

Lecturers' competence and the Quality of University Graduates; The Case of Private and Public Universities in Uganda.

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Abstract

This study investigated the effect of lecturer competence on the quality of university graduates in Uganda. Quality of university graduates was measured by satisfaction of students with their current university experience and their labour market expectations. Competency of university lecturers was measured by their content knowledge competency, methods competence, professional competence and techniques that they use to assess students' work. A correlational, cross-sectional survey design was used with quantitative approaches to collect data from a sample of 300 university students of the graduating class and qualitative approaches were used to collect data from 12 university heads of academic departments and 12 human resource managers of selected employers. The study found a positive significant correlation between lecturer attributes and the quality of university education in Uganda. The study recommends that increasing the numbers of staff with higher qualification will improve efficiency not only in teaching but also in research engagement and supervision which in the long run should improve the quality university graduates.

Key Words: Education Quality, Lecturers' Competence, Students' Satisfaction, Labour Market

1.0 Introduction

It is widely accepted that skills and human capital have become the backbone of economic prosperity and social wellbeing in the 21st century (OECD 2012), and as such nations have to focus on the type of university education which develops a skilled workforce that meets the labour market demands. Universities have to be internally efficient in utilizing both the human and physical resources and at the same time focus on the quality of their graduates which reflects the quality of university education.

This study examined the effect of Lecturers' Competence on the quality of university graduates in Uganda. The problem of quality in Ugandan university education dates back to the founding of Makerere University in 1922 (Hayward 2006). Makerere University was established as a technical college to serve students from the British East African territories of Kenya, Uganda and Tanzania (Cloete, Maassen, & Bailey 2011; UNCHE 2016). In the initial stages of university education, quality was measured on the training of graduates in practical skills of carpentry, building and mechanics; and when the university expanded other courses in medical care, agriculture, veterinary sciences, and teacher training were introduced which demanded for more advanced models of quality assurance (Kasozi 2003, Muwagga 2006).

In these initial stages, university training also focussed on producing high quality civil servants and administrators to work for the colonial government. These first endeavours for ensuring quality in university education were guided by the Phelps-Stokes Commission of (1924-1925) which suggested that the educational policies of missionaries were inadequate because they emphasised reading, writing, and numeracy (Nakanyike & Nansozi 2003; Muwagga 2006) and that there was need to teach agriculture and technical skills.

With the growing demand for university education in Uganda, in the 2nd half of the 20th century, more students have enrolled in Ugandan universities, and more public and private universities have been established. With this new development in the university sector the issue of quality of graduates are becoming of paramount importance to ensure that Governments and Parents get value for the cost which they incur on education. The quality of university lecturers is seen as an important input in determining the quality of these graduates.

The measures for the competency of lecturers included their mastery of subject knowledge; the methods that they use to teach; their professional conduct and how they guide students in their career choices; and the methods that they use to assess students' work. The quality of university education is defined as an improvement of all aspects of teaching and learning and ensuring excellence so that recognizable and measurable learning outcomes are achieved by all university learners (Kagoda & Ezati 2013).

1.1 Theoretical Framework of the Study

This study was guided by the human capital theory advanced by Theodore Shultz in 1961 which suggests that individuals and nations spend on education in order to take advantage of better job opportunities and better earnings (Becker 1993; Johnes 1993; Schultz 1972).

Studies further suggest that individual decisions to pursue higher education involve an informal analysis of the costs of education as measured against the expected value of the returns to that education (Chevalier & Dalton 2004). It is further suggested that the human capital theory assumes that education determines the marginal productivity of labour which also determines earnings and that intellectual formation constitutes a mode of economic capital.

The signaling theory also called the screening hypothesis suggests a contrary argument that the earning differentials associated with education do not mainly reflect improvements in individual productive capacity caused by education but, rather, employers' use education to identify preexisting differences in talents (Riley 1979; Weiss 1995).

The motivation for private and public investment in education is to increase productivity of individuals, enhance employment prospects, and increase earning potentials. Therefore, lecturers' competence is viewed as an important factor in determining university graduates attributes which are rewarded in the labour market.

1.2 Statement of the Problem

The demand and supply of university education in Uganda are expanding and this is indicated by the rise in the number of students looking for university places; the increase in the number of public and private universities; and the raise in the private and public cost of education. Economic

Theory would suggest that these changes in the university sector should benefit individuals who participate in education and the nation in terms of the contribution of the educated to national wealth.

However, there is concern that growth in university provision in Uganda has not been efficient at producing graduates who are relevant to the Ugandan labour market. This has contributed to high levels of graduate unemployment at 36% of graduates who are unemployed (World Development Report 2016).

This study therefore, investigated how lecturers input in terms of their competencies were affecting the quality of University graduates in Uganda.

1.3 Purpose of the Study

The purpose of the study was to establish the effect of lecturers' competence on the quality of university education in Uganda.

1.4 Objectives of the Study

1. To establish the relationship between lecturer knowledge competence and the quality of university graduates in Uganda.
2. To find out how methods of teaching used by lecturers are related to the quality of university education in Uganda.
3. To establish how lecturers profession competence is related to the quality of university education in Uganda.
4. To examine how lecturers methods of assessing students are related to the quality of university graduates.

1.4 Research Hypotheses

1. There is a relationship between lecturer knowledge competence and the quality of university graduates in Uganda.
2. There is a relationship between lecturers' methods of teaching and the quality of university graduates in Uganda.

3. There is a relationship between lecturers' professional competence and the quality of university graduates in Uganda.
4. There is a relationship between lecturers' methods of assessing students and the quality of university graduates in Uganda.

2.0 Methodology

2.1 The Research Paradigm, Design and Approach

This study was leaning more on the positivist research paradigm which is rooted on the ontological principle and doctrine which suggests that truth and reality are free and independent of the viewer and observer (Muwagga 2015; Genza 2016; & Owino 2016). The study followed a correlational cross-sectional survey research design which mainly allows quantitative approaches which enable the sampling of a large numbers of 'units of analysis' in a relatively short time and enabled the generalization of findings to many universities in Uganda (Itaaga 2012; Onen *et al* 2016; Ezati *et al* 2016). To a small extent, qualitative approaches were used to corroborate findings got from the quantitative approaches.

2.2 Study Population, Sample Size and Selection

The general population for this study included all actors and stakeholders in the university education sector in Uganda. The target population for this study, included all enrolled students in private and public universities; academic heads of departments in private and public universities; and human resource managers of employers of graduates in Uganda.

The accessible population were the university students selected from six universities (three private and three public) and they were the principal subjects for the study. In order to complement the findings from the students, interviews were conducted with twelve (12) academic heads of departments selected from the six universities and twelve (12) human resources managers from two commercial banks and two telecom companies.

A sample of 300 students was selected for this study using the stratified random sampling methodology to include 50 students from each of the six sampled universities. The sample of 300 subjects was appropriate for this study because following the (Krejcie & Morgan, 1970)'s

sampling table of sample size determination a minimum sample of 300 elements for the population of 100,000 and above is representative enough.

2.3 Methods of data Collection and Research Instruments

The structured questionnaire was used as an empirical method to collect data from university students as principal subjects. A structured questionnaire was preferred for this study because the study requires standardized data on facts and opinions to be provided by respondents and the respondents would give answers to identical items. Interviews were used to collect qualitative data from purposively selected heads of academic departments from the six selected universities, and human resource managers from the six selected employers.

2.4 Methods of Data Analysis

Data screening was done to check for missing values. Descriptive statistics specifically the mean, the standard deviation, and the Shapiro-Walk test along with histograms and scatter plots were used to check whether data fulfilled the assumptions of normality, linearity, and bivariate normal distribution and if there were extreme outliers.

The spearman rank-order correlation (*rho*-coefficient) was conducted in IBM SPSS 24 to measure the strength and direction of the correlation between the predictor variables of internal efficiency and those of the quality of university education. A multiple regression analysis was run to establish which factors in lecturers' competence were most important in determining the quality of university graduates in Uganda.

2.5 Ethical Considerations

The current study on 'Lecturers' Competence and the Quality of University Graduates in Uganda' took into consideration the three main ethical conditions of necessity, no potential for harm on subjects and intentionality as proposed researchers like (Deborah, 2008) as essential criteria for ethics in social science research. Ethical approval was obtained from Makerere University Research Ethics Committee (MUREC) and further approval was obtained from the Uganda National Council of Science and Technology (UNCST) with reference No SS 508. Informed consent was sought from all the human participants and the necessity, intentionality, potential risks of the project were clearly indicated for the participants.

3.0 Findings of the Study and Discussion

3.1 Descriptive Statistics

Descriptive statistics were analysed to explain the central position, the distribution and pattern of responses on the different variables and also explain the spread of the data. The *mean* was analysed to describe the central position of the responses for each of the variables of interest in the dataset. The *standard deviation* was analysed for each of the variables of interest to describe how spread the responses were from the central position. The *Shapiro-Wilk test*, *histograms* and the *scatter plot* were used to test whether data was normally distributed. The findings are presented in Table 1.

Table 1: Descriptive Statistics of Response on Lecturers' Competency

Variable	Descriptive Statistics			
	Alpha	Mean	SD	Shapiro-Wilk test
Lecturer Competences				
Mastery of Subject Content	0.904	1.90	0.796	0.829
Methods of Teaching	0.901	2.57	0.968	0.900
Professional and Career Guidance	0.900	2.72	1.245	0.905
Assessment of Examinations	0.900	2.40	1.195	0.880

Source: Primary data

From Table 1, the overall alpha for this sample was 0.905 indicating that the instrument was internally consistent in measuring what it was meant to measure because an alpha which is equal to or greater than 0.700 is reliable (Diamond & Jefferies, 2001). Except for the attribute '*mastery of subject content*' whose mean is 0.190 and SD is 0.796 and is slightly skewed to the left, all the other attributes indicate a relatively normal distribution of responses on the variable lecturer competence. The Shapiro-Wilk Test indicated mastery of subject content to be significant at 0.829, methods of teaching at 0.900, professional competence at 0.905, and assessment of students'

exams at 0.880 all indicating a normal distribution since the value of the Shapiro-Wilk Test is greater than 0.05.

3.2 Correlation between Lecturers' Competence and the Quality of University Graduates

The key attributes for competence of lecturers were mastery of subject knowledge; use of appropriate methods of teaching, giving of professional and career guidance to students; and use of objective methods to assess students' exams. The alternative and null hypotheses for these variables were:

Hi: A positive significant correlation exists between competent lecturers and the quality of university education.

Ho: There is no positive significant correlation between the competence of university lecturers and the quality of university education.

The Spearman Rank – Order Correlation Analysis on these hypotheses revealed the following results in Table 2.

Table 2: Correlation between Lecturer Competence and Quality of University Education

Lecturer Competence	Indicators of the Quality of University Education					
	Retention and Completion		Employment Prospects		Earnings Prospects	
	Rho	P-Value	Rho	P-Value	Rho	P-Value
Knowledge Competence	0.106	0.095	0.195	0.002	0.185	0.003
Methods of Instruction	0.213	0.001	0.264	0.000	0.345	0.000
Career and Professional Support	0.295	0.000	0.524	0.000	0.397	0.000
Methods of Assessing Examinations	0.176	0.005	0.354	0.000	0.327	0.000

Source: Primary Data. ***Correlation is significant at the 0.01 level (2-tailed)

These results suggest a positive statistically significant correlation at the 0.01 level of significance, between the predictors of lecturers' competence and the predictors of quality of graduates. However, Methods competence, professional competence, and assessment of exams seem to be more co-related to university students' satisfaction and labour market expectations compared to knowledge competence.

3.3 Multiple Regression Results

A Multiple Regression Model was conducted in SPSS to establishing the effect of the competence of university lecturers on the quality of university education. The findings are presented in Table 3 and 4.

Table 3: Model Summary and ANOVA Results for the Model

IV: Lecturer Competence	DV: Indicators of Quality of University Education		
	Employment		
	Retention	Prospects	Earning Prospects
R	0.325	0.544	0.455
R-Square	0.106	0.2282	0.207
Adjusted R-Square	0.088	0.282	0.191
F-Statistic	5.777	20.473	12.721
P-Value	0.000	0.000	0.000

Source: Primary Data

The SPSS model summary and the ANOVA results in Table 3 indicate that whereas lecturer competency may be a good predictor for students' employment expectations and earning expectations it may not be a good predictor for their persistence on their programmes of study.

However, the results in the coefficients table suggest that the variable professional competence is the better predictor of the quality of university education compared to the other variables in the models. Findings in Table 4:

Table 4: Coefficient Results for the Models

DV: Indicators of Quality of University Education

IV: Lecturer

Competence	Retention			Employment Prospects			Earning Prospects		
	Beta	t	Sig.	Beta	t	Sig	Beta	t	Sig.
Knowledge competence	-0.036	-0.534	0.596	0.020	0.337	0.737	0.023	-0.361	0.718
Methods Competence	0.118	1.542	0.124	-0.012	0.176	0.861	0.195	2.702	0.007
Professional Conduct	0.249	3.166	0.002	0.438	6.235	0.000	0.259	3.489	0.001
Assessment of Exams	-0.007	-0.924	0.924	0.125	1.891	0.060	0.131	1.881	0.061

Source: Primary Data

Findings in Table 4 suggest that Lecturers' competence statistically and significantly predicts the quality of university graduates in Uganda, but knowledge competence and assessment of exams are not good predictors of retention and earnings. These findings are supported response from the interviewed administrators who suggested thus:

Lecturers mastering their subject content and using good methods to deliver their lectures may have an effect on how students perform in examinations at university. Much as they are important factors in determining the competence of the lecturer it may be hard to determine their effect on students' willingness to complete their programmes of study and what they expect in the world of work for employment and earnings. (Head of Department; November 20th, 2017).

In the same direction, another head of department noted that:

'As a lecturer I go to class to teach my students the subject that I am assigned to teach and I must prepare my lecture and deliver it with the best methods. I am more interested in having my students understand the content of the subject after all some of the courses that we teach are not directly related to employment and earnings but they are meant to give our students general knowledge. However, I feel good when I meet my students employed and doing well and they acknowledge that I made a contribution to their successes'. (Head of Department, November 24th, 2017).

Therefore, Lecturers' Competence is an important factor in determining the quality of university graduates in Uganda though knowledge competence and methods of assessment may not be strong factors compared to professional competence and methods competence in determining students' satisfaction and labour market expectations.

3.4 General Conclusions

From the findings, the study concludes that:

1. Lecturers are an important input in determining the quality of university graduates in Uganda.
2. All the predictors of lecturer quality are positively and significantly correlated with the predictors of quality of university education.
3. The multiple regression analysis results indicated that some attributes of lecturer quality mainly professional guidance of students and methods of assessment are better predictors of retention, employment, and earnings compared to mastery of subject content and teaching methods.

3.5 Recommendations of the Study

1. Private and public universities in Uganda need to improve on their human resources by recruiting more qualified lecturers and enhancing staff development programmes which should improve on mastery of content and teaching methods which cater for the labour market needs.
2. Increasing the numbers of staff with higher qualification and better competencies will improve efficiency not only in teaching but also efficiency in research and supervision of graduate programmes which in the long run should improve the quality university graduates.

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