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Massification and Employability of University Graduates in Kenya

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Abstract

Massification is a significant enrolment of students in universities over available resources. Kenya has expanded student enrollment in universities beyond the available educational resources, thus raising quality concerns. Quality of education in the universities is related to the judicious use of resources in the institutions, that is, efficiency in the university system. Quality of education enhances efficiency in the university education system and the economy. This study evaluated the impact of massification on external efficiency in universities in Kenya. It sought to determine its impact on the employability of graduates in public and private universities in Kenya. The study adopted a causal-comparative research survey design. The population of the study was 194,852 respondents consisting of 190,674 students and 4,178 lecturers in the eight randomly sampled universities in Kenya. A sample of 437 respondents consisting of 409 students and 12 lecturers from four public and four private universities in Kenya were proportionally derived, and 16 heads of academic departments were selected for the study through a simple random sampling technique. Questionnaires and interviews were used to collect data. According to the findings, students' questionnaires had a reliability coefficient index of 0.854, and lecturers' questionnaires had a reliability coefficient index of 0.766, which were deemed reliable, being on the threshold at 0.7 Cronbach Alpha coefficient index. Data was analyzed using descriptive and inferential statistics. The study showed no significant statistical difference in the impact of massification on external efficiency between public and private universities in Kenya. University graduates face uncertainties about employment after graduation. The study recommends that universities encourage labor market surveys to match their courses to improve the employability of university graduates.

Keywords: Employability of University Graduates, Private and Public Universities**,** Massification, External Efficiency

Introduction

Mass enrolment of university students globally has outstripped the available resources, a phenomenon described as massification (Mohammedbhai, 2008). Underdal (2010) asserts that the term massification in the context of the higher education system describes the rapid increase in student enrolment in the latter part of the twentieth century. Massification can be viewed as a global phenomenon resulting from factors such as the democratization of education, the advent of the knowledge economy, and globalization (Mohammedbhai, 2008). Higher Education enrolment rates in Europe showed that massification was experienced in Europe. For example, in the 21st century, higher Education enrolment rates were as follows: United Kingdom 60%, Poland 59%, Hungary 53%, Czech Republic 37%, and Turkey 30 % (Republic of Turkey, 2012).

According to Trow's (2000) typology, massification in higher education was defined in three stages. The "Elite" phase represents a national enrolment ratio of up to 15 percent; "Mass" represents a ratio of 50 percent, and "Universal" represents a ratio over 50 percent. Thus, Turkey had reached the "mass" stage while other countries, such as Hungary and the United Kingdom, were at the "universal" enrolment stage.

Massification has also been experienced in the Asian continent. In Asia, universities have adopted mega universities to increase access to higher education for larger numbers in society. Mega- Universities are defined as "a distance teaching institution with over 100,000 active students in degree level courses. Examples are the Open University of China, with over 2,700,000 students, and Shanghai Open University, with 610,000 students (Daniel, 2013).

In Africa, the massification of higher education occurred mainly because of improvements at the primary and secondary education levels, resulting in a large cohort of graduates seeking access to higher education and realizing that higher education is vital for economic development (Mohammedbhai, 2008). According to the Republic of Kenya (2012), the student enrolment in the universities in Kenya by 2012 stood at 250,000. In Kenya, massification began in the 1990s when there was a double intake of students from Form Four and those who had graduated from Form Six. This scenario caused the Kenya government to establish several universities and chartered private universities with the hope of absorbing as many students from secondary school as possible to increase the pool of highly skilled human resources for development (The Republic of Kenya, 2007). Establishing self-sponsored programs (SSP) in all public universities further increased the enrolment of students in universities in Kenya. Due to

the increase in enrolments, the concern for quality education became a major concern. Quality education comprises internal and external efficiency. Internal efficiency is concerned with the level of achievement of school organization students, including mean scores, mean grades, and completion rates, among others. External efficiency is the usefulness of university training for the concerned and society; that is, the employability of graduates.

Employability refers to transferrable skills needed by an individual to make them employable. This study examines the perception of students and lecturers on the relevance of university training to the objective needs of students, such as skill employability. Thus, it is the perception of students and lecturers on students' training for future graduate employment.

Issues of external efficiency need to move to the forefront of policymakers' education agendas at the higher education level. Considering the high government and individual interests in university education, there is an urgent need to evaluate how effectively universities are being managed by examining the employability of university graduates. The study aimed to determine the impact of massification on the employability of graduates in public and private universities in Kenya, where the hypothesis which was tested at $\alpha = 0.05$ level of significance was that there is no statistically significant difference in the impact of massification on the employability of graduates between public and private universities in Kenya.

The study enables university administrators to develop policies that increase graduates' employability. Scholars will find the findings helpful in expanding their knowledge base on the impact of rapid enrolment of students on external efficiency in universities in Kenya.

Literature Review

This chapter reviews the literature on the impact of massification on external efficiency in universities. It is concerned with the impact of massification on the employability of university graduates. External efficiency involves students' success after college. Student success is linked with many desired outcomes that benefit individuals and society (Kuh, Kinzie, Bridges & Hayek, 2006).

In the study on factors for the employability of employees in Bangladesh University by Hosain et al. (2023), the desired factors are of a theoretical and practical nature. These factors coincide with student outcomes. Those of a theoretical nature were Academic Performance (AP) and technical Skills (TS). At the same time, the Practical competence domain included the acquisition of time management, interpersonal Communication Skills (CS), Teamwork and

Problem-Solving Skills (TPSS), Personality (PE), Leadership and Motivational skills (LMS), demonstrating sensitivity and workplace culture needed at work. All these forms of training, whether formal, non-formal, or implied, are necessary for employment.

According to Gibbons (2016), universities employ their own graduates as lecturers and in administrative capacities as professionals, thus acting as labor markets for their products. University graduates in Europe find employment within their own countries and in regional economic blocs such as the European Union (Republic of Turkey, 2012). There is decentralization of departments and "marketization" of the courses. To improve the employability of university graduates, universities have commercialized their courses in vocationalization of courses; for instance, English Literature is offered as Business English. To enhance the marketability of university graduates, universities have to collaborate with manufacturing firms, businesses, and government policymakers to identify relevant skills and knowledge to be taught in the universities.

Apart from open unemployment, massification has caused unemployment. International research on general youth employment and university graduation has shown that highly educated people are not guaranteed job opportunities (Brown, McHardy, McNabb& Taylor, 2011; Mok & Wu, 2015). The subjects or discipline a student pursues at the university may result in unemployment. Expansion of higher education tends to increase differences in the mean ability of students' fields because "hard" subjects (mathematics, engineering, physics, computer science) maintain entry standards, and "soft" subjects (social sciences, humanities) allow entry to less able students.

Over-qualification is common among graduates from specific fields. Ortiz and Kucel's (2008) analysis of the data from the European labor force survey 2003–2005 for Spain and Germany suggested that over-qualification is highest in fields related to services, agriculture, veterinary, social sciences, and business and that over-qualification is less likely in systems with emphasis less on academic than occupational focused degrees.

Taiwan, Japan, and South Korea have universal access to university education and training, which might be related to higher unemployment rates for bachelor's degree holders than those in other phases of massification (Yang and Chan, 2017). The relation between employment and academic qualifications is that the higher the educational qualifications, the higher the unemployment rate. One primary reason accounting for a high proportion of graduate

unemployment in Taiwan is closely related to the universalization of higher education (over 90% enrolment) in Taiwan compared with mainland China (30 %) and Hong Kong 60 percent (Mok and Wu, 2016). With an output of more than 4 million graduates in 2006, the higher education system mass-produces highly qualified managers, leaders, doctors, top-level technicians, and the like. Chinese labor is not adequately prepared for this wave of skilled professionals. Many graduates work in menial jobs (Melvin, 2006). In the meantime, the economy of China is too weak to support its large number of university graduates, and many seek employment elsewhere (Pascarella & Terenzini, 2005). In India, most private universities do not undertake research, and some offer programs of dubious quality, giving rise to graduates having difficulty finding suitable employment (Chavaillier, 2002).

In North Africa, unemployment rates among the generally more educated labor force are quite high (23.8 percent estimated in 2012, with a 3 percent increase between 2010 and 2011 and increased steadily since 2007 and is projected to remain higher over the next five years). African universities can structure their courses so that they are relevant to the societies, and there will be a ready market for students who graduate from them. Institutions need to determine their needs and tailor their courses accordingly (Sawyer, 2004). However, job market players have a role in university graduate employment. An employer needs survey is critical in any country to match industry needs and training programs (Yorke & Knight, 2003).

Unemployment among Kenyan youth is now estimated to stand at 20 percent compared to 15 percent for both Tanzania and Uganda (Danish Trade Union Development Agency, 2024). This is attributed to Kenya's inability to create new jobs as it lagged behind population growth, resulting in narrow formal opportunities, especially for entry-level workers fresh from college. Approximately 800,000 young Kenyans enter the labor market every year, and youth unemployment is estimated to be as high as 35 percent compared to the overall national unemployment rate of 10 percent (ILO, 2017). Thus, Kenya needs a relevant university education for its industrial development. It has been argued that apart from employers' dissatisfaction with the state of training in the universities, the slow growth of the economy is to blame for unemployment in Kenya. The trends of new jobs in the modern sector 2008–2012 are shown in Table 1.

Table 1

Trends of new jobs in the modern sector in Kenya (2008–2012)

Year	No of jobs '000's	
	Private	Public
2008	35,000	10,000
2009	52,000	25,000
2010	57,000	9,000
2011	69,000	23,000
2012	65,000	10,000

Source: *The Standard Newspaper*, June, 2013.pp1–3.

In Table 1, the information shows that the private sector has the potential for future graduate employment. Each year, at least 800,000 young Kenyans enter the job market. However, just 15 percent of them complete the transition: finding a stable or satisfactory job (Danish Trade Union Development Agency (2024). This leads to graduate unemployment and underemployment. Industrialists blame the government for failing to stimulate fresh investments in the manufacturing sector to generate new jobs. Employers cite inappropriate curricula and rapid expansion of universities without regard to standards. There is a disconnect between courses offered at the institutions and what graduates must do in the job market (World Bank, 2000).

Harvey and Knight (2005) posit that to enhance competitive advantage for graduates, employment students need to develop skills and acquire knowledge from specific subjects. Therefore, the curricula should include more practical applications by students, internships, incubation centers in each university, and role modeling. Industry players have to work closely with higher education institutions to offer practical experiences to students in their areas of interest.

It is documented in the blueprint for Kenya Vision 2030 (Republic of Kenya, 2007) that the problem of mismatch between the level of skills imparted by the education system as a whole and the requirements of the labor market must be corrected to meet the demands of the new economy. There is a need to reform the curriculum to respond to future jobs. Such future jobs

can be deduced from empirical data, which makes projections for the future of the national and global economies and job opportunities (Okebukola, 2014). One is to re-orient "non-professional" programs to provide better the types of qualifications considered for particular categories of jobs or a particular segment of the labor market. In efforts to improve the employability of university graduates, universities have turned to commercializing their courses. Other strategies are casework focusing on current problems or opportunities of a particular industry or community or practical training in a particular type of activity, such as memo writing for decision-makers (Underdal, 2010). The education system must respond to labor market demands for skills and knowledge.

Theoretical and Conceptual Framework

The evaluation theory was the theoretical framework for the study of the impact of massification on the employability of university students. The evaluation theory is a conceptual, analytical model used to specify feasible practices that evaluators can use to construct knowledge about the value of social programs. This approach focuses on the theory of change and causal mechanisms underlying the problem. One of the most common types of evaluation is impact or outcome evaluation, which focuses on whether the program objectives have been achieved. The founder of the theory was Chen (2006).

The conceptual framework of the study is developed on the literature review. Massification is hypothesized to directly impact the external efficiency of universities. The intervening variables are causal factors of massification. A conceptual framework, therefore, captures the relationship between the independent and dependent variables. The independent variable is the massification of universities in Kenya, while the dependent variable is external efficiency, which is moderated by factors such as government education policy and societal pressures. Diagrammatically, the relationships among the variables are presented in Figure 1.

Figure 1 indicates the relationship between study Variables.

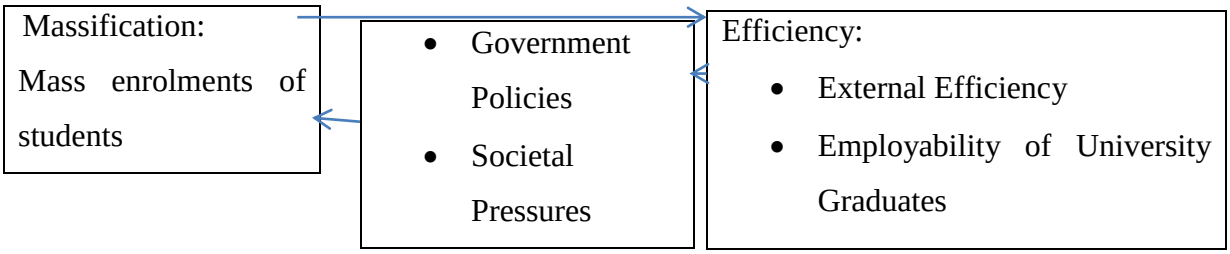

Figure 1: Relationship between Massification and Efficiency

The rapid enrolment of university students has resulted from government policies such as the double intake of free primary education students in 1990/91 and 2011/2012. Society's demand for university has led to massification on the realization that lack of university education retards individual progress. Massification has directly affected the skill employability of university graduates. Government policies and social pressures impact efficiency in the universities. The study compares the impact of the massification of universities on private and public universities.

Methodology

The research design adopted for the study was a causal-comparative research design. It explained the difference between independent and dependent variables. It helped define the effects of an independent variable on a dependent variable. The study sought to compare the impact of massification on external efficiency between public and private universities in Kenya to compare employers' preferences regarding graduates' university backgrounds to improve the relevance of university education and training.

The study population consisted of 194,852 respondents, 190,674 students, and 4,178 lecturers from eight universities selected for the study. Using a proportional sampling technique, according to Wierma and Jurs (2005), a population of 194,852 has a standard sample size of 384. Thus, 384 were shared among the eight universities in proportion to their total enrolments for all the universities sampled. Thus, proportionate sampling was applied. Two questionnaires were used: the students' Questionnaire (SQ) and the Lecturers' Questionnaire (LQ).

The data was analyzed using descriptive and inferential statistics, which included percentages, while the inferential statistics used were chi-square. The hypothesis was analyzed

using the Statistical Package for Social Sciences (SPSS) Computer Software version 21. The findings of the study were presented using tables and prose narration in qualitative data.

Findings and Discussion

The objective of the study was to find out the impact of the massification of universities on the skill employability of university graduates between public and private universities in Kenya. The skill employability of university graduates involves the potential of graduates of universities to be meaningfully employed in industries, public service, self-employment, and non-governmental organizations. The information sought from the students was analyzed by determining the percentages of students' responses on 11 items measuring the construct on a 5-point Likert scale where SA= Strongly Agree, A= Agree, NO= No opinion, D= Disagree and SD = Strongly Disagree. The data was analyzed in percentages. The results are depicted in Table 2.

Table 2

Students' responses on the perception of employability of university graduates:

	Private University					Public University				
Statement	SA (%)	A (%)	NO (%)	D (%)	SD (%)	SA (%)	A (%)	NO (%)	D (%)	SD (%)
My employment prospects will be very high after I complete the course.	43.8	38.4	8.2	8.2	1.4	29.8	48.8	9.4	7.7	3.5
My employment prospects are low because there is a skill oversupply of graduates.	11.0	17.8	31.5	21.9	16.4	10.3	21.4	30.8	19.5	15.7
My future career prospects are high after course completion because my skills are in high demand.	38.8	42.5	11.0	8.2	0	27.0	46.5	16.2	7.0	2.1
I will take a long time to be employed because my skills are in low demand by employers.	6.8	9.6	20.5	26.0	34.2	8.9	16.2	24.9	23.7	23.9
I would like to change my career to enhance my employment prospects.	4.1	12.3	20.5	26.0	35.6	10.1	16.0	27.0	19.5	23.7

My course has a specific job description for easy employment.	28.8	38.4	16.4	6.8	8.2	31.2	50.2	9.6	4.9	1.6
Overall	22.2	26.5	18.0	16.2	16	19.5	33.2	19.7	13.7	11.8

The information in Table 2 shows that 52.3% of students in private universities and 49.7% in public universities indicated that the skills and knowledge acquired in the universities are sufficient to offer them employment immediately after graduation. In this study, Table 3 lecturers' responses on skill employability of university graduates showed that most university lecturers' indicated that the skills and knowledge acquired in the universities are sufficient to guarantee employment after graduation. University students who have acquired knowledge and skills in mathematics, engineering, physics, and computer science enhance their chances of employment after graduation.

A total of 28.8% of students in private and 31.7% in public universities indicate that they would take a long time to be employed because of the mass skill production of university graduates. In line with this finding, Sawyer (2004) and Underdal (2010) observed that humanities and social sciences students are most likely to be unemployed for some time after graduation. The results show that 61.6% of private and 43.2% of students in public universities indicated that they would change their courses to enhance their employment prospects. The analysis showed that most students in private universities would like to change their courses compared to their public university counterparts. The finding concurs with the demographic results of this study, which showed that most students in private universities are in the 23–28 age bracket. Most students enrolled in private universities are mature students who need to upgrade their skills for promotion purposes in their place of work (Bradburn & Hurst, 2001).

Most students' responses in private universities (81.3%) and 73.5% in private universities indicated that their future career prospects are high because of the relevant skills demanded by the economy. The results concur with Abagi, Vargheze, Nzomo, and Otieno's (2007) study in public and private universities in Kenya, which found that private universities mainly offer market-oriented courses such as business and health-related courses to improve the career prospects of their graduates. The results show that 16.4% of students in private universities and 24.9% in public universities expect a long time before their first employment after graduation because their employers do not highly demand their skills. Related studies by Yorke and Knight

(2003) found that graduates are employed soon after graduation when the employers demand their skills. Based on this study, the government of Kenya and the universities need to conduct a needs market survey to match their academic programs with the needs of the employers.

The results show that 54.7% of students in private universities and 50.4% in public universities indicated they would like to be employed by non-governmental organizations because the students have relevant training. The government economic survey (2015) showed that more graduates are likely to be employed in the informal sector since it has the largest graduate employment (Republic of Kenya, 2015). Likewise, in the lecturers' questionnaire, an item required lecturers' responses on their perception of lecturers' skills and employability of university graduates. The results are shown in Table 3.

Table 3

Lecturers' responses on the perception of employability of university graduates

	Private University					Public University				
Statement	SA (%)	A (%)	NO (%)	D (%)	SD (%)	SA (%)	A (%)	NO (%0	D (%)	SD (%)
Private organizations easily absorb our graduates because they have acquired relevant skills.	52.9	35.3	5.9	5.9	0	22.2	55.6	5.6	5.6	0
Our graduates are easily employed by public service because they are highly qualified.	35.3	17.8	64.7	0	0	0	27.8	44.4	16.7	0
Our graduates are involved in self-employment since they have acquired relevant skills and attitudes.	29.4	58.8	11.8	0	0	27.8	22.2	22.2	22.2	0
International Organizations employ our graduates because they are highly qualified professionals.	17.6	76.5	5.9	0	0	22.2	22.7	38.9	5.6	0
Overall	33.8	58.8	5.9	1.5	0	25.0	37.5	20.9	9.8	0

Results in Table 3 show that 92.6% of lecturers in private universities and 62.5% in public universities are confident of the employable skills they impact on their university students. The finding indicates that lecturers in private universities have confidence in the potentiality of employability of their graduates in the job market compared to their counterparts in public universities.

Information in Table 3 reveals that 88.2% of the lecturers in private universities and 77.8% in public universities believe that industrial organizations readily absorb their graduates because they have acquired relevant skills in the universities. The results show that lecturers in private universities are more assertive about the absorption of their graduates in industrial organizations than their colleagues in public universities. Past studies by Gibbons (2016), Kinyanjui and Subotzky (2007), and Pascarella and Terenzini(2005) indicated that curriculum changes in the universities towards science and technology increase chances of being employed by industry organizations. A previous study by Vargheze(2015) showed that a curriculum review in the university's academic programs based on employers' job demands increases graduate employment.

All lecturers in private universities (100%) and 72.2% in public universities indicated that university graduates are easily employed by public service because they are highly qualified. The findings show that lecturers in private universities are more self-assured about their students' immediate employment in public service than their colleagues in private universities. The findings concur with Bradurn and Hurst's (2001) study, which indicated that most students in private universities are employed in the public sector as working adults and are in the universities to fulfill their employer requirements and lead stable careers. According to the Republic of Kenya (2015) economic survey, the areas of high growth in employment in the public sector were in public administration, compulsory security, and education (Republic of Kenya, 2015). However, statistics from the Kenya National Bureau of Statistics (Republic of Kenya, 2015) showed that the private sector had a higher employment rate for graduates of 4.4% in 2014 compared to public sector employment, which rose by 2.6 % in 2013–2014. Based on this finding, policymakers must initiate courses that prepare students for self-employment (Yorke & Knight, 2003).

The results in Table 3 show that 88.2 % of lecturers in private universities and 50.0% in public universities indicated that university graduates are involved in self-employment since they

have acquired relevant skills and attitudes. The finding shows that lecturers in private universities are more confident about their graduates' self-employment ability than lecturers in public universities. A study by Abagi, Varghese, Nzomo, and Otieno (2007) of private and public universities in Kenya found that private universities are keen on offering marketable courses.

The results revealed that 94.1 % of lecturers in private and 50.0 % in public universities showed that international organizations employ university graduates because they are highly qualified professionals. The Government Economic Survey (2015) showed that more graduates are likely to be employed in the informal sector since it has the largest graduate employment (Republic of Kenya,2015). This shows that lecturers in private universities than those in public universities asserted that international organizations employ their graduates because they are highly qualified professionals.

A Chi-square test was performed to determine whether there was any significant difference in the impact of massification on the skill employability of university graduates between public and private universities in Kenya based on students' responses. The results are presented in Table 4.

Table 4

Chi-Square Test Results n Students' Responses on Perception of Employability of University Graduates

Statement	Chi-Square	df	p-value	Interpretation
My employment prospects will be very high after I complete the course.	9.046	4	0.160	No difference
My employment prospects are low because there is a skill oversupply of graduates.	7.957	4	0.093	No difference
My future career prospects are high after course completion because my skills are in high demand.	0.852	4	0.931	No difference
I will take a long time to be employed because my skills are less demanded by employers.	7.497	4	0.112	No difference

I would like to change my career to enhance my employment prospects.	12.126	4	0.816	No difference
My course has a specific job description for easy employment.	9.589	4	0.548	No difference
Overall	7.845	4	0.443	No difference

Information in Table 4 shows no significant difference in the impact of Massification on the skill employability of university graduates between public and private universities in Kenya based on student responses (χ^2 =7.845, P= 0.443, p>0.05). The student's opinions on the relevant skills training to the job market are similar in both public and private universities, probably because the researchers have indicated that the percentage of unemployment among graduates is high irrespective of the university they studied. Similarly, a Chi-Square test was computed for the lecturers' perception of students' skill employability of university graduates. Analyzed results are depicted in Table 5.

Table 5

Chi-Square Test on Lecturers' responses on perception of employability of university graduates

Statement	Chi-Square	df	p-value	Interpretation
Private organizations easily absorb our graduates because they have acquired relevant skills.	2.9543	4	0.415	No difference
Our graduates are easily employed by public service because they are highly qualified.	2.8959	4	0.408	No difference
Our graduates are involved in self-employment since they have acquired relevant skills and attitudes.	7.238	4	0.065	No difference
International organizations employ our graduates because they are highly qualified professionals.	9.198	4	0.067	No difference
Overall	5.572	4	0.238	No difference

Information in Table 5 shows no significant difference in the impact of massification on the skill employability of university graduates between public and private universities in Kenya based on

lecturers' responses (χ^2=5.572, P=0.238, P>0.05). Information in Table 26 and Table 5 reveals no significant difference in the impact of massification on the skill employability of university graduates between public and private universities in Kenya. The null hypothesis (HO4) was accepted, stating that there is no statistically significant difference in the impact of massification on the employability of university graduates in public and private universities. This means that the mass enrolment of university students has negatively affected graduate employment prospects at all the universities in Kenya.

In order to shed light on the impact of massification on external efficiency between public and private universities, the researcher conducted an in-depth interview with Heads of Departments in the universities. Interview responses are given in excerpt 1. The real names of the Heads of Departments interviewed were withheld to conceal their true identities. The heads of departments indicated that they had introduced several market-oriented academic programs in universities. The findings in this study showed that departmental heads were not satisfied with the inadequate skills offered by the universities for employment purposes. The finding concurs with the finding by Kairu (2014) that university students have not acquired the necessary technical skills needed by employers.

The results of lecturers' responses on the impact of massification on students' employability indicated no statistical difference between public and private universities in Kenya (χ^2=5.572, p=0.238,p >0.05). The finding revealed no statistically significant difference in the impact of massification on the skill employability of university graduates between public and private universities in Kenya. It suggests that lecturers in both public and private universities in Kenya have similar perceptions that they have prepared their graduates satisfactorily.

Most students perceive that they are adequately trained for the labor market. However, a significant number of them hold the view that they may not be employed immediately after schooling. It suggests that universities are not adequately addressing their academic programs to match the demands of the job market. This probably affects the external efficiency of universities. The study recommendation is that university authorities encourage labor market surveys to match their courses to improve the employability of university graduates.

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