



ANALYSING THE INFLUENCE OF LECTURERS' PEDAGOGICAL PRACTICES ON STUDENTS' ACADEMIC PERFORMANCE IN THE UNIVERSITIES OF UGANDA: EMPIRICAL EVIDENCE FROM NKUMBA AND KYAMBOGO UNIVERSITIES, UGANDA

Peter Lwanga Kayizziⁱ

Simon Peter Ongodia

Nkumba University,
Uganda

Abstract:

The purpose of the study was to establish the influence of lecturers' pedagogical practices on students' academic performance in the universities of Uganda. The study delineated pedagogical practices in Kyambogo and Nkumba universities of central Uganda. The objective of the study was to analyse the influence of lecturers' pedagogical practices on students' academic performance in the selected universities of Uganda, using a sample of 334 randomly selected final-year students and purposively selected lecturers from the selected universities. The study utilised a convergent parallel mixed methods research design, an objective and subjective epistemological positioning and a dualism ontological stance. Findings from the correlation results revealed a significant positive, but moderately weak relationship between pedagogical practices and students' academic performance in the selected universities of Uganda ($r = 0.486$, $p = 0.000 < 0.05$). Regression analysis results indicated that the pedagogical approaches, engagement/interaction and assessment practices, when combined as in the model, explained only 23.6% of the variation in students' academic performance in the selected universities of Uganda ($R^2 = .236$). The remaining (76.4%) may be explained by other factors which were not considered in the study. The study, therefore, recommended that Government of Uganda (GoU), through the National Council for Higher Education (NCHE) of Uganda, and other supervisory bodies of higher education ought to give ample sensitization and training to the university lecturers on better adoption and application of appropriate assessment practices to enhance students' academic performance in the universities of Uganda.

Keywords: pedagogical practices, interaction, performance

ⁱ Correspondence: email peterkayizzi1@gmail.com

1. Introduction

The Universities and Other Tertiary Institutions Act (2001), amended in 2003 and 2006, was established by Parliament of the Republic of Uganda and regulates that all university lecturers possess the requisite qualifications to enable them to teach at the university level. The Act commits to academic qualifications but does not consider the pedagogical competencies that accompany the academic qualifications. Similarly, the country through its vision 2040, also aspires that the country is transformed from a peasantry population to a modern and prosperous country. One of the avenues to achieve this milestone is through the provision of quality education including but not limited to a quality human resource. The Uganda National Teacher Policy (NTP) of 2019 also recognises that the educational transaction in the classroom is critical in helping students to acquire the requisite skills to become successful learners. The same NTP benchmarks from the best systems in the world which draw their lecturers from among the best graduates and train them rigorously focusing on achieving the best classroom practices (MoES, 2019). Unfortunately, in Uganda's case this is not adequately done and in most cases is not done at all.

The meaning of the term 'pedagogy' has become a point of concern and confusion among many scholars. Pedagogy was first coined during the Middle Ages and derived from two Greek words, 'paid' (child) and 'agogus' (leader), thereby 'paidagogus' to mean the leader of a child. It was coined after the slaves who accompanied the Roman boys to school, and these slaves had the duty to informally educate the boys on the way to school on what to do and thereby developing the term 'leader' of children. However, it later became the art and science of teaching regardless of the age of the learner and in late 1500 the famous philosopher Johann Heinrich Pestalozzi saw the need of studying pedagogy as a subject of its own. Modern higher education and its associated practices are deeply rooted in the schools and systems of the ancient Roman and Greek education systems in the 8th century into the Middle Ages. In Uganda, an educational qualification was not a requirement to teach at the university in the 1970s but all that was required was to have good academic credentials. The pedagogical practices training for lecturers was introduced in 1979 because the university lecturers lacked the necessary teaching skills and, as a result, they were really doing a bad job (Ssebuwufu, 2017).

Pedagogical practices are those instructional or teaching strategies that are presumed that they can aid effective students' academic performance and achieve the educational intents depending on the prevailing learning environment, which is characterised by; class sizes, physical resources, lecturers' characteristics, and students' characteristics among others. Mugimu and Mugisha (2013) concur that pedagogical practices are those activities practiced by different education stakeholders to enhance educational learning outcomes. Pedagogical practices such as pedagogical approaches, assessment practices and engagement/interaction are therefore critical in assisting the students to learn important concepts which they need for their practice (Kabanga,

Mugimu & Oonyu, 2018). The choice of one pedagogical practice over another has a direct influence on the outcome of the learning and consequently on the students' academic performance at the universities and learning cannot be effective without a learning method (Munawaroh, 2017).

The lecturers' pedagogical practices were conceptualised as lecturers' pedagogical approaches (teacher-centred, and student-centred), assessment practices and interaction/engagement. On the other hand, students' academic performances are the skills and knowledge attained by learners during the learning process (Matovu, 2020). Similarly, Mekonnen (2014) defines students' academic performance as the scholastic standing of a student at a given moment as explained in terms of the grades attained in a program or group of courses. In the context of the study, students' academic performance was conceptualised as the grades attained through the cumulative grade point average (CGPA), completion rates and skills acquisition (such as attaining the 21st-century skills like creative thinking, collaborative thinking, critical thinking, caring thinking and communication thinking skills). The substantial lack of knowledge for the application of pedagogical practices coupled with the lack of initial pedagogical training means that these lecturers largely teach the way they were taught (Ezati, Opolot-Okurut & Namubiru, 2014).

2. Statement of the problem

The Uganda National Teacher Policy (2019) suggests that all teachers should possess basic pedagogical training before being certified to teach. Just like the National teacher policy, the Uganda Vision 2040 also envisages that the teachers who possess efficient pedagogical practices would be able to achieve quality education leading to effective students' academic performance, especially at the university level. Research studies have shown that the major challenge facing universities is to enable their students to be successful in their studies (Sikhwari, Ravhuhali, Lavhelari & Pataka, 2019), and the studies in pedagogical studies have found the gaps that affect students' academic performance (Hussain, Afzal, & Gilani, 2017). In fact, according to Muzenda (2013), sub-optimal academic performance has been attributed to poor lecturers' subject knowledge, lecturers' attitude and their teaching skills in teaching. For instance, at Kyambogo University studies by Kyahura (2009) found that practical units were being taught theoretically and pedagogical approaches were limited to group dynamics. Another study by Kasule, Wesselink, Noroozi & Mulder (2016) revealed that participation in professional development activities at Kyambogo university was rare.

At Nkumba University, Mugoya (2011) found that there was a mismatch between the skills demanded by the employers and those that the graduates possessed. For instance, theoretical methods by the lecturers took 65% of the study time while only 35% was allocated to the practical approach of teaching. This approach to teaching does not promote critical thinking and creative thinking skills among the students especially at

such level as the university. Although these studies supported the current study, it was imperative to establish the current state of lecturers' pedagogical practices and how they influence students' academic performance in the universities of Uganda or else students' academic performance continues to decline. This research, therefore, sought to analyze the influence of lecturers' pedagogical practices on students' academic performance in the universities of Uganda and devise recommendations to address the gaps.

2.1 Purpose of the study

The purpose of the study was to analyse the influence of lecturers' pedagogical practices on students' academic performance in the universities of Uganda based on evidence from Nkumba and Kyambogo universities, in Uganda. The study also devised recommendations to improve the students' academic performance in the universities of Uganda.

2.2 Objective of the study

The objective that guided the study was to analyse the influence of lecturers' pedagogical practices on students' academic performance in the selected universities of Uganda.

2.3 Research question

What is the influence of lecturers' pedagogical practices on students' academic performance in the selected universities of Uganda?

2.4 Research hypothesis

Ho1: There is no influence of lecturers' pedagogical practices on the students' academic performance in the selected universities of Uganda.

3. Significance of the study

The study may be of significance to the following categories;

3.1 Policymakers

Publishing the findings from the research may create awareness to the entire world on the critical areas of academic performance triggered by the different pedagogical practices by the lecturers in the universities, that other studies could have left out. This could also aid evidence-based interventions to influence policy in higher education.

3.2 Ministry of Education and Sports (Uganda)

The Ministry of Education through the National Council for Higher Education may benefit from the findings and recommendations and strengthen its oversight and supervisory role by instituting stringent policies on lecturers' practice and this intervention may consequently improve students' academic performance.

3.3 To future researchers

Since there are scanty studies around this area of lecturers' pedagogical practices, the findings may be used as reference by future researchers in this area by identifying the gaps that this study may have left out.

4. Literature review

Lecturers' pedagogical practices at the university level are critical indicators of a successful teaching and learning transaction. Global interest in how teaching practices affect students' learning outcomes is growing (Kim, Raza, & Seidman, 2019) and the choice of a particular method over another may directly influence the outcomes of learning. Studies on pedagogical practices show that lecturers' practices have a substantial impact on students' lifelong academic success (Blazer, 2016). This justifies the choice of particular pedagogical practices at universities that are geared towards enhancing students' academic performance.

The student-centred approach which is also known as 'child-centred learning' puts the learner or student at the centre of his/her own learning, and majorly focuses on the students' needs thereby keeping the learners in active mode (Shaista, Kumar, Hem, Christina & Gurleen, 2018). Lin, Yin, Han and Han (2020) agree that student-centred approaches put the responsibility of learning on the students as well as choosing the content that they want to study. However, the weakness of this approach is that the free interaction could lead to an uncondusive noisy and chaotic classroom which may make classroom management difficult for the lecturer. Conversely, the teacher-centred approaches to learning rely more on the teacher to use their expertise and knowledge to help the learner understand while the learner takes a receptive and almost passive role in the learning transaction. This approach necessitates the lecturers to have full control of the classroom (class management), and because the students learn on their own, it helps them to make their own independent decisions in learning. However, this approach to learning has its drawbacks such as; the possibility of students getting bored and missing out on the opportunity of sharing their discoveries and experiences with their peers. In a quasi-experimental study by Ismail, Sawang, & Zolin (2018) on 308 undergraduate students in Malaysia to establish whether the different pedagogical approaches influenced teaching entrepreneurship education, findings revealed that both pedagogical approaches had positive effects on developing learning outcomes but the students who learned with the teacher centred approaches developed a higher level of objective and subjective learning outcomes as compared to those who learned using the student-centred approaches. This means that the teacher-centred approach was ideal for teaching because it enabled the learners to acquire the concept better from their lecturers. Similarly, in Germany, in a study by Fischer and Hanze (2019), when comparing the effectiveness of teacher-guided and student-centred methods the results revealed that the teacher-centred methods were associated with an increase in the students' cognitive

development, interest and attainment of learning outcomes. This means that both approaches can contribute to the achievement of learning outcomes depending on the context in which they are used.

In Saudi Arabia, Al Zube (2013) studied the differences between the two approaches to teaching English as a foreign language. The findings revealed that each approach had its own strengths and weaknesses and choosing one over the other would mean avoiding the advantages of the other. Whereas both approaches may have had strengths and weaknesses, the teacher-centred approach in this situation would be ideal because the students may not be able enough to learn the English language as a foreign language entirely on their own.

In Rwanda, lecturers' experience and training in pedagogical practices plays a crucial role in aiding the students to achieve academic success. For instance, in a study by Shyiramunda, Bavugirije & Bizimana (2020) to establish the effect that unqualified teachers had on their students' academic performance in Gakenke district, findings revealed that unqualified teachers negatively affect the students' academic performance. In Somalia, Dahie and Muhamud (2018) carried out a study to establish the factors affecting students' academic performance. Results showed a positive relationship between techniques of learning and students' academic performance.

Just like other African nations, Uganda has also embraced the student-centred approach to learning (Altinyelken, 2010) as a possible transition from lecture-driven pedagogies. Through student-centred pedagogies, the students can realise the twenty-first century skills such as; critical thinking, creative thinking, collaborative thinking skills, caring skills and communication skills through such approaches which encourage own discovery. For instance, in a study by Kisalama, Ahumuza, & Okurut (2018) to strengthen the learner-centred approaches among teacher trainers, revealed that irrespective of the experience, teacher trainers appreciate the contribution of college-based mentors towards adoption of learner centred pedagogical approaches. In a study by Kabanga et al. (2018) to explore the linkage of pedagogical practices to competency-based learning among nurses and midwives in Uganda, their findings revealed that pedagogical practices were in position to link theory into practice and to help in achieving learning outcomes.

In a study by Kintu and Wanami (2019) about the students' perception on a distance learning program at Kyambogo University, their findings revealed that the students perceived negatively the delivery methods of their lecturers and un timely feedback from their lecturers. This implies that the students were not satisfied with the pedagogical practices that were being practiced by their lecturers. In fact, as Ezati, Onen & Ezati (2016) opine, lecturers especially in public universities should always adopt teaching strategies that enhance the performance of their students. Ludigo, Mugimu & Mugagga (2019), similarly found that student-centred approaches had a positive and significant influence on academic performance of students but the teacher centred approaches did not.

In conclusion, there are scanty studies on lecturers' pedagogical practices but the few available presented some methodological, contextual and knowledge gaps that the study intended to fill. For instance, the study by Ludigo et al. (2019) studied the relationship between pedagogical strategies and academic achievement of students in public universities of Uganda leaving out the private universities. This study addressed that contextual gap by studying at least a private and a public university in Uganda. Kisalama et al. (2018) carried out the study on teacher trainers instead of students. The knowledge gap was filled by studying students at the universities. Dahie and Muhamud (2018) posed a methodological gap by using only a single approach moreover with a very small sample of only 80 (eighty) purposively selected participants. The study filled that gap by using simple random sampling, and a relatively bigger sample of 334 participants to allow for generalizability, and using a mixed methods research approach.

5. Methodology

The study took an objective and subjective epistemological stance, and a dualism ontological positioning, using a convergent parallel mixed methods research design. This research design allowed for collection of both qualitative and quantitative data at about the same time to allow identify the convergent and divergent data after data analysis. The study followed a pragmatism research paradigm which assumes that there is no single reality in the quest for establishing knowledge on a phenomenon and that reality can be negotiated.

This study targeted a total of 8,233 final year three students from the selected universities of Nkumba and Kyambogo universities. This is illustrated in Table 1 below.

Table 1: The summary of the sampling procedure and distribution for the quantitative approach

University	Category	Target	Sample	Actual	Sampling technique	Tool
Nkumba	Students	1,333	62	49	Simple random sampling	Questionnaire
Kyambogo		6,900	319	285	Simple random sampling	Questionnaire
Total population		8233	381	334		

Source: Academic Registrars' Department

The sample size was 381 students from the selected universities, arrived at using the Taro Yamane formula for establishing sample size, with a 95% confidence interval and a 0.05 level of precision.

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{8233}{1 + 8233(0.05)^2}$$

$$n = 381$$

Where;

n is the sample size;

N is the population size;

e is the level of precision or allowable sampling error.

The qualitative sample was arrived at after conducting interviews to the point of saturation, thereby interviewing 19 (nineteen) lecturers and 2 (two) academic registrars of the two selected universities as key informants.

5.1 Data quality control

This was achieved through:

a. Validity

An instrument is considered valid when the researcher ensures accuracy and credibility of the research findings (Creswell, 2014) and that the instrument measures what it purports to measure (Kothari, 2004). Content validity was achieved through collecting data from both students and lecturers and calculating a content validity index (CVI) of the questionnaire items by experts in the field of pedagogy. An index of 0.84 was achieved and according to Sarantakos (2005), a value greater than 0.7 is acceptable and renders the instrument as valid.

For qualitative data collection, triangulation of methods and data sources, relatively prolonged stay in the field and members' validation aided validity.

b. Reliability

This is the extent to which replication can occur (Ritchie & Lewis, 2003). However, according to the pragmatism paradigm which guided this study and which assumes that there is no single reality, it was not possible to experience exactly the same situations. Reliability was therefore achieved through control of reflexivity in sample selection, recording personal notes, 'bracketing' and providing evidence-based interpretation of results. For internal consistency of the instrument, a Cronbach's alpha coefficient of 0.847 was obtained. According to Manual and Pallant (2010), a value above 0.6 is acceptable for data analysis and this therefore confirmed that the instrument had internal consistency.

c. Data collection instruments

Quantitative data was collected using self-administered five-point Likert scale questionnaires that were supplied to the sampled students in the two universities; Kyambogo and Nkumba universities. Qualitative data was collected through interviews

from the lecturers who taught third year students. Key informant interviews were also held for academic registrars who were presumed to have sufficient knowledge on the issue of lecturers' pedagogical practices and students' academic performance with in their universities. A document analysis check list was used to review the relevant documents that supported the findings.

d. Data analysis

The data that was collected using self-administered questionnaires was analysed using descriptive statistics, and SPSS computer software, version 16.0 to compute correlation and regression analyses to establish the relationship and effect between variables respectively. Content and thematic analyses was used to analyse qualitative data, then establish the divergent and convergent data as the procedure for the convergent parallel mixed methods design. The results were corroborated with document analyses to establish evidence of the research findings.

6. Results and discussion

Out of a sample of 381 respondents, 334 returned the duly filled questionnaires presenting a good response rate of 87.7%. This is presented in Table 2 below:

Table 2: Showing the response rate from the supplied questionnaires

Sample size targeted	Responses received	Response rate
381	334	$334/381 * 100 = 87.7\%$

Source: Primary data, 2022.

Table 2 above shows the response rate of 87.7% which, according to Nulty (2008), a response rate of 60% and above, was adequate to deal with the objective of the study.

Table 3: Summary of descriptive statistics on lecturers' pedagogical practices in universities in Central Uganda

Lecturers' pedagogical practices	Mean	Std. Deviation
Pedagogical approaches		
The learning materials used by my lecturers are appropriate learning materials	3.61	1.04
The teaching aids like projectors and charts among others used by lecturers during the lectures are always appropriate	3.76	1.09
The lectures make use of supportive student-centred approaches that permit my participation during the lectures	3.87	1.01
Sub Mean & Standard Deviation	3.75	1.05
Engagement/ interaction		
We are given chance to interact with the lecturers during the lectures	4.14	0.94
Our lecturers engage us into critical thinking during the lecture sessions	4.07	0.91
The interactions during the lectures have improved my self-esteem	4.11	0.94

Peter Lwanga Kayizzi, Simon Peter Ongodia
 ANALYSING THE INFLUENCE OF LECTURERS' PEDAGOGICAL PRACTICES
 ON STUDENTS' ACADEMIC PERFORMANCE IN THE UNIVERSITIES OF UGANDA:
 EMPIRICAL EVIDENCE FROM NKUMBA AND KYAMBOGO UNIVERSITIES, UGANDA

as a learner		
Sub Mean & Standard Deviation	4.11	0.93
Assessment practices		
I am always assessed by my course lectures as required for the course	3.99	0.99
All my lecturers use a diversity of assessment practices like tests, course works, group work and examinations	4.25	0.91
Feedback is provided by all my lecturers on every assessment that he/she gives us	3.82	1.11
Sub Mean & Standard Deviation	4.02	1.00
Pooled Mean & Standard Deviation	3.96	0.99

Source: Field data, 2022.

As seen in Table 3 above, there is a high level of demonstration of pedagogical practices exhibited by the lecturers in the selected universities of Uganda (Mean = 3.96, SD = 0.99). However, the results revealed that there is a low level of variation in the pedagogical practices demonstrated by lecturers across the students (SD > 0.5). Similarly, Kim et al. (2019) found that the global interest on the influence of lecturers' practices on students' learning outcomes is growing. This result is also consistent with what was similarly found by Meguid and Collins (2017), when they established that changes in the instructional strategies set by lecturers is required to capture the students' understanding in order to improve the students' academic scores. In practice, this finding means that it is evident that pedagogical practices influence the students' academic performance in the universities of Uganda.

Table 4: Descriptive statistics for students' academic performance in universities in central Uganda

Students' academic performance	Mean	Std. Deviation
My CGPA has been improving over the years	3.69	1.05
My CGPA is well above the point required if the graduation was to be held today	3.63	0.98
I have no pending retake to deny me from completing my course this final year	3.89	0.98
I have acquired all the necessary skills that this course requires during the course of work after university	3.79	0.97
Pooled Mean & Standard Deviation	3.75	0.99

Source: Primary data, 2022.

According to Table 4 above, the results reveal that there is a high level of academic performance from the students in the selected universities of Uganda. (Mean = 3.75, SD = 0.99), which implied that the results were reliable (SD>0.5). In fact, this was consistent with Adediwura and Tayo (2007), who found that academic performance of students is determined by the grades that are assigned by the lecturers after assessment. Since students' Cumulative Grade Point Average (CGPA) was conceptualized as one of the measures for students' academic performance, it can be concluded that from the results,

students' performance was good (Mean = 3.69, SD = 1.05). However, the high level of variance (SD>0.5) implies that the level of CGPA does not necessarily mean a good students' academic performance. This inconsistency from the results is supported by Hussain et al. (2017), that students' academic performance as shown by grades or students' scores is not reliable as proof that there is overall students' academic performance. In real practice, this means that there should be more assessment methods and not to rely on grades as the determinant of students' academic performance in the Uganda universities.

6.1 Correlation results

A correlation is a statistical method that assesses the degree of relationship between two measured variables (Sheeri, 2009). According to the objective of the study of establishing the relationship that existed between lecturers' pedagogical practices and students' academic performance in the selected universities of Uganda, a Pearson correlational analysis was conducted and the results are presented in Table 5 below:

Table 5: Correlation results between pedagogical practices and students' academic performance in universities in central Uganda

Correlations		Students' academic performance
Pedagogical approaches	Pearson Correlation	.406**
	Sig. (2-tailed)	.000
	N	334
Engagement/interaction	Pearson Correlation	.408**
	Sig. (2-tailed)	.000
	N	334
Assessment practices	Pearson Correlation	.397**
	Sig. (2-tailed)	.000
	N	334
Pedagogical practices	Pearson Correlation	.486**
	Sig. (2-tailed)	.000
	N	334

** . Correlation is significant at the 0.05 level (2-tailed).

Source: Primary data, 2022

From the Pearson correlational analysis computed above, the results showed a significant positive, but moderately weak relationship between pedagogical practices and students' academic performance in the selected universities of Uganda ($r = 0.486, p = 0.000 < 0.05$). Therefore, since the p -value of 0.000 is less than 0.05, the stated null hypothesis that pedagogical practices don't influence students' academic performance in the selected universities in Uganda is rejected. This therefore means that there is sufficient evidence that pedagogical practices have a significant influence on students' academic performance. This influence implies that application of pedagogical practices is followed by improvement in students' academic performance and vice versa.

This result was in tandem with the study by Ismail et al. (2018), that both teacher-centred and student-centred pedagogical approaches had a positive influence on the development of learning outcomes. However, whereas the study by Ludigo et al. (2019), is in line with the results, it only revealed that only student-centred approaches had a positive and significant influence on students' academic performance while the teacher-centred approaches did not.

This was also in tandem with the response from one of the lecturers who was asked about how their pedagogical approaches influence their students' academic performance in the selected universities of Uganda. The respondent agrees that the students are more attentive and focussed during learner-centred approaches as compared to the teacher-centred approaches,

"...they greatly influence student's academic performance because the time taken to deliver and the amount of content taught in learner-centered and teacher centred approach is different. Further still, there is more benefit when the learners are involved, as it is in the learner-centred approaches and less benefit when they are not or less involved like in lecturer-centred approaches." (Source: L001...KyU)

This means that pedagogical practices that the lectures adopt have an influence on the students' academic performance and this is influenced by the time taken for instruction in the universities.

6.2 Regression results

Having run the correlation analysis, it was crucial to run a regression analysis to establish the effect of the different dimensions of lecturers' pedagogical practices on the students' academic performance in the selected universities of Uganda. The findings are presented in Table 6 below:

Table 6: Multivariate regression results for the effect of lecturers' pedagogical practices on students' academic performance in universities in Central Uganda

Coefficients ^a						
Model		Unstandardized coefficients		Standardized coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.459	0.233		6.267	.000
	Pedagogical approaches	0.195	0.056	0.209	3.488	.001
	Engagement/interaction	0.203	0.063	0.199	3.227	.001
	Assessment practices	0.181	0.062	0.178	2.907	.004
	R =	0.486 ^a				
	R ² =	0.236				
	F =	34.031				
	p =	0.000				

a. Dependent variable: Students' academic performance

Source: Field data, 2022.

As in Table 6 above, the different dimensions of lecturers' pedagogical practices which are; pedagogical approaches, engagement/ interaction and assessment practices are combined as significant factors that contribute to explaining the students' academic performance ($F = 34.031, p = 0.000 < 0.05$) in the selected universities in Uganda. This result therefore confirms that pedagogical practices influence the students' academic performance in the selected universities in Uganda. The pedagogical approaches, engagement/interaction and assessment practices, if they are wholly combined as in the model, explain only 23.6% of the variation in students' academic performance in the selected universities of Uganda ($R^2 = .236$). The remaining (76.4%) may be explained by other factors which were not considered in the study.

In the fitted model in Table 6, a unit increase in the application of pedagogical approaches results in a 0.195 (19.5%) increase in the students' academic performance if other factors like engagement and assessment practices are kept constant ($\beta = 0.195, p = 0.001 < 0.05$). Such an increase in the students' academic performance resulting from the use of appropriate pedagogical approaches is statistically significant since the p value ($p = 0.001$) is less than 0.05 (5%).

In this case therefore, pedagogical approaches have significant positive influence on students' academic performance in selected universities of Uganda. For example, this was similar to the finding by Niyonzimana (2017), that experience of the university lecturers and subsequent training in pedagogical practice plays a very important role in helping students achieve academic success. Similarly, Dahie and Muhamud (2018), found that there was a strong and positive relationship between techniques of learning and students' academic performance. When interviews were conducted to ask the influence of the lecturers' pedagogical practices to students' academic performance, one respondent acknowledged that,

"...the students prefer the learner centred approaches which is evidenced when they refer to their lecturers who use the learner centred approaches as 'teachers' and those who use the teacher centred approaches as 'lecturers' meaning that the 'teachers' provide more detail when they are teaching. Evidence at this university was seen when the students in a large group shared by different lecturers, so students would storm a lecture because of preference of a particular lecturer's pedagogical approaches." (Source: L003...KyU)

In reference to the above response and the literature in the study, from the pedagogical approaches conceptualized in the study that is: student-centred and teacher-centred, research studies have shown that the student-centred approaches are the most preferred methods to contribute to students' academic performance. This is in line to findings by both Ganyaupfu (2013) and Mvula (2020), that whereas there were no significant differences on the effectiveness of the three pedagogical approaches, the mean results indicated that teacher-student interactive method had the relatively higher

academic performance and was therefore considered the most effective approach followed by student-centred and the teacher-centred was the least effective approach.

The study did not aim at establishing the significant differences between the pedagogical approaches conceptualised in the study, but basing on the results, all pedagogical approaches contribute to students' academic performance. Basing on other studies, like Mvula (2020) and Ganyaupfu (2013), it is clear that the lecturers in the selected universities of Uganda ought to be involved in the interaction with their students' learning to achieve better students' academic performance.

According to the model in Table 6, a unit increase in the engagement/interaction with the students and the lecturers, results in a 0.203 (20.3%) increase in students' academic performance if other factors like pedagogical approaches and assessment practices are kept constant ($\beta = 0.203, p = 0.001 < 0.05$). This increase in students' academic performance as a result of the increase in student interaction and engagement is statistically significant since the p value ($p = 0.001$) is less than 0.05. This means that student engagement/interaction has a significant and positive influence on students' academic performance in Uganda's universities. This result was consistent with Costa, Cardoso, Lima, Ferreira & Abrantes (2015) that factors such as pedagogical interaction, student-student interaction, student-lecturer interaction and student-content interaction were essential in creating learning environments that improve students' learning outcomes. Learning outcomes which were conceptualized in the study as one of the measures for students' academic performance in the universities, in order to achieve the expected learning outcomes, the lecturers have to practice interaction techniques such as asking questions to understand concepts.

In support of the result, Al Munnr, Yunusa & Itse (2017) study found out that although there was a weak strength in the relationship, students' engagement was positively linked with some learning outcomes such as critical thinking skills and grades as were conceptualized for academic performance in the study. The results are in line with a study by Merkine, Bisa & Ayele (2019), that there is a significant positive relationship between student teachers' interaction and academic performance. During the interview with lecturers, one responded avowed that students would prefer to form social groups where they would be most comfortable,

"it increases peer learning and gives confidence to the low achievers because some students here don't believe in themselves, until you push them in class, they see themselves as valuable but this is limited for big classes. There is limited interaction in big classes. The interaction in big classes is influenced by social aspects than knowledge/content aspects."
(Source L001...KyU)

The above interview response was consistent with the Vygotsky's social constructivism theory which assumes that knowledge is socially constructed through interactions. This implies that students tend to form social clusters which require the

guidance of the lecturers when they are selecting the social groups for interaction so that they can make meaningful learning and consequently students' academic performance.

On the contrary, the results in the model are inconsistent with that of Uleanya (2019) that student-lecturer relationship influences the students' academic performance, but the lecturers feared relating and interacting with the students for fear of their relationship and interaction being misconstrued by students, or being disrespected by the students. This meant that the lecturers' fear of being misunderstood by students hinders effective engagement and interaction and consequently the students' academic performance. Similarly, a study by Nyadanu, Garglo, Adampah & Garglo (2015) deviates from the results that the little interaction that resulted in average relationship, was not strong enough to influence students' academic performance. This means that lecturers in the selected universities of Uganda need to engage and interact with students in order to promote effective learning that contributes to enhanced students' academic performance. According to Table 6, a unit increase in the use of appropriate lecturers' assessment practices, explains a 0.181 (18.1%) increase in students' academic performance if other factors are kept constant ($\beta = 0.181$, $p = 0.004 < 0.05$). This increase in students' academic performance as a result of the increase in the use of lecturers' appropriate assessment practices is statistically significant since the p-value of ($p = 0.004$) is less than 0.05. This implies that, assessment practices have a significant positive influence on students' academic performance in the selected universities of Uganda. The result is consistent with that of Pereira and Flores (2016), that the approach in which assessment is done has implications on students' academic performance. In fact, the same study found that assessment methods like group work enabled development of skills such as communication skills which, formed part of the conceptualisation of students' academic performance.

One key informant from Kyambogo University affirmed that the type of assessment practices of the lecturers even influences the students' critical thinking skill even at the world of work,

"...when you vary the assessment practices, they build the students' inquiry. It also affects the students' performance at the work place after the university because the person who was used to single methods of assessment begins to expect even routine things at the workplace unlike the one who was exposed to a variety of assessment methods who can ably adapt to new things at the work place." (Source: Key informant-KyU)

This was also supported by another response from a lecturer who responded that:

"...of course, if you are specific you will capture a certain group of students and if you are general you capture another group, so you need to use a variety of assessment including practicals, tests, assignments, group work..." (Source: L003...NU)

This, therefore, means that the assessment practices by the lecturers in the selected universities of Uganda should be varied.

Assessment practices can also take the form of; diagnostic, formative and summative assessment. Diagnostic assessment is done at the beginning prior to teaching to establish what the students can do before instruction. Formative assessment is continuous assessment during learning whereas summative assessment is done at the end to evaluate if the students are able to do what they were not able to do at the start of the learning process. Sahibzada and Himat (2019) found that the lecturers who used formative assessment, allocated time for feedback, group work assignment, project presentation which had a positive impact on the students' academic performance and improved the grades.

7. Summary and Conclusion

From the study findings, correlation analysis results between lecturers' pedagogical practices and students' academic performance revealed that there was a positive significant but moderately weak relationship between lecturers' assessment practices and students' academic performance in the selected universities of Uganda ($r = 0.397$, $p = 0.000 < 0.05$). This means that the assessment practices of lecturers are critical in determining how the students perform as a result of adoption of those assessment practices since the results showed a significance of 0.000 which is less than 0.05 set as the allowable sampling error. Similarly, regression analysis results to establish the effect that lecturers' pedagogical practices had on students' academic performance, revealed that only 23.6% ($R^2 = 0.236$, $p = 0.000 < 0.05$) explained the effect. This meant that there were other factors apart from lecturers' pedagogical practices that need thorough investigation and address in establishing what students' academic performance likely depends on. This study therefore revealed that whereas students' academic performance is influenced by lecturers' pedagogical practices, and also confirm the hypothesis of the study, there may be other factors that need investigation to establish further what influences students' academic performance in the universities of Uganda.

7.1 Recommendations

The findings from the study revealed that there was a positive and significant but moderately weak relationship between lecturers' assessment practices and students' academic performance in the universities of central Uganda. This weakness in the relationship implies that Government of Uganda (GoU), through the National Council for Higher Education (NCHE) and other supervisory bodies of higher education need to give enough sensitization and training to the university lecturers on better application of appropriate assessment practices that promote enhancement of students' academic performance in the universities of Uganda.

Conflict of Interest Statement

The author declares no conflicts of interest.

About the Author(s)

Peter Kayizzi Lwanga is a Ugandan education practitioner by profession who has a passion for undertaking educational research inquiry in the practice of pedagogy especially at higher education institutions and universities. He has worked as a classroom teacher for a number of years and also in the field of educational quality assurance. He is undertaking a PhD leading in education management.

Dr. Simon Peter Ongodia is a Ugandan lecturer of teacher education and training at Nkumba University who has taught for a number of years and has the passion for research in educational pedagogy and practice especially for teacher trainees.

References

- Adediwura, A. A., & Tayo, T. (2007). Perceptions of teacher knowledge, attitudes and teaching skills as a predictor of academic performance in Nigeria secondary schools. *Educational Research and Review* 2(7) 165-171
- Altinyelken, H., K. (2010). Pedagogical renewal in sub-Saharan Africa: The case of Uganda. *Comparative Education*. Vol. 46, No. 2 pp151-171
<http://dx.doi.org/10.1080/03050061003775454>.
- Al Munnr, A., Yunusa, A., & Itse, J., B. (2017). Students' engagement in relationship to academic performance. *Journal of Education and Social Sciences*. Vol. 8 Issue 1.
- Al-Zu'be, M. F. (2013). The difference between the learner-centred approach and the teacher-centred approach in teaching English as a foreign language. *Education Research International*, Vol. 2, No. 2.
- Blazer, D. (2016). Teacher and teaching effects on students' academic performance, attitudes, and behaviours. Harvard University.
- Costa, C., Cardoso, A. P., Lima, M., Ferreira, M., & Abrantes, L. (2015). Pedagogical interaction and learning performance as determinants of academic achievement. *Procedia-Social and Behavioral Sciences*, Vol, 171 pp874-881
- Creswell, J., W. (2014). *Research design. Qualitative, quantitative and mixed methods approaches*. 4th Edition, SAGE publications.
- Dahie, M., & Muhamud, A., A. (2018). Factors affecting students' academic performance: Case study from university of Somalia in Mogadishu- Somalia. *IOSR Journal of Humanities and Social Sciences*. Vol. 23 Issue 3, Version 9 pp73-80
DOI:10.9790/0837-2303097380
- Ezati, B., Opolot-Okurut, C., & Namubiru, P. (2014). Addressing pedagogical training needs of teaching staff: Lessons from Makerere university short professional

- development programs 2006-2010. *American Journal of Educational Research*. Vol, 2, No.2. 1190-1198 doi:10.12691/education-2-12-9.
- Ezati, A., Onen, D., & Ezati, B. (2016). The influence of planning on the quality of teaching in public universities. *International Journal of Education and Research*. Vol. 4 No.2
- Fischer, E., & Hänze, M. (2019). Back from “guide on the side” to “sage on the stage”? Effects of teacher-guided and student-activating learning methods in student learning in higher education. *International Journal of Educational Research*. <https://doi.org/10.1016/j.ijer.2019.03.001>
- Ganyaupfu, M, E. (2013). Teaching methods and students' academic performance. *International Journal of Humanities and Social Science Invention*. Vol. 2 Issue 9
- Hussain, S., Ahmad, N., & Khan, N., F. (2017). The effects of authentic pedagogical practices on students' educational performances and retention power.
- Ismail, A. B. T., Sawang, S., & Zolin, R. (2018). Entrepreneurship education pedagogy: teacher-student-centred paradox. *Education + Training*. Vol, 60, No. 2 pp168-184
- Kabanga, M., Mugimu C. B., & Oonyu, J. (2018). Exploring the pedagogical practices used in competence-based education training of nurses and midwives in Uganda. *International Journal of Learning, Teaching and Educational Research*. Volume, 17, No. 1 pp 133-154.
- Kasule, G., W., Wesselink, R., & Mulder, M. (2016). Professional development status of teaching staff in a Ugandan public university. *Journal of Higher Education Policy and Management*. Vol. 38 No. 4 <https://doi.org/10.1080/1360080X.2016.1181883>
- Kim, S., Raza, M., & Seidman, E. (2019). Improving 21st century teaching skills. The key to effective 21st century learners. *Research in Comparative & International Education* Vol. 14, No.1 pp 99-117 DOI: 10.1177/1745499919829214
- Kintu, D., & Wanami, S. (2019). Students' perception about a distance learning program: A case of the open, distance and e-learning programme at Kyambogo university, Uganda. *International Journal of Advanced Research, ideas and innovations in Technology*. Vol. 5, Issue 1
- Kisalama, R., Ahumuza, A. E., & Okurut, D. S. (2018). Strengthening the adoption of learner-centred pedagogy in teacher education in Uganda through video-based self-reflection and college-based mentorship system. *Baraton Inter-disciplinary Research Journal*. Vol. 8 pp 1-8
- Kyahurwa, P. B. (2009). Vocational training and the labour market needs: A case of clothing and textile training in Kyambogo university. Published Master's Thesis. Kyambogo University.
- Lin, W., Yin, H., Han, J., & Han, J. (2020). Teacher-student interaction and Chinese students' Mathematics learning outcomes: The mediation of Mathematics achievement emotions. *International Journal of Environmental Research and Public Health*. Vol, 17 <https://doi.10.3390/ijerph 17134742>

- Ludigo, H., Mugimu, C. B., & Mugagga, A. M. (2019). Pedagogical strategies and academic achievement of students in public universities in Uganda. *Journal of Education and Practice*. DOI: 10.47941/jep.314
- Matovu, M. (2020). Academic self-efficacy and academic performance among university undergraduate students: An antecedent to academic success. *European Journal of Educational Studies*. Vol, 7, Issue 3 doi:10.5281/zenodo.3756004
- Mekonnen, S. (2014). Problems challenging the academic performance of Physics students in higher governmental institutions in the case of Arbaminch, Wolayita Sodo, Hawassa and Dilla universities. *Natural Sciences*. Vol. 6 pp 362-375 <https://dx.doi.org/10.4236/ns.2014.65037>
- Merikine, B., Bisa, Y., & Ayele, A. (2019). The relationship between student-teachers' interaction and academic achievement of trainee teachers in Dilla College of teacher education. *Global Journal of Human Social Sciences: Arts and Humanities Psychology*, Vol. 19, Issue 3.
- Mugimu, B., & Mugisha, W. (2013). Educational practices, curriculum design and implementation at the MLT Diploma program in Uganda. *Creative education*, Volume 14, No.12B 105-115. <http://dx.doi.org/10.4236/ce.2013.412A2016>.
- Mugoya, A. (2011). Analysis of the hospitality training curriculum at university level: A case study of Makerere University Business school and Nkumba University. Published Masters' Thesis. Kyambogo university.
- Munawaroh, (2017). The influence of teaching methods and learning environment to the students' learning achievement of craft and Entrepreneurship subjects at vocational high school: *International Journal of Environment and Science Education*. Vol, 14, No.4 665-678
- Mvula, K. A. (2020). Teaching methods and students' academic performance in Kinematical motion. Graphical interpretation and conceptual understanding. *American Journal of Social Sciences and Humanities*. Vol. 5 No. 1
- Muzenda, A. (2013). Lecturers' competence and students' academic performance. *International Journal of Humanities and Social Science invention*. Vol. 3, Issue 1 pp. 06-13
- Niyonzima, E. (2017). Effects of teaching methods on students' learning outcomes in higher learning institutions in Rwanda. Published Doctoral thesis.
- Nyadanu, D., Garglo, M., Adampah, T., & Garglo, R. (2015). The impact of lecturer-student relationship on self-esteem and academic performance at higher education. *Journal of Social Science Studies*. Vol. 2 No. 1 <http://dx.doi.org/10.5296/jsss.v2i1.6772>
- Pallant, J., & Manual, S., S. (2010). A step-by-step guide to data analysis using SPSS. Berkshire UK: McGraw-Hill Education.
- Pereira, R, D., & Flores, A, M. (2016). Conceptions and practices of assessment in higher education: A study of Portuguese university teachers. *Revista Iberoamericana de Evaluacion Educativa*. Vol 9 No. 1 pp 9-29. DOI: 10.15366/riee2016.9.1.001

- Sarantakos, S. (2005). *Social research* (3rd ed) Melbourne, McMillan Education.
- Sahibzada, J., & Himat, N. A. (2019). Impacts of formative assessment on EFL students' academic performance at Kandahar university. *American International Journal of Social Science Research*. Vol. 4, No.2
- Ssebuwufu, J. (2017). *Managing and transforming an African university*: Published by the council for the development of social science research in Africa, Dakar Senegal.
- Shaista, S., Kumar, J. M., Hem, R., Christina, G., & Gurleen, K. (2018). Teaching and learning through large and small groups. *Journal of Research in Medical Education and Ethics*. Vol. 8 DOI: 10.5958/2231-6728.2018.00048.3
- Sheeri, J. (2009). *Research methods and statistics. A critical thinking approach*. 3rd Edition. Jacksonville University.
- Shyiramunda, T., Bavugirije, F., & Bizimana, B. (2020). The effect of unqualified teachers on students' academic performance at Rusoro secondary school of Gakenke district, Rwanda. *International Journal of All Research Writings*. Vol. 2 Issue 2.
- Sikhwari, T., D., Ravhuhali, F., Lavhelari, N., P., & Pataka, H. (2019). The students' perceptions of some factors influencing academic achievement at a rural South African university. *South African Journal of Higher Education*. Vol. 33 No. 4 pp. 291-306 <https://dx.doi.org/10.20853/33-4-2937>
- Uleanya, C. (2019). Exploring effects of lecturer-students' relationship on students' academic performance in selected rural universities. *Interchange*. Vol. 51 pp 345-360 <https://doi.org/10.1007/s10780-019-09377-x>

Peter Lwanga Kayizzi, Simon Peter Ongodia
ANALYSING THE INFLUENCE OF LECTURERS' PEDAGOGICAL PRACTICES
ON STUDENTS' ACADEMIC PERFORMANCE IN THE UNIVERSITIES OF UGANDA:
EMPIRICAL EVIDENCE FROM NKUMBA AND KYAMBOGO UNIVERSITIES, UGANDA

Creative Commons licensing terms

Author(s) will retain the copyright of their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Education Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflicts of interest, copyright violations and inappropriate or inaccurate use of any kind content related or integrated into the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).