



UGANDA NATIONAL EXAMINATIONS BOARD

EFFECTS OF COVID-19 PANDEMIC ON TEACHING AND LEARNING AT PRIMARY AND SECONDARY EDUCATION LEVELS IN UGANDA



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2021 Report



THE REPUBLIC OF UGANDA



NATIONAL ASSESSMENT OF PROGRESS IN EDUCATION (NAPE)



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The assessment exercise was conducted at a time when the country was already experiencing the COVID – 19 pandemic. It was by the grace of God that the exercise was completed successfully.

We wish to extend our sincere appreciation to all the learners, teachers and parents who participated in the assessment. We are also indebted to officers from various institutions who participated as team leaders, test administrators, scorers, data entrants and monitors. Your commitment in the various activities is greatly appreciated. We also extend our appreciation to the Headteachers and District (Municipal) Inspectors of schools for their organization and cooperation before and during the field administration exercise.

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FOREWORD



World over the COVID-19 pandemic has greatly affected all aspects of people's lives. In Uganda, schools were closed in order to keep the learners safe. There was, therefore, need to determine the effects of the disruption on the teaching and learning process at re-opening.

Indeed, the Ministry of Education and Sports tasked UNEB and the Department for Education Planning and Policy Analysis to conduct a study on the effects of COVID –19 pandemic on the teaching and learning at the primary and secondary education levels. The report of the findings is ready for use.

As UNEB, we are grateful to the Ministry of Education and Sports and the Global Partnership for Education for the support towards the entire assessment exercise and eventual production of this report. We thank the Almighty God who made it possible for the assessment to be completed, despite the many odds.

It is my sincere hope that the findings will help the Ministry of Education and Sports and other stakeholders in education in their efforts to mitigate the impact of COVID–19 pandemic on the teaching and learning process in our country.

A handwritten signature in black ink, which appears to read 'Dan N. Odongo'. The signature is fluid and cursive, extending to the right with a long horizontal stroke.

Dan N. Odongo

EXECUTIVE DIRECTOR

EXECUTIVE SUMMARY

Uganda was under the first lockdown due to the Covid-19 pandemic between March and September, 2020. Schools were closed and learners and teachers stayed at home. During the lockdown, learners and teachers were affected in different ways. However, how (much) these groups were affected up to the time of school re-opening was not known.

As a result, the Ministry of Education and Sports (MoES) tasked Uganda National Examinations Board (UNEB) and the Department for Education Planning and Policy Analysis (DEPPA) to conduct a joint study on the **'Effects of Covid-19 Pandemic on Teaching and Learning at the Primary and Secondary Education Levels in Uganda'**.

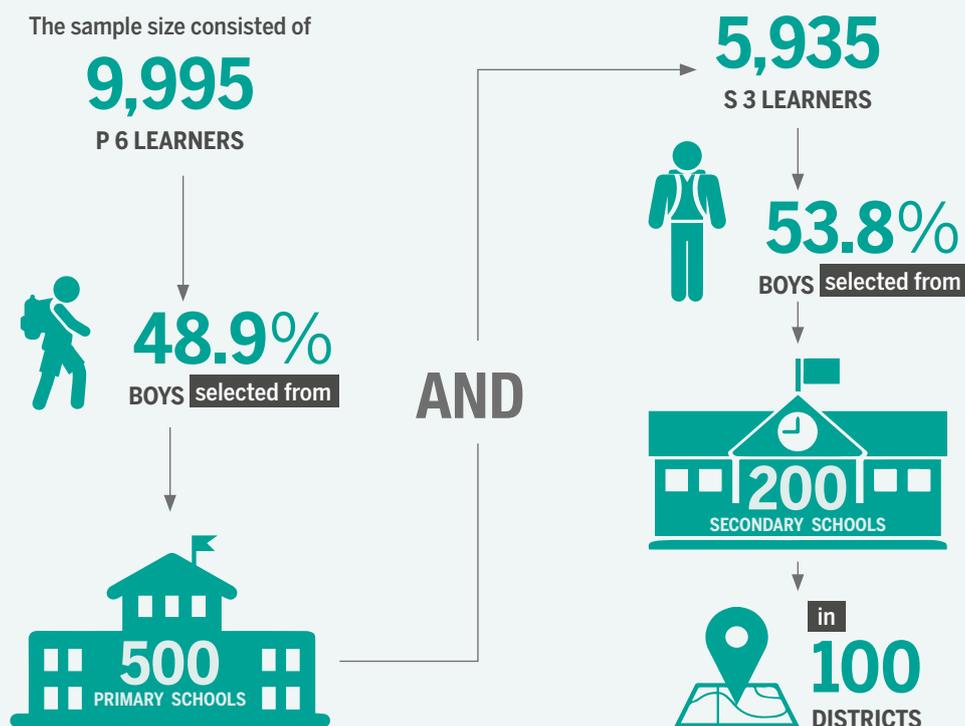
In order to establish the gap in achievement of the learners who reported back to school, the same NAPE 2018 Primary six (P 6) tests of Numeracy

and Literacy in English and NAPE 2017 Senior three (S 3) tests of Mathematics and English, were administered to the cohort of Primary six and Senior three learners of 2021, respectively, who had reported back to school at re-opening. The test scores were equated and analysed using item response theory.

In addition to the written tests, focus group discussions were also held with the learners and then face-to-face interviews were conducted with their teachers who had reported back to school. Telephone interviews were also conducted with those teachers and parents of P 6 and S 3 learners who had not reported back to school. This was done to gain a deeper understanding of the effect of the pandemic on teachers and learners. To establish whether the schools retained the learners and teachers when they re-opened, the study relied on their registers before and after the lockdown.

SAMPLE SIZE AND SAMPLE DESIGN

QUANTITATIVE DATA



QUALITATIVE DATA

In the sampled schools



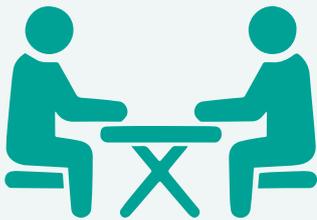
TEACHERS OF EACH OF P 6 AND S 3 CLASS

who had reported back to school

were selected for a



FACE-TO-FACE INTERVIEW



A SAMPLE OF



TEACHERS

who had not reported back to school

PLUS



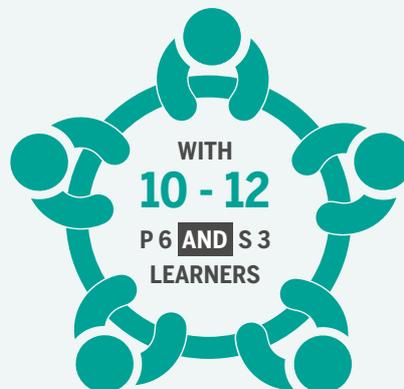
PARENTS OF EACH OF P 6 AND S 3 LEARNERS

who had not reported back to school

were selected for a



In addition, FOCUS GROUP DISCUSSIONS were held



(most of whom had not been selected for the written tests). Respondents for the interview and participants in the focus group discussion were purposively selected taking into account the gender of the respondents.

FINDINGS

The findings are summarized according to the objectives:

OBJECTIVE 1: To establish the gap in achievement levels of learners before and after the lockdown

1. The gap in achievement levels of learners before and after the lockdown

At P 6, the percentage of learners rated proficient in Literacy in English and Numeracy in 2021 dropped by 4.7 and 13.4, respectively, from that of 2018. This result also implies that learners were more affected in Numeracy.

At S 3 level, results show that the percentage of learners rated proficient in English Language and Mathematics in 2021 increased by 10.3 and 3.2, respectively, from that of 2017. This, therefore, implies that more learners actually became proficient in English Language than in Mathematics. It is worth noting that the study in 2017 targeted only learners from hard to reach schools in the rural areas.

2. Whether learners studied while at home during the lockdown

In almost two thirds (66.5%) of the 269 primary schools, P 6 learners reported that they had some form of studying during the lockdown. Similarly, in just over half (55.4%) of the 83 secondary schools S 3 learners reported that they had some form of studying.

3. Why some learners never studied while at home during lockdown

In at least half of the primary schools and two-thirds of the secondary schools, learners reported that they never had time to study during the day and would feel tired at the end of the day's work because of engagement in home chores and casual labour. In 10% of the secondary schools, the S 3 learners reported that they could not study while at home because they had lost interest in learning.

OBJECTIVE 2: To establish the effects of COVID-19 pandemic on learners during the lockdown

1. Have all the learners reported back to school?

Results show that 10% of the P 6 learners and 13% of the S 3 learners did not report back to school. Gender wise, the proportion of P 6 girls (8%) who did not report back to school was significantly lower than that of boys (10.2%), that is, male learners were more affected than female learners. The proportion of P 6 learners in rural areas (11.3%) who did not return back to school was also significantly higher than that of urban areas (1.9%). While private primary schools gained 1.5% more P 6 learners at re-opening, 11.8% of the learners in public primary schools did not return to school.

At S 3 class level, there was no significant variation in the proportion of learners who did not report back to school by gender, location or school ownership.

2. What are the reasons for not reporting back?

According to parents, the following are the reasons why their children did not report back to school after the lockdown; lack of tuition fees, teenage pregnancy, child marriages, preference for casual labour and loss of interest in learning .

However, about 90% of the parents had plans to take their children back to school.

3. Challenges faced by learners during lockdown

In at least 55% of primary schools and at least 72% of secondary schools, learners who reported back to school shared the challenges they faced as follows; child labour, domestic violence, sexual abuse by relatives and other community members and occurrence of child marriages, inadequate finances to cater for family, inadequate parental support to girls/teenage pregnancy, kidnaps/arrests by police/idleness/joining bad peer groups, inability to worship and uncertainty about schools re-opening date.

OBJECTIVE 2: To establish the effects of COVID-19 pandemic on learners during the lockdown

4. Achievements by learners who reported back to school amidst challenges faced

The learners who reported back to school reported that they acquired basic skills relevant to house chores, positive behavioural change, new knowledge, positive attitude and entrepreneurship skills during the lockdown.

OBJECTIVE 3: To establish the effects of COVID-19 pandemic on teachers during the lockdown

1. Have all the teachers reported back to school?

Overall, results showed that more teachers in public schools reported back to teach P 6 and S 3 learners at re-opening, that is, 7.4% more at P 6 and 7.8% more at S 3. This is attributed to the fact that some of the teachers of lower classes were also summoned back to school to handle the extra streams created for P 6 and S 3 learners as a result of the requirement for social distancing. However, 8% of the P 6 teachers and 3.4% of the S 3 teachers in private schools did not report back to school. The difference was significant amongst P 6 teachers, by school ownership. While secondary schools in rural areas had 11.5% more teachers of S 3 learners reporting back at re-opening, 3.4% of the teachers in urban schools didn't report back to school.

2. What were the reasons given by the teachers for not returning following the re-opening of schools?

The majority of the teachers had lost interest in teaching because of inadequate or no pay; and yet the income generating activities they had established proved a better alternative in terms of earnings.

3. Whether teachers who reported back to school experienced any challenges during the lockdown

Teachers in the majority of private schools had no salary while their counterparts in government schools lacked allowances of any kind. Teachers also experienced social challenges such as inability to visit relatives, families and friends.

4. Achievements by teachers who reported back to school amidst challenges faced

Although teachers experienced a number of challenges, they also achieved many good things, among which are the following: had enough time with the family/community/self, started income generating activities, became creative (innovative), had enough time for their side business and received support from family members, friends, school authority and government or non-governmental organisations.

5. What will happen to the income generating activities now that the schools are fully open?

Results show that more than half of the P 6 and S 3 teachers started income generating activities during the lockdown. Teachers reported that they would sustain the businesses using one or more of the following ways: hire someone to run it, handover business to a family member or attend to it when not engaged at school.

RECOMMENDATIONS

RECOMMENDATIONS	RESPONSIBILITY CENTRE
A follow up study needs to be done to find out why there was a decline in P 6 learners' achievement whereas there was an improvement for the S 3 learners.	UNEB
Sensitise the parents on the need to regulate the amount of work given to children so that children get time to learn.	MoES/Local Councils
Assist teachers on striking a balance between teaching and sustaining the established income generating activities.	MoES /Headteachers/DEO/DIS
Sensitise the youth about the consequences of involvement in risky behaviours because they are not above the law.	Parents/Headteachers
Provide psycho-social support and counselling to the youth who were arrested, sexually harassed and those who experienced domestic violence and child labour.	MoES/Religious leaders/Police (Family and Child Protection Department)

CHAPTER 1

1.0 INTRODUCTION

Uganda was under the first lockdown due to the Covid-19 pandemic between March and September, 2020. Schools were closed and learners and teachers stayed at home. During the lockdown, learners and teachers were affected in different ways. However, how (much) these groups were affected up to the time of school re-opening is not known.

As a result, the Ministry of Education and Sports (MoES) tasked Uganda National Examinations Board (UNEB) and the Department for Education Planning and Policy Analysis (DEPPA) to conduct a joint study on the **'Effects of Covid-19 Pandemic on Teaching and Learning at the Primary and Secondary Education Levels in Uganda'**. The study was sponsored by the Global Partnership for Education. It involved the administration of NAPE written tests to a sample of Primary six (P 6) and Senior three (S 3) learners in Uganda. Besides the tests, qualitative data were also collected through focus group discussion and key informant interviews.

1.1 Purpose of the study

The overall purpose of the study was to investigate the effects of COVID-19 pandemic on teaching and learning at primary and secondary education levels in Uganda.

1.2 Objectives of the study

The specific objectives of the study were:

- (a) To establish the gap in achievement levels of learners before and after lockdown
- (b) To establish the effects of COVID-19 pandemic on learners during the lockdown
- (c) To establish the effects of COVID-19 pandemic on teachers during the lockdown

CHAPTER 2

2.0 METHODOLOGY

The methodology of the study is discussed in the next sub-sections.

2.1 Instruments

2.1.1 Written Tests

These consisted of Numeracy and Literacy in English tests at Primary six and English Language and Mathematics at Senior three.

2.1.2 Focus Group Discussion guide

This was used by the facilitators to guide the discussion with P 6 and S 3 learners (most of whom had not been selected for the written tests).

2.1.3 Interview schedule

This was used by the interviewer to guide the interview. The interview was conducted face-to-face with teachers of P 6 and S 3 learners, who reported back to school. The teachers who did not return to school were interviewed over telephone. Parents of P 6 and S 3 learners who did not report back to school were also interviewed over telephone.

2.2 Sample Size and Sample Design

Quantitative Data: The sample size consisted of 9,995 Primary six learners (48.9% boys) from 500 primary schools and 5,935 Senior three learners (53.8% boys) from 200 Secondary schools in 100 districts.

A stratified three stage cluster sampling design was used. Stratified by 15 administrative sub-regions of the country (Appendix 1), at least 4 districts were randomly selected through probability proportional to size (except for Kampala sub-region). From each of the sampled districts, 5 Primary and 2 Secondary schools were randomly selected through probability proportional to learners' enrolment. A simple random sample of 20 Primary six and 30 Senior three learners was obtained from each of the sampled schools. However, where the school had less than the required number of learners, a compensation was made by oversampling from another school with more learners in order to realize the required minimum number of learners per district.

Qualitative Data: In the sampled schools, two teachers of each of P 6 and S 3 class who had reported back to school were selected for face-to-face interview. A sample of two teachers who had not reported back to school and two parents of P 6 learners and two parents of S 3 learners, who had not reported back to school were also selected for telephone interview. In addition, focus group discussions were held with 10-12 of P 6 and S 3 learners (*most of whom had not been selected for the written tests*). Respondents for the interview and participants in the focus group discussions were purposively selected taking into account the gender of the respondents.

2.3 Analysis Procedures

Both descriptive and inferential statistical procedures were used during the analysis. As a specialised procedure, psychometric analysis (Item Response Theory) was followed.

2.3.1 Descriptive Statistics

The frequency (number) and proportions of learners, teachers and parents who participated in focus group discussions and interviews were computed and presented in order to explain the percentage of occurrences by each category.

Survey mean percentage procedure was used to estimate the percentage of P 6/S 3 learners and their teachers who reported back to school after the lockdown. Inferential statistics was also applied to test significant differences by selected factors such as gender and location.

2.3.2 Measurement of Achievement Gap using Psychometric Analysis

In order to establish the gap in achievement of learners on return to school, the NAPE 2018 P 6 tests of Numeracy and Literacy in English and NAPE 2017 S 3 tests of Mathematics and English Language, were administered to the P 6 and S 3 learners of 2021, respectively.

The 2017, 2018 and 2021 NAPE tests were individually analyzed using a suitable Item Response Theory model. Before the 2018 and 2021 primary test scores and the 2017 and 2021 secondary test scores were equated, the test scores in the corresponding years, that is; 2018 and 2021 for P 6 and 2017 and 2021 for S 3 were checked for Differential Item Functioning. That is, the interference by either demographic characteristics or groupings on the relationship between the ability of the learner and item response.

The process eliminated items with drifting parameters and retained as anchor items only those items whose difficulties and discriminations were approximately the same for both populations, that is, P 6 learners of 2018 and 2021 and S 3 learners of 2017 and 2021. Items that functioned differentially across the two periods were dropped from being anchor items. The test scores from the corresponding years were concurrently calibrated; thus putting the item measures on a common metric scale of reference – equating.

2.4 Study Limitations

- To answer the question of whether all the teachers reported back to school at re-opening, this study collected data on the number of teachers who taught P 6 – P 7 and S 3 – S 4 before the lockdown and the number teaching the same classes at re-opening. However, at the time of data collection, it had not been realized that teachers for lower classes had also been called upon to handle the extra classes which had been created in these schools in a bid to observe the Covid-19 Standard Operating Procedures.
- Special Education Needs learners were not included in the study.
- The inability to interview the very learners who did not report back to school because of accessibility challenge.

CHAPTER 3

3.0 FINDINGS

The findings are discussed according to the study objectives in the next sub-sections:

3.1 Objective One: To establish the gap in achievement levels of learners before and after the lockdown

3.1.1 The gap in achievement levels of learners before and after the lockdown

The achievement of P 6 learners in Literacy in English and Numeracy and that of S 3 learners in English Language and Mathematics is presented in this sub-section.

3.1.1.1 Achievement of P 6 Learners in Literacy in English

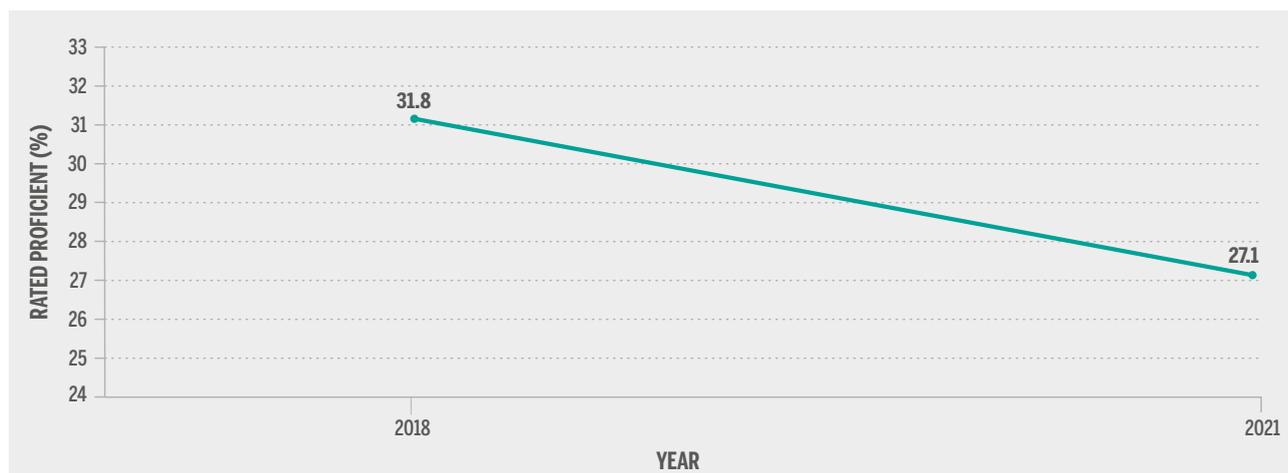
Learners' achievement was categorized into four proficiency levels, that is, lowly proficient, moderately proficient, proficient and highly proficient. The competences for each proficiency level are shown in Table 1.

TABLE 1: DESCRIPTION OF LEVEL OF KNOWLEDGE AND SKILLS DEMONSTRATED, BY PROFICIENCY LEVEL

PROFICIENCY LEVEL	LEVEL OF KNOWLEDGE AND SKILLS	COMPETENCES
Lowly proficient	Limited understanding of concepts and use of relevant skills	Typical learners in this category can recognize common nouns, extract information from a text, recognize and use common words in sentences, only begin an informal letter with a correct address and salutation.
Moderately proficient	Basic understanding of concepts and use of relevant examples	In addition to having the skills in the above proficiency level, typical learners in this category can form plurals of words, re-arrange jumbled letters to form words, re-arrange words to form sentences, extract information from continuous and non-continuous texts, use common vocabulary in context and use the techniques of basic English writing.
Proficient	High level of understanding of concepts and use of relevant skills	In addition to having the skills in the above proficiency levels, typical learners in this category can use the correct tense, form comparative and superlative adjectives, construct grammatically correct sentences using verbs, draw simple inferences from everyday situations based on a continuous text and use complex grammatical structures.
Highly proficient	Exceptionally high level of understanding of concepts and use of relevant skills	In addition to having the skills in the above proficiency levels, typical learners in this category can interpret information from a complex text, draw inferences from a non-continuous text, use less familiar vocabulary correctly, produce contextual meanings of words and write an essay composition.

The desired minimum proficiency level expected of a P 6 learner is the *proficient* level. A learner is regarded *proficient* if he/she reaches the *proficient* or *highly proficient* level.

Figure 1: The proportion of P 6 learners rated proficient in Literacy in English in 2018 and 2021



Results show that the percentage of P 6 learners rated proficient in Literacy in English in 2021 dropped by 4.7 from that of 2018.

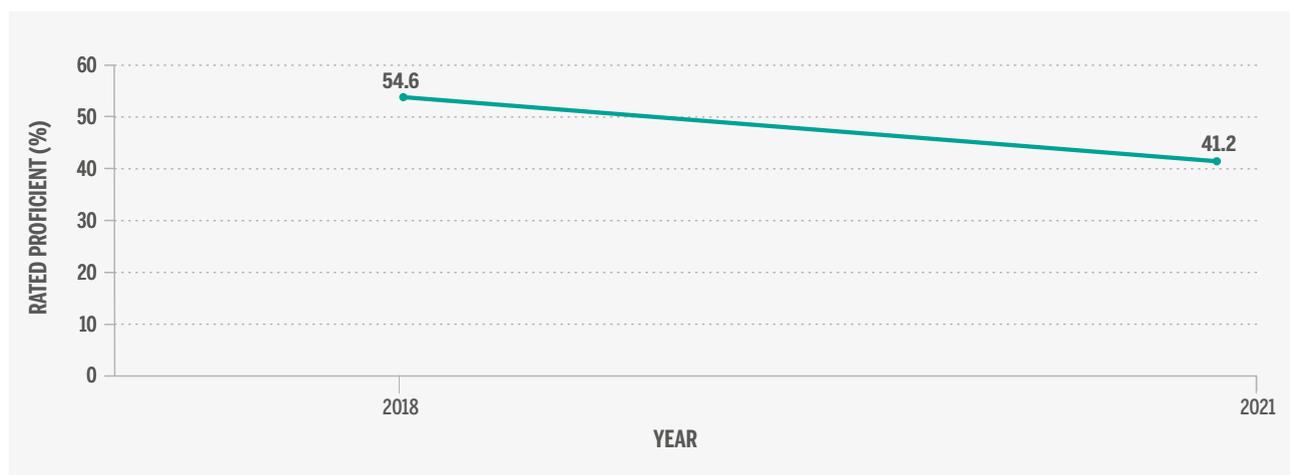
3.1.1.2 Achievement of P 6 Learners in Numeracy

The achievement of P 6 learners was categorized into four proficiency levels, that is, lowly proficient, moderately proficient, proficient and highly proficient. The competences for each proficiency level are shown in Table 2.

TABLE 2: DESCRIPTION OF LEVEL OF KNOWLEDGE AND SKILLS DEMONSTRATED, BY PROFICIENCY LEVEL

PROFICIENCY LEVEL	LEVEL OF KNOWLEDGE AND SKILLS	COMPETENCES
Lowly proficient	Limited understanding of concepts and use of relevant skills	The learners in this category can perform basic numerical operations such as addition of up to four-digit numbers with carrying, subtraction of up to three-digit numbers with borrowing, multiply two and three-digit numbers with carrying, add simple fractions with a common denominator and recognize place values up to thousandth.
Moderately proficient	Basic understanding of concepts and use of relevant examples	In addition to having the skills in the above proficiency level, typical learners in this category can solve word problems involving subtraction of up to four-digit numbers, divide up to four-digit numbers without remainders, name basic shapes, identify fractions, order numbers in ascending order, complete a pattern, extract information from simple graphs, represent sets using venn diagrams, write four-digit numbers in words and calculate simple profit.
Proficient	High level of understanding of concepts and use of relevant skills	In addition to having the skills in the above proficiency levels, typical learners in this category can divide up to four-digit numbers with remainders, recognize decimal place values, subtract fractions without common denominators, convert a decimal to a fraction, calculate mean and area, form subsets, perform operations (union) on closed sets, round off numbers to the nearest thousands, convert units, calculate speed, solve word problems involving multiple operations and currency and perform simple geometric construction.
Highly proficient	Exceptionally high level of understanding of concepts and use of relevant skills	In addition to having the skills in the above proficiency levels, typical learners in this category can solve word problems involving division of up to three-digit numbers, divide fractions, illustrate information in the form of a bar graph, infer information from a bar graph, calculate simple finite probability, interpret a venn diagram, tell time, use a ruler to measure length and understand the basic concept of symmetry.

Figure 2: The proportion of P 6 learners rated proficient in Numeracy in 2018 and 2021



The results show that the percentage of P 6 learners rated proficient in Numeracy in 2021 dropped by 13.4 from that of 2018. This result also implies that learners were more affected in Numeracy than in Literacy in English.

3.1.1.3 Achievement of Senior 3 Learners in English Language

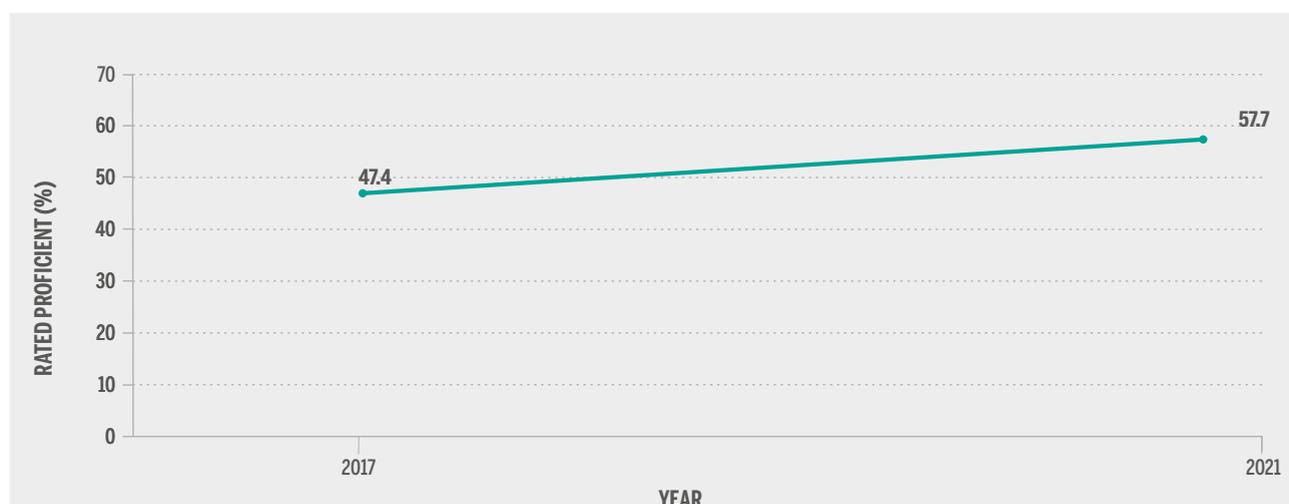
The achievement of S 3 learners was categorized into four proficiency levels, that is, lowly proficient, moderately proficient, proficient and highly proficient. The competences for each proficiency level are shown in Table 3.

TABLE 3: DESCRIPTION OF LEVEL OF KNOWLEDGE AND SKILLS DEMONSTRATED, BY PROFICIENCY LEVEL

PROFICIENCY LEVEL	LEVEL OF KNOWLEDGE AND SKILLS	COMPETENCES
Lowly proficient	Limited understanding of concepts and use of relevant skills	Learners in this category can compare adjectives correctly and use comparative form of adjectives, form plurals from regular nouns, use quantifiers with countable nouns (money and days), extract information directly from the text and address the person to whom they are writing a formal letter.
Moderately proficient	Basic understanding of concepts and use of relevant examples	The learners in this proficiency level can in addition to the above: use present simple tense correctly in sentences, use the correct form of auxiliary verbs, use the second conditional 'if clause', use the correct quantifier with uncountable nouns or abstract nouns, make inferences from a read text, predict an eventuality from a text read, use inferences to describe behaviour of characters in a text, understand the story and summarize it in a phrase to bring out its general meaning and tittle, write an advert including some relevant attributes, pick positive behaviour from a text read and use it to derive lessons, deduce knowledge and get evidence from the text read to back it up, write an application letter including most of the attributes of a formal letter, use information in a text to form their own opinion, draw from their vocabulary to explain phrases in a text read, write an opinion essay including some attributes of an essay such as tittle, introduction, conclusion and proper format.

PROFICIENCY LEVEL	LEVEL OF KNOWLEDGE AND SKILLS	COMPETENCES
Proficient	High level of understanding of concepts and use of relevant skills	In addition to the above, learners in this category can: use the continuous aspect in tense formation, use the future aspect in tense formation, form adverbs, use correct prepositions in sentences, identify and use the co-relative conjunction in sentences, use the correct question tag in commands, write in reported speech, use contrast conjunctions to join two sentences, punctuate sentences correctly using; exclamation marks, capital letters and question marks, write an advert including most of its attributes, use adjectives to describe a character in the text read, infer from their contemporary knowledge and apply it to answer questions about a text read, use vocabulary to explain meaning of a phrase in the text read, understand and summarize a text read in their own words, extract information from a text and use their own words to talk about that information, use adjectives or abstract nouns to describe feelings in a poem, use adjectives to describe characters of people in the text read, write an opinion essay using the right language in terms of spelling, tense and punctuation.
Highly proficient	Exceptionally high level of understanding of concepts and use of relevant skills	These learners can do all the above and, place comma correctly to emphasize a pause in natural speech, write an advert and include all the attributes, write an application letter and include all the attributes of a formal letter, infer knowledge or apply their contemporary knowledge to answer questions on the text read, write an opinion essay with at least three well explained points and examples

Figure 3: The proportion of S 3 learners rated proficient in English language in 2017 and 2021



At S 3 level, results showed that the percentage of learners rated proficient in English Language in 2021 increased by 10.3 from that of 2017. This, therefore, implies that more learners actually became proficient in English Language. It is worth noting that the study in 2017 targeted only learners from hard to reach schools in the rural areas.

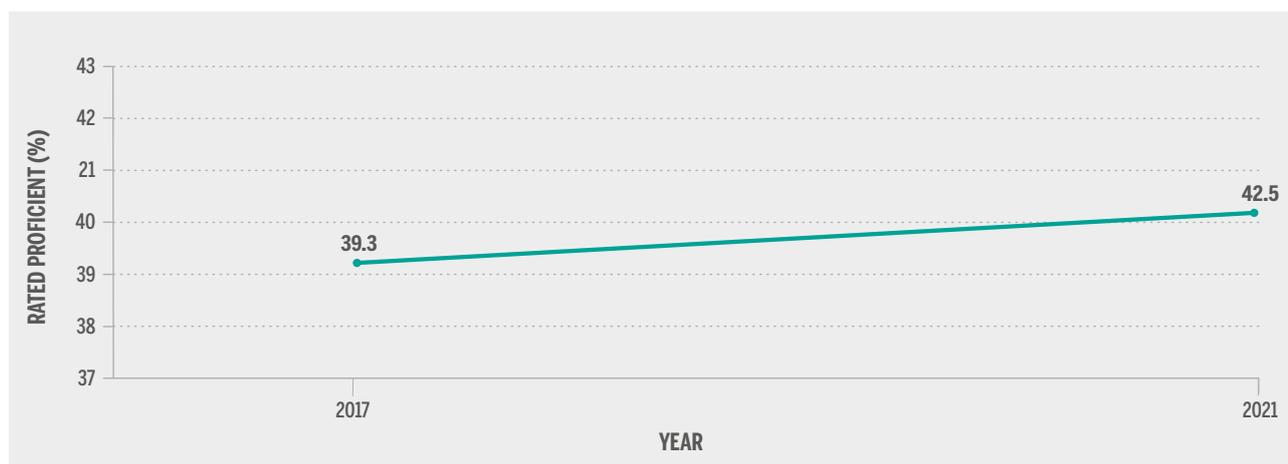
3.1.1.4 Achievement of Senior 3 learners in Mathematics

The achievement of S 3 learners was categorized into four proficiency levels, that is, lowly proficient, moderately proficient, proficient and highly proficient. The competences for each proficiency level are shown in Table 4.

TABLE 4: DESCRIPTION OF LEVEL OF KNOWLEDGE AND SKILLS DEMONSTRATED, BY PROFICIENCY LEVEL

PROFICIENCY LEVEL	LEVEL OF KNOWLEDGE AND SKILLS	COMPETENCES
Lowly proficient	Limited understanding of concepts and use of relevant skills	Learners in this category: can write elements outside a given set, know the concept of a discount, can identify the required multiples and factors of given numbers, can compare quantities with same units using ratios, can multiply by required multiple, can convert recurring decimal into a fraction, can plot a given coordinate, can manipulate an expression to obtain a simplified form, can apply division in conversion, understand time, know the concept of business interest and its formula, are able to substitute numbers in a function, understand the concept of opposite of a vector, can draw a pie chart and recognize a bar chart.
Moderately proficient	Basic understanding of concepts and use of relevant examples	Learners in this proficiency level can in addition to the above, represent the relation between the elements on a papygram, apply the concept of discount, identify required prime numbers, round off decimal numbers, identify factors to find H.C.F, multiply decimal numbers, decrease a number in a given ratio, divide numbers, calculate the gradient of a straight line, use the concept of a gradient and coordinates on a straight line to find an equation, measure angles and lengths, use angle construction procedures to construct angles, apply Pythagoras' theorem to calculate length of a right angled triangle, manipulate basic operations (arithmetic) of numbers, perform subtraction in a given base, perform correct substitution and calculation of business interest, understand the concept of symmetry, understand lines and geometry, understand vectors, plot coordinates correctly and interpret the line graph correctly.
Proficient	High level of understanding of concepts and use of relevant skills	In addition to the above, learners in this category can, identify exterior angles, understand the difference between direct proportion and inverse proportion, interpret 3D drawings accurately, identify different types of polygons, understand foreign currency conversions, interpret bar chart correctly, understand concept of the median of data, understand circle and its properties of symmetry, use trigonometric ratios, understand the concept of midpoint and its use and apply the concept of midpoint in situations.
Highly proficient	Exceptionally high level of understanding of concepts and use of relevant skills	Learners in this category can do all the above and in addition, state the type of mapping, use the concept of finding the number of sides using the exterior angle, describe the elements of a set, understand the concept of reflection as well as different properties of reflection, plot lines on a coordinate axes, understand the concept of reflection in a vertical line, interpret inverse ratios and compare lengths using ratios.

Figure 4: The proportion of S 3 learners rated proficient in Mathematics in 2017 and 2021



The results show that the percentage of learners rated proficient in Mathematics in 2021 increased by 3.2 from that of 2017. This, therefore, implies that more learners actually became proficient in Mathematics. Like stated before, it is worth noting that the study in 2017 targeted only learners from hard to reach schools in the rural areas.

3.1.2 Whether learners studied while at home during the lockdown

TABLE 5: THE PROPORTION OF SCHOOLS WHERE LEARNERS STATED THAT THEY HAD STUDIED WHILE AT HOME DURING THE COVID – 19 PANDEMIC LOCKDOWN

STUDIED WHILE AT HOME	PRIMARY SCHOOLS		SECONDARY SCHOOLS	
	N	N (PERCENT)	N	N (PERCENT)
All	269	179 (66.5)	83	46 (55.4)
Urban	208	132 (63.5)	50	24 (48.0)
Rural	61	47 (77.1)	33	22 (66.7)

In almost two thirds (66.5%) of the 269 primary schools, P 6 learners reported that they continued to study during the lockdown, while in just over half (55.4%) of the 83 secondary schools, S 3 learners reported that they had continued to study.

Similarly, the proportion of schools where the learners said that they had studied while at home was higher in the rural than in the urban areas.

In less than half (48%) of the secondary schools in urban areas, S 3 learners reported that they continued to study.

3.1.2.1 Mode of studying during lockdown

TABLE 6: THE PERCENTAGE OF SCHOOLS, BY HOW THEIR LEARNERS REPORTEDLY STUDIED WHILE AT HOME DURING THE LOCKDOWN

MODE OF STUDYING	PRIMARY SCHOOLS		SECONDARY SCHOOLS	
	N = 179	PERCENT (%)	N = 46	PERCENT (%)
Radio	141	78.8	42	91.3
Home study materials	132	73.7	35	76.1
Television	111	62.0	31	67.4
Coaching by family member or others	60	11.3	17	10.1
Virtual lessons	14	7.8	6	13.0
Group discussions	3	1.7	3	6.5

Both P 6 and S 3 learners in more than 60% of the primary and secondary schools reported that they continued to study during the lockdown through: radio, home study materials and/or television. The other mode of studying used by learners in less than 15% of the schools were: coaching, virtual lessons or group discussion.

3.1.2.2 Why some learners never studied while at home during lockdown

TABLE 7: THE PROPORTION OF SCHOOLS, BY REASONS WHY THEIR LEARNERS DID NOT STUDY WHILE AT HOME DURING LOCKDOWN

HINDRANCES	PRIMARY SCHOOLS		SECONDARY SCHOOLS	
	N = 90	PERCENT (%)	N = 37	PERCENT (%)
Home chores	66	73.3	30	81.1
Casual labor	45	50.0	25	67.6
There was no learning material or facility	14	15.6	5	13.5
Loss of interest	0	0.0	4	10.8

In at least half of the primary schools and two-thirds of the secondary schools, learners never had time to study during the day and would feel tired at the end of the day's work because of engagement in home chores and casual labour. In 10% of the secondary schools, S 3 learners reported that they could not study while at home because they had lost interest in learning.

3.2 Objective Two: To establish the effects of COVID-19 pandemic on learners during the lockdown

3.2.1 Have all the learners reported back to school?

TABLE 8: THE PROPORTION OF LEARNERS WHO RETURNED BACK TO SCHOOL AFTER THE COVID-19 PANDEMIC LOCKDOWN

FACTOR	CATEGORY	NUMBER OF PRIMARY SCHOOLS	P 6 LEARNERS	NUMBER OF SECONDARY SCHOOLS	S 3 LEARNERS
Overall return rate	All	287	90.6	88	87.4
Gender	Male	287	89.8	88	87.4
	Female	287	92.0*	88	86.8
Location	Urban	54	98.1*	32	89.9
	Rural	233	88.7	56	84.2
Ownership	Public	240	88.2	54	88.8
	Private	47	101.5*	34	85.3

* Shows significant difference at 5% level of significance.

The results show that 10% of the P 6 learners and 13% of the S 3 learners did not report back to school. Genderwise, the proportion of P 6 girls (8%) who did not report back to school was significantly lower than that of boys (10.2%), that is, male learners were more affected than female learners. The proportion of P 6 learners in rural areas (11.3%) who did not return back to school was also significantly higher than that of urban areas (1.9%). While private primary schools gained 1.5% more P 6 learners at re-opening, 11.8% of the learners in public primary schools did not return back to school.

At S 3 class level, there was no significant variation in the proportion of learners who did not return back to school by gender, location or school ownership.

3.2.2 Reasons why some learners did not report back to school after the lockdown

In order to overcome the challenge of locating learners who had not yet reported back to school, their parents were interviewed on their behalf through phone calls.

TABLE 9: THE PROPORTION OF PARENTS WHO GAVE REASONS WHY THEIR CHILDREN DID NOT REPORT TO SCHOOL AFTER COVID-19 PANDEMIC LOCKDOWN

REASONS WHY LEARNERS DID NOT RETURN TO SCHOOL	PARENTS OF P 6 LEARNERS		PARENTS OF S 3 LEARNERS	
	N=352	PERCENT (%)	N=118	PERCENT (%)
Lack of tuition fees	137	38.9	48	40.7
Teenage pregnancy	63	17.9	36	30.5
Preference of casual labour to studies	49	14.0	14	11.9
Loss of interest in learning	47	13.4	8	6.8
Child marriages	35	9.9	27	22.9
Sickness of learners	27	7.7	5	4.2
Domestic violence (misunderstanding between parents)	9	2.6	0	0.0
Fear of contracting Covid-19	5	1.4	0	0.0

According to parents, the following are the reasons why their children did not report back to school after the lockdown;

- Lack of tuition fees was a hindrance to about 40% of both P 6 and S 3 learners who did not return to school.
- Teenage pregnancy affected 18% of P 6 and 30.5% of S 3 girls who did not return to school; while child marriages hindered 10% of P 6 and 23% of S 3 learners who did not return to school.
- Preference for casual labour over studies hindered 14% of P 6 and 12% of S 3 learners who did not return to school.
- Loss of interest in learning affected 13% of P 6 and 7% of S 3 learners who did not return to school.
- Other challenges included learners becoming sick, domestic violence and fear of contracting Covid-19.

3.2.3 Parents' plan for children who did not report back to school after lockdown

TABLE 10: THE PROPORTION OF PARENTS, BY THEIR PLAN FOR CHILDREN WHO DID NOT REPORT BACK TO SCHOOL AFTER LOCKDOWN

FUTURE PLANS	PARENTS OF P 6 LEARNERS		PARENTS OF S 3 LEARNERS	
	N=352	PERCENT (%)	N=118	PERCENT (%)
Take the child back to school when finances are available	171	48.6	55	46.6
Daughter to go back to school after delivery	66	18.8	34	28.8
Take child back to school after counselling	27	7.7	12	10.2
Take the child for specialized courses (skilling)	45	12.8	12	10.2

Although 8.5% of parents of P 6 learners and 10.2% of parents of S 3 learners did not have any plan at all for their children's return to school, the majority of them reportedly had some plan. The plans include;

- (a) Parents who lacked tuition fees for their children, reported that they planned to take the learners back to school when finances become available.
- (b) Parents whose daughters got pregnant, planned to take them back to school after delivery.
- (c) Parents whose children preferred casual labour to formal studies, planned to take the children for skilling courses.
- (d) Parents whose children lost interest in formal studies, planned to counsel them in order to convince them to go back to school.

3.2.4 Challenges faced by learners during lockdown

TABLE 11: THE PROPORTION OF SCHOOLS, BY THE CHALLENGES FACED BY THEIR LEARNERS DURING LOCKDOWN

CHALLENGES	PRIMARY SCHOOLS		SECONDARY SCHOOLS	
	N=269	PERCENT (%)	N=83	PERCENT (%)
Child labour	207	77.0	66	79.5
Sexual harassment/ child marriages	168	62.5	65	78.3
Domestic violence	148	55.0	60	72.3
Rape of girls	55	20.5	27	32.5
Inadequate finances to cater for family needs	46	17.1	28	33.7
Inadequate parental support to girls	43	16.0	17	20.5
Arrests by police officers	38	14.1	31	37.4
Kidnaps	26	9.7	7	8.4
Idleness/ joining bad peer groups	22	8.2	14	16.7
Teenage pregnancy	20	7.4	11	13.3
Inability to worship (i.e., prayers)	9	3.4	3	3.6
Uncertainty about re-opening date	4	1.5	4	4.8

In at least 55% of primary schools and at least 72% of secondary schools, learners reported that they faced the following challenges;

- (a) *Child labour* - the learners reported that they were over-worked (got tired). They suggested that the amount of domestic work given to them should be regulated.
- (b) *Domestic violence* - which includes disputes between parents/guardians and their use of abusive language, corporal punishments and others on the children. Some of them became traumatized. They suggested that parents should peacefully settle their disputes and also guide and counsel their children instead of abusing them.
- (c) *Sexual harassment by relatives and other community members and occurrences of child marriages*. They suggested that learners should be empowered to report child abuse and domestic violence to police.

The other challenges reported by those learners in less than 40% of the schools were;

- (a) *Inadequate finances to cater for family needs* - they suggested that government should support citizens with relief e.g., funds and food.
- (b) *Inadequate parental support to girls/teenage pregnancy* - they suggested that parents should provide for the girls.
- (c) *Kidnaps/arrests by police officers/idleness/joining bad peer groups* - they suggested that teenagers should be sensitised by parents and or community leaders against the dangers of joining bad groups.
- (d) *Inability to worship and uncertainty about schools re-opening date*.

3.2.5 The good things learners who reported back to school learnt at home during the lockdown

TABLE 12: THE PROPORTION OF SCHOOLS, BY THE GOOD THINGS LEARNERS LEARNT AT HOME DURING LOCKDOWN

GOOD THINGS LEARNT	PRIMARY SCHOOLS		SECONDARY SCHOOLS	
	N=269	PERCENT (%)	N=83	PERCENT (%)
Acquired basic skills such as baking	241	89.6	81	97.6
Experienced positive behavioural change	148	55.0	47	56.6
Acquired new knowledge	111	41.3	44	53.0
Experienced attitude change i.e., mind set	66	24.5	29	34.9
Acquired entrepreneurs skills	8	3.0	9	10.8

In at least 90% of the primary and secondary schools, the learners reported that they acquired basic skills relevant to house chores like cleaning, cooking and washing, and baking during the lockdown.

The learners in over half of the primary and secondary schools also did say that they experienced positive behavioural change during the lockdown. Learners in some of the schools reportedly acquired new knowledge, experienced positive attitude (mind set) or entrepreneurship skills.

3.3 Objective Three: To establish the effects of COVID-19 pandemic on teachers during the lockdown

3.3.1 Have all the teachers returned to school?

TABLE 13: THE PROPORTION OF TEACHERS WHO REPORTED BACK TO SCHOOL AFTER THE COVID – 19 PANDEMIC LOCKDOWN

FACTOR	CATEGORY	NUMBER OF PRIMARY SCHOOLS	P 6 TEACHERS (%)	NUMBER OF SECONDARY SCHOOLS	S 3 TEACHERS (%)
Overall return rate	All	287	104.7	88	103.2
Gender	Male	287	102.4	88	102.4
	Female	287	108.5	88	107.6
Location	Urban	54	101.7	32	96.6
	Rural	233	105.5	56	111.5
Ownership	Public	240	107.4*	54	107.8
	Private	47	92.1	34	96.6

* Shows significant difference at 5% level of significance.

Overall, results show that more teachers in public schools reported back to teach P 6 and S 3 learners at re-opening i.e., 7.4% more at P 6 and 7.8% more at S 3. This is attributed to the fact that some of the teachers of lower classes were also summoned back to school to handle the extra streams created for P 6 and S 3 learners as a result of the requirement for social distancing. However, 8% of the P 6 teachers and 3.4% of the S 3 teachers in private schools did not report back to school. The difference was significant amongst P 6 teachers, by school ownership. While secondary schools in rural areas had 11.5% more teachers of S 3 learners reporting back at re-opening, 3.4% of the teachers in urban schools did not report back to school.

3.3.2 The reasons given by the teachers who did not report back to teach after lockdown

A total of 47 teachers of P 6 class and 23 teachers of S 3 class who had not reported back to teach after lockdown were interviewed and majority of them said that they either had no pay or the pay was inadequate to sustain their financial needs. They observed that the income generating activities they had established became a better alternative in terms of earnings.

3.3.3 Whether teachers who reported back to school experienced any challenges during the lockdown

Teachers of P 6 and S 3 classes who reported back to school after the lockdown were also interviewed in order to elicit their views on how the COVID-19 pandemic had affected them.

TABLE 14: THE PROPORTION OF TEACHERS, BY CHALLENGES FACED DURING THE LOCKDOWN

CHALLENGES FACED	P 6 TEACHERS		S 3 TEACHERS	
	N=519	PERCENT (%)	N=165	PERCENT (%)
No salary/Inability to provide for family and friends	237	46.8	110	66.7
No allowances	189	37.4	99	60.0
Unable to visit friends and relatives because of high transport costs	274	54.2	75	45.5
Psychological torture due to engagement in low class enterprise underated by community members	16	3.2	13	7.9
Unruly children/daughter eloped	31	6.1	13	7.9
Idleness/boredom	30	5.9	13	7.9
Marriage break down (disputes)	51	10.1	10	6.1
Forgetfulness of subject content/Loss of interest in teaching	18	3.6	3	1.8

A total of 519 teachers of P 6 class and 165 of S 3 class who reported back to school were interviewed. Nearly all of them (97.5% of P 6 and 100% of S 3) reported that they faced some form of challenges during the lockdown. The teachers who did not report back to school also experienced similar challenges.

Teachers in the majority of primary and secondary schools experienced financial distress and social challenges:

- About 47% of those teachers of P 6 class and two-thirds (66.7%) of those teachers of S 3 class experienced inability to provide for their family and friends, because there was no salary for teachers in private schools and also the lack of allowances of any kind for those teachers in public schools.
- Because of high transport costs and other restrictions, about a half of the teachers did say that they were not able to make visits to any person so as to relieve the stress of the pandemic.

The affected teachers suggested that the challenge of financial distress could have been mitigated through:

- Government giving teachers interest free loans.
- Government supporting teachers in private schools with relief in form of rent, food stuff and medication or allowing teachers to access a percentage of their savings with NSSF/pension funds.
- Private schools continuing to pay salaries to teachers or provide relief in form of rent, food stuff and medication.

3.3.4 The good things experienced by the teachers who reported back to school after the lockdown

TABLE 15: THE PROPORTION OF TEACHERS WHO REPORTED BACK TO SCHOOL, BY THE GOOD THINGS THEY EXPERIENCED DURING THE LOCK DOWN

ACHIEVEMENTS	P 6 TEACHERS		S 3 TEACHERS	
	N=519	PERCENT (%)	N=165	PERCENT (%)
Had enough time with family/community/ self	404	77.8	121	73.3
Started income generating activities	299	57.6	108	65.5
Became creative (innovative)	204	39.3	63	38.2
Had enough time for their side business	150	28.9	52	31.5
Received support from family members, friends and school authority	105	20.2	31	18.9
Received support from government/NGO	49	9.4	6	3.6

Although teachers experienced a number of challenges, they also benefited in a number of ways, among which are the following:

- Having enough time with the family/community/self - 77.8% P 6 teachers and 73.3% S 3 teachers.
- Starting income generating activities - 57.6% P 6 teachers and 65.5% S 3 teachers.
- Becoming creative (innovative) - 39.3% P 6 teachers and 38.2% S 3 teachers.
- Having enough time for their side businesses - 28.9% P 6 teachers and 31.5% S 3 teachers.
- Receiving support from family members, friends, school authority and government or Non-Governmental Organisations – 29.6% P 6 teachers and 22.5% S 3 teachers.

3.3.5 What will happen to the income generating activities now that the schools are fully open?

TABLE 16: THE PROPORTION OF TEACHERS, BY HOW THEY WOULD SUSTAIN THE INCOME GENERATING ACTIVITIES THEY HAD ESTABLISHED

WAYS OF BUSINESS SUSTAINABILITY	P 6 TEACHERS		S 3 TEACHERS	
	N=299	PERCENT (%)	N=108	PERCENT (%)
Hire someone to run it	118	39.5	48	44.4
Hand over to a family member	97	32.4	31	28.7
Attend to it when not engaged at school	46	15.4	16	14.8

The results show that more than half of the P 6 and S 3 teachers started income generating activities during the lockdown. The challenge was how the teachers would sustain the businesses while at school. Teachers reported that they would sustain the businesses in one or more of these three ways:

- Hire someone to run it
- Handover business to a family member
- Attend to it when not engaged at school

4.0 RECOMMENDATIONS

RECOMMENDATIONS	RESPONSIBILITY CENTRE
A follow up study needs to be done to find out why there was a decline in P 6 learners' achievement whereas there was an improvement for the S 3 learners.	UNEB
Sensitise the parents on the need to regulate the amount of work given to children so that children getx time to learn.	MoES/Local Councils
Assist teachers on striking a balance between teaching and sustaining the established income generating activites.	MoES/Headteachers/DEO/DIS
Sensitise the youth about the consequences of involvement in risky behaviours because they are not above the law.	Parents/Headteachers
Provide psycho-social support and counselling to the youth who were arrested, sexually harassed and those who experienced domestic violence and child labour.	MoES/Religious leaders/ Police (Family and Child Protection Department)

Appendix 1: Map of Uganda showing the sub-regions



Source: Status of Older Persons in Uganda Making the invisible visible, UBOS 2019

NOTE: This map does not reflect a position by UNEB on the legal status of any country or territory or the delimitation of any frontiers.



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