A CROSS-SECTIONAL STUDY ON THE RELATIONSHIP BETWEEN FORMS OF ASSESSMENT AND LEARNERS' ACADEMIC ACHIEVEMENTS IN SELECTED PRIMARY GOVERNMENT SCHOOLS IN SERERE DISTRICT, UGANDA.

Gideon Odongo*, Patience Tugume

School of Graduate Studies and Research, Team University.

Page | 1

Abstract. Background.

There has been a challenge of low academic performance among learners in Serere District, particularly in government-aided schools, which necessitated an examination of the role of assessment methods in influencing academic outcomes. This study investigated the relationship between forms of assessment and learners' academic achievements in selected primary government schools in Serere District, Uganda.

Methodology.

A cross-sectional correlational survey design was employed, involving self-administered questionnaires distributed to 130 selected Primary Six learners and 40 teachers from 10 primary schools, as well as structured interviews with 10 headteachers. The collected data were analyzed using Pearson's correlation coefficient and significance at the 99% and 95% confidence limits (two-tailed level).

Results.

68(54.8%) of the participants were females 90(72.6%) of the respondents were learners. This is a statistically significant positive correlation between formative assessments and learners' academic performance, (r = 0.538 at p = 0.000), suggesting a moderate positive relationship. Similarly, there was a high positive correlation between summative assessments and learners' academic performance, (r = 0.756, p = 0.000). One headteacher stated that: "Summative assessments are key in the education system in Uganda it's used for certification of the completing students at all levels of learning and this assessment is organized at the national level"

Conclusion.

Summative assessments, particularly end-of-term and end-of-year examinations, were found to serve as benchmarks for evaluating student competencies. However, the study revealed that an over-reliance on summative assessment limited opportunities for continuous skill development.

Recommendations.

There is a need to integrate formative assessment strategies into daily lesson plans to offer individualized learning approaches and adaptive teaching methods. Achieving a balanced combination of formative and summative assessments is crucial in fostering improved learning outcomes among primary school learners.

Keywords: Forms of assessment, Academic achievement, Primary education, Government schools, Serere District.

Corresponding Author: Patience Tugume Email: odongogideon20@gemail.com

School of Graduate Studies and Research, Team University.

Background.

In Uganda, the Education Policy Review Commission (Darling-Hammond, 1998) was initiated to review the education system. The commission recommended seven years of primary education to give adequate time for the preparation of pupils for final examinations. The same commission emphasized the importance of both continuous assessment and final examinations (Tobi, 2015). The Jomtien Declaration (1990) in Thailand about Education for

All (EFA) required defined targets for quality improvement and it specified a need to assess pupils' achievement (Ito, 2012). This is why the White Paper (1992) on the Education for National Integration and Development recommended that schools should maintain a cumulative record card on continuous internal assessment including class performance. Since then, teachers have not fairly continued to carry out continuous assessments in primary schools because of discouragement in that the formative assessment results play

Page | 2

no role towards the placement and grading of learners simply because the end of each term or year result takes greater value as regards the education system in Uganda. Therefore, this study will be of great value as it's going to investigate the relationship between forms of assessment and pupils' academic achievements in primary schools in Serere District that may lead to good decision-making in the conduct of both Formative and Summative Assessments.

The education system of Uganda is examination-oriented and this has persisted since the 1960s up to date. All the teaching and learning is centered on passing final examinations. It is sometimes referred to as "teaching to the test" (Oludare & Rasak Bolanta, 2020). This challenge is compounded even further by the fact that pupils' promotions or placements in the next classes are based on pupils' grades in final examinations. In Kabale Municipality, teachers and pupils equally do a lot to prepare for the final examination hence undermining continuous assessment (Worale, 2017). Kellaghan and Greany (2011), that this kind of assessment (Formative assessment) is subjective, informal, immediate, ongoing, and intuitive as it interacts with learning as it occurs. For instance, teachers teaching primary six are required to assess their students regularly using different assessment strategies so that learners can memorize the subject content taught to them during the final examinations. This is done so that pupils can perform highly in the final examinations. The downside of this approach is that pupils are encouraged to exercise rote memorization of facts and cramming of information rather than acquiring problemsolving skills and this state of learning is so much practice leading to the production of half-baked learners who could not manage tasks of high reasoning in universities.

The National Curriculum Development Centre (2004) introduced continuous assessment as one of the basic educational principles of teaching and learning in lower primary schools (Bolstad, 2004). It is part of the ongoing education reform process in Uganda where teachers are required to use individual child progress cards to keep track of children's competence and performance. This is vital in creating a reliable picture of the learner's strengths and weaknesses as specified in the syllabuses. The pupils' academic performance is assessed by the use of tests, assignments, and examinations; but learners in primary schools in Serere District have persistently continued to perform poorly. It's within this context this study is established to investigate the effect of continuous assessment on learners' performance.

Currently, all primary schools in Uganda implement Assessment in thematic curriculum focusing more on what a learner can do than on what the learner knows or can remember. The assessment covers all competencies ranging from oral and written to practical. Assessment indicators are shown at the end of each theme in the thematic curriculum. Other methods used to assess children in primary one include: direct observation, talking to individual children,

oral and written questions, children's drawing and work they display, looking at children's exercise books, observing play and free activities, listening to children's debates, group discussions, songs, games and acting but the performance of learners in national examinations remains poor in more especially rural areas.

Continuous assessments at middle and upper primary, that is primary four to primary seven; are carried out in five subjects, English Language, Mathematics, Integrated Science, and Social Studies with Religious Education at the end of each term, year, and primary cycle (Worale, 2017). The summative assessment aims at providing a picture of the learner's progress at any given point in time, e.g. End of Term Exams, and is a demotivating factor in the conduct of continuous assessment in primary schools.

Continuous assessment is the use of different approaches and evaluation tools in the process of assessing the learners such as texts, questionnaires, rating scales, observation, and anecdotal records to obtain information on the cognitive, affective, and psychomotor domains of learning by children (Lukman et al., 2021). Assessment in the cognitive is concerned with the process of knowledge and understanding. The affective domain is associated with characteristics such as attitudes, motives, interests, and other personality traits.

Assessment in the psychomotor domain involves assessing the learner's ability to use his or her hands such as handwriting, construction, and projects (Lukman et al., 2021) Teachers in Kabale Municipality focus their greatest attention on measuring head (cognitive) learning rather than the hand (affective) or psychomotor (heart), which is not the real essence of continuous assessment. Thus, continuous assessment becomes examination-centred.

Integrating continuous assessment in the Ugandan education curriculum is becoming a top priority encouraged at all levels of education, but it is challenging. Primary schools in Serere County in Serere District have focused on providing Continuous Assessments to pupils as one of the ways to improve academic performance. It has become a challenge for some schools. The parents are unable to meet the costs of the Continuous Assessment test and buy other requirements needed by a pupil to qualify for the Continuous Assessment test. This study investigated the relationship between forms of assessment and learners' academic achievements in selected primary government schools in Serere District, Uganda.

Methodology. Research design.

The study adopted a cross-sectional correlational survey design because this type of design helps one to collect data from a large number of cases at a particular point in time. Quantitative and qualitative approaches were used to support the research design. A qualitative approach was of

particular importance to this research because of its ability to penetrate the different expressions and experiences of respondents to the subject matter.

Study Population.

The general total population across the ten selected primary schools in Serere County, Serere District was 342 pupils, from which a study sample of 180 respondents was drawn respondents that included Headteachers, teachers and learners purposively selected in Serere County in Serere district and the following Primary Schools were selected for this study, (Sapir Primary School, Akoke Primary School, Kateta Model Primary School, Okodo Primary School, Ajoba Primary School, Olio Primary School, Homeland Primary School, Emmanuel Primary School, Atiira Primary School and Serere Primary School). 130 learners of primary six in selected schools were selected because they were able to read and write using a simple sample method. After all, they were the beneficiaries of assessment strategies being used by the teachers in their schools and it was also the pupils that sat for the final examinations, Teachers were 40 selected using purposive sampling in the sampled schools because they teach and execute testing and examination of pupils, and Headteachers were 10 that were considered Equation 1: Israel Glenn's formula;

$$n = N \div (1 + Ne^{2})$$

$$n = \frac{342}{1 + 342 \times 0.05^{2}}$$

$$= \frac{342}{1 + 0.855}$$

$$= 342 \div 1.855$$

$$\approx 184$$

because they were school administrators in the sampled schools who determine what forms of assessment management and strategies were used by teachers and this target population was used to determine the sample size using Israel Glenn's formula $n=N\div(1+Ne2)$ that will be analyzed both quantitatively and qualitatively.

Sample size.

A total of ten primary schools in Serere County, Serere District were purposively selected for this study. Among them, eight were government-aided schools and two were privately owned. These schools were selected primarily because of their persistently low learner performance in End of end-of-term examinations, especially in public schools. All selected schools had relatively similar teaching facilities, staffing levels, and learning environments, which helped ensure the comparability of data across the sample. The total target population across the ten schools was 342 individuals, comprising learners, teachers, headteachers. From this population, a sample size of 180 respondents was selected to participate in the study. The sample size was determined using Israel Glenn's formula (2012):

Where:

n= required sample size

N= population size (342)

e= Margin of error (0.05)

However, due to practical constraints and access, the final sample used was 180 respondents.

The sample included:

10 headteachers (1 from each school), were selected purposively due to their administrative roles and insights into school-level assessment practices. Teachers are also

purposively selected since they are the direct implementers of assessment strategies.130 learners, were randomly selected from Primary Six classes using simple random sampling, as they had been exposed to ongoing formative and summative assessments but had not yet sat for the final national examination (PLE).

labie 1: Snowing variables in Conceptual Framework								
School	Category	Population	Sample size	Data collection tool	Sample technique			
Public selected schools	Headteacher	10	10	Interview guide	Purposively sampled			
And Private schools.	Teachers	40	40	Questionnaire	Cross sectionally sampled			
	P 6 Learners	292	130	Questionnaire	Simple random sampling			
Total								

Source: Primary data (2017-2022).

Sampling techniques. Purposive Sampling.

In each of the participating schools, a head teacher and 3 teachers were purposively selected to participate in the study, making a total of 10 head teachers 40 teachers, and 130 learners. Purposive sampling was used to obtain specific and reliable data about forms of assessment and pupils' academic achievement in primary schools in Serere County in the Serere district.

Random Sampling.

Simple random sampling was used to select pupils from the ten primary schools. Primary six pupils' registers were used for the selection of learners as pupils' names were picked randomly from each school for interviews. A total of 180 learners were selected across the ten schools. The number of pupils selected from each school was determined proportionally based on the total number of Primary six pupils in each school. The total target population of Primary Six learners in the selected schools was 342, from which a sample size of 180 was drawn using simple random sampling. The proportion of learners selected from each school was calculated as follows:

Equation 2: simple random sampling

In total, the ten selected schools had a combined population of 342 Primary Six pupils, who formed the general learner population considered for the study. From this population, a representative sample of 180 pupils was selected using simple random sampling, as these learners had been exposed to both formative and summative assessments, making them suitable for this research. The distribution of learners by school was as follows: Ajoba Primary School – 35 pupils, Emmanuel Primary School – 29 pupils, Atiira Primary School – 35 pupils, Sapir Primary School – 40 pupils, Olio Primary School – 38 pupils, Akoke Primary School – 32 pupils, Kateta Model Primary School – 41 pupils, Okodo Primary School – 38 pupils, and Serere Primary School – 33 pupils. The inclusion of learners from all ten schools ensured that the data collected reflected diverse school

settings and performance levels across Serere County. This stratified distribution allowed for a balanced analysis of how assessment strategies influenced learners' academic achievements in different learning environments.

Data Type and Sources.

Data was collected from both secondary and primary sources using a mixed methodology for triangulation purposes during the various phases of the study.

Primary source.

The interview guide was used through oral verbal interactions with purposively selected head teachers in a structured way to minimize time wastage. Structured interviews require less skill, are more economical, and provide room for inference. Since interviews allow flexibility, it enables the researcher to adjust the interview to meet the diverse situations in the field. Interviews allowed explanations of meanings to the questions to eliminate ambiguity and provide an opportunity for the respondents and the researcher to correct any misunderstanding, and indepth information search through further investigation of the responses that serve the purpose of this research. The collection of data was done through questionnaires. The researcher questionnaires contained several closed-ended questions about the objectives of the study and were given to the teachers and learners who read and this study ticked the statement he or she felt correct in the spaces provided in the questionnaire which marked it more economical and convenient as supported by (Amin, 2005).

Secondary sources.

Secondary data was collected from journals, government reports, academic performance reports, unpublished these, and the internet. It was gathered from existing literature on forms of assessment and academic achievement of pupils in primary schools. Secondary data was collected through documentary review documents for 2017- 2022 of academic performance analysis reports in order to establish the existing level of knowledge on forms of assessment and

academic achievement in primary schools in Serere County in Serere district.

Data Collection Instruments.

The main data collection instruments in this study were interview guides and questionnaires. The researcher used these two types of instruments for purposes of triangulation and they were developed based on the study objectives and the conceptual framework.

Questionnaires.

In the case of this study, it was used for teachers and learners because data about the conduct and administration of assessments was collected in a short time from a large number of respondents.

Interview Guide

Face-to-face interviews that contained open-minded questions were conducted between a researcher and Headteachers to get useful information relevant to the study and it enabled the researcher to obtain in-depth feedback from the respondents which was a variety of information that was synthesized to concretize the information as found in primary schools in Serere County in the Serere District.

Documentary Review

Some data was reviewed from written documents such as the District Education Officer's Annual Release Performance, books, and other published sources. In searching for these documents, the researcher visited head teachers of the selected primary schools and requested them to provide mark sheets with information about assessments conducted and academic performance. This was done using a documentary review guide.

Measurements of Variables

The forms of assessment and learners' academic achievement in Serere county in Serere district was based on the questionnaire and was measured using five-point- Likert scale of 1=Agree (A), 2=Strongly Agree (SA), 3 =Neutral (N), 4 = Disagree (D), 5 = Strongly Disagree (SD) Nominal and ordinal measurements used to measure variables. In nominal measurements, numbers were assigned to each category only to identify similar objects with a category that is different. While ordinal measurements were used to determine the ranking of the variables. From the provided factors as options, the research identified which factors were selected most by respondents in the self-administered questionnaires. Learners' academic achievements such as reading are tested through comprehension reading then answering comprehension questions, writing skills are tested by looking at class written work.

Data Collection Procedure.

An introductory letter was obtained from the School of Graduate Studies and Research of TEAM University. Permission to carry out the study from the selected schools was sought from head teachers. Consent to participate in the sought study was also from all participants. Questionnaires were administered to teachers and pupils to provide data regarding the forms of assessment and learners' academic achievements in primary schools in Serere County in Serere District. Interviews were conducted with head teachers who were purposively selected to obtain data for qualitative analysis. However, the researcher agreed with the head teachers on their time of convenience so that interviews with them were conducted as agreed while the researcher took notes. Data collected, data was coded using Microsoft Excel and later analyzed using Statistical Package for Social Sciences version 20.0.

Data Analysis.

Descriptive statistics was used to present the data of this study.

Quantitative Data Analysis.

Data was collected from the field and is examined for the accuracy and completeness of the information given. It was cleaned, sorted out, and entered into the SPSS computer software Version 20.0, explored, and analyzed. Descriptive statistics such as frequencies, percentages, mean square, and standard deviation were used to generate reports for discussion. A regression coefficient was employed to determine the magnitude of the forms of assessment and learners' academic achievements of pupils in primary schools. Frequencies and percentages were used because they easily communicate research findings to the majority of the readers.

Qualitative Data Analysis.

Qualitative data analysis was done through thematic content analysis as was recorded during face-to-face interviews. This study investigated the relationship between forms of assessment and learners' academic achievements in selected primary government schools in Serere District, Uganda.

Results.

Demographic data of the respondents.

On the demographic data of the respondents, a number of variables were investigated. To establish the background characteristics of the respondents, the researcher asked the respondents to indicate bio-data and the results obtained were as follows:

Table 2: Shows the demographic data of the respondents.

ITEM		FREQUENCY	PERCENTAGE	ANALYSIS
Gender	Male	56	45.2 %	Most of the respondents
	Female	68	54.8 %	were female.
Total		124	100 %	
Qualification	Degree	10	8.1 %	
	Diploma	24	19.4 %	
	Certificate	90	72.5 %	
	No.			
	certificate			
Total		124	100%	
Categories of	Headteacher	07	5.6 %	Most of the respondents
respondents	S			were learners.
	Teachers	27	21.8 %	
	Learners	90	72.6 %	
Total		124	100 %	

Table 3: Shows responses of teachers on Formative Assessment and Learners Academic Achievements

	/10:1	Achievements								
ITEM	A (0/)	SA	N	D	SD	Mean	St.Dev			
	(%)	(%)	(%)	(%)	(%)					
Formative assessment of learner's	41	30	35	18		4.52	.783			
academic achievements.	(33.1)	(24.2)	(28.2)	(14.5)						
Formative assessment increases	45	37	2	28	12	3.78	.571			
quality of feedback.	(36.3)	(29.8)	(1.6)	(22.6)	(9.7)					
Formative assessments involves in	23	50		28	23	3.98	.794			
gathering information about students	(18.5)	(40.3)		(22.6)	(18.5)					
learning.										
Formative assessments increase	53	16		32	23	4.10	.692			
quality of dialogue.	(42.7)	(12.9)		(25.8)	(18.5)					
There is integration of teaching and	18	9	2	62	33	4.17	.859			
assessment.	(14.5)	(7.3)	(1.6)	(50)	(26.6)					
Group discussions enhance student's	48	38		18	20	3.76	.698			
enjoyment to perceive learning.	(38.7)	(30.6)		(14.5)	(16.1)					
Group discussions promotes critical	52	38		14	20	4.58	.845			
reflective skills among students.	(41.9)	(30.6)		(11.3)	(16.1)					
Tests are used to assign students	35	47	7	19	16	4.48	.745			
grades ranks in terms of abilities.	(28.2)	(37.9)	(5.6)	(15.3)	(12.9)					
Tests provide comparable information	30	47	4	32	11	3.98	.589			
to teachers for accurate judgment.	(24.2)	(37.9)	(3.2)	(25.8)	(8.9)					
Average mean						4.091	0.734			

Source: Primary Data, (2017-2022)

Table 3 indicated, that 58.8 % of the respondents agreed while 4.5 % of the respondents were Neutral, and 36.7 % of the respondents disagreed that formative assessment enhances learners' understanding, improves the quality of feedback, and promotes critical reflective skills among students. This means that the majority of teachers agreed that formative assessment leads to the improvement of learner's academic achievements, this is shown by a mean

value of 4.091 and a standard deviation of 0.734 which suggests that respondents varied in their responses to the test statements meaning that views from other teachers did not deviate much from the stated one.

During the face-to-face, interview one respondent said; "formative assessments play an essential role but due to shortage of funds in these government schools, It is expensive to maintain monthly, and weekly tests due to its

contributing towards the academic development of their learners, especially these schools He further said "Conduct of formative assessment helps a teacher to evaluate learning abilities of learners for adjustment to take place but due lack of enough funds rural schools can't afford to run the Continuous Assessment that is why we concentrate only in end of term and year exams (summative assessment) for promotional purpose of learners to next class levels.

financial implications since the parents are not effectively

Learners' responses on Formative Assessment and Learners Academic achievements.

To examine formative assessments and learners' academic Achievements, data collected from 117 questionnaires were analyzed and presented in the Table below the respondents were asked to tick the box that best describes their opinion of the statement, by using a scale of 1 to 5 where;

 $I=Agree\ (A),\ 2=Strongly\ Agree\ (SA),\ 3=Neutral\ (N),\ 4=Disagree\ (D),\ 5=Strongly\ Disagree\ (SD)$

Table 4: shows the responses of learners on the Formative Assessment of learners.

ITEM	A	SA	N	D	SD	Mean	St.Dev
	(%)	(%)	(%)	(%)	(%)		
Teachers give feedback during	41	30	35	18		4.52	.783
learning process in the classroom.	(33.1)	(24.2)	(28.2)	(14.5)			
We do class exercises regularly	45	37	2	28	12	3.78	.571
	(36.3)	(29.8)	(1.6)	(22.6)	(9.7)		
We do take home assessments.	23	50		28	23	3.98	.794
	(18.5)	(40.3)		(22.6)	(18.5)		
We do tests assessments regularly	53	16		32	23	4.10	.692
	(42.7)	(12.9)		(25.8)	(18.5)		
We do Group discussions exercises	18	9	2	62	33	4.17	.859
	(14.5)	(7.3)	(1.6)	(50)	(26.6)		
Average mean						4.022	0.740

Source: Primary Data, (2017-2022)

Table 4 showed, out that 51.9 % of the respondents agreed 6.3 % of the respondents were Neutral, and 41.8 % of the respondents disagreed that teachers give feedback during the learning process, learners do class exercises regularly, take home assessments, and participate in group discussions as part of formative assessments. This means that most of the learners agreed that formative assessments influence the academic achievements of learners even in final examinations, this is exhibited by a mean value of 4.22 It means that the respondents Agreed on that that formative assessment improves learner's academic achievements and a standard deviation of 0.797 which suggests that respondents varied in their responses to the test statements meaning that views from other learners did not swerve much from the stated option.

During a face-to-face interview, one Headteacher said: "Formative assessments are equally important in the improvement of the learner's academic achievement but with the large populations we have in these public primary schools, continuous assessment tests become expensive for the schools that are poorly facilitated by government to acquire the tests for the learners and marking will become a problem for one teacher for over 200 learners that's why

we concentrate with end of term exams specifically for this school."

Similarly, Correlation analysis of the relationship between formative assessment and learner's academic achievement in primary schools in Serere County in Serere district. To test if there is a relationship between formative assessment and learners' academic achievement in primary schools in Serere County in the Serere district, a correlation analysis was conducted using Pearson's correlation coefficient and significance at the 99 and 95 confidence limits (two-tailed level).

Summative Assessment and Learner's Academic Achievements

Objective two of the study sought to examine summative assessment and learner's academic Achievements and the data collected from 48 questionnaires were analyzed where the respondents were asked to tick the box which best describes their opinion of the statement, by using a scale of 1 to 5 where;

1=Agree (A), 2=Strongly Agree (SA), 3 =Neutral (N), 4 = Disagree (D), 5 = Strongly Disagree (SD

Table 5: The responses of teachers on Summative Assessment and Learner's Academic Achievements.

ITEM	A	SA	N	D	SD	Mean	St.Dev
	(%)	(%)	(%)	(%)	(%)		
Summative assessment that helps	58	19		47		4.21	.767
teachers determine the student's overall	(46.8)	(15.3)		(37.9)			
achievement							
End of year Primary Leaving exams is	49	6		69		4.17	.869
done.	(39.5)	(4.8)		(55.6)			
Leads to the acquisition of the	53	32		39		4.59	.664
certificate of completion.	(42.7)	(25.8)		(31.5)			
Summative assessments are used as an	24	25	4	42	29	3.89	.893
accountability measure.	(19.4)	(20.2)	(3.2)	(33.9)	(23.4)		
Summative assessments influence	63	55	6			4.33	.595
policy-making in education system	(50.8)	(44.4)	(4.8)				
practices.							
Summative assessment results,	30	24	2	38	30	4.96	.713
influence adjustment teaching and	(24.2)	(19.4)	(1.6)	(30.6)	(24.2)		
learning.							
Makes teachers train students to pass		83		41		4.81	.816
any kind of exam or test.		(66.9)		(33.1)			
Summative assessments don't give	29	58		37		4.78	.987
information necessary to guide pupils	(23.4)	(46.8)		(29.8)			
during the teaching and learning							
process.							
Average mean						4.378	0.890

Source: Primary Data, (2017-2022)

Table 5 revealed that 61.3 % of the respondents agreed that assessments summative promote the academic achievements of learners while 1.2 % of the respondents were Neutral and 37.5 % disagreed. This clearly shows summative assessments help teachers to determine the student's overall achievements, this is illustrated by a mean value of 4.378 It means that the respondents agreed that summative assessment is important in the cycle of learner's academic achievements as it leads to certification and a standard deviation of 0.890 suggests that respondents varied strongly in their responses to the test statements meaning that views from other teachers did not strayed much from the stated option.

During a face-to-face interview with the Headteacher of the school

The response of Headteacher 3 as regards summative assessment was as below;

"Summative assessments are key in the education system in Uganda it's used for certification of the completing students at all levels of learning and this assessment is organized at the national level. Similarly, it has created an element of exam malpractice of exams in Uganda despite it being escorted by security personnel for better results."

Table 6: The responses of learners on Summative Assessments of learners.

Table 6: The responses of learners on Summative Assessments of learners.							
ITEM	A	SA	N	D	SD	Mean	St.Dev
	(%)	(%)	(%)	(%)	(%)		
I do beginning of term.	10	38		29	47	3.58	.845
	(8.1)	(30.6)		(23.4)	(37.9)		
I do Mid-term exams	23	22	2	48	21	4.08	.742
	(18.5)	(17.7)	(1.6)	(38.7)	(16.9)		
I do end of year exams.	48	47		9	20	4.76	.698
	(38.7)	(37.9)		(7.3)	(16.1)		
We do end of term exams.	35	47	7	19	16	4.28	.745
	(28.2)	(37.9)	(5.6)	(15.3)	(12.9)		
Average mean						4.175	0.758

Source: Primary Data, (2017-2022)

Table 6 shows that 54.4 % of the respondents Agreed 1.8 % of the respondents were neutral and 43.8 % Disagreed, this means that most respondents agreed that learners do end-of-year and End of Term Exams for certification, this is reflected by a mean value of 4.175 It means that the respondents agreed on that that learners do summative assessments and a standard deviation of **0.758** suggests that respondents varied in their responses to the test statements implicating that views from other learners deviated less from the stated opinion.

During a face-to-face interview with the Headteacher of the school

During a face-to-face interview said, "It's evident that most of our public primary schools in Serere conduct majorly end-of-term exams and national examinations PLE organized by UNEB for P7 candidates, this is because the schools have no supportive funds for assessments by parents".

This was also confirmed using Correlation analysis between summative assessment and learners' academic achievement in primary schools in Serere County in the Serere district. To obtain the relationship between summative assessment and learners' academic achievement in primary schools in Serere County in the Serere district, a correlation analysis was conducted using Pearson's correlation coefficient and significance at the 99 and 95 confidence limits (two-tailed levels).

Findings from Documentary Analysis (2017-2022).

The study conducted a documentary analysis of academic performance reports from (2017-2022) to examine the impact of different forms of assessment on learner academic achievements in primary schools in Serere County, Serere District. Secondary data was collected from school records, and academic performance reports to establish the trends in assessment forms and their effect on learners' performance. The findings indicated that the majority of schools relied heavily on summative assessments, particularly end-of-term and end-of-year exams, due to financial constraints and the lack of adequate resources to implement continuous assessments. The reviewed documents showed that while continuous assessments such as tests, quizzes, and assignments were effective in improving learning outcomes, their implementation was inconsistent across schools.

Additionally, the analysis of academic performance data from selected primary schools in Serere County revealed a significant correlation between formative assessments and improved learner performance. Schools that incorporated regular formative assessments had better academic outcomes compared to those that primarily relied on summative assessments.

However, the findings also indicated that many government primary schools faced challenges in maintaining formative assessments due to financial constraints, limited teaching staff, and lack of parental support in facilitating continuous assessment programs.

Findings on Learner Academic Achievements

Table 7: Summary of Assessment Methods and Their Impact on Academic Achievements in Primary Schools in Serere County.

Category	Question	Respondents	Agreed	Disagreed	Comments
			(%)	(%)	
Teachers'	Do you provide	Teachers	58.8%	36.7%	Feedback improves
Responses	feedback to				learning outcomes
	learners during				but is inconsistent
	the learning				due to constraints.
	process?				
	Do formative		41.9%		Consensus that
	assessments		strongly		formative
	such as group		agreed;		assessments promote
	discussions and		30.6%		critical thinking.
	tests help		agreed.		
	improve learner				
	understanding?				
	What are the				Large class sizes,
	challenges in				limited resources,
	implementing				and financial

Page	10
rage	1 10

	formative assessments?				constraints cited as barriers.
Learners' Responses	Do teachers give feedback during the learning process?	Learners	33.1%	28.2%	Feedback is acknowledged but inconsistently applied across schools.
	Do you participate in class exercises and discussions?		36.3% agreed; 29.8% strongly agreed	22.6% disagreed	Class exercises are common but not always effective.
	Do you take home assessments or tests regularly?		40.3% strongly agreed; 18.5% agreed		22.6% neutral. Home assessments are common but inconsistently applied.
	Do group discussions enhance your learning?		42.7% strongly agreed; 12.9% agreed		25.8% neutral. Group discussions are effective for many but not all learners.
Headteachers' Responses	What is the relationship between formative assessments and academic achievements?	Headteachers	100%	0%	Formative assessments are useful but challenging to maintain due to financial issues.
	What is the impact of summative assessments on learner achievements?				Summative assessments determine student performance but limit continuous learning opportunities.
	What advice would you give to teachers regarding assessment practices?				Recommended integrating more formative assessments despite financial challenges to improve outcomes.

Table 8: Average End-of-Term Scores for 10 Primary Six selected schools.

Table 6. Average Eliu-01-Term Scores for 10 Primary Six Selected Schools.								
School Name	Term 1 Avg.	Term 2 Avg. Score	Term 3 Avg. Score	Annual Average				
	Score (%)	(%)	(%)	(%)				
Sapir P/S	42	45	47	44.7				
Akoke P/S	48	51	53	50.7				
Kateta Model P/S	54	56	58	56.0				
Okodo P/S	39	43	46	42.7				
Ajoba P/S	45	48	50	47.7				
Olio P/S	44	47	49	46.7				
Homeland P/S	50	53	56	53.0				
Emmanuel P/S	43	46	48	45.7				

Atiira P/S	40	42	44	42.0
Serere P/S	46	49	51	48.7

Figure 1: A Bar graph showing the Average End-of-Term Scores for 10 Primary Six selected schools.

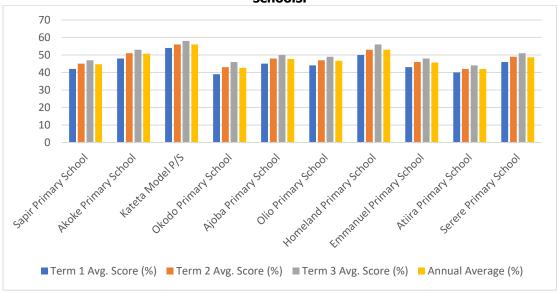


Figure 1 shows that the scores are out of 100 and reflect averages of subject test scores per term for P.6 students.

Kateta Model P/S and Homeland P/S reflect relatively stronger performance, consistent with partial implementation of formative assessments.

Schools like Okodo and Atiira P/S are at the lower end, aligning with reports of limited continuous assessment and resource constraints.

Overall, most schools show a gradual improvement from Term 1 to Term 3, consistent with findings that formative assessment improves learning outcomes over time.

Discussion of findings.

The relationship between formative assessment and learners' academic achievements in primary schools in Serere County in Serere district.

The study findings indicate a strong positive relationship between formative assessment and learners' academic achievements in primary schools in Serere County. Formative assessments, such as group discussions, tests, and continuous feedback, play a crucial role in shaping students' learning experiences and improving their performance.

These findings align with educational research that emphasizes the role of continuous assessment in enhancing students' learning experiences. Formative assessment provides teachers with the opportunity to monitor student's progress and adjust their teaching strategies accordingly, ensuring that learners receive the necessary support to improve their academic outcomes.

Group Discussions and learner's academic achievements

The results from the current study presented that through group work students can learn among themselves as learners through the sharing of experiences which improves overall performance. It helps learners to generate specific skills sought by employers since they have different skills that improve their performance. Through Group work teachers reduce workload and this reduces the teachers' workload when assessing, grading, and providing feedback to students. The results of the current study on group work were also analyzed along with the views of other scholars in the field of formative assessment of learning and student academic performance and results revealed related situations.

Andresen et al., (2000) noted that students learn best by thinking, evaluating, integrating, and internalizing insights gained from their various experiences. Group reflective discussion is not a novel pedagogy per se. Elements of group reflective discussion are embedded into various teaching and learning approaches including peer coaching, cooperative learning, community of practice, peer learning and collaborative learning, etc. This tends to improve learners' academic performance in higher education institutions. The findings of the current study also agreed

Page | 12

with Henderson (2002) who suggested that semi-structured reflective group discussions enhanced students' enjoyment and perceived learning. Student perceptions, variations in student reflective orientation and learning approaches, the need to modify traditionally "technical rationality"-oriented and content-laden curricula to accommodate and align with reflective learning, the most appropriate reflective practice/s to incorporate, the time needed for developing and improving critical reflective skills as well as the time and space needed for in-depth critical reflection and the subsequent application and transformation, the challenges of assessing reflections, the implications of ethics and impact in terms of learner and patient outcomes, are frequently overlooked or "under considered".

The results of the current study on group discussions are underpinned by Spearman's Psychometric Theory of Measurement (1904) which was identified for this study. The validity of group discussions is determined in part by evaluating, integrating, and internalizing insights gained from their various experiences. Group reflective discussion is not a novel pedagogy per se. Elements of group reflective discussion are embedded into various teaching and learning approaches including peer coaching, cooperative learning, community of practice, peer learning and collaborative learning, etc. This tends to improve learners' academic achievements in higher education institutions. Evaluating the content of a classroom assessment includes evaluating not only the match to instructional objectives but also to classroom instruction. It may also include a consideration of what happened during that instruction. For example, a teacher may put on a test a problem of the sort that learners find particularly troubling, so they can demonstrate that they can do it. Or the teacher may avoid such a problem so as not to trip up students unnecessarily.

Test assignments and learner's academic achievements

The results from the current study indicated that it is through test assignments that learners can identify their strengths and weaknesses which improves their performance. Through tests, learners are able learners to monitor their learning and progress in terms of performance, through a test that can relate what the teacher teaches and what is likely to be assessed and this makes students perform better in final exams, tests can motivate and shape learning process through reading the materials and through tests students can gauge they have mastered and what they have not mastered during the learning process and this improves our learning. The results of the current study on test assignment were also analyzed along with the views of other scholars in the field of formative assessment of learning and learners' academic achievements and revealed related situations, William James (1890) argued that tests can serve other purposes in educational settings that greatly improve performance. One

key benefit is the active retrieval that occurs during tests, Teachers often drastically overestimate what they believe their students to know and testing provides one way to improve a teacher's estimation of their student's knowledge of the findings of the current study also agreed with views of other scholars on the indirect benefit of testing, that tests create a release from proactive interference. Proactive interference occurs when sets of materials are learned in succession; the previous material learned influences the retention of new materials in a negative manner. Thus, proactive interference refers to the poorer retention of material learned later, caused by prior learning.

However, research has shown that when tests are inserted between study episodes, they cause a release from proactive interference and enable new learning to be more successful. The findings of the current study also agreed with the views of other scholars on the benefit of testing. It leads to improvement of met cognitive accuracy relative to restudying.

Testing permits learners to have better calibration of their knowledge. The results of the current study on test assignments are underpinned by Spearman's Psychometric Theory of Measurement (1904) which was identified for this study. The validity of Test assignments as noted by William James (1890) can serve other purposes in educational settings that greatly improve performance. One key benefit is the active retrieval that occurs during tests. Teachers often drastically overestimate what they believe their students to know and testing provides one way to improve a teacher's estimation of their learners' knowledge.

The relationship between Summative Assessment and learners' academic achievements

Results revealed a positive and significant relationship between summative assessment and learners' academic achievements in primary schools in Serere County in the Serere district. The results also indicated that summative assessment is exemplified by end-of-semester/quarter exams which show the skills learners have gained through the class, and results also show that the end-ofsemester/quarter exams are an opportunity to boost learners' grades by demonstrating knowledge and skill at a level that has not been previously demonstrated by completion of assignments. The results of the current study on summative assessment were also analyzed along with the views of other scholars in the field of summative assessment of learning and learners' academic achievements and revealed related situations The findings of the current study also agreed with the view that summative assessment is to determine the learners t's overall achievement in a specific area of learning at the end of term/year exams, a purpose that distinguishes it from all other forms of assessment. This argument is supported by (Harlen 2005).

Page | 13

However, in line with the above, teacher judgments can be clouded by an inability to distinguish between learner's achievement and student traits like perceived ability, motivation, and engagement that relate to achievement.

Poor judgments can be further exacerbated when teachers assess learners with diverse backgrounds and characteristics About Spearman's Psychometric Theory of Measurement (1904) which was used to underpin this study on summative assessment, the reliability and validity of summative assessment, can be achieved when they are well designed, valid, reliable, and fit for purpose to enable an accurate assessment of learners attainment and in line with this, has pointed out that, assessments have been used to identify differences in learners and then rank those students accordingly.

Evaluating the content of a classroom assessment includes evaluating not only the match to instructional objectives but also to classroom instruction. It may also include a consideration of what happened during that instruction. For example, a teacher may put on a test a problem of the sort that learners find particularly troubling, so they can demonstrate that they can do it. Or the teacher may avoid such a problem so as not to trip up learners unnecessarily.

Conclusions.

There was a significant positive relationship between formative assessment and learners' academic achievements. The study established that formative assessment plays a critical role in improving learners' academic achievements by facilitating continuous feedback, tracking progress, and identifying learning gaps early. Regular formative assessment methods such as quizzes, class discussions, peer reviews, and teacher feedback enhance students' ability to master concepts and develop essential academic skills.

There was a strong positive relationship between summative assessment and learners' academic achievements. Government-aided primary schools in the Serere district concentrate much on summative assessments simply because leads to the acquisition of the Primary Leaving Certificate. Summative Assessments are given periodically to determine at a particular point in time what learners know and do not know. Many associate summative assessments only with standardized tests such as state assessments, but they are also used and are an important part of classroom programs. Summative assessment at the classroom level is an accountability measure that is generally used as part of the grading process. Although the information that is gleaned from this type of assessment is important, it can only help in evaluating certain aspects of the learning process. Because they are spread out and occur after instruction every few weeks, months, or once a year, summative assessments are tools to help evaluate the effectiveness of programs, school improvement goals, alignment of curriculum, or student placement in specific programs.

Recommendations

Strengthen Teacher Competence in Assessment Design and Use: Teachers must be continuously trained in both formative and summative assessment methods to effectively plan, implement, and interpret a variety of assessment tools. This includes integrating low-stakes classroom activities like quizzes, peer assessments, and oral questioning (formative), as well as designing end-of-term tests aligned with curriculum objectives (summative). Training should focus on how to give timely, constructive feedback, use assessment data to adapt instruction, and understand learner progress beyond test scores. District education offices and the Ministry of Education should organize regular workshops and professional development sessions to ensure teachers develop and maintain competency in using assessments to drive instruction and support all learners equitably.

Integrate Formative Assessment as a Daily Instructional Practice: Formative assessment should not be treated as supplementary but as a core part of classroom teaching. Teachers should consistently use it to guide instruction and personalize learning, especially for learners with diverse needs and abilities. Activities such as daily reflective questioning, group discussions, and learning journals allow students to demonstrate understanding in multiple ways. Importantly, this practice enables teachers to adjust lesson plans dynamically to support learners who struggle with particular concepts. The goal is to make assessment "for learning," not just "of learning," ensuring that learners develop skills continuously and meaningfully throughout the term.

Align Summative Assessment with Continuous Feedback Mechanisms: While summative assessments remain essential for certification and promotion decisions, they should be embedded within a broader feedback-oriented learning process. Schools should reduce over-reliance on high-stakes testing by incorporating mid-term reviews, mock assessments, and learner reflection activities that prepare students gradually and holistically. Teachers should also ensure that summative exams reflect both content coverage and critical thinking demands, not just rote memorization. Sharing the syllabus with learners at the beginning of each term, linking new topics with previously taught content, and revisiting past lessons regularly can reduce exam anxiety and support retention.

Institutional Support and Stakeholder Involvement: Effective implementation of assessment strategies requires strong institutional support. School administrators, local government, and the Ministry of Education must provide resources for conducting both formative and summative assessments, including teaching materials, training programs, and assessment tools. Stakeholders—including parents and community leaders—should be sensitized on the importance of continuous assessment in improving educational outcomes, especially in under-resourced rural

schools. Schools should also adopt a culture of collaborative planning, where teachers regularly meet to reflect on assessment practices, analyze performance data, and share strategies for improvement.

Acknowledgment

Page | 14 I am most grateful to the Almighty God for the opportunity given to advance in my studies and for my good health.

My earnest debts honestly go to my supervisor Dr. Patience Tugume who continuously guided, supported, and advised me throughout the period of my study. I sincerely appreciate his patience and commitment to see me through the Master's program.

My sincere gratitude also goes to all lecturers of Team University and in the Department of Education in particular for the skills, knowledge, and academic expertise offered to me during my academic struggle. You were so inspiring for without you, this dissertation would not have reached this far.

I am also grateful to my classmates for their endless support in the discussions, and assignments throughout the time we spent together in our studies.

Humble appreciation goes to all my respondents who provided me with data.

List of Abbreviations.

ools
er

MoESTS Ministry of Education, Science, Technology

and Sports

NCDC National Curriculum Development Center

NGOs Non-Government Organization
UNEB Uganda National Examination Board
UPE Universal Primary Education

SPSS Statistical Package for Social Sciences

Source of funding.

There is no source of funding.

Conflict of interest.

No conflict of interest was declared.

Availability of data.

Data used in this study is available upon request from the corresponding author.

Authors contribution.

GO designed the study, conducted data collection, cleaned and analyzed data, and drafted the manuscript and PT supervised all stages of the study from conceptualization of the topic to manuscript writing and submission.

Ethical approval

During the planning, collection, and processing of data, the researcher followed some research guidelines to maintain ethical standards which include: seeking informed consent from the respondents and making it known that their participation was voluntary and they were free to withdraw from the study at any time or was not free not to answer questions that they were uncomfortable with. The researcher accorded due respect to the respondents' privacy and confidential treatment. The names of the participants and their schools were not identified and the respondents had to remain anonymous.

Approval and permission to conduct the study was sought and obtained from the Education Department of TEAM University. The researcher thought and obtained permission from head teachers requesting them to allow the researcher to conduct the study. The researcher was objective in conducting the research process to avoid bias; for example, by employing well-trained research assistants to collect the data.

Informed consent

A consent form was filled out by the respondents after explaining the purpose of the study to them. The respondents were assured of confidentiality as no name would appear on the questionnaire. No participant was forced to participate in the study and all the study materials used during the interviews were safely kept under lock and key only accessible by the researcher.

Authors biography

Gideon Odongo is a student with a master's degree in education planning and management at the School of Graduate Studies and Research, Team University.

Patience Tugume is a research supervisor at the School of Graduate Studies and Research, Team University.

References.

- 1. Amin, M. E. (2005). Social science research: Conception, methodology, and analysis.

 Makerere University.
- Andersson, C., & Palm, T. (2018). Reasons for teachers' successful development of a formative assessment practice through professional development—a motivation perspective.
 Assessment in Education: Principles, Policy and Practice, 25(6), 576–597. https://doi.org/10.1080/0969594X.2018.143068
- 3. Bolstad, R. (2004). School-based curriculum development: Principles, processes, and practices. *Journal of Curriculum Studies*, *31*(November), 83–97. http://www.nzcer.org.nz/pdfs/1314bib.pdf
- 4. Darling-Hammond, L. (1998). Teachers and teaching: Testing policy hypotheses from a

- Page | 15
- national commission report. *Educational Researcher*, 27(1), 5–15. https://doi.org/10.3102/0013189X027001005
- Government of Uganda. (1992). Government White Paper on the Education Policy Review Commission Report.
- 6. Harlen, W. (2005). Teachers' summative practices and assessment for learning–tensions and synergies. *Curriculum Journal*, *16*(2), 207-223. https://doi.org/10.1080/09585170500136093
- 7. Henderson, E., Berlin, A., Freeman, G., & Fuller, J. (2002). Twelve tips for promoting Significant event analysis to enhance reflection in undergraduate medical students. *Medical Teacher*, 24(2), 121-124. https://doi.org/10.1080/01421590220125240
- Kellaghan, T., & Greaney, V. (2003). Association for the Development of Education in Africa Monitoring Performance: Assessment and Examinations in Africa. ADEA Biennial Meeting, 2003.
- Lukman, Marsigit, Istiyono, E., Kartowagiran, B., Retnawati, H., Kistoro, H. C. A., & Putranta, H. (2021). Effective teachers' personality in strengthening character education. *International Journal of Evaluation and Research in Education*, 10(2), 512–521. https://doi.org/10.11591/ijere.v10i2.21629

- 10. Oludare, L. A., & Rasak Bolanta, O. (2020). Influence of Continous Assessment on Students' Academic Performance. *Journal of The Business of Education (JTBE*, 3(1), 81–87. https://www.kwasujtbe.com.ng
- 11. Spearman, C. (1904). "General Intelligence" Objectively Determined and Measured. *The American Journal of Psychology*, 15(2), 201–292. https://doi.org/10.2307/1412107
- 12. Worale, F. (2017). Impact of Continous Assessment on Students' Academic Performance in Selected Public Secondary Schools in Mbale Municipality. June.
- William, D. (2011). FORMATIVE ASSESSMENT: DEFINITIONS AND RELATIONSHIPS Dylan Wiliam, Institute of Education, University of London. Assessment for Learning: Origins and Antecedents For, 1–26. http://eprints.ioe.ac.uk/6806/1/Wiliam2011What2.pdf
- 14. Tobi, D. O. (2015). The Correlation Between Students' Continuous Assessment and Academic Performance of Students in the Examination in Urban and Rural Areas of Oyo State. July 2015, 10. https://doi.org/10.13140/RG.2.2.15043.84001
- 15. Ito, H. (2012). Jomtien to Jomtien: The evolving coordination process of education for all 1990-2011. *International Education Studies*, *5*(5), 1–13. https://doi.org/10.5539/ies.v5n5p1

PUBLISHER DETAILS:

AfroGlobal Press



Contact: +256 763 123 847

Email: afroglobalpress@gmail.com

Website: https://afroglobalpress.com

Address: Scholar's Summit, Nakigalala, East Africa