriculum or course development is significantly minimal (mean 2.1526). Similarly, the least preferred type of UIC involvement is collaborating with and/or funding university research and innovation activities (mean 1.9086). Research in the university is very closely related to curriculum development.

The EDAG findings on this item are more indicative to what needs to be done than on what is done presently. This by deduction means that very little is being done currently in terms of the involvement of employers in the specified types of UIC. From the 16 documents that gave attention to the item (D1, D2, D3, D4, D8, D9, D10, D12, D13, D14, D15, D16, D17, D18, D19, D20), a clear indication of what should be done to strengthen UIC in Kenya emerged: 1) That the most important aspect of UIC is collaborative curriculum construction, hence universities and industry should work together to design courses that concurrently expose the student to both theoretical academic learning and practical work integrated learning; 2) that, in line with the collaborative curriculum construction, all players in the UIC space should endeavor to initiate, structure and strengthen apprenticeships, dual training, industrial attachment, internships, entrepreneurship training, cadetships, and other forms of work-based and/or work-related traineeships for students to develop industry-demanded competence; 3) that the government should play an active regulatory and facilitative role by initiating and enacting a policy framework for UIC. To some extent, this is being addressed, for instance through the National Internship Policy and the National Internship Program initiative (D13). However, this initiative is confined to the public sector, to the exclusion of the private service sector, and in any case, its focus is only on internship, which is a single aspect in the vast array of activities and programs that such an envisaged policy would cover; 4) that there should be “systematic monitoring and evaluation of relevant policies and programs which could support the development of evidence-based forward-looking youth employment interventions” (D4, p.16).

These findings, while illuminating the gap that currently obtains in the UIC space in Kenya, also point to the fact that successful and appropriate UIC policies, programs

and practices are hinged on a ‘triple-helix’ relationship: universities collaborating with industry and the collaboration is ideally stimulated, facilitated and mediated by government (Bennet, 2018, Leydesdorff, 2013; Matkovic, Tumbas, Sakal, and Pavlicevic, 2014; Ssebuwufu, Ludwick and Beland, 2012; Tamrant, 2019; Tomlinson, 2017).

#### **4.8 Curriculum Implications of Employers’ Rating and Perceptions of Employability in Kenya**

The fourth objective of this study was to identify the implications of the employers’ rating and perceptions of the employability of university graduates on university curricula in Kenya. The data generated and analyzed for the foregoing three objectives clearly indicate a poor rating and low perception of the employability of university graduate employees by the service sector employers sampled for this study. The logical question following these findings is: how should curricula in the universities respond to this reality?

The point of departure in considering this question is an assertion which essentially synthesizes the discussions in the foregoing sections:

Employers demand work-ready graduates who can think critically, solve problems, show initiative and who are entrepreneurial, flexible and adaptive. Prospective students demand educational programs that offer flexibility plus relevant and applicable content. Thus contemporary curricula perspectives in higher education need to meet these evolving educational needs. (Correia, 2014, p.114)

In relation to this item, reference to curriculum was obtained in 15 documents (D1, D2, D3, D6, D7, D8, D9, D12, D13, D14, D15, D17, D18, D19, D20). It is instructive to note that all these documents allude to the existence of “inappropriate curricula” (D19, p.30) through generic statements indicating that university curricula are not currently responsive to industry employability expectations.

In Kenya, there exist limited linkages and collaboration between education and training institutions, and industry. This is reflected in the development and implementation of education and training curricula which is mostly done without effective consultation with relevant stakeholders. Kenyan tertiary institutions have, for example, continued to develop training programs which are supply driven rather than demand driven. (D8, p.20)

The significance of a responsive or relevant curriculum in developing a competent workforce is expressed thus:

The quality of Kenya's human capital, in turn, partly depends on the type of curriculum offered in the schooling system. A good curriculum contributes to the development of thinking skills and the acquisition of relevant knowledge that learners need to apply in the context of their studies, daily life, and careers. The curriculum, therefore, needs to be a channel that brings about mastery of acceptable global competencies. (D12, pp.20-21)

This idea of a 'good curriculum'; that is, a curriculum that is relevant to the needs of the society, including the workplace, is not explicitly defined in these documents. Rather the documents indicate what should be done to make the curriculum responsive to employability expectations and demands. Thus universities should "deliver curriculum that is aligned to national priority areas and industry demands" (D12, p.69) by implementing "innovative curricular and pedagogical practices" (D20, p.58), which should focus on: "incorporating employers in curriculum development and training" (D2, p.26); strengthening "education, training and skills development by providing ICT integrated education" (D14, p.42); building "soft skills, positive attitude and ethics among the learners" (D2, p.27); providing for "continuous professional development trainings for industry trainers and lecturers charged with the responsibility of skills development" (D3, p.27); "transforming pedagogy" to offer "opportunities for students to engage in discussion, to critique and apply the ideas conveyed" (D1, p.98); embracing "new forms of assessment ... to support the development of analytical skills, creativity and teamworking"; "ensuring adequate

learning resources”; and “ensuring curriculum relevance” by conducting “regular reviews of program and curriculum content” based on “close interaction with industry and professional organizations” (D1, p.99) .

The imperative to “review all academic programs” (D12, p.69) in order to ensure curriculum relevance in relation to enhancing employability is a recurrent motif in the analyzed documents. This is propounded thus:

Education at the secondary, tertiary and technical levels needs a curricular revision to create a readily employable, skilled workforce. Such revisions must be on several fronts: 1/ to ensure that courses are up to date in terms of materials and techniques; 2/ to improve the quality of courses being offered; and 3/ to ensure that courses relevant to expected employment opportunities are being offered. (D19, p.58)

However, advocating that higher education curriculum should be re-conceptualized to meet the demands of employability is a contentious undertaking. This is because:

The assertion that colleges and HEIs should explicitly take account of their learners’ future employment needs (including the generic skills and abilities needed in the workplace) in developing the curriculum has an educational impact on program and course design. This impact can be seen as positive (for example, by broadening the ways we encourage learning at university we broaden engagement with the subjects being studied) or negative (for example, by engaging with the employability agenda we are allowing an ideological position antithetical to university and disciplinary study to determine what we include in our curriculum). (Gunn, Bell and Kaffmann, 2010, p.1)

The polarity alluded to by Gunn, Bell and Kaffmann (2010) has been comprehensively discussed in chapter 2 (see sections 2.1 and 2.3.2). Nonetheless, it is critical to take note of the fact that there is an ever shifting dispensation in the labour market that has implications on employability development programs.

Market demands are rapidly shifting, and intending to meet market requirements rather than acting proactively and preparing adaptable and critical professionals may have detrimental results. Stressing the importance of developing higher-order skills, even if not immediately sought for by employers, remains relevant. An open and

continued dialogue between academia and employers, with two-way contributions, may prove a worthy undertaking. (Abelha, et al., 2020, p.7)

Since the university, as we have seen, is the fulcrum of the employability enterprise, it is logical that attention is given to the inner workings of a university as it responds to various factors that influence its capacity and mission as far as employability development is concerned. These factors, which have been termed as ‘drivers of institutional responsiveness’ include “wider social priorities, government policies, local community needs, student needs, environmental factors, and future scenarios, among others” (Wedekind and Mutereko, 2016, p.1). Institutional responsiveness, which is indicated by institution’s focus on and practice of employability development, is achieved through curriculum.

Central to both student employability and the responsiveness of an institution to the various drivers is the curriculum. The curriculum is the medium through which knowledge is selected, translated, and transferred, and it represents both official intentions of an education institution and the lived experiences of teaching and learning of the participants within the institution. (Wedekind and Mutereko, 2016, p.1)

Curriculum as conceptualized here should consider and address the following aspects of responsiveness:

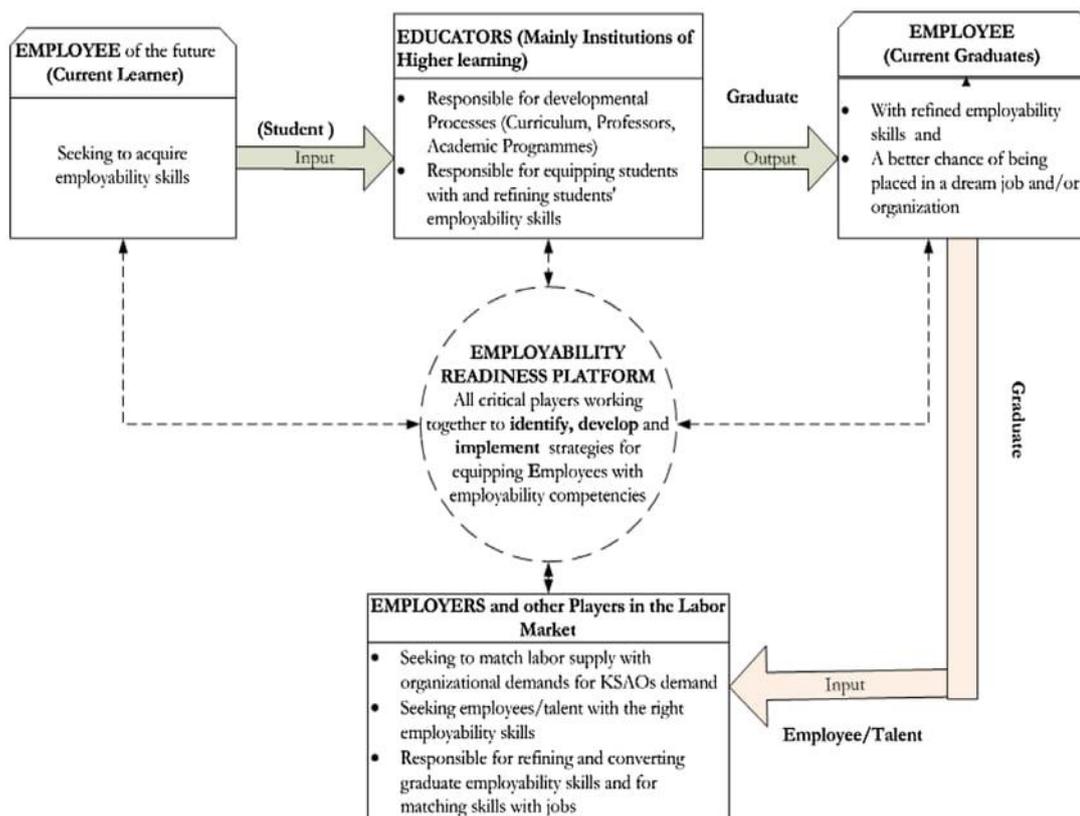
- The economic aspect – how the curriculum responds to both existing and emerging realities of the economy in general and the labour market in particular, and the expectations of employers
- The cultural aspect – how the curriculum acknowledges and responds to ethnic, cultural, religious, political and philosophical diversity among its participants and in its environment

- The disciplinary aspect – how the curriculum relates with the disciplinary community; that is, scholars and teachers, that generates new knowledge through research and practice
- The learner aspect – how the curriculum identifies and responds to the differentiated learning needs and capabilities of an individual learner. This goes beyond academic intelligence; it also espouses emotional intelligence
- The regulatory aspect – how the curriculum is situated in and responds to its policy and regulatory environment. This has to do especially with government and professional regulatory bodies
- The social aspect – how the curriculum responds to culture, societal pressures and trends and how it fosters the development of ‘social intelligence’ in its participants especially the learners who ultimately become graduates
- The natural environment aspect – how the curriculum prepares for and responds to both predictable and unpredictable natural phenomena (Moll, 2005; Wedekind and Mutereko, 2016)
- To these may be added *the future aspect* – which refers to the capacity of a curriculum to anticipate and prepare for the future and to develop this capacity in its participants, especially the students. This is critical because, in the super-complex world of today and tomorrow, universities “need to prepare students for jobs that do not exist yet, for using technologies that have yet to be invented, and for solving problems that nobody has yet thought of” (Romgens et al., 2019, p.1)

These aspects of curriculum responsiveness, or curriculum relevance, point to a variegated composite for employability development. Such variety has elicited attempts to integrate these aspects into distinguishable models of developing

employability through university curricula. One such model is the Educator-Employee-Employer-Employability (4E) framework developed by Mpho Pheko and Kaelo Molefhe in 2016. In presenting this model, the authors opine that higher education institutions should respond to the current employability challenges by altering their curricula to “close the gap and ensure that their products and the knowledge created benefit the individual, prospective employers, and the broader economy” (Pheko and Molefhe, 2016, p.6).

The 4E framework attempts to close this gap by proposing an employability readiness platform in which the prospective employee (current university student), the educator (an institution of higher learning) and the employer and other players in the labour market “work together to identify, develop and implement strategies for equipping employees with employability competencies” (Pheko and Molefhe, 2016, p.10). This 4E framework echoes the two theoretical frameworks that underpinned this study: Needs assessment and Backwards Design. The 4E framework is presented in figure 4.1 below.



**Figure 4.1 The 4E Framework**

Source: Pheko and Molefhe, 2016, p.10

The 'Employability Readiness Platform' proposed by Pheko and Molefhe (2016) could best be construed to be a framework for an employability curriculum in a given university. Typically, an employability curriculum allows a university to strategically articulate the skills and experiences developed as a result of a tertiary education, to work collaboratively with diverse stakeholders to better understand the needs of the workforce, economy and community, to demonstrate interest in the students' long-term personal, professional and financial success, to better understand how students' coursework and experiences transfer into the workforce, and to improve student engagement and motivation (Mohee, 2019, p.13).

An employability curriculum seeks to increase holistic student preparedness for the world of work through a reflective, developmental process in which academics, career

development programs and experiential learning are integrated (University of Kansas, 2014). Such holistic preparation is intended to produce “T-Shaped” graduates, individuals who have both depth; that is, expert proficiency in a particular knowledge and skill area, and breadth; which is the intelligence to explore insights from multiple and diverse perspectives and the capacity to develop variable competencies that are adaptable and applicable across different and shifting contexts (Feller and Whichard, 2005; Knight and Yorke, 2004; MacCraith, 2016; University of Kansas, 2014).

Authentic T-shaped graduates are products of holistic curricula which deliberately integrate academic and co-curricular experiences with work-based or work-related learning. For an employability curriculum to be authentically holistic, it needs to exhibit the following seven overarching characteristics:

- Academic learning: developing and excelling at a course of study that provides breadth and depth combining academic strengths, interests and specialized knowledge in the context of career aspirations
- Experiential learning: engaging in purposeful, meaningful experiences outside of the classroom in order to expand and enhance academic, personal and career interests through guided reflection
- Career maturity: helping students to believe in a clear picture of self as it relates to the world of work, having knowledge and direct experience with career exploration and engagement activities, and anticipating changes to career plans once circumstances change
- Professional skills: demonstrating skills that employers value for successful transition to the workplace such as planning and prioritizing work, communication, problem solving, teamwork and collaboration, and leadership

- Career management: developing and employing the skills necessary to successfully navigate the job search process and making informed, sound judgments in relation to lifetime career progression
- Meaningful connections: capitalizing on mutually beneficial relationships that expand perspective, build interpersonal communication skills, and create access to opportunities
- Global perspective: navigating the global economy by developing a broader understanding of the different cultures, economies and systems of the world and applying that perspective to the context of work. (University of Kansas, 2014, p. 13)

Such holistic curricula are also characterized by effective pedagogical strategies which include learner centered approaches such as cooperative learning, project based learning, problem based learning, and inquiry based learning; performance based assessment methods such as portfolios and performance rubrics; and deliberate stakeholder engagement in curriculum development, for example in course design and delivery (Soomro, et al., 2024)

An analysis of the discussion in this section reveals the following salient implications of employability on curriculum:

- While employability is a multi-stakeholder-driven concept, the onus for actually developing employability in individuals is ascribed to the university. University curricula are therefore expected to live up to the expectations of students, employers, and the community at large by producing graduates with dynamic employability attributes and dispositions

- Universities are expected to design their curricula to respond to both the current and the emerging and ever-shifting world-of-work demands while upholding their intrinsic function of developing higher-order intellectual competencies in students
- Employability curriculum is a holistic composite which both influences and is influenced by the prevailing and emerging socio-cultural, economic, political, and natural/physical environments. Thus the nature of interaction between a university and the totality of its environment is a critical indicator of the employability quality of that university's graduates
- A holistic curriculum is a product of decisions and actions undertaken to foster and promote employability in three arenas: the teaching and learning arena, the work experience arena, and the institutional culture arena. These three arenas provide learning opportunities across four key spheres which, when integrated, develop the totality of a learner's faculties: the academic sphere, the co-curricular sphere, the work-related and work-based learning sphere, and the careers education sphere.
- Holistic learning is mostly achieved when employability concepts and actions that develop all the faculties of the learner are explicitly embedded throughout the curriculum.

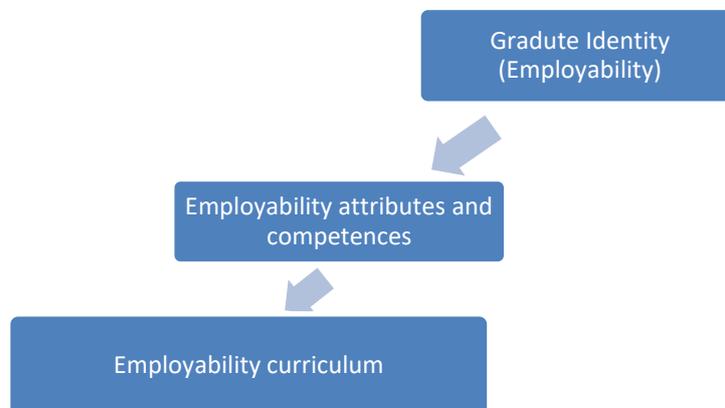
#### **4.9 Reflections on the Philosophical Postulation and Theoretical Frameworks**

The purpose of this study was to investigate employers' rating and perceptions of the employability of university graduates, and to determine the implications of these rating and perceptions on university curricula in Kenya. To achieve this purpose, and as detailed in Chapter three (see sections 3.1.1 and 3.1.2), the study was premised on pragmatist ontology and epistemology.

On the basis of pragmatist ontology and epistemology, the study sought to answer the research questions and to accept or reject the hypothesis upon which data were generated and analyzed and from which findings were realized in this chapter. The findings presented and discussed in the foregoing sections of this chapter portray the present reality – *the what is* -- of the employability arena in Kenya. Consistent with pragmatist ontology, this reality was construed through both a quantitative medium (the ERPEQUE), and qualitative media (the EKIIG and the EDAG) and their attendant qualitative and quantitative analyses respectively. The appraisal and appreciation of reality is made possible only through knowledge, which is a basis of epistemology. Pragmatic epistemology considers knowledge to be multifaceted and multidimensional. It is on this epistemic understanding that this study sought knowledge on employability from multiple and varied sources.

Furthermore, pragmatist ontology guided the choice of the two theoretical frameworks that underpinned this study: Needs Assessment and Backward Design. These are discussed comprehensively in chapter one (see section 1.9). Ontologically, this study employed Needs Assessment to determine whether employers' rating and perceptions of the manifest employability of their graduate employees matches their expectations of the employability of university graduates. The data presented and analyzed in this chapter points to the reality that there is a mismatch between the expectations and the manifestation of employability. Epistemologically, the Backward design was employed in this study to generate knowledge on how curriculum may be re-engineered to bridge the employability mismatch. As the findings in this chapter have indicated, a curriculum for employability is determined by societal and work-place demands. Thus, to customize the Backward Design process, the desired result is employability as a graduate identity; the acceptable

evidence of performance is employability attributes and competences; and the learning experiences comprise the employability curriculum which is a composite of academic learning, career and work related learning, and life skills (or soft skills) learning. Figure. 4.2 portrays this reconceptualization.



**Fig. 4.2: Customized Backward Design process**

To operationalize this re-conceptualized backward design, and to address the employability deficit that the findings in this chapter have illuminated, this study proposes a Holistic Graduate Identity Curriculum (HoGIC) model. This model is presented and explained in Chapter 5 section 5.5.

#### **4.10 Chapter Summary**

This chapter has presented and analyzed data from the ERPEQUE, EKIIG and EDAG, from which it is apparent that there is a discrepancy between the competences -- attributes, attitudes, and aptitudes -- that employers expect from graduate employees, and the nature and level of competence that employees actually manifest in the workplace. The essence of this discrepancy is captured in the thesis statement of this study (see Chapter five, section 5.3). While this discrepancy is occasioned by a plurality of factors both within and without the university, the university is commonly deemed to be the most effective and efficient vehicle for the addressing and redressing it. The implication here is that university curricula should be re-

engineered to be holistic enough to produce graduates whose individual identities espouse the broad characteristics of employability: competences which help an individual to meet and satisfy the demands of a specific occupation while at the same time being able to successfully and progressively navigate the numerous different other spaces that invariably compete for their attention.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS

#### 5.0 Introduction

This is the final chapter of this study. It presents the summary of the findings arrived at in Chapter four, the conclusions attendant to these findings, and the recommendations based on these conclusions. The purpose of this study was to investigate service sector employers' rating and perceptions of the employability of university graduates and to determine the implications of the same on university curricula. The study was guided by the following five research questions and one hypothesis, the answers to which will form the conclusion of this study.

#### *Research questions*

1. Which degrees, institutions and recruitment channels do service sector employers prefer when selecting university graduates for entry level positions in Kenya?
2. Which employability attributes do service sector employers expect in graduate employees?
3. What is the employers' rating of the actual employability attributes of their graduate employees?
4. What are the perceptions of the employers on the involvement or participation of the service sector in university education in Kenya with a view to enhancing employability?
5. What are the implications of the employers' rating and perceptions of the employability of university graduates on university curricula?

### *Hypothesis*

There is no significant difference between service sector employers' rating of the desirability of specific employability attributes and competencies and the employers' actual rating of these attributes and competencies in their graduate employees.

### **5.1 Summary of Findings**

The prominent findings arrived at in this study are summarized below:

1. The most preferred minimum entry-level qualification by service sector employers in this study is a Bachelor's degree irrespective of the discipline
2. The commonly used recruitment channel by service sector employers is the advertisement-application-interview-recruitment process
3. Many employers do not have a particular preference of the university from which they recruit their employees. As such, they would recruit graduates of any university as long as the individual graduate meets their expectations
4. In terms of the employability expectations of employers in the service sector, personal, 'soft skill' graduate attributes such as leadership, self-drive, and responsibility are rated higher than 'hard skill' graduate attributes such as digital competence, specialized/technical/vocational competence and mathematical competence
5. In terms of employers' actual rating of the employability attributes exhibited by their graduate employees, the employers rate the 'hard skills' higher than the 'soft skills'
6. There is a significant discrepancy between the employability attributes employers expect in their graduate employees and the actual employability

attributes the employees exhibit at the workplace. The nature of this discrepancy is that the employees' manifest employability attributes are much lower than, and therefore do not match, the employers' expectations

7. A majority of employers perceive the involvement of the service sector in university education to be low. The few employers engaged in university-industry collaboration (UIC) prefer offering opportunities for industrial or field attachment or internships to any other form of UIC
8. The involvement of employers in university curriculum development is low
9. Employability at the university is best developed through a holistic curriculum that explicitly targets the development of the totality of the student's faculties (mental, physical, and emotional), and which is responsive to the totality of the university's environment. Such a curriculum offers students learning opportunities across four key spheres: academic skills, co-curricular activities, work-related and work-based learning, and careers education.

## **5.2 Conclusion**

The findings of this study lead to the overall conclusion that there is a significant discrepancy between employers' expectations of the employability of university graduates and the employers' actual rating of the employability of their graduate employees. This discrepancy implies the urgent need for university curricula to be re-engineered in order to develop and produce holistic graduates who are sustainably valuable both to the world of work and to all other facets of individual and communal life. Specifically, the following conclusions were arrived at:

### **5.2.1 Employer's preferences when recruiting university graduates**

This study sought to determine which type of degrees, institutions and recruitment channels service sector employers prefer when selecting university graduates for entry level positions in Kenya. The findings of the study lead to the conclusion that most service sector employers would employ a graduate with a Bachelor's degree without particular preference for any discipline. With regards to institutions, this study concludes that most service sector employers have no preference for the university a job candidate studied in as long as the candidate is suitable for the job. The study also concludes that the most commonly used recruitment channel among service sector employers is the advertisement-application-interview-recruitment process.

### **5.2.2 Employers' rating of expected employability attributes of university graduates**

This study also sought to establish which employability attributes service sector employers expect in graduate employees. The findings on this item lead to the conclusion that while the graduate's possession of both 'soft' generic skills and 'hard' technical or vocational skills is desired by the employers, they rank the soft skills much higher than the hard skills. The employers therefore have high expectations that their graduate employees will manifest soft skills such as leadership, self drive, and responsibility.

### **5.2.3 Employers' rating of the actual employability attributes of their graduate employees**

In response to the question 'what is the employers' rating of the actual employability attributes of their graduate employees?' this study arrived at the conclusion that in actual manifestation by the employees, all the employability attributes studied are

rated much lower than the employers' expectations. Further, the study concludes that employees in the service sector are perceived by their employers to have higher manifestations of hard skills than soft skills, which is incongruent with the employers' expectations as indicated in sub-section 5.1.2.

#### **5.2.4 The relationship between employers' rating of their expectations and their rating of the actual employability attributes of their graduate employees**

A null hypothesis was formulated for this item thus: there is no significant difference between service sector employers' rating of expected specific employability attributes of university graduates and the employers' actual rating of these attributes in their graduate employees. This hypothesis was tested and the results lead to the conclusion that there is actually a significant difference between the employability expectations of employers and the employability manifestations of employees, where the expectations are much higher than the manifestations. This conclusion does not support the null hypothesis.

#### **5.2.5 Service sector employers' involvement in university education**

This study explored the perceptions of the employers on the involvement or participation of the service sector in university education in Kenya with a view to enhancing employability. This is in line with the increasingly popular concept of university-industry collaboration (UIC). From the employers' responses, the study concludes that the incidence of UIC in Kenya is still low, at least in so far as the service sector is concerned. Further, the study concludes that even in instances where UIC exists, it is rarely in high impact areas like curriculum design or course development; rather, the most common type of UIC detected is where organizations offer students opportunities for industrial or field attachment for the students fulfill

their course requirements. This study also came to the conclusion that this particular type of UIC, as presently structured, is superficial and does not overtly develop or enhance the employability of the students involved.

### **5.2.6 University curriculum implications of employers' rating and perceptions of the employability of graduate employees**

This study purposed to determine the implications of the employers' rating and perceptions of the employability of university graduates on university curricula. In this determination, the study concludes that university curricula as presently structured do not develop and enhance employability in its holistic sense, which is conceived here as the entire corpus of a university graduate's attributes, which consist of the knowledge, skills, attitudes, competencies and dispositions that may qualify them for one or more positions of employment, including self-employment, and which would help them to remain progressively productive and valuable in all the personal, social, and economic spheres of their life. The study further concludes that an employability curriculum is a holistic curriculum which is responsive to the totality of its environment and which targets the development of the totality of a learner's faculties. Such a curriculum cuts across and integrates academic learning, co-curricular activities, work-related experience, and careers education. This study therefore proposes a holistic curriculum model that is presented in section 5.5.

### **5.3 Thesis Statement**

Due to the foregoing findings and conclusions, this study asserts that there exists an employability deficit in Kenya; that is, a discrepancy between the employability expectations of employers and the employability manifestations of employees, and

that university curricula as presently designed and delivered are deficient in adequately and appropriately developing or enhancing employability.

#### **5.4 Recommendations of the Study**

The following recommendations emanate from the findings and conclusions of this study:

1. Every individual university should delineate and explain its conceptualization of employability. This conceptualization forms the framework within which all the university's programs are operationalized. The conceptualization should be arrived at through a comprehensive deliberative process both within the university and between the university and its employability partners. The conceptualization should be explicitly disseminated to all the university's key stakeholders: students (including prospective ones), faculty and staff, employers ('the market'), regulatory agencies, institutional sponsors, and government. This conceptualization should be periodically reviewed and updated to maintain contextual relevance.
2. Universities should either adopt or design and implement a holistic curriculum model in which the learner is wholesomely prepared for a dynamic world of work and the fluidity of life in general. One such holistic curriculum model is the 'Holistic Graduate Development Curriculum model' presented in Section 5.4 of this study.
3. The government and relevant regulatory agencies should both promote and enforce the existence of vibrant and productive University-Industry Collaboration (UIC) in every university. Government can promote UIC by

making it a policy requirement for some percentage of capitation for public universities and for re-accreditation for private universities. Government can also promote UIC by offering tax-rebates or other incentives to industry partners who are in UIC. Regulatory agencies such as the Commission for University Education and Professional bodies should require evidence of UIC in every program of study and in every university.

4. Every university should maintain accurate graduate destinations records and close relationships with its alumni so as to better understand the impact of its programs. This understanding will invariably inform the university's conception of employability referred to in recommendation 1 above.
5. Universities should initiate a broader conversation on employability in which the roles of earlier stages of education (ECDE, primary, and secondary education) in developing employability is interrogated.

### **5.5 Novel Contribution to Knowledge: Holistic Graduate Identity Curriculum (HoGIC) model**

This study has determined that university curricula as presently structured are deficient in developing or enhancing employability, a scenario that explains the apparent discrepancy between the employability expectations of employers and the employability manifestations of employees. This study has labelled this discrepancy an employability deficit. This employability deficit, as this study has shown, cannot be understood and therefore addressed through the simple and linear polarity between employer demands and employee competencies. Rather, this discrepancy can be best understood and effectively addressed with an appreciation of the supercomplex context within which employability is conceived and constructed. This supercomplex context is discussed comprehensively in Chapter two.

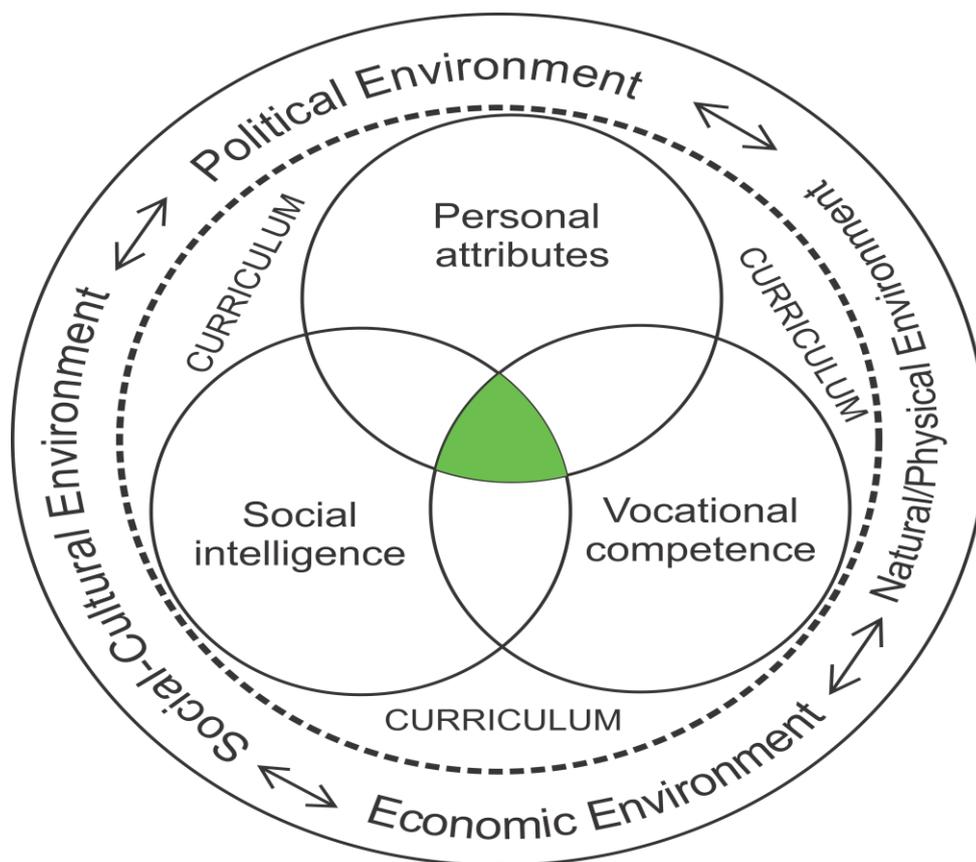
University education “is faced with not just preparing students for a complex world; it is faced with preparing students for a supercomplex world” (Barnett, 2000b, p.257). As such, “pedagogies are required that provide capacities for coping with supercomplexity; which encourage the formation of human being that maintains a purposive equilibrium in the face of radical uncertainty and contestability” (Barnett 2000c, 419). Thus “education in a supercomplex world needs to address not just ways of knowing (disciplinary epistemology), but ways of being (ontologies) (Wilson & Morieson, 2022, p.3). In sum, therefore, for a university in a supercomplex world, “*the educational task is primarily an ontological task* (Barnett, 2012, p.69), concerned essentially with developing holistic identity of a student and, concomitantly, a graduate. Such a graduate fits into the employability profile that has been advanced in this study.

In the supercomplexity that characterizes the world today, and even more so in the future, employability should of necessity be understood as a multi-dimensional construct whose definition and assessment should consider as many and as varied aspects of life as possible. To repeat, employability is the entire corpus of a university graduate’s attributes, which consist of the knowledge, skills, attitudes, competencies and dispositions that may qualify them for one or more positions of employment, including self-employment, and which, subject to the prevailing and/or emerging socio-cultural, political, economic, and physical/natural environments would help them to remain progressively productive and valuable in all the personal, social, and economic spheres of their life.

Such understanding of employability foregrounds the concept of graduate identity, which is a comprehensive composite of attributes that cover the personal, social, and

vocational abilities, competencies and dispositions of an individual graduate. To realize a graduate identity that comprises these characteristics, there is need for a model of holistic graduate development. The literature on employability exhibits a proliferation of models conceived as frameworks to explain or describe the construct of employability. Some of the more commonly cited of such models include: the USEM model (Knight & Yorke, 2002); the DOTS model (Law & Watts, 1977); the SOAR model (Kumar, 2015); CareerEDGE key to employability model (Dacre Pool & Sewel, 2007); the Educator-Employee-Employer-Employability (4E) framework (Pheko & Molefhe, 2016); the employABILITY thinking model (Bennet, 2018); the Graduate Employability 2.0 model (Bridgstock, 2020); and the Relational Graduate Employability paradigm (Lackovic, 2019). These models nearly entirely focus on how individuals (should) develop employability attributes or competencies. What is missing here is a model that explicitly foregrounds the university curriculum as the arena for developing and/or enhancing the individual's employability through a holistic process of defining graduate identity and the relationship between the curriculum and the environment within which it is enacted. To fill this gap, a Holistic Graduate Identity Curriculum (HoGIC) model is hereby proposed.

The HoGIC model is essentially a framework with three integral components: the environment within which curriculum is enacted, the curriculum of a specific institution, and graduate identity. While these components may seemingly be considered in isolation, in the HoGIC model they are interdependent and interrelated. The HoGIC model is presented in graphic form in figure 5.1:



**Fig. 5.1: The Holistic Graduate Identity Curriculum model**

Note: Conceptualized and designed by the author

### 5.5.1 Environment

The environment within which a curriculum is conceptualized, constructed and operationalized is crucial to the success or failure of that curriculum. Every curriculum developer needs to acknowledge and understand this environment. It is important to consider how the environment, or aspects of it, will influence the curriculum and also how the curriculum may impact on its environment. The curriculum environment, or milieu, or context, is the totality of the forces which influence and which may be influenced by curriculum. While such forces are numerous, the HoGIC model narrows them to four: political, socio-cultural, economic, and natural/physical environmental forces.

The *political environment* refers mostly to decisions and actions of authority and power that influence the conceptualization, design and delivery of curriculum in a university. These decisions and actions mainly focus on and impact curriculum facets such as expected outcomes, allocation of resources, teaching/learning processes, and curriculum assessment and evaluation. Such decisions emanate from a variety of contexts such as: 1) Legal and policy frameworks. This includes relevant constitutional provisions, acts of parliament, relevant Ministry of Education policies and regulations, policies and regulations of higher education regulatory agencies such as the Commission for University Education, and guidelines of professional bodies that either license or register graduates; 2) University governance and management structure. This includes university councils, university management boards, university senates and other offices in management structure in a university; 3) Curriculum stakeholders. Significant stakeholders in university curriculum include the students, academic staff, parents/sponsors, industry (employers), professional fraternities and communities of practice, and the regulatory agencies mentioned above. All these should be deliberately engaged in curriculum conceptualization and construction.

The *socio-cultural environment* refers to the many and varied societal and cultural forces that influence what goes on in the university. The university exists within a social context and is a microcosm of the culture(s) of this context. The culture(s) around a university influence and shape the curriculum and operations of the university. Likewise, a university's curriculum influences the culture(s) around the university. Some of the social and cultural issues that have a significant bearing on university curricula include: demographic changes, social prejudices and conflicts,

cultural beliefs and value systems including religion, cultural diversity, globalization, digitization and other forms of technological advancement, access and equity, gender and inclusivity of hitherto marginalized populations, and knowledge explosion. Even as these and many other issues impact the curriculum, it is important to always keep in mind that culture is dynamic. This therefore necessitates the university curriculum, both as a reflection and as an influencer of the culture, to be dynamic in tandem with its social and cultural environment.

The *economic environment* refers mainly to both the financial and material resources available to institutions and individuals (especially students) in the pursuit of curriculum outcomes, and the opportunities available to graduates to exploit their potential in the world of work. The economic environment is a crucial consideration in university curriculum since it has a direct and critical bearing on the quality and relevance of the curriculum. Some of the specific factors to consider in the economic environment include: the nature and strength of the national economy, funding and resource allocation to the university, evolving workforce demands, the capacity of job markets to absorb and sustain graduates, and cost effectiveness and efficiency in curriculum design and delivery.

The *natural/physical environment* refers either to physical elements such as topography and climate, or to unpredictable natural phenomena such as floods, famines, and pandemics which may somehow influence and therefore impact on curriculum design and delivery in a university. A recent example of this is the Covid-19 pandemic which disrupted curriculum delivery worldwide and occasioned a significant shift from traditional face-to-face curriculum delivery to virtual platforms of curriculum delivery. Beyond altering curricula processes, natural/physical

environments also pose problems to humanity for which university curricula seek solutions.

As is evident in Fig.1, the environment encompasses the curriculum. Yet the boundary, if it may be referred to as such, between the environment and the curriculum is porous. This porosity signifies the constant symbiosis between the environment and the curriculum; the environment impacts on or influences the curriculum, while the curriculum in turn seeks to either manage or manipulate the environment.

### **5.5.2 Curriculum**

Each university has its own unique curriculum. Irrespective of this uniqueness, it is important, for the purpose of this model, that a common conception of curriculum is adopted. Thus in the context of the HoGIC curriculum is conceptualized as “intentions for learning; the actions, interactions, and processes elicited and directed by these intentions; and the actual learning that emanates from the prevailing context” (Nyandusi, 2017). This conceptualization denotes a holistic curriculum, one that evinces the relationships between the four fundamental components of a curriculum namely: the context, the inputs, the process(es), and the product(s).

Such a holistic curriculum is achieved through action in three key arenas: one, pedagogy and assessment, where the focus is on experiential and practical learning approaches such as exploration, experimentation, learning by doing and reflection in authentic contexts, and assessment methodologies that focus on evaluating understanding and knowledge transfer rather memory and knowledge recall. Two, work experience, which refers to authentic work-based, work-related, or work-integrated learning such as attachment, internship, fieldwork, or practicum, or at the

very least, work-related learning such as case studies, employer/expert talks, role playing, workplace simulation, or work place tours and field trips. Three, an institutional culture that fosters and promotes employability. Such a culture includes a deliberate, diverse and vibrant co-curricular and extra-curricular activities program, a compulsory careers education complement where learners develop, among others, job searching skills, CV construction skills, interview competencies, and career selection and planning skills (Cook, 2022; Lau et al., 2014; Lowden et al., 2011; Rowe & Zegwaard, 2017).

As far as employability curriculum is concerned, out of the proliferation of conceptions and models, there are three principal approaches to delivering employability through the university curriculum: total embedding, explicit embedding and integration, and parallel development. In total embedding, employability skills are implicitly taught but not explicitly assessed. Employability as a concept has low visibility and is often not taught in a real work context. Explicit embedding and integration is an approach where employability skills are explicitly taught and overtly assessed. Employability is therefore a highly visible concept that is always taught in a real work context. In parallel development, employability skills are taught in or as separate courses, often as ‘bolt-on’ courses with limited or little contextualization. While it is true that in the supercomplex world there cannot be a universally applicable approach for embedding employability, the general consensus is that of the three approaches discussed here, explicit embedding and integration has the highest impact in developing employability in university students (Cook, 2022; Fraser et al., 2019; Rowe & Zegwaard, 2017). As such, the explicit embedding and integration approach is the one advocated for in the HoGIC model.

The HoGIC model is informed by Bennett's (2019) three postulations: that "employability development is most effective when it is aligned with disciplinary knowledge, skills and practices" (p.47); that "the development of employability is most effective through a processual approach in which the responsibility for employability development is shared by the institution, industry, and the student" (p.50); and that "all learning should have relevance to possible disciplinary, societal, personal and/or professional futures of students" (p.50). These postulations point to a composite approach to learning which "encapsulates a range of experiential and practice based learning models" (Rowe and Zegwaard, 2017, p.89), and which "demands a pedagogical shift towards process and relevance through reflection, engagement, and experiential learning" (Bennett, 2019, p.50). This is the approach adopted by the HoGIC model. In such an approach, content, pedagogy and assessment are constructively aligned to ultimately achieve a holistic graduate identity across three integrated curriculum spaces: academic curricular learning, co-curricular learning, and extra-curricular learning. These learning spaces, and the specific learning activities for each space, are presented in table 5.1.

**Table 5.1: Curricular Learning Spaces in the HoGIC model**

<b>Academic curricular Learning</b>	<b>Co-curricular learning</b>	<b>Extra-curricular learning</b>
<p style="text-align: center;"><u>Content</u></p> <p>Discipline-specific coursework including research; Cross/trans-disciplinary learning; General education; Higher-order cognitive skills; Work Integrated Learning i.e. workplace simulation, internship, industrial or field attachment, practicums; Workplace tours and field trips.</p> <p style="text-align: center;"><u>Pedagogy</u></p> <p>Learner Centered approaches such as: cooperative learning; project-based learning; problem-based learning; inquiry-based learning; technology-based or technology-assisted learning;</p> <p style="text-align: center;"><u>Assessment</u></p> <p>Formative assessments; Performance-based rubrics; portfolios; Research reports, Project reports; formal summative evaluation.</p>	<p style="text-align: center;"><u>Content</u></p> <p>Academic/profession-related clubs and societies; Conferences, workshops and seminars; Employment/career fairs; Career guidance and counseling; Careers education including help with CV writing and interview skills; Personal Development Planning</p> <p style="text-align: center;"><u>Assessment</u></p> <p>Certificates of membership, or participation, or completion; Performance-based rubrics; portfolios; Personal reflective journals; self-report skill-set checklists; completed CV, Competed Personal Development Plan.</p>	<p style="text-align: center;"><u>Content</u></p> <p>Voluntary community service; Games and sports; Non-academic/profession-related clubs and societies; Creative and performing arts; Hobbies; Part-time non-discipline-related jobs (including university work-study programs); Student leadership</p> <p style="text-align: center;"><u>Assessment</u></p> <p>Certificates of membership, or participation, or completion; Performance-based rubrics; portfolios; Personal reflective journals; self-report skill-set checklists; authentic recommendation letters.</p>

### 5.5.3 Graduate identity

Graduate identity is a “complex capability-set” (Hinchliffe and Jolly, 2010, p.20) comprised of four major components: 1) Values, which include personal ethics and shared (community) norms and values; 2) Intellect, which is the graduate’s capacity for critical and lateral thinking, continuous learning, creativity, innovativeness, and problem solving; 3) Performance, which is the graduate’s application of their knowledge and skills to successfully accomplish given tasks at the workplace and/or in the community and their attitude or disposition to performing these tasks; 4) Social

engagement, which characterized by social responsibility, awareness of diversity and appreciation of inclusivity, and successful interpersonal interactions and transactions.

Yet graduate identity is an aspect of employability that is often either overlooked or ignored (Bennett, 2019; Hinchliffe and Jolly, 2010). Individuals construct personal identity as they interact with their total environment. The past, present and anticipated realities of an individual's environment continuously influence, shape, re-shape, and reinforce the individual's identity. Every individual graduate possesses a unique identity. This identity defines and positions the individual in relation to the personal, social, and vocational demands, expectations, and obligations that characterize their existence.

From a holistic employability perspective, the ultimate purpose of a university curriculum is to produce a graduate who will either adapt to or manipulate the environment so as to remain productive and valuable to self and the community. To produce such a graduate, the curriculum, across its three spaces, should endeavor to develop in each of its graduates a holistic identity that is the confluence of personal attributes, social intelligence, and vocational competencies. This confluence is achieved in the shaded segment of fig.5.1

Personal attributes are qualities, characteristics or personality traits that define an individual's abilities, disposition and behavior. These include intellectual capacity, self-drive, emotional intelligence, resilience, creativity and innovativeness, critical thinking and problem solving skills, responsibility, integrity, willingness to learn continuously, adaptability, time management, and appropriate dressing and personal grooming.

Social intelligence is an individual's ability to successfully get into and maintain interpersonal relationships, to navigate diverse social contexts, and to be a valuable and productive member in a social setting. Social intelligence is manifested through: oral communication competence, effective listening skills, interpersonal intelligence, cross-cultural intelligence, the ability to work in a team, conflict management and resolution skills, empathy, leadership, and social networking and relationship management skills.

Vocational competence refers to both an individual's technical or specialized knowledge and skills which predispose them to occupy a given position in a given occupation and the individual's broad and transferable skills and aptitudes that are applicable across various positions in diverse occupations. Vocational competence is exhibited through: job-specific skills or professional/occupational expertise, digital competence, written communication skills, a positive work ethic, mathematical skills, planning and organizational competence, and career planning and development, including opportunity awareness and job searching skills.

### **5.6 Suggestions for Further Research**

In the course of this study, certain areas of interest to employability were highlighted, but due to the scope of this study, they were not discussed exhaustively. The study therefore makes the following suggestions for further research:

1. An investigation into the role of early years and primary education in laying a developmental foundation for employability
2. A study on improving the efficacy of field or industrial attachment to enhance the employability of university students

3. A study on the modalities of enhancing university-industry collaboration in Kenya

## REFERENCES

- Abelha, M., Fernandes, S. R. G., Mesquitta, D., Seabra, F., & Ferreira-Oliveira, A. T. (2020). Graduate employability and competence development in higher education: a systematic literature review using PRISMA. *Sustainability*, 12, 5900. <https://doi.org/10.3390/su12155900>
- Abuja, P. M., Carapina, T., de Kort, M., Raess, M., Tiekler, C., & Wagstaff, N. (2019). *Academia-industry collaboration best practices guide*. Deliverable D8.3. CORBEL.
- Adaptability (2019). *Adaptability: 5 strategies to teach this skill of the future*. <https://www.extendednotes.com/adaptability>.
- Adedeji, S. O., & Oyebade, S. A. (2016). *Graduate employability in Nigeria: thoughts, travails and tactics*. British Council.
- Africa Development Bank (2013). *The state of Kenya's private sector*.
- Aineah, A. (2017). Bridging the gap between classroom and the job market. *Daily Nation*, 3.
- Ainley, J., Schulz, W., & Fraillon, J. (2016). *A global measure of digital and ICT literacy skills*. [https://research.acer.edu.au/ict\\_literacy/12](https://research.acer.edu.au/ict_literacy/12)
- Albrecht, J.R. & Karabenick, S.A. (2017). Relevance for learning and motivation in education. *Journal of experimental education*, 86(1), pp.1-10. <https://doi.org/10.1080/00220973.2017.1380593>
- Allio, R. J. (2005). Leadership development: teaching versus learning. *Management Decisions*, 43(7), 1071-1077.
- Altschuld, J.W. and Kumar, D.D. (2010). Needs assessment: an overview. [Doi:10.4135/9781452256795](https://doi.org/10.4135/9781452256795)
- Altschuld, J.W. and Watkins, R. (2014). A primer on needs assessment: more than 40 years of research and practice. *New directions for evaluation*, Vol. 2014 number 114, p.5-18.
- American Management Association (2020). *The five steps to conflict resolution*. <https://www.amanet.org/articles/the-five-steps-to-conflict-resolution>
- Amimo, C. (2012). Tailoring Higher Education in Kenya to the demands of the post-industrial workplace. *Baraton Interdisciplinary Research Journal*, 2(1), 52-58.
- Ananga, E. D., Adzahlie-Mensah, V., & Tamanja, E. (2016). Higher education and employability in Ghana. In British Council, *Universities, employability, and inclusive development: repositioning higher education in Ghana, Kenya, Nigeria, and South Africa* (pp.77-90). <http://www.britishcouncil.org/education/ihe>

- Anderson, M. S. (2001). The complex relations between the academy and industry: views from the literature. *The Journal of Higher Education*, 72(2), 226-246.
- Anderson, R. (2010). The 'idea of a university' today. *History and Policy*, 1, 22-26. [www.historyandpolicy.org/policy-papers/papers/the-idea-of-a-university-today](http://www.historyandpolicy.org/policy-papers/papers/the-idea-of-a-university-today)
- Andrews, J. & Higson, H. (2008). Graduate Employability, 'soft skills' versus 'hard' business knowledge: A European study. *Higher Education in Europe*, 33(4). <https://doi.org/10.1080/03797720802522627>
- Ankra, S., & Al-Tabaa, O. (2015). Universities-industry collaboration: a systematic review. *Scandinavian Journal of Management*, 31, 387-408.
- Armstrong, J. (2016). *Responsibility in the workplace*. <https://www.linkedin.com/pulse/responsibility-workplace-jason-armstrong>
- Artess, J., Hooley, T., & Mellors-Bourne, R. (2017). *Employability: a review of the literature 2012 to 2016*. Higher Education Academy.
- Ashman, G. (2019). Can critical thinking be taught? <https://gregashman.wordpress.com/2019/12/15/can-critical-thinking-be-taught>
- Awiti, A., Orwa, C., Mbuvi, L., & Karumba, M. (2019). *Whole youth development in Kenya: survey of employers and employees in the formal and informal sectors to determine entry-level skills among youth (18-30yrs) in employment in Kenya*. Aga Khan University, Nairobi, Kenya.
- Babos, P., Lubyova, M., & Studena, I. (2015). *Lifelong learning is a growing factor in employability*. Policy Brief. LLLight in Europe Research Consortium.
- Baharun, R., & Suleiman, E. S. (2009). *The employers' perceptions of what makes graduates marketable*. [www.academia.edu/1029280/the-employers-perceptions-of-what-makes-graduates-marketable](http://www.academia.edu/1029280/the-employers-perceptions-of-what-makes-graduates-marketable)
- Bandura, A. (1994). *Self-efficacy*. John Wiley & Sons.
- Barnett, R. (2000). *Realizing the university in an age of supercomplexity*. Open University Press.
- Baron, P., & McCormack, S. (2024). Employable me: Australian higher education and the employability agenda. *Journal of higher education policy and management*. DOI:10.1080/1360080x.2024.2344133
- Belt, V., Drake, P., & Chapman, K. (2010). *Employability skills: a research and policy briefing*. UK Commission for Employment and Skills (UKCES).
- Bennett, D. (2019). Graduate employability and higher education: past, present and future. *HERDSA Review of higher education*, 5, pp.31-61. <https://www.herdsa.org.au/herdsa-review-higher-education-vol-5/31-61>

- Bhandari, P. (2021). Mediator vs moderator variables: differences and examples. <https://www.scribbr.com/methodology/mediator-vs-moderator>
- Blake, N., Smith, R., & Standish, P. (1998). *The universities we need: higher education after Dearing*. Kogan Page.
- Bogonko, L.B. (2018). *Factors affecting the employability of first degree graduating millennials: a case of employers of United States International University – Africa graduates*. [Research project report]. United States International University – Africa, Nairobi, Kenya.
- Bokea, H. (2005). *Developing employability skills among Kenyan university graduates*. [Research project report]. United States International University – Africa, Nairobi, Kenya.
- Boomsma, K. (2017, July 6). Reorient varsity training to market needs. *Daily Nation*, 15.
- Bosire, E. S. (1996). *Proposals for the improvement of training teachers of English for primary schools in Kenya* [Unpublished masters thesis]. Moi University, Kenya.
- Bowers-Brown, T. & Harvey, L. (2004). Are there too many graduates in the UK? A literature review and an analysis of graduate employability. *Industry and Higher Education*, 18(4), 243-254. <https://doi.org/10.5367/0000000041667538>
- Brahmakasikara, L., Achwarin, N. & phongsatha, S. (2017). Determinants of quality in higher education. *Assumption university e-journal of interdisciplinary research (AU-eJIR)*, 2(2)
- Breaugh, J. A. (2009). *Recruiting and attracting talent: a guide to understanding and managing the recruitment process*. SHRM Foundation.
- Brennan, J. (2004). *Graduate unemployment: issues for debate and inquiry*. <http://www.bc.edu/bc-org/avp/soe/cihe/newsletter/new34/text007.htm>
- Bridges, W. (2004). *Job Shift*. [www.entre.educ.org/-entre/jobshift.htm](http://www.entre.educ.org/-entre/jobshift.htm)
- Bridgstock, R. (2020). Graduate employability 2.0: Enhancing the connectedness of learners, programs and higher education institutions [Final report]. Australian Government Department of Education, Skills and Employment. [https://ltr.edu.au/resources/FS15-0241\\_Bridgstock\\_Report\\_2020.pdf](https://ltr.edu.au/resources/FS15-0241_Bridgstock_Report_2020.pdf)
- British Council (2016). *Universities, employability, and inclusive development: repositioning higher education in Ghana, Kenya, Nigeria, and South Africa*. <http://www.britishcouncil.org/education/ihe>
- Brown, S., & Drew, S. (2005). *Developing an employability framework: an institutional approach*. [Paper presentation]. Ninth quality in higher education international seminar, Birmingham, UK.

- Cai, Y. (2012). Graduate employability: a conceptual framework for understanding employers' perceptions. *Higher Education*, 65, 457-469.
- Canadian Labor Force Development Board (1994). *Putting the pieces together: towards a coherent transition for Canada's labor force*.
- CareersNZ (2018). *Skills employers are looking for*. <https://www.careers.govt.nz/plan-your-career/not-sure-what-to-do/skills-employers-are-looking-for>
- Catcheside, K. (2012, March 5). The benefits of a university education. *The Guardian*. <https://www.theguardian.com/higher-education-network/blog/2012/mar/05/benefits-of-a-university-education>
- Cheruiyot, P. K. (2004). *Equity and efficiency implications of financing higher education through a student loan scheme in Kenya: a case study of Moi University* [Unpublished masters thesis]. Moi University, Kenya.
- Chester, E. (2012). *Reviving work ethic: a leader's guide to ending entitlement and restoring pride in the emerging workforce*. Greenleaf Book Group.
- Chetty, Y. (2012). Graduateness and employability within the higher education environment: a focused review of the literature. In Coetzee, M., J. Botha, N. S. Eccles, N. Holtzhausen, & H. Nienabar (Eds.), *Developing student graduateness and employability: issues, provocations, theory and practical guidelines* (pp. 5-24). Knowres.
- Chiaha, G. T. U., & Agu, R. A. (2013). Entrepreneurship education and graduate employability in Nigeria. *Association of African Universities General Conference selected papers* (pp.16-33). AAU.
- Childress, J. (2017). *Leadership can't be taught, but it can be learned!* <https://www.td.org/insights/leadership-cant-be-taught-but-it-can-be-learned>
- Chithra, R. (2013). Employability skills – a study on the perception of the engineering students and their prospective employers. *Global Journal of management and Business Studies*, 3(5), 525-534.
- Cleverism (2020). *Persuasion*. <https://www.cleverism.com/persuasion>
- Clokie, T. L. & Fourie, E. (2016). Graduate employability and communication competence: are undergraduates taught relevant skills? *Business and Professional Communication Quarterly*, 79, 442-463. <https://doi.org/10.1177/2319490616657635>
- Coetzee, M., Botha, J., Eccles, N. S., Holtzhausen, N., & Nienabar, H. (eds.) (2012). *Developing student graduateness and employability: issues, provocations, theory and practical guidelines*. Knowres.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6<sup>th</sup> ed.). Routledge.

- Cohen, L., Manion, L., & Morrison, K. (2017). *Research methods in education* (8<sup>th</sup> ed.). Routledge.
- Collini, S. (2012). *What are universities for?* Penguin.
- Commission for Higher Education (2003). *Re-engineering university education for national development*. A report of the symposium on university education organized by the Commission for Higher Education.
- Commission of the European Community (2006). *Delivering on the modernization agenda for universities: education, research and innovation*. Communication from the Commission to the Council and the European parliament. <http://ec.europa.eu/education/policies/2010/doc/comuniv2006-en.pdf>
- Confederation of British Industry (CBI) (1999). *Making employability work: an agenda for action*.
- Confederation of British Industry (CBI) and National Union of Students (NUS) (2011). *Working towards your future: making the most of your time in higher education*
- Conference Board of Canada (2000). *Employability skills 2000+*. [www.conferenceboard.ca/education](http://www.conferenceboard.ca/education)
- Cook, E.J. (2022). A narrative review of graduate employability models: their paradigms, and relationships to teaching and curricula. *Journal of Teaching and Learning for Graduate Employability*, 13(1), DOI:10.21153/jtlge2022vol13no1art1483
- Correia, A. (2014). Creating curriculum within the context of an enterprise. In M. Gosper & D. Ifenthaler (Eds.), *Curriculum models for the twenty-first century: using learning technologies in higher education* (pp.113-134). Springer. <https://doi.org/10.1007/978-1-4614-7366-4>
- Cote, A. (2019). The benefits of a strong work ethic, and how it can help you land and keep your dream job. <https://medium.com/paymo/the-benefits-of-a-strong-work-ethic>
- Cranmer, S. (2006). Enhancing graduate employability: best intentions and mixed outcomes. *Studies in higher education*, 31(2), 169-184. <http://doi.org/10.1080/03075070600572041>
- Creswell, J. W. (2009). *Research design: qualitative, quantitative, and mixed methods approaches*. Sage.
- Cresswell, J.W. and Creswell, J.D. (2018). *Research Design* (5<sup>th</sup> edition) Sage.
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2<sup>nd</sup> ed.). Sage.

- Creswell, J. W., Plano Clark, V. L., Gutmann, M. L., & Hanson, W. E. (2003). Advanced mixed methods research designs. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp.209-240). Sage.
- Crosling, G., & Ward, I. (2002). Oral communication: the workplace needs and uses of business graduate employees. *English for Specific purposes*, 21, 41-57.
- Dabiri, S. (2013). Human capital development and graduate employability in post-war Liberia. *Association of African Universities General Conference selected papers* (pp.34-59). AAU.
- Dacre-Pool, L., & Sewell, P. (2007). The key to employability: developing a practical model of graduate employability. *Education and Training*, 49(4), 277-289.
- Dang, V. H. (2015). A mixed method approach enabling the triangulation technique: case study in Vietnam. *World Journal of Social Science*, 2(2), 1-13.
- Darkwa, P., & Adu-Gyamfi, A. B. (2013). Graduate unemployability in Ghana: views of unemployed graduates. *Association of African Universities General Conference selected papers* (pp.60-73). AAU.
- Dasgupta, A. (2017). *Finding the right fit in academia and industry collaboration*. <https://www.geospatialworld.net/challenges-and-expectations-in-academia-and-industry-collaboration>
- De Bono, E. (2005). *Creativity*. <http://www.edwdebono.com/debono/msg.htm>
- De Janasz, S. C. & Forret, M. L. (2008). Learning the art of networking: a critical skill for enhancing social capital and career success. *Journal of Management Education*, 32(5), 629-650.
- Denzin, N. K. (2010). Moments, Mixed methods and paradigm dialogs. *Qualitative Inquiry*, 16, 419-427.
- Denzin, N. K. (2012). Triangulation. *Journal of Mixed Methods Research*, 6, 80-88.
- Denzin, N. K., & Lincoln, Y. S. (2005). Introduction: the discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (3<sup>rd</sup> ed.). pp.1-32. Sage.
- Denzin, N.K. & Lincoln, Y.S. (2017). *The Sage Handbook of qualitative research*. (5<sup>th</sup> ed.). Sage.
- Department of Education Science and Training (DEST) (2002). *Employability skills for the future: project final report*. [http://www.dest.gov.au/sectors/training\\_skills/publications\\_resources/profiles/employability.htm](http://www.dest.gov.au/sectors/training_skills/publications_resources/profiles/employability.htm)

- Doh, J. P. (2003). Can leadership be taught? Perspectives from management educators. *The Academy of Management Learning and Education*, 2(1), 54-67.
- Doyle, A. (2019). *Important adaptability skills for workplace success*. [www.thebalancecareers.com/important-adaptability-skills-for-the-workplace](http://www.thebalancecareers.com/important-adaptability-skills-for-the-workplace)
- Drvcourt (2016). *Can critical thinking be taught?* <https://drvcourt.wordpress.com/2016/01/11/can-critical-thinking-be-taught>
- Durrani, N & Tariq, V. N. (2012). The role of numeracy skills in graduate employability. *Education and training*, 54(4), 419-434.
- Duszynski, M. (2020). *Top 10 employability skills: definition and list of examples*. <https://zety.com/blog/employability-skills>
- Dyson, E. (2020). *How to effectively recruit recent graduates*. <https://www.peoplescout.com/effective-recruitment-of-recent-graduates>
- Earnest, S. (2014, June 12). Over 50% of East African graduates halfbaked. *The EastAfrican*. <http://www.theeastafrikan.co.ke/over-50-per-cent-of-EA-graduates-half-baked/2558-2345578-jw87c4/index.html>
- Education Council of the European Union (2001). *The concrete future objectives of education and training systems*.
- Ehile, E. E. (2013). Preface. In Association of African Universities (2013). *Association of African Universities General Conference 2013 selected papers* (pp. iv-vi). AAU.
- Evans, C. (2016). Can innovation be taught? <https://eaglesflight.com/blog/can-innovation-be-taught>
- Fair, L. (2013). *An employers' perspective on teaching essential employability skills to advertising students at St. Lawrence College*. [MBA research project]. Cape Breton University, Canada.
- Farell, J. (2019). *What is Cultural intelligence? Breaking down the buzzword*. <https://theewgroup.com/what-is-cultural-intelligence>
- Federation of Kenya Employers (FKE) (2018). *Skills mismatch survey*.
- Fehnel, R. (2003). Massification and future trends in African higher education. In D. Teffera & P.G. Altbach (Eds.), *African Higher Education* (pp. 73-81). Indiana University Press.
- Flash Eurobarometer (2010). *Employers' perception of graduate employability – analytical report*. The Gallup Organization.
- Flynn, M. (2020). *Why colleges should turn to companies for inspiration*. <https://www.insidehighered.com/higher-ed-has-much-to-learn-from-the-world-of-work-opinion>

- Forbes (2000). *Can integrity be taught?* <http://www.forbes.com>
- Frailon, J., Ainley, J., Schulz, W., Friedman, T., & Gebhardt, E. (2014). Preparing for life in a digital age. *The International computer and literacy information study report of the International Association for the Evaluation of Educational Achievement (IEA)*.
- Frankham, J. (2017). Employability and Higher Education: the follies of the 'production challenge' in the Teaching Excellence Framework. *Journal of education policy*, 32(5), pp.628-641. doi:10.1080/02680939.2016.1268271
- Fraser, C. J., Duignan, G., Stewart, D., & Rodrigues, A. (2019). Overt and covert: strategies for building employability skills of vocational education graduates. *Journal of Teaching and Learning for Graduate Employability*, 10(1), 157-172.
- Friedman, A. (2019). *9 tips for teaching kids responsibility*. <https://www.care.com/stories/9-tips-for-teaching-kids-responsibility>
- Frith, B. (2016). *Adaptability is a key skill of the future*. <https://www.hrmagazine.co.uk/adaptability-is-a-key-skill-of-the-future>
- Fulgence, K. (2015). *Employability of higher education institution graduates: exploring the influence of entrepreneurship education and employability skills development program activities in Tanzania*. [PhD thesis]. University of Siegen, Germany.
- Furlong, P., & Marsh, D. (2002). A skin not a sweater: ontology and epistemology in political science. In D. Marsh & G. Stoker (Eds.), *Theory and methods in political science* (pp. 17-41). Palgrave Macmillan.
- Gann, D., Montessor, F., & Eisenberg, J. (2018). *Three ways to nurture collaboration between universities and industry*. <https://www.weforum.org>
- Gardner, H. (1983). *Frames of mind: a theory of multiple intelligence*. Basic Books.
- Gerth, D. R. (n.d.) *Relevance in higher education*. Education: reform and innovation in higher education. [http://portal.unesco.org/education/en/ev.php-URL\\_ID=12775](http://portal.unesco.org/education/en/ev.php-URL_ID=12775)
- Gibbons, M. (1998, October 5-9). *Higher education relevance in the 21<sup>st</sup> century*. [Paper presentation]. UNESCO World Conference on Higher Education, Paris, France.
- Glaze, S. (2014). For effective schools, teamwork is not optional. *Edutopia*. <https://www.edutopia.org/blog/effective-schools-teamwork-not-optional-sean-glaze>
- Glen, S. (2018). Mediator variable/mediating variable: simple definitions. <https://www.statisticshowto.com/mediator-variable>
- Glossary of Education Reform (2013). *Locus of control*. <https://edglossary.org>

- Glover, D., Law, S., & Youngman, A. (2002). Graduateness and employability: student perceptions of the personal outcomes of university education. *Research in Post-compulsory Education*, 7(3), 293-306.
- Gokulsing, D. (2013). Linking higher education and employability: a case study of graduates (2009) of the University of Mauritius. *Association of African Universities General Conference selected papers* (pp.90-101). AAU.
- Goldkuhl, G. (2012). Pragmatism vs Interpretivism in qualitative information systems research. *European Journal of Information Systems*, 21(2), 135-146.
- Goleman, D. (1995). *Emotional intelligence: why it can matter more than IQ*. Bantam Books.
- Golola, I. (2001). *Higher education and employment opportunities: the case of Bugema University graduates*. [Masters thesis, Uganda Management Institute, Uganda].
- Goman, C. K. (2012). *What it really means to dress for success*. <https://www.forbes.com>
- Gorlich, D., Stepanok, I., & Al-Hussami, F. (2013). Youth unemployment in Europe and the world: causes, consequences and solutions. *EconPapers*. <https://www.econstor.eu/bitstream/10419/70102/1/735082359.pdf>
- Gosper, M., & Ifenthaler, D. (2014). Curriculum design for the twenty-first century. In M. Gosper & D. Ifenthaler (Eds.), *Curriculum models for the twenty-first century: using learning technologies in higher education* (pp.1-14). Springer. <https://doi.org/10.1007/978-1-4614-7366-4>
- Graduate Recruitment Bureau (GRB) (n.d.). *Running a graduate recruitment campaign*. <https://www.grb.uk.com/graduate-recruitment-campaign>
- Grant, J. (2002). *Learning needs assessment: assessing the need*. <http://bmj.bmjournals.com/cgi/content/full/324/7330/156>
- Gudo, C. O., Olel, M. A., & Oanda, I. O. (2011). University expansion in Kenya and issues of quality education: challenges and opportunities. *International Journal of Business and Social Science*, 2(20), 203-214.
- Gunn, V., Bell, S., & Kafmann, K. (2010). *Thinking strategically about employability and graduate attributes: universities and enhancing learning for beyond university*. QAA.
- Hannum, W., & Hansen, C. (1989). *Instructional systems development in large organizations*. Educational Technology Publications.
- Harvey, L. (1999). *Employability: developing the relationship between higher education and employment*. [Paper presentation]. Fifth Quality in Higher Education 24-hour seminar, Warwick University, UK.

- Harvey, L. (2000). New realities: the relationship between higher education and employment. *Tertiary Education and Management*, 6, 3-17.
- Harvey, L. (2001). Defining and measuring employability. *Quality in Higher Education*, 7(2), 97-109. <https://doi.org/10.1080/13538320120059990>
- Harvey, L. (2003). *Transitions from higher education to work*. ESECT.
- Harvey, L. (2017). *Social research glossary*. Quality research international. <http://www.qualityresearchinternational.com/socialresearch.htm>
- Harvey, L., & Knight, P. (2003). *Briefing on employability 5: helping departments to develop employability*. ESECT.
- Harvey, L., Locke, W., & Morey, A. (2002). *Enhancing employability, recognizing diversity: making links between higher education and the world of work*. UniversitiesUK. [www.universitiesUK.ac.uk/employability](http://www.universitiesUK.ac.uk/employability)
- Harvey, L., Moon, S., & Geall, V. (1997). *Graduates work: organizational change and students' attributes*. Center for Research into Quality.
- Haward, D. (2018). Adaptability. *Training Industry Magazine*, 2018, 57.
- Hayton, E. (2018). *How to improve your graduate recruitment strategy*. <https://harver.com/blog/graduate-recruitment-strategy>
- Heathfield, S. M. (2020). *What is teambuilding?* <https://www.thebalancecareers.com/what-is-team-building>
- Her Majesty's Treasury (1997). *Treasury Press Release 122/97*.
- Hetemaj, F. (2017). *Can soft skills be taught?* <https://www.medium.com/can-soft-skills-be-taught>
- Hillage, J., & Pollard, E. (1998). *Employability: developing a framework for policy analysis*. Department for Education and Employment.
- Hinchliffe, G. (2005, January 27-28). *Graduate employability: a need for realism?* [Paper presentation]. Ninth quality in higher education international seminar, Birmingham, UK.
- Hinchliffe, G.W. & Jolly, A. Graduate identity and employability. *British educational research journal*, 37(4), pp.563-584. DOI:10.1080/01411926.2010.482200
- Hinchliffe, K. (1987). *Higher education in sub-saharan Africa*. London: Croom Helm
- Hinton, K. (2019). *Why self efficacy is critical to learning*. <http://www.apertureed.com/why-self-efficacy-is-critical-to-learning>
- Holland, S., Shore, D.B., Cortina, J.M. (2016). Review and recommendation for integrating mediation and moderation. *Organization research methods*, pp.1-35. Doi:10.1177/1094428116658958

- Holmes, L. (2000). *Reframing the skills agenda in higher education: graduate identity and the double warrant*. [Paper presentation]. The future business of higher education conference, Oxford, UK.
- Holmes, M. (n.d.). Can leadership be taught? <https://www.academia.edu/can-leadership-be-taught>
- Indeed (2019). *Employability skills: definition and 10 examples*. <https://www.indeed.com/career-advice/finding-a-job/employability-skills?from=careeradvive-US&subfrom=article#4>
- Indeed (2020). *Leadership skills: definitions and examples*. <https://www.indeed.com/leadership-skills-definitions-and-examples>
- Institute Economic Affairs (2010). *The dynamics and trends of employment in Kenya*.
- International Careers Institute (2016). *The top 8 skills employers are looking for*. <https://www.ici.net.au/blog/the-top-8-skills-employers-are-looking-for>
- International ICT Literacy Panel (2002). *Digital transformation: a framework for ICT literacy*. <https://www.ets.org/media/research/pdf/ICTREPORT.pdf>
- International Labour Organization (ILO) (2013). Global employment trends for youth 2013: a generation at risk. [www.ilo.org/wcms\\_212423](http://www.ilo.org/wcms_212423)
- Jakob, A. (2001). On the triangulation of quantitative and qualitative data in typological social research: reflections on a typology of conceptualizing “uncertainty” in the context of employment biographies. *Qualitative Social Research*, 2(1). <https://doi.org/10.17169/fqs-2.1.981>
- Jenkins, R. (2017). *I useful way to instill a strong work ethic in millennials*. <https://www.inc.com/ryan-jenkins>
- Johnson, A. (2019). *Nine best recruitment channels to use in 2020*. <https://harver.com/blog/9-best-recruitment-channels-to-use-in-2020>
- Johnson, R. B., & Christensen, I. B. (2017). *Educational research: quantitative, qualitative and mixed approaches* (6<sup>th</sup> ed.). Sage.
- Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research*, 1, 112-133. <https://doi.org/10.1177/1558689806298224>
- Jowi, J. O. (2003). *From government to governance: responses by Kenyan universities to the changing role of the state in Kenya’s higher education*. [Unpublished masters thesis]. University of Oslo, Norway.
- Jun, K. (2017). Factors affecting employment and unemployment for fresh graduates in China. In Y. Liu (Ed.), *Unemployment – perspectives and solutions*. Intech Open. <https://doi.org/10.57772/intechopen.69809>

- Jung, S. (2014). Stratified Fisher's exact test and its sample size calculation. *Biometrical journal*, 56(1), pp.129-140. DOI: 101002/bimj.201300048
- Jwan, J. O., & Ongondo, C. O. (2011). *Qualitative research: an introduction to principles and techniques*. Moi University Press.
- Kadushin, C., Hecht, S., Sasson, T., & Saxe, L. (2008). Triangulation and mixed methods designs: practicing what we preach in the evaluation of an Israel Experience Educational program. *Field Methods*, 20(1). <https://doi.org/10.1177/1525822X07307426>
- Kalei, A. (2014). University graduates' employability skills mismatch and the labor market demands in Kenya. *International Journal of Business and Management Science*, 2(10), 1-8.
- Kalfa, S., & Taksa, L. (2015). Cultural capital in business higher education: reconsidering the graduate attributes movement and the focus on employability. *Studies in higher Education*, 40(4), 580-595.
- Kalufya, N. & Mwakajinga, L. (2016). Employability of graduates from higher education institutions in Tanzania. *Institute of Social Work Journal*, 1(2), 51-68.
- Kamau, S.W., & Waudo, J. (2012). Hospitality industry employers' expectations of employees' competences in Nairobi hotels. *Journal of Hospitality Management and Tourism*, 3(4), 55-63.
- Kamer, L. (2023). University enrolment in Kenya 2016-2022 by gender. <https://www.statista.com/statistics/1135820/university-enrolment-in-kenya-2016-2022-by-gender>
- Kaminske, A. N. (2019). Can we teach critical thinking? <https://www.learningscientists.org/blog/2019/2/28/can-we-teach-critical-thinking>
- Kamunzyu, E. N. L. (2010). Challenges facing hospitality industrial attachment as a learning experience in selected institutions in Nairobi, Kenya. [Unpublished masters thesis]. Kenyatta University, Kenya.
- Karim, R. (2015). *A study of graduates' employability in the United Kingdom*. [Independent MSc Research Paper]. University of London.
- Kasozi, A.B.K. (2003, September). *Contemporary issues in education: global forces that impact on East African education and affect local empowerment*. [Paper presentation]. IUCEA workshop on contemporary issues in education: globalization and local empowerment, Makerere University, Kampala, Uganda.
- Kathuri-Ogola, L., Van Leeuwen, C., Kabaria-Murithi, J., Weeks, L. E., Kieru, J., & Ndayala, P. (2015). Supervision challenges encountered during Kenyatta University students' practicum attachment. *Journal of Education & Practice*, 6(17), 111-117.

- Kaufman, R. (2000). *Mega-planning*. Sage.
- Kaufman, R. (2019). Alignment and success: applying the hierarchy of planning and the needs-assessment hierarchy. *Performance improvement*, 58(7), pp.24-28. doi:10.1002/pfi.21891
- Kaufman, R., Oakley-Brown, H., Watkins, R., & Leigh, D. (2003). *Strategic planning for success: aligning people, performance and payoffs*. Jossey Bass.
- Kelly, M. (2007). Teaching children responsibility. *Life Times Newsletter*, 9(4), 3.
- Kent, C. (2018). *Teaching students to manage their time*. <https://www.insidehighered.com/how-to-teach-students-time-management-skills>
- Keoro, A., Yungungu, A., & Nyandusi, C. (2014). *Constraints in the integration of computers in curriculum delivery*. Lambert Academic Publishing.
- Keyser, A. (2018). *Seven tips to teach responsibility*. <https://www.worksheetcloud.com/7-tips-to-teach-responsibility>
- KICD (n.d.). *The curriculum development cycle*. <http://www.kicd.ac.ke>
- Kimani, G. N. (2005). Graduates' perceptions of university programs and their relevance to employment: University of Nairobi (1991-1998). *Africa Development*, 30(1&2), 68-85.
- Kingsley, D. (2020). Can innovation be taught? <http://channels.theinnovationenterprise.com/can-innovation-be-taught>
- Kithinji, M.M. (2023). History of higher education in Kenya. <https://doi.org/10.1093/acrefore/9780190277734.013.1272>
- Kenya Institute for Public Policy Research and Analysis (KIPPRA) (2013). *Kenya economic report 2013: Creating an enabling environment for stimulating investment for competitive and sustainable counties*.
- Kleinman, M., & West, A. (1998). Employability and the new deals: employability is what the government wants but what exactly is it? *New Economy*, 5(3). <https://doi.org/10.1111/1468-0041.00038>
- Knight, P. T., & Yorke, M. (2002). Employability through the curriculum. *Tertiary education and management*, 8(4), 261-276.
- Knight, P. T., & Yorke, M. (2004). *Learning, curriculum and employability in higher education*. Routledge.
- Knowledge@Wharton (2008). *The objective of education is learning, not teaching*. <http://www.knowledge.wharton.upenn.edu>

- Kombo, K. & Mwangi, M. I. (2018). Strengthening university partnerships and collaborations in Kenya: strategies for sustainability. *The Cradle of Knowledge: African Journal of Educational and Social Science Research*, 6(3), 19-23.
- Koyi, S., Kiprono, C.Z., & Manyali, G. (2020). Higher education trajectory in Kenya: historical lessons and prospects for universities. *African journal of emerging issues*, 2(13), pp.1-12.  
<https://ajoeijournals.org/sys/index.php/ajoei/article/view/149>
- Kukreja, R. (2020). 10 practical ways to improve time management skills. <https://lifehack.org/articles/10-practical-ways-to-improve-time-management-skills>
- Kumar, A. (2007). *Personal, academic and career development in higher education: SOARing to success*. Routledge.
- Kumar, A. (2015). *Enabling all learners to SOAR for employability: an inclusive, integrative pedagogy*. Higher Education Academy Innovative Pedagogy Series.
- Kumar, S. R. (2019). *Employability skills: creativity*. <https://www.nationalskillsnetwork.in/employability-skills-creativity>
- Lackovic, N. (2019). Graduate employability (GE) paradigm shift: towards greater socioemotional and eco-technological relationalities of graduates' futures. In Peters, M., Jandric, P. & Means, A. (Eds.), *education and technological unemployment*, pp. 193-212, Springer. [https://doi.org/10.1007/978-981-13-6225-5\\_13](https://doi.org/10.1007/978-981-13-6225-5_13)
- Lai, E. R., Yarbo, J., Di Cerbo, K., & De Geest, E. (2018). *Skills for today: what we know about teaching and assessing creativity*. Pearson.
- Lau, H.H., Hsu, H.Y., Acosta, S., & Hsu, T.L. (2014). Impact of participation in extracurricular activities during college on graduate employability: an empirical study of Taiwanese business schools. *Educational Studies*, 40(1), 26-47.
- Law, B., and Watts, A. G. (1977). *Schools, careers and community: a study of some approaches to careers education in schools*. Church Information Office.
- Law, B., and Watts, A.G. (2003). *The DOTS analysis: original version*. <http://hihohiho.com/memory/Gafdots.pdf>
- Lee, J. (2019). Rapid needs assessment: an evidence based model. *European journal of training and development*, 43(1-2), pp. 61-75. doi:10.1108/EJTD-08-2018-0077
- Lees, D. (2002). *Graduate employability – literature review*. LTSN Generic centre.

- Leydesdorff, L. (2013). Triple helix of university-industry-government relations. In E. G. Carayannis (Ed.), *Encyclopedia of creativity, invention, innovation, and entrepreneurship*. Springer. <https://doi.org/10.1007/978-1-4614-3858-8>
- Lie, K. Y., Pang, V., & Mansur, F. (2009). Employer perceptions on graduate literacies in higher education in relation to the workplace. *English for specific purposes*, 4(20), 1-15
- Ligami, C. (2016). Universities and the quest for employable graduates. *University World News*. <https://www.universityworldnews.com/post.php?story=20161012081647544>
- LIWA (2019). *Creating sustainable linkages between academia, industry and government: strengthening linkages deepening the role*. <https://www.liwaprogrammetrust.org>
- Lowden, K., Hall, S., Eliot, D., & Lewin, J. (2011). *Employers' perceptions of the employability skills of new graduates*. University of Glasgow.
- Lucas, S. (2017). *Can you teach work ethic?* <https://fsd.servicemax.com>
- Lucey, B. M. (2014). *How far have we drifted from the Newman/Humboldt idea of a university?* <http://brian.lucey.worldpress.com/2014/06/06/how-far-have-we-drifted-from-the-newman-humboldt-idea-of-a-university?>
- MacIntosh, N. (n.d.). *Organizational skills for your resume*. <https://www.monster.ca/article/organizational-skills-for-your-resume>
- Mainga, W., Daniel, R.M., & Alamil, L. (2022). Perceptions of employability skills of undergraduate business students in a developing country: an exploratory study. *Higher education research communications*, 12(1), pp. 28-63. <https://doi.org/10.18870.v12i1.1257>
- Marasi, S. (2019). Team building: developing teamwork skills in college students using experiential activities in a classroom setting. *Organization Management Journal*, 16(4), 324-337.
- Marchetti, C. (2018). *Team work that works*. <http://www.insidehighered.com>
- Mario, M., Buendia, M., Kouwenhoven, W., Alberto, A., & Waddington, C. (2002). *Review of education sector analysis in Mozambique*. UNESCO.
- Martin, M. (2000). University-industry partnerships: the changing context. *IIEP Newsletter*, 18(3), 1,4.
- Martin, R, Villeneuve-Smith, F, Marshal, L., & McKenzie, E. (2008). Employability skills explored. Learning and Skills Network. <http://www.lseducation.org.uk>
- Matkovic, P., Tumbas, P., Sakal, M., & Pavlicevic, V. (2014). Curriculum development process redesign based on university-industry cooperation. *Proceedings of the 6<sup>th</sup> International Conference on Education and New Learning Technologies, Barcelona, Spain* (pp.4113-4123).

- Mayne, D. (2019). *Social etiquette tips*. <https://thespruce.com/social-etiquette-tips>
- Mbebeb, F. E. (2013). Harnessing career entrepreneurship as an optimistic measure of graduate employability in Cameroon. *Association of African Universities General Conference selected papers* (pp.74-89). AAU.
- McCowan, T. (2015). Should universities promote employability? *Theory and Research in Education*, 13(3), 267-285.
- McCowan, T. (2016a). Introduction. In British Council, *Universities, employability, and inclusive development: repositioning higher education in Ghana, Kenya, Nigeria, and South Africa* (pp. 2-14). <http://britishcouncil.org/education/ihe>
- McCowan, T. (2016b). Conclusion. In British Council, *Universities, employability, and inclusive development: repositioning higher education in Ghana, Kenya, Nigeria, and South Africa* (pp.101-103). <http://britishcouncil.org/education/ihe>
- McCraith, B. (2016, March 29). Why we need more T-shaped graduates. *The Irish Times*. [www.irishtimes.com](http://www.irishtimes.com)
- McGovern, G. (2002). *Knowledge management: from lifelong employment to lifelong learning*. <http://gerrymcgovern.com/nt/2002/nt2002-05-06-lifelong.htm>
- McGrath, S. (2009). *What is employability? Learning to support employability*. [Project paper]. University of Nottingham, UK.
- McIlveen, P. (2018). *Defining Employability for the new era of work*. Sydney: Select Committee on the future of work and workers.
- McKay, D. R. (2018). *How to dress professionally*. <https://www.thebalancecareers.com/how-to-dress-professionally-524789>
- McLoughlin, C. (2011). *What ICT related skills and capabilities should be considered central to the definition of digital literacy?* [https://researchbank.acu.edu/cgi/viewcontent.cgi?article=2658&content=fea\\_publication](https://researchbank.acu.edu/cgi/viewcontent.cgi?article=2658&content=fea_publication)
- McMillan, J. H. & Schumacher, S. (2001). *Research in education: a conceptual introduction* (5<sup>th</sup> ed.). Longman.
- McMillan, J.H. & Schumacher, S. (2014). *Research in education: evidence based inquiry* (7<sup>th</sup> ed.). Pearson Education.
- McQuaid, R. W., & Lindsay, C. (2005). The concept of employability. *Urban Studies*, 42(2), 197-219.
- Mellisa, K. (2020). *Teaching students identified with interpersonal intelligence*. <http://www.thoughtco.com/interpersonal-intelligence-8091>
- Memon, M.A., Jun-Hwa, C., Ramayah, T., & Ting, H. (2018). Mediation Analysis: issues and recommendations. *Journal of Applied Structural equation modelling*, i-ix. doi:10.47263/JASEM.2(1)01

- Migosi, J. A. (1998). *Enrolment at university level in Kenya and its equity implications: a case study of Moi University*. [Unpublished masters thesis]. Moi University, Kenya.
- Mindtools (2020). *What is time management? Working smarter to enhance productivity*. [https://www.mindtools.com/pages/article/newHTE\\_00.htm](https://www.mindtools.com/pages/article/newHTE_00.htm)
- Mohee, R. (2019). *A guide to integrating employability in higher education institutions: The Commonwealth of Learning's employability model*. Commonwealth of Learning.
- Moll, I. (2005). Curriculum responsiveness: the anatomy of a concept. In H.Griesel (Ed.), *Curriculum responsiveness: case studies in higher education* (pp.1-9). South African Universities Vice Chancellors Association.
- Money Matters (n.d.). *What are the purposes of planning in an organization?* <http://accountlearning.com/what-are-the-purposes-of-planning-in-an-organization>
- Moon, J. (2004). *Reflection and employability*. Learning and Teaching Support Network.
- Moreau, M. P., & Leathwood, C. (2006). Graduates' employment and the discourse of employability: a critical analysis. *Journal of Education and Work*, 19(4), 305-324. <https://doi.org/10.1080/13639080600867083>
- Morgan, D. L. (2007). Paradigms lost and pragmatism regained: methodological implications of combining qualitative and quantitative methods. *Journal of Mixed Methods Research*, 1(1), 48-76.
- Morgan, D. L. (2014). Pragmatism as a paradigm for social research. *Qualitative Inquiry*, 20(8), 1045-1053.
- Muiruri, B.N. (1996). *Strategic planning in higher education: a survey of planning practices in universities and colleges in the United Kingdom and Kenya*. [Unpublished masters thesis]. University of Wales, UK.
- Munda, C. (2018, May 27). Hiring fresh graduates now a costly burden, say employers. *Daily Nation*, 38.
- Munsanje, V. M. (2013). *The impact of the socio-economic environment on higher education in Zambia*. [Paper presentation]. 13<sup>th</sup> General Conference of the Association of African Universities, Libreville, Gabon.
- Munyoki, J.M., & Ndemo, B. (2017). Entrepreneurial education, youth employability, and economic development in Kenya. In J. Bode & C. Freitag (Eds.), *Universities, entrepreneurship and enterprise development in Africa – conference proceedings*, 5, (pp.122-145). German African University Partnership Platform for the Development of Entrepreneurs and Small/Medium Enterprises. <https://doi.org/10.18418/978-3-96043-042>

- Murray, J. (2017). *Do employers actually care which university you went to?* <https://debut.careers/insight/do-employers-actually-care-which-university-you-went-to>
- National Committee of Inquiry into Higher Education (NCIHE) (Dearing Report) (1987). *Higher education in the learning society*.
- National Institute for Newman Studies (2007). *Newman reader – works of John Henry Newman*.
- Nawaz, N. (2013). Role of employability skills in management education: a review. *Zenith International Journal of Business Economics and Management Research*, 3(8), 34-45
- Ndayala, E. (2018, December 7). Over 64% of Kenyan university graduates lack job skills. *TukoNews*. <https://www.tuko.co.ke/293299-over-64-kenyan-university-graduates-lack-job-skills-survey.html>
- Nganga, G. (2014). Survey finds most East African graduates “half-baked”. *University World News*, Issue 321.
- Nganga, G. (2016, May 9). Spike in university enrolment brings new challenges. *University World News*. Issue 413.
- Nganga, G. (2020). Bleak future as employers get picky. *University World News*. <https://www.universityworldnews.com/bleak-future-as-employers-get-picky>
- Nguyen, D. N., Yoshinari, Y., & Shigeji, M. (2005). University education and employment in Japan: students’ perceptions on employment attributes and implications for university education. *Quality Assurance in Education*, 13(3), 202-218.
- Njoroge, K. (2008). *Current state of play of trade in services in Kenya*. Department of External Trade, Ministry of Trade, Nairobi, Kenya.
- Noakes, N. S. (2004). *Employability, lifelong learning, personal development planning, and e-portfolios at Hong Kong University of Science and Technology*. [Paper presentation]. The Second Teaching and Learning Symposium of the Hong Kong University of Science and Technology.
- Nyaigotti-Chacha, C. (2008, August 13-15). *What is a university?* [Paper presentation]. Stakeholders workshop on enhancing quality in higher education in Kenya, Nairobi, Kenya.
- Nyamai, F. (2018). Fresh graduates’ gap in skills in job market worrying. *Business Daily*. <https://www.businessdailyafrica.com/new/Fresh-graduates-gap-in-skills-in-job-market-worrying/539546-4739546-7en7gyz/index.html>
- Nyanchwani, S. (2017, July 27). Are you graduating? Here is what employers want you to know. *The Standard*, 6.

- Nyandusi, C. (2001). *Employers' perceptions of secondary school graduates' general workplace competence* [Unpublished masters thesis]. Moi University, Kenya.
- O'Leary, Z. (2010). *The essential guide to doing your research project*. Sage.
- Oanda, I. O., & Jowi, J. (2012). University expansion and the challenges to social developments in Kenya: dilemmas and pitfalls. *Journal of Higher Education in Africa*, 10(1), 49-71.
- Oanda, I. O., & Sifuna, D. N. (2016). Divergent narratives on graduate employability in Kenya: dysfunctional institutions or dysfunctional labor markets? In British Council, *Universities, employability and inclusive development: repositioning higher education in Ghana, Kenya, Nigeria and South Africa* (pp. 39-58). <http://www.britishcouncil.org/education/ihe>
- Ochieng, P.A. (2009). An analysis of the strengths and limitations of qualitative and quantitative research paradigms. *Problems of education in the 21<sup>st</sup> century*, 13, 13-18.
- Odhiambo, G. (2018). The role of Kenyan universities in national development. *Forum for international research in education*, 4(3), pp.191-209
- Oigo, M. (2019, May 16). Soft skills make graduates employable. *Daily Nation*.
- Okebukola, P. (2006). Principles and policies guiding current reforms in Nigerian universities. *Journal of Higher Education in Africa*, 4(1), 25-36.
- Oliva, P. F. (1992). *Developing the curriculum* (6<sup>th</sup> ed). HarperCollins.
- Oliver, B., & de St Jorre, T. J. (2018). Graduate attributes for 2020 and beyond: recommendations for Australian higher education providers. *Higher Education Research and Development*, 37(4), 821-836.
- Omolo, J. O. (2012). *Youth employment in Kenya: Analysis of labour market and policy interventions*. Friedrich Ebert Stiftung.
- Ondieki, C., Kimani, G. N., & Tanui, E. (2018). Industry based learning improves skills and training of undergraduate Engineering programs in Kenya: a case study of University of Nairobi. *IRA International Journal of Education and Multidisciplinary Studies*, 11(3), 63-74. <https://doi.org/10.21013/jems.v11.3.p2>
- Onwuegbuzie, A. J., & Johnson, R. B. (2006). The validity issue in mixed research. *Research in the schools*, 13(1), 46-63.
- Onwuegbuzie, A. J., Johnson, R. B., & Collins, K. M. T. (2011). Assessing legitimation in mixed research: a new framework. *QualQuant*, 45(6), 1253-1271.

- Onyango, C. M., Kunyanga, C. N., Karanja, D. N., & Wahome, R. G. (2018). Employer perceptions and attitudes towards agricultural university training in Kenya. *International Journal for Innovation Education and Research*, 6(1), 175-185. <https://doi.org/10.31686/ijer.vo16.iss1.932>
- Ooro, S. (2009). The quest for inclusive higher education in Kenya: A vivisection of concerns, policies and reform initiatives. <http://www.ocides.org/wp-content/uploads/2011/02/Ooro-Sarah-Higher-Education-Kenya.pdf>
- Othman, H., Buntant, Y., Suleiman, A., Salleh, B. M., & Herawan, T. (2010). Applied mathematics can enhance employability skills through problem based learning (PBL). *Procedia Social and Behavioral Sciences*, 8, 332-337.
- Otunga, R. N. (2010). *The dilemma of curriculum relevance in Kenya*. Moi University Press.
- Patel, S. (2015). The research paradigm – methodology, epistemology and ontology – explained in simple language. [www.salmapatel.co.uk](http://www.salmapatel.co.uk)
- Paul, R. W., & Elder, L. (2016). *The thinkers guide to the art of Socratic questioning*. Foundation for Critical Thinking.
- Peck, J., & Theodore, N. (2000). Beyond ‘employability’. *Cambridge Journal of Economics*, 24(6), 729-749
- Pegg, A., Waldock, J., Hendy-Isaac, S., & Lawton, R. (2012). *Pedagogy for employability*. Higher Education Academy. <http://www.heacademy.ac.uk/resources/detail/employability/pedagogy-for-employability-update-2012>
- Peters, D. L., and Lucietto, A. M. (2016, June 26-29). *A survey of types of industry-academia collaboration*. [Paper presentation]. The 123<sup>rd</sup> Conference and Exposition of the American Society of Engineering Education.
- Pheko, M.M., & Molefhe, K. (2016). Addressing employability challenges: a framework for improving the employability of graduates in Botswana. *International Journal of Adolescence and Youth*, 22(4), 1-15. <https://doi.org/10.1080.02673843.2016.1234401>
- Pihlström, S. (1998). *Pragmatism and philosophical anthropology: understanding our human life in a human world*. Peter Lang.
- Poku, K.A. (2013). Enhancing the employability of blind graduates in Ghana: employers’ perspectives. *Association of African Universities General Conference selected papers* (pp.1-15). AAU.
- Pollard, E., Hirsh, W., Williams, M., Buzzeo, J., Marvell, R., Artess, J., Redman, J., & Ball, C. (2015). *Understanding employers’ graduate recruitment and selection practices: main report*. (BIS Research Paper; No. 231). Department for Business, Innovation and Skills. [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/474251/BIS-15-464-employer-graduate-recruitment.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/474251/BIS-15-464-employer-graduate-recruitment.pdf)

- Ponge, A. (2013). Graduate unemployment and unemployability in Kenya: transforming university education to cope with market demand and the lessons for Africa. *International Journal of Social Science Tomorrow*, 2(3), 1-12.
- Porteous, C. (2020). 11 organizational skills that every smart leader needs. <https://www.lifehack.org/organizational-skills-that-every-leader-needs>
- Prewitt, K. (2016). Higher education, society, and government: changing dynamics. *Journal of Higher Education in Africa*, 2(1), 35-56.
- Price-Mitchell, M. (2015). Integrity in the classroom. *Psychology Today*. <https://www.psychologytoday.com/blog/the-moment-youth/201509/integrity-in-the-classroom>
- Pukelis, K., Pileičikiene, N., Allan, A., & Dailidiene, E. (2007). European and National level strategies for competency-based curriculum development. HEGESCO. [www.decowe.comstatic/uploaded/htmlarea/finalreporthegesco/European National and Universities Strategies summary.pdf](http://www.decowe.comstatic/uploaded/htmlarea/finalreporthegesco/European_National_and_Universities_Strategies_summary.pdf)
- Quality Assurance Agency for Higher Education (QAA) (2012). *Enterprise and entrepreneurship education guidance for UK higher education providers*. <http://www.qaa.ac.uk/publications/information-and-guidance/publication?PubID=70>
- Rahman, S. A., & Shuib, M. (2011). Graduate employability and graduateness: an overview of concepts, interpretations and emerging issues. *International proceedings of economic development and research*, 23, 183-187
- Rampersad, G., & Patel, F. (2014). Creativity as a desirable graduate attribute: implications for curriculum design and employability. *Asia-Pacific Journal of Cooperative Education*, 15(1), 1-11.
- RAND (2001). *A million random digits with 100,000 normal deviates*.
- Rasul, M. S., Rauf, R. A., & Mansur, A. N. (2013). Employability skills indicator as perceived by manufacturing employers. *Asian Social Science*, 9(8), 42-46.
- Reddan, G., & Rauchle, M. (2017). Combining quality work-integrated learning and career development learning through the use of the SOAR model to advance employability. *Asia Pacific Journal of Cooperative Education*, 18(2), 129-139.
- Rehman, S. & Mazhar, S. S. (2016). A study on new hiring strategies to manage talent crisis at entry level from the perspective of recruiters and fresh graduate engineer job seekers. *International Journal of Research – Granthaalayah*, 4(9), 14-29. <https://doi.10.5281/zenodo.157507>
- Republic of Kenya (1981). *Report of the Presidential Working Party on a Second University in Kenya*. Government Printer.
- Republic of Kenya (1988). *Report of the Presidential Working Party on Education and Manpower training for the Next Decade and Beyond*. Government Printer.

- Republic of Kenya (1999). *Report of the Commission of Inquiry into the Education System of Kenya*. Government Printer.
- Republic of Kenya (2002). *National Development Plan 2002-2008*. Government Printer.
- Republic of Kenya (2005). *Sessional Paper no. 1 of 2005 on A Policy Framework for Education, Training and Research*. Government Printer.
- Republic of Kenya (2006). *Transformation of higher education and training in Kenya to secure Kenya's development in the knowledge economy*. Government Printer.
- Republic of Kenya (2012). *Towards a globally competitive quality education for sustainable development: Report of the Task Force on the Re-alignment of the Education Sector to the Constitution of Kenya 2010*. Government Printer.
- Republic of Kenya (2013). *Sessional Paper no. 4 of 2013 on employment policy and strategy for Kenya*. Government printer.
- Republic of Kenya (2015). *County statistical abstracts: Nairobi City County*. Kenya National Bureau of Statistics.
- Rescher, N. (1996). *Process metaphysics: an introduction to process philosophy*. State University of New York Press.
- Riechi, A. R. O. (2010). *Demand for regular academic programs offered in Kenya's public universities and their relevance to the labor market*. Institute for Policy Analysis and Research.
- Rintari, N. G. (2017). University graduates' employability skills preparedness in Kenyan economic sectors. *European Journal of Business and Management*, 9(12), 93-99.
- Robescu, L. D., & Manea, E. E. (2015, November 1-4). *Improving teamwork skills of the students by extra-curricular activities*. [Paper presentation]. 3<sup>rd</sup> International Engineering and Technology Conference, Sibill, Romania. <https://doi.org/10.1515/cplbu-2015-0003>
- Robinson, J. P. (2000). What are employability skills? *The workplace*, 1(3), 1-3.
- Robles, M. M. (2012). Executive perceptions of the top 10 soft skills needed in today's workplace. *Business Communication Quarterly*, 75(4), 453-465.
- Römgens, I., Scoupe, R., & Beusaert, S. (2019). Unravelling the concept of employability, bringing together research on employability in higher education and the workplace. *Studies in higher education*. <http://doi.org/10.1080.03075079.2019.1623770>
- Rono, B. K. (1997). *Standards and quality control in higher education in Kenya*. [Masters thesis]. University of London.

- Rothwell, A., & Arnold, J. (2007). Self-perceived employability: development and validation of a scale. *Personnel Review*, 36(1), 23-41.
- Rowe, A. D., & Zegwaard, K. E. (2017). Developing graduate employability skills and attributes: curriculum enhancement through work integrated learning. *Asia Pacific Journal of Cooperative Education*, 18(2), 87-99.
- Sá, C. M. (2015). *Perspective of industry's engagement with African universities*. Association of African Universities.
- Sannö, A., Oberg, A. E., Floress-Garcia, E., & Jackson, M. (2019). Increasing the impact of industry-academia collaboration through co-production. *Technology Innovations Management Review*, 9(4), 37-47.
- Schmitz, M. (2015). *Six rules to be effective at planning and organizing*. <https://www.conovercompany.com/6-rules-to-be-effective-at-planning-and-organizing>
- Scriven, M. & Paul, R. W. (1987). *Defining critical thinking*. [Paper presentation]. 8<sup>th</sup> Annual International Conference on Critical Thinking and Education Reform. <https://www.criticalthinking/pages/defining-critical-thinking>
- Seelig, T. (2012). *InGENIUS: a crash course on creativity*. Harper Collins.
- Sewell, A. & St. George, A. (2000). Developing efficacy beliefs in the classroom. *Journal of educational Inquiry*, 1(2), 58-71.
- Shaughnessy, M. F. (2013). An interview with Roger Kaufman: Mega thinking and planning in the business/industry world. *Journal of Contemporary Issues in Business Research*, 2(1), 31-36.
- Shewakena, B., & Belay, S. (2017). The role of university-industry linkages to produce graduates with employable skills: analysis of banking and finance graduates' attributes from educators and industries perspectives. *International Journal of African and Asian Studies*, 30, 36-43.
- Shiundu, J. S. & Omulando, S. J. (1992). *Curriculum theory and practice in Kenya*. Oxford.
- Sifuna, D.N. (2010). Some reflections on the expansion and quality of higher education in public universities in Kenya. *Research in Post-Compulsory Education*, 15(4), 415-425. <https://doi.org/10.1080/13596748.2010.526803>
- SkillsYouNeed (2017). *Interpersonal skills*. <https://www.skillsyouneed.com/ips/interpersonal-skills.html>
- SkillsYouNeed (2020). *What is negotiation?* <https://www.skillsyouneed/ips>
- Smith, C. S., & Ridoutt, L. (2007). The importance employers attach to employee qualifications. *Asia Pacific Journal of Human Resources*, 45(2), 180-199.

- Smith, N. (2019, February 27). Who says creativity can't be learned? *Business News Daily*. <https://www.businessnewsdaily.com>
- Soomro, R.B.K., Soomro, A.B., Channa, W.M., Memon, I, and Soomro, T.H. (2024) Exploring the factors influencing curriculum development for 21<sup>st</sup> century skills: a grounded theory study. *International Journal of Contemporary Issues in Social Sciences*, 3(2), pp.517-535. <https://ijciss.org/index.php/ijciss/article/view/669>
- Ssebuwufu, J., Ludwick, T., & Beland, M. (2012). *Strengthening university-industry linkages in Africa: a study on institutional capacities and gaps*. Association of African Universities.
- STEMNET (2017). Top 10 employability skills. <https://www.exeter.ac.uk/ambassadors/HESTEM/resources/General/STEMNET-employability-skills-guide.pdf>
- Steur, J., Jansen, E., & Hofman, A. (2016). Towards graduateness: exploring academic intellectual development in university Masters students. *Educational Research and Evaluation*, 22(1-2), 6-22.
- Suarez, T. M. (1991). Curriculum evaluation strategies: needs assessment studies. In A. Lewy (Ed.), *The International Encyclopedia of Curriculum* (pp.433-435). Pergamon.
- Sumanasiri, E. G. T., Yajid, U. S. A., & Khatibi, A. (2015). Conceptualizing learning and employability: learning and employability frameworks. *Journal of Education and Learning*, 4(2), 53-63.
- Swart, W. (2021). Academic needs assessment: continual improvement for academic units. *Performance improvement*, 60(1), pp.19-25. doi:101002/pfi21950
- Syomwene, A., Yungungu, A. M., & Nyandusi, C. M. (2017). Curriculum development process. In A. Syomwene, C. M. Nyandusi, & A. M. Yungungu (Eds.), *Core principles in curriculum*. Utafiti Foundation.
- Taba, H. (1962). *Curriculum development: theory and practice*. Harcourt Brace.
- Tamrant, W. (2019). Work-ready graduates require strong partnerships. *The World View*. <https://www.insidehighered.com>
- Tashakkori, A. & Creswell, J.W. (2007). The new era of mixed methods. *Journal of Mixed Methods Research*, 1(1), 3-7
- Tashakkori, A. & Newman, I. (2010). Mixed methods: integrating quantitative and qualitative approaches to research. In B. McGaw, E. Baker, & P. P. Peterson (Eds.), *International Encyclopedia of Education*, (3<sup>rd</sup> ed.), 514-520. Elsevier.
- Tashakkori, A. & Teddlie, C. (2003). *Handbook of mixed methods in social and behavioral research*. Sage.

- Tejan, O.A., & Sabil, A. (2019) Understanding employers' perception of employability skills and career development in Morocco. *International journal of education and literacy studies*. 7(2), p.134-138. <http://dx.doi.org/10.7575/aiac.ijels.v.7n.2p134>
- Teferra, D., & Altbach, P. G. (Eds.) (2003). *African higher education: An international reference handbook*. Indiana University Press.
- Thurmond, M. L. (n.d.). *Dress and grooming for job success*. State of Georgia, Department of Labor. <https://www.dol.state.ga.us>
- Tillman, M. K. (1990). The philosophic habit of mind: Aristotle and Newman on the end of liberal education. *Paideusis*, 3(2), 17-27.
- Toffler, A. (1972). *Future Shock*. Bantam Books.
- Tumuti, D.W., Mule, L.W., Gecaga, M., & Manguriu, D.G. (2013). Enhancing graduate employability through community service: a case study of students' community service at Kenyatta University. *Journal of Administration Sciences and Policy Studies*, 1(1), 1-14.
- Tumuti, D.W., Wanderi, P.M., & Langat-Thoruwa, C. (2013). Benefits of university-industry partnerships: the case of Kenyatta University and Equity Bank. *International Journal of Business and Social Science*, 4(7). <https://doi.org/10.30845/ijbss>
- Turak, A. (2011). Can creativity be taught? [www.forbes.com](http://www.forbes.com)
- Tusculum University (2011). Personal responsibility one of the greatest lessons to be learned in college. <http://www3.tusculum.edu>
- Tutorials Point (2016). *Recruitment and selection*. [www.tutorialspoint.com/recruitment-and-selection](http://www.tutorialspoint.com/recruitment-and-selection)
- Tyler, R. W. (1949). *Basic principles of curriculum and instruction*. University of Chicago Press.
- United Kingdom Commission for Employment and Skills (UKCES) (2009). *The employability challenge*.
- UNESCO (1995). *UNESCO policy paper for change and development in higher education*.
- UNESCO (1998). *World declaration on education for all for the twenty first century: vision and action*.
- UNESCO (2006). *Factbook on education for all*.
- UNESCO (2012). *Graduate employability in Asia*

- UNISA (n.d.). *Graduateness*. <http://www.unisa.ac.za/sites/myunisa/default/learner-support-and-regions/counseling-and-career-development/plan-your-career/career-planning-for-first-years/graduateness>
- University of Birmingham (n.d.). *Employability skills*. <https://intranet.birmingham.ac.uk/as/employability/careers/documents/public/what-is-employability.pdf>
- University of Bradford (2020). *Planning and organizing: developing your skills*. <https://www.bradford.ac.uk/careers/planning-and-organizing-developing-your-skills>
- University of Dar-es-Salaam (1999). *Report of the 1998 University of Dar es Salaam audit*.
- University of Exeter (n.d.). *Skills that employers want*. <https://www.exeter.ac.uk/ambassadors/HESTEM/resources/general/STEMET%20employability%20skills%20guide.pdf>
- University of Kansas (2014). *The employability curriculum: a roadmap for creating global professionals*. University Career Center.
- University of Kent (n.d.). *What are the main employability skills?* <https://www.kent.ac.ke/careers/sk/WhatAreSkills.htm>
- University of Leeds Careers Center (n.d.). *Employability skills*. [http://careerweb.leeds.ac.uk/info/4/make\\_yourself\\_employable/202/employability\\_skills/13](http://careerweb.leeds.ac.uk/info/4/make_yourself_employable/202/employability_skills/13)
- University of Strathclyde (n.d.). *Planning and organizing skills*. <https://www.ac.uk/skills/planning-and-organizing-skills>.
- University of Warwick (n.d.). *Employability skills*. <https://www2.warwick.ac.uk/services/careers/getahead/employability.pdf>
- Venkatesh, V., Brown, S. A., & Sullivan, Y. W. (2016). Guidelines for conducting mixed-methods research: an extension and illustration. *Journal of the Association for Information Systems*, 17(7), 435-494.
- Vesuri, H. (2004). *Final UNESCO e-forum report on the relevance of higher education*. <http://portal.unesco.org/education/en/ev.php>
- Wagner, T. (2010). *The global achievement gap: why even our best schools don't teach the new survival skills our children need – and what we can do about it*. Basic Books.
- Waihenya, K. (2020, May 7). Employers prefer UoN and Kenyatta University graduates, study reveals. *Daily nation*, 9.

- Walker, M., & Fongwa, S. (2016). Universities and employability in South Africa: equity in opportunities and outcomes. In British Council, *Universities, employability, and inclusive development: repositioning higher education in Ghana, Kenya, Nigeria, and South Africa* (pp. 15-38). <http://www.britishcouncil.org/education/ihe>
- Wamari, E. (2010, November 5). Alarm bells get louder on outdated varsity training. *Daily Nation*, 1.
- Wangege-Ouma, G. (2008). Higher education marketization and its discontents: the case of quality in Kenya. *Higher Education*, 56(4), 457-471.
- Wanzala, O. (2017, April 6). Varsityes and employers team up to resolve skills mismatch. *Daily Nation*.
- Wasunna, M. (2018, February 22). Kenya has a massive skills gap: how it can fix the problem. *The Conversation*. <https://theconversation.com/kenya-has-a-massive-skills-gap-how-it-can-fix-the-problem-91170>
- Watkins, R., West-Meiers, M., & Visser, Y. L. (2012). *A guide to assessing needs: essential tools for collecting information, making decisions, and achieving development results*. World Bank Group. <https://openknowledge.worldbank.org/handle/10986/11981>
- Watts, A.G. (2006). *Career development learning and employability*. [https://www.heacademy.ac.uk/system/files/esect\\_career\\_development\\_learning\\_and\\_employability.pdf](https://www.heacademy.ac.uk/system/files/esect_career_development_learning_and_employability.pdf)
- Workforce Development Agency of Singapore (WDA) (2006). *Employers guide to the Singapore employability skills system and appraisal of workers for training*.
- Wedekind, V., & Mutereko, S. (2016). *Employability and curriculum responsiveness in post-school education and training*. Labour Market Intelligence Partnership.
- Weinert, F. (1999). Demands on education today. *Education*, 60, 7-13.
- Weligamage, S.S. (2009). *Graduates' employability skills: evidence from literature review*. ASAIHL.
- Wesangula, D. (2014, June 8). Only half of university graduates in Kenya are ready for job market, study says. *The Standard*, 14.
- Wiggins, G. P., & McTighe, J. (2005). *Understanding by Design*. 2<sup>nd</sup> Ed. Association for Supervision and Curriculum Development.
- Wilson, R. and Morieson, L. (2022). Belonging as a responsive strategy in times of supercomplexity and change. *Journal of University Teaching and Learning Practice*, 19(4), <https://ro.uow.edu.au/jutlp/vol19/iss4/03>

- Wilton, N. (2012). The impact of work placements on skills development and career outcomes for business and management graduates. *Studies in higher education*, 37(5), 603-620.
- Witkin, B.R & Lincoln, Y.S. (1986). Assessing needs in educational and social programs. *Educational evaluation and policy analysis*, 8(1), 115
- Wong, S. S. H., Lim, S. W. H., & Quinlan, K. M. (2016). Integrity in and beyond contemporary higher education: what does it mean to university students? *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2016.01094>
- World Economic Forum (2016). *The future of jobs report*. [http://www3.weforum.org/docs/WEF\\_future\\_of\\_jobs.pdf](http://www3.weforum.org/docs/WEF_future_of_jobs.pdf)
- World Bank (2002). *Constructing knowledge societies: new challenges for tertiary education*.
- World Bank (2012). *Special focus: creating jobs*.
- Yorke, M. (2006). *Employability in higher education: what it is – what it is not*. Higher Education Academy.
- Young, S. (2019). *DOTS model by Law and Watts*. [www.cdanz.org.nz/te-mohiotanga](http://www.cdanz.org.nz/te-mohiotanga)
- Yusuf (2016, June 13). Survey: Kenyan graduates not prepared for workplace. *VoA News*. <https://www.voanews.com/africa/survey-kenyan-graduates-not-prepared-workplace>
- Zaharim, A., Yussoff, Y., Omar, M. Z., Mohamed, A., & Mohamad, N. (2009). *Engineering employability skills required by employers in Asia*. [Paper presentation]. The 6<sup>th</sup> WSEAS International Conference on Engineering Education.

## APPENDICES

### Appendix A Employability Rating and Perceptions Questionnaire (ERPEQUE)

#### INTRODUCTION:

Dear Participant,

I am a Doctor of Philosophy student at Moi University. I am carrying out research on *Curriculum Implications of Service Sector Employers' Rating and Perceptions of the Employability of University Graduates in Kenya*. The study seeks responses from officers responsible for recruiting, managing, and appraising employees in service sector firms in Kenya. It is on this basis that you have been randomly selected to participate in this study. Kindly fill out this questionnaire with the most appropriate responses according to your experience in recruiting, managing, and appraising graduate employees. Your responses are for academic purposes only and they will be treated with utmost confidentiality.

I thank you in advance for accepting to participate in this study.

Yours faithfully,

Charles M. Nyandusi

**SECTION A: PROCEDURES AND MODE OF EMPLOYMENT OF UNIVERSITY GRADUATES IN SERVICE SECTOR**

1. What are the minimum entry level qualifications for University graduates joining your firm? (You may tick (√) more than one item)

- Bachelors degree in any discipline [ ]
- Bachelors degree in a specific discipline [ ]
- Bachelors degree plus some postgraduate qualifications [ ]
- Bachelors degree plus professional qualifications e.g CPA [ ]
- Bachelors degree plus some relevant work experience [ ]

2. How do you select University graduates for appointment in your firm? (You may tick (√) more than one item)

- Through the advertisement – application – Interview – Recruitment process [ ]
- Job seekers come by themselves to the firms premises [ ]
- Through employment agencies [ ]
- Through University careers offices [ ]
- Through the Internship – Recruitment Process [ ]

3. Which University graduates does your firm prefer to employ?

- Public University graduates [ ]
- Private University graduates [ ]
- Foreign University graduates [ ]
- No particular preference [ ]

## SECTION B: EMPLOYERS' EXPECTATIONS OF UNIVERSITY GRADUATES

This section contains employability attributes and competencies expected of employees in many workplaces. Please indicate your firm's level of expectation for each attribute by ticking (√) against the number that corresponds with the level. Below is an elaboration of the rating scale: 5 Very High; 4 High; 3 Average; 2 Low; and 1 Very Low

		5	4	3	2	1
1	Specialized/Professional/Vocational competence					
2	Oral Communication competence					
3	Written Communication competence					
4	Mathematical competence					
5	Digital competence					
6	Critical thinking and problem solving ability					
7	Self drive					
8	Ability to work in a team					
9	Integrity					
10	Responsibility					
11	Adaptability					
12	Willingness to learn continuously					
13	Creativity and Innovation					
14	Commitment to work					
15	Interpersonal intelligence					
16	Time management					
17	Leadership					
18	Appropriate dressing and personal grooming					
19	Planning and organizational competence					

**SECTION C: EMPLOYERS' RATING OF ACTUAL COMPETENCIES OF  
THEIR UNIVERSITY GRADUATE EMPLOYEES.**

Using the attributes and competencies listed in Section B above, please rate the level of each competency in the University graduate employees in your firm. Please

Remember: 5 Very High; 4 High; 3 Average; 2 Low; and 1 Very Low

		5	4	3	2	1
1	Specialized/Professional/Vocational competence					
2	Oral Communication competence					
3	Written Communication competence					
4	Mathematical competence					
5	Digital competence					
6	Critical thinking and problem solving ability					
7	Self drive					
8	Ability to work in a team					
9	Integrity					
10	Responsibility					
11	Adaptability					
12	Willingness to learn continuously					
13	Creativity and Innovation					
14	Commitment to work					
15	Interpersonal intelligence					
16	Time management					
17	Leadership					
18	Appropriate dressing and personal grooming					
19	Planning and organizational competence					

**SECTION D: EMPLOYERS PERCEPTION OF THE INVOLVEMENT OF THE SERVICE SECTOR IN UNIVERSITY EDUCATION**

1. In your opinion, what is the level of service sector involvement / Participation in University Education in Kenya.

- Very High [ ]
- High [ ]
- Average [ ]
- Low [ ]
- Very Low [ ]

2. Below are some common forms of university-industry collaboration (UIC). Please indicate by a tick [√] the frequency of your firm's involvement these forms of UIC. Please note: **(N)** is Never; **(R)** is Rarely; **(S)** is Sometimes; **(O)** is Often; and **(A)** is Always

		N	R	S	O	A
1	Sponsoring co-curricular and extra-curricular activities in universities					
2	Offering scholarship, bursaries, or other financial aid to outstanding/needy students in university					
3	Collaborating with and/or funding university research and innovation activities					
4	Collaborating with universities in curriculum or course development					
5	Offering students opportunities for industrial attachment, field experience, or internship					

Thank you.

## **Appendix B: Employability Key Informant Interview Guide (EKIIG)**

**Good morning/afternoon (as appropriate) Sir/Madam.**

EKII:.....

...

**As I had mentioned to you earlier, my name is Charles Nyandusi. I am a Doctor of Philosophy student at Moi University. I am conducting a study on Curriculum Implications of Service Sector Employers' Rating and Perceptions of the Employability of University Graduates in Kenya. Thank you for accepting to participate in this study as a key informant interviewee. Welcome to the interview.**

EKII:.....

...

**Before we begin the interview, I need your consent to record it. The recording will be strictly for the purpose of this study and it will be treated with utmost confidentiality.**

EKII:.....

...

**What are the minimum entry level qualifications for university graduates joining service sector firms? For instance:**

- **Bachelors degree in any discipline**
- **Bachelors degree in a specific discipline**
- **Bachelors degree plus some postgraduate qualifications**
- **Bachelors degree plus professional qualifications e.g CPA**
- **Bachelors degree plus some relevant work experience**

EKII:.....

...

**Which process do service sector firms commonly use to select university graduates for recruitment? For instance:**

- **Through the advertisement – application – Interview – Recruitment process**
- **Job seekers come by themselves to the firms premises**
- **Through employment agencies**

- **Through University careers offices**
- **Through the Internship – Recruitment Process**

EKII:.....

...

**Which University graduates do service sector firms prefer to employ? For instance:**

- **Public University graduates**
- **Private University graduates**
- **Foreign University graduates**
- **No particular preference**

EKII:.....

... **Employability attributes are divided into two categories: “soft skills” such as integrity, leadership, self-drive and others, and “hard skills” such as technical or specialized skills, mathematical competence, digital competence and others. In your experience, which category of employability attributes do service sector employers prefer and expect their entry level graduate employees to exhibit? Why?**

EKII:.....

...

**What is the relationship between the employability attributes that employers prefer and desire and those that employees actually exhibit in the workplace?**

EKII:.....

...

**In your perception, what is the level of involvement of the service sector in university programs in Kenya?**

EKII:.....

.....

**Here are certain common types of collaboration between universities and industry:**

- **Sponsoring co-curricular and extra-curricular activities in universities**
- **Offering scholarships, bursaries, or other financial aid to outstanding or needy students**
- **Collaborating with universities in research and innovation activities**

- **Collaborating with universities in curriculum or course development**
- **Offering students opportunities for industrial attachment, field experience or internship**

**In your perception, which of these types of collaboration are prevalent in Kenya?**

**EKII:.....**

...

**Thank you.**

### Appendix C: Employability Document Analysis Guide (EDAG)

<b>Document Code</b>	<b>Document content</b> (Check for thematic relevance using the study objectives as the thematic categories)
D1	
D2	
D3	
D4	
D5	
D6	
D7	
D8	
D9	
D10	
D11	
D12	
D13	
D14	
D15	
D16	
D17	
D18	
D19	
D20	

### Appendix D: Interview Transcript For Key Informant Interviewee A (EKIIa)

- Charles: Good morning Madam. (shakes hands)
- EKIIa: Good morning to you Bwana Nyandusi. Right? Karibu [welcome] to (name of organization withheld). Please make yourself comfortable.
- Charles: Thank you. Yes, I am Nyandusi Charles. As I had mentioned to you earlier, I am a PhD student at Moi University. I am conducting a study on Curriculum Implications of Service Sector Employers' Rating and Perceptions of the Employability of University Graduates in Kenya. Thank you for accepting to participate in this study as a key informant interviewee. Welcome to the interview.
- EKIIa: Yes, yes. I am glad to be of help. And congratulations for getting to PhD by the way.
- Charles: Thank you. Before we begin the interview, I need your consent to record it. The recording will be strictly for the purpose of this study and it will be treated with utmost confidentiality.
- EKIIa: Absolutely. In any case, there is nothing to hide.
- Charles: Indeed. Now, if we may begin. What are the minimum entry level qualifications for university graduates joining service sector firms? For instance:
- Bachelors degree in any discipline
  - Bachelors degree in a specific discipline
  - Bachelors degree plus some postgraduate qualifications
  - Bachelors degree plus professional qualifications e.g CPA
  - Bachelors degree plus some relevant work experience
- EKIIa: That's an interesting place to begin. I think that employers, especially in the service sector, are increasingly viewing a degree, any degree, as the threshold for considering a graduate for recruitment. It doesn't really matter what the specialization is. Possession of a degree says I have the ability to learn, to manage myself and grow.
- Charles: Which process do service sector firms commonly use to select university graduates for recruitment? For instance:
- Through the advertisement – application – Interview – Recruitment process

- Job seekers come by themselves to the firm's premises
- Through employment agencies
- Through University careers offices
- Through the Internship – Recruitment Process

EKIIa: Actually, recruitment in Kenya is still rather conservative. Most employers advertise positions in mainstream media, then they go through a rigorous process of elimination through shortlisting applicants who appear for formal interviews. The successful candidate or candidates depending on the number required are then hired on the basis of performance in the interviews.

Charles: Which University graduates do service sector firms prefer to employ? The graduates could be from public universities, private universities, or foreign universities.

EKIIa: Well, some employers would prefer private university graduates to public ones due to the personal confidence levels of the private university graduates, which are relatively higher than those of the public university graduates. However, it is frequently the individual profile of the interviewee rather than the university they attended that will finally convince the recruiters.

Charles: Ok. Employability attributes are divided into two categories: “soft skills” such as integrity, leadership, self-drive and others, and “hard skills” such as technical or specialized skills, mathematical competence, digital competence and others. In your experience, which category of employability attributes do service sector employers prefer and expect their entry level graduate employees to exhibit? Why?

EKIIa: There really shouldn't be an either or situation here. Employers are looking for a wholesome candidate. One who possesses both categories of skills in fairly equal measure.

Charles: What is the relationship between the employability attributes that employers prefer and desire and those that employees actually exhibit in the workplace?

EKIIa: Let me tell you. There is an obvious disparity between what an employer expects from a fresh graduate and what the graduate actually

delivers when he gets employed. This is what we have always complained about. Universities are doing us a disservice. We recruit supposedly highly trained graduates from the universities, only for us to end up training them all over again. As we speak, the level of technological infrastructure and technical know-how in private sector firms in Kenya is way far ahead of what even the best endowed local university can boast of.

Charles: In your perception, what is the level of involvement of the service sector in university programs in Kenya?

EKIIa: There is little dialogue between universities and employers. Of course there are exceptions, but the truth is the overall trend is bleak.

Charles: Here are some common types of collaboration between universities and industry:

- Sponsoring co-curricular and extra-curricular activities in universities
- Offering scholarships, bursaries, or other financial aid to outstanding or needy students
- Collaborating with universities in research and innovation activities
- Collaborating with universities in curriculum or course development
- Offering students opportunities for industrial attachment, field experience or internship

In your perception, which of these types of collaboration are most prevalent in Kenya?

EKIIa: Most employers take in university students for attachment. I wouldn't speak authoritatively about the other types of collaboration, but I know for a fact is that there is very minimal collaboration in terms of R&D, oh, that is research and development, and curriculum design. This is something we are very keen on. I should say watch this space!

Charles: I definitely will watch the space. Well, that brings us to the end of our interview. Thank you so much for your time. Have a good day.

EKIIa: It was my pleasure. Good day too. (shakes hands)

### Appendix E: Interview Transcript For Key Informant Interviewee B (EKIIB)

- Charles: Good morning Sir.
- EKIIB: Oh! You are here for the interview? Welcome and have a seat. How are you?
- Charles: (Sits) I am fine, thank you. As I had mentioned to you earlier, I am Charles Nyandusi, a PhD student at Moi University. I am conducting a study on Curriculum Implications of Service Sector Employers' Rating and Perceptions of the Employability of University Graduates in Kenya. Thank you for accepting to participate in this study as a key informant interviewee. Welcome to the interview.
- EKIIB: You know that was my university? I did my undergraduate at Moi University.
- Charles: Really? That is great! Now I am even more comfortable!
- EKIIB: Of course.
- Charles: Thank you. Before we begin the interview, I need your consent to record it. The recording will be strictly for the purpose of this study and it will be treated with utmost confidentiality.
- EKIIB: That's alright. You can record. No problem.
- Charles: Thank you. I won't take too much of your time. Shall we begin?
- EKIIB: Yeah. Go ahead.
- Charles: What are the minimum entry level qualifications for university graduates joining service sector firms? For instance:
- Bachelors degree in any discipline
  - Bachelors degree in a specific discipline
  - Bachelors degree plus some postgraduate qualifications
  - Bachelors degree plus professional qualifications e.g CPA
  - Bachelors degree plus some relevant work experience
- EKIIB: A majority of our members have no particular preference for a job specific degree when recruiting fresh university graduates. However, those who insist on a job specific degree are usually looking for employees to fill technical or highly specialized positions. But these are mostly in the manufacturing sector. Your focus is on the service sector, isn't it?

Charles: Yes, it is. Speaking of service sector firms, which process do they commonly use to select university graduates for recruitment? For instance:

- Through the advertisement – application – Interview – Recruitment process
- Job seekers come by themselves to the firm’s premises
- Through employment agencies
- Through University careers offices
- Through the Internship – Recruitment Process

EKIIb: Many employers prefer to conduct face to face interviews which lead to employment. Lately, some employers are taking the on-line interview route. Usually the jobs are advertised in newspapers or in the company websites or both.

Charles: Which University graduates do service sector firms prefer to employ? The graduates could be from public universities, private universities, or foreign universities.

EKIIb: As an employer, you are interested in the individual you wish to recruit rather than the university they attended. It is the individual being interviewed, not the university. Of course there could be biases especially depending on which university the interviewer attended, or on the general perception of a given university. Here the bigger, older public universities may seem to have an advantage. But many are the times when a candidate from a small university has outperformed those from the big universities, or a candidate from a private university has outperformed those from public universities. The reverse is also true. So really it is about the individual candidate.

Charles: Employability attributes are divided into two categories: “soft skills” such as integrity, leadership, self-drive and others, and “hard skills” such as technical or specialized skills, mathematical competence, digital competence and others. In your experience, which category of employability attributes do service sector employers prefer and expect their entry level graduate employees to exhibit? Why?

- EKIIb: An employer seeks an individual that is sure of himself, who works without or at least with minimum supervision, who takes responsibility for his actions and decisions, and who is a positive influence on colleagues at work. Technical skills are also important, yes, but one achieves more as a worker when the personal traits drive the technical skills.
- Charles: What is the relationship between the employability attributes that employers prefer and desire and those that employees actually exhibit in the workplace?
- EKIIb: There is no question about it. Really, what we desire is not what we get. It seems universities have perfected the art of academic spoon-feeding. Students aren't given ample opportunity to discover for themselves and beat new paths. They are content with the beaten paths. They become conformers. They have no personal initiative, nor are they intrinsically motivated to look beyond the horizons that demarcate their immediate world. These are definitely not the kind of employees we require.
- Charles: In your perception, what is the level of involvement of the service sector in university programs in Kenya?
- EKIIb: Generally, universities and employers live worlds apart. Rarely do you see any meaningful interaction between a given university and employers. This is unfortunate. Imagine the wealth that both would create for themselves and their communities if they purposefully came together.
- Charles: Here are some common types of collaboration between universities and industry:
- Sponsoring co-curricular and extra-curricular activities in universities
  - Offering scholarships, bursaries, or other financial aid to outstanding or needy students
  - Collaborating with universities in research and innovation activities

- Collaborating with universities in curriculum or course development
- Offering students opportunities for industrial attachment, field experience or internship

In your perception, which of these types of collaboration are most prevalent in Kenya?

EKIIb: In most cases the only time many employers interact with universities is when they are requested to take in students for field attachment. But even this, to be honest, is just a ritual. There is often no clear understanding between the university and the employer on the how and the what of the whole exercise, you understand? By the way, it is also common that some of the universities even fail to supervise their own students on attachment. That is why some companies are very choosy when it comes to accepting students for attachment.

Charles: We have come to the end of our interview. Thank you so much for your time. Have a good day.

EKIIb: Thank you too and enjoy the rest of your day

## Appendix F: Interview Transcript For Key Informant Interviewee B (EKIIB)

- Charles: Good afternoon Sir.
- EKIIC: Good afternoon Nyandusi. I hope you don't mind us meeting here (a hotel). I sometimes work from here because it is quiet. I get too much traffic into my office.
- Charles: This is fine. Thank you for making time for me.
- EKIIC: Why not? If I understood your project well, it will be beneficial to us as employers and the country too. So we are in this together.
- Charles: Yes, indeed. I appreciate that perspective. As I had mentioned to you, I am conducting a study on Curriculum Implications of Service Sector Employers' Rating and Perceptions of the Employability of University Graduates in Kenya. Thank you for accepting to participate in this study as a key informant interviewee. Welcome to the interview.
- EKIIC: Sawa kabisa [that's very ok].
- Charles: Thank you. Before we begin the interview, I need your consent to record it. The recording will be strictly for the purpose of this study and it will be treated with utmost confidentiality.
- EKIIC: Sure, you have my permission to record.
- Charles: Ok. Let's begin then. What are the minimum entry level qualifications for university graduates joining service sector firms? For instance:
- Bachelors degree in any discipline
  - Bachelors degree in a specific discipline
  - Bachelors degree plus some postgraduate qualifications
  - Bachelors degree plus professional qualifications e.g CPA
  - Bachelors degree plus some relevant work experience
- EKIIC: A Bachelor's degree is just an indicator that the candidate an employer is looking for has the intelligence and exposure to adapt to the working environment. The degree gets a candidate to be shortlisted for interview. Most employers rarely dwell on the degree during the interview. They are more interested in who the candidate really is and what he or she can actually deliver if employed.
- Charles: Which process do service sector firms commonly use to select university graduates for recruitment? For instance:

- Through the advertisement – application – Interview – Recruitment process
- Job seekers come by themselves to the firm’s premises
- Through employment agencies
- Through University careers offices
- Through the Internship – Recruitment Process

EKIIc: Different employers use different modes of recruitment depending on their needs. For our members, the variety includes the written application then interview then recruitment process, retention of outstanding students during industrial attachment, and let’s be honest, referrals from the high and mighty. We are yet to fully exploit the more creative recruitment methods that are common in the developed world, although locally the telcos are going that direction.

Charles: Which University graduates do service sector firms prefer to employ? The graduates could be from public universities, private universities, or foreign universities.

EKIIc: Private universities generally seem to be more in touch with what employers expect from them and they prepare their students accordingly. However, graduates from private universities are still very few, such that the labor force is largely populated with public university graduates.

Charles: Employability attributes are divided into two categories: “soft skills” such as integrity, leadership, self-drive and others, and “hard skills” such as technical or specialized skills, mathematical competence, digital competence and others. In your experience, which category of employability attributes do service sector employers prefer and expect their entry level graduate employees to exhibit? Why?

EKIIc: By the time I shortlist you for interview, I have a fairly good idea about your technical skills. These are normally quantifiable and therefore easily documented. Infact, they are mainly the reason you are shortlisted in the first place. During the interview, and for me to hire you, I need to know who are you as a person? How can your personality make your expertise beneficial to the organization? How

will you relate with others in the organization? What I need is the person, not the papers.

Charles: What is the relationship between the employability attributes that employers prefer and desire and those that employees actually exhibit in the workplace?

EKIIC: Though we sometimes recruit very exceptional graduates, generally, the performance is much lower than we expect.

Charles: In your perception, what is the level of involvement of the service sector in university programs in Kenya?

EKIIC: In Kenya we are still behind in terms of industry collaborating with academia. This is a practice that we need to urgently embrace as a country if we wish to be innovative and productive.

Charles: Here are some common types of collaboration between universities and industry:

- Sponsoring co-curricular and extra-curricular activities in universities
- Offering scholarships, bursaries, or other financial aid to outstanding or needy students
- Collaborating with universities in research and innovation activities
- Collaborating with universities in curriculum or course development
- Offering students opportunities for industrial attachment, field experience or internship

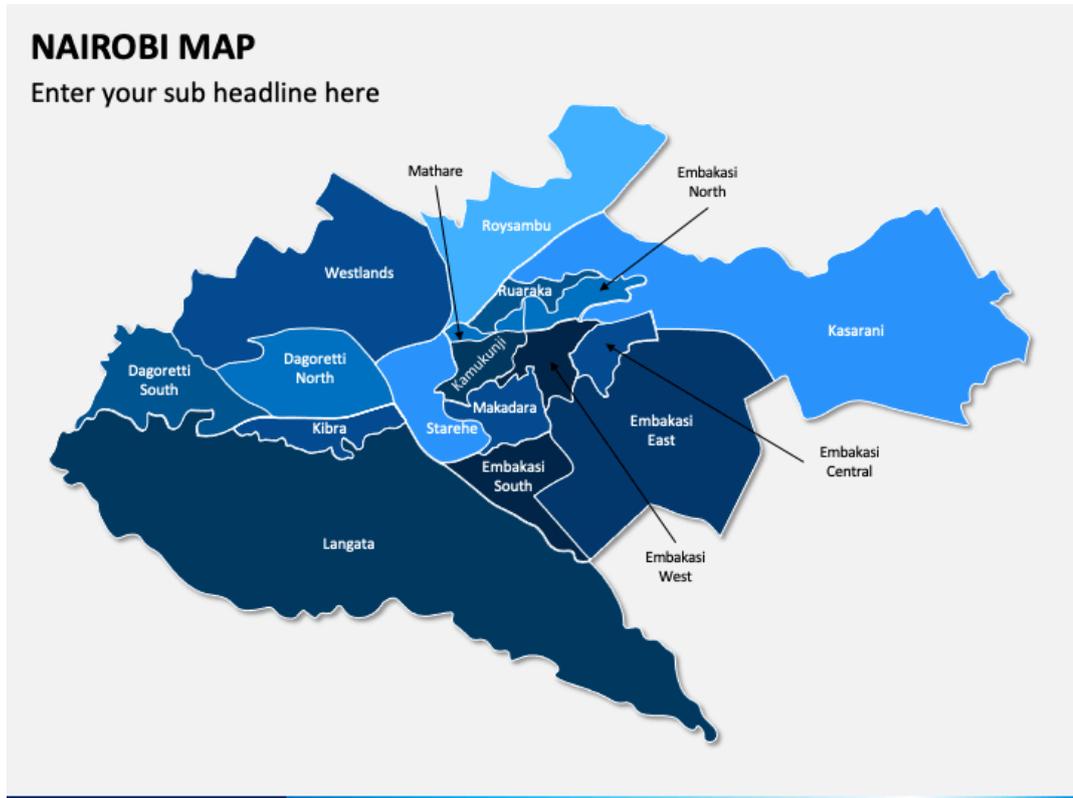
In your perception, which of these types of collaboration are most prevalent in Kenya?

EKIIC: There are instances of each of these types of collaboration, but the highest incidence is in offering opportunities for work-based learning such as attachment or field practice.

Charles: We have come to the end of the interview. Once again may I truly appreciate your making time for this interview. Have a good evening.

EKIIC: You too have a good evening.

### Appendix G: Map of the Study Area (Nairobi City)



## Appendix H: Research Authorization



**MOI UNIVERSITY**  
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**REF: EDU/D.Phil.CM/04/06**

**DATE: 5<sup>th</sup> September, 2022**

**THE EXECUTIVE SECRETARY**

National Council for Science and Technology  
Box 30623-00100  
**NAIROBI**

Dear Sir/Madam,

**RE: RESEARCH PERMIT IN RESPECT OF CHARLES MOTTANYA  
NYANDUSI – EDU/D.Phil.CM/04/06**

The above named is a 2<sup>nd</sup> year PhD Student at Moi University, School of Education, Department of Curriculum, Instruction and Educational Media.

It is required of his PhD studies to conduct a research project and produce a research report. His research topic is entitled:

**“Curriculum Implications of Service Employers’ Rating and Perceptions of the Employability of University Graduates in Kenya.”**

Any assistance given to enable him conduct research successfully will be highly appreciated.

Yours faithfully,

**PROF. ANNE S. KISILU**  
**DEAN, SCHOOL OF EDUCATION**





## Appendix J: Plagiarism Awareness Certificate



SR691

*ISO 9001:2019 Certified Institution*

### THESIS WRITING COURSE

### *PLAGIARISM AWARENESS CERTIFICATE*

This certificate is awarded to

*CHARLES MOTTANYA NYANDUSI*

**EDU/D.PHIL.CM/04/06**

In recognition for passing the University's plagiarism

Awareness test for Thesis entitled: **CURRICULUM IMPLICATIONS OF SERVICE SECTOR EMPLOYERS' RATING AND PERCEPTIONS OF THE EMPLOYABILITY OF UNIVERSITY GRADUATES IN KENYA** similarity index of 4% and striving to maintain academic integrity.

**Word count: 70218**

Awarded by

Prof. Anne Syomwene Kisilu

CERM-ESA Project Leader    Date: 19/09//2024