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CHAPTER 6

School contexts of teaching and learning during COVID-19

HIGHLIGHTS

Principals were asked to indicate how the pandemic affected schooling, teaching and learning. There were considerable commonalities in principals' responses across countries.

- The COVID-19 pandemic resulted in school closures across five of the six countries for varying lengths of time (Table 6.2).
- Overwhelmingly, principals reported they expected that the pandemic would have a negative impact on academic outcomes for all students (Table 6.3).
- Most schools did not offer remote learning programs universally. In many countries, teachers remained onsite during the entire pandemic period (Table 6.4).
- Changes to school policies and procedures mostly focused on increased hygiene and cleaning. Policies that related to supplementing face-to-face teaching with remote instruction, or the continuation of remote instruction during the pandemic were less common (Table 6.5).

- The key barriers to remote learning were student access to digital devices or to the internet (Table 6.6).
- In preparing for remote instruction, principals were most likely to report that they provided staff access to digital devices (Table 6.7).
- Academic progress and students' health and wellbeing were key concerns for principals (Table 6.10).

With school closures impacting many countries, teaching and learning needed to adapt in order to support students during and after closures.

- Although a limited proportion of students had access to live virtual lessons or digital materials, many schools suggested educational TV and radio to students during the pandemic (Table 6.11).
- To minimise the impact on teaching and learning, schools most commonly engaged the broader community and increased communication between staff and students (Table 6.12).
- Monitoring students' health and safety was the most common provision when schools returned to regular teaching (Table 6.13).
- Throughout the pandemic, schools undertook a number of activities to support student health and wellbeing, mainly checking in with students and contacting families (Table 6.14).

Teachers were expected to maintain student assessment and monitoring and provide feedback to students during the pandemic.

- Most schools expected and required teachers to continue to assess students (Table 6.15).
- Consistently, teachers were expected and required to provide feedback to students about their schoolwork (Table 6.16).

INTRODUCTION

The school environment and the actions taken by the schools in response to the pandemic, can exaggerate or insulate students from the COVID-19 disruption. One of the four overarching goals of the MILO project was to identify the impact of different distance learning mechanisms used to remediate the learning disruption generated by COVID-19.

This chapter explores the school-level contexts in the six countries that participated in MILO and the effects of the COVID-19 disruption on schools. The data for this chapter were collected mainly from school principals who completed the MILO School Questionnaire, as described in Chapter 1. This chapter looks at the COVID-19 disruption on schools, defined for each country as shown in Table 6.1.

Focusing on these periods, this chapter examines the school environment, teaching and learning and student assessment and monitoring. The information presented in this chapter complements the national contexts discussed in Chapter 5 and the student contexts discussed in Chapter 7.

TABLE 6.1 COVID-19 disruption periods for MILO countries

Country	Defined COVID-19 disruption period
Burkina Faso	14 March – 31 May 2020
Burundi	January – 28 February 2021
Côte d'Ivoire	20 March – mid-May
Kenya	March 2020 – January 2021
Senegal	Mid-March – late-May 2020
Zambia	Early March – 20 September 2020

THE COVID-19 DISRUPTION ON SCHOOLS

While schools in Burundi did not close in response to the pandemic, school closures in the other five MILO countries affected all or almost all schools. Principals were asked to specify the length of time their schools were closed, from the beginning of 2020 due to COVID-19 or another emergency (Table 6.2). School closures were defined as when the school was closed to the majority of students.

Principals' responses regarding the duration of their school closures were largely consistent with the information gathered from the System Questionnaire. Kenya experienced longer school closures; 79% of students attended schools that was reportedly closed for six months or more.¹² In other countries, schools tended to be closed for up to three months, although 28% students in Burkina Faso, 41% in Zambia and 37% in Senegal attended schools that closed for three to six months.

Twenty-nine per cent of students in Burkina Faso, 23% in Senegal, 20% in Côte d'Ivoire, 16% in Zambia and 12% in Kenya attended schools where the principal reported school closures due to an

emergency not related to the pandemic, and these closures tended to be for up to three months.

Principals were asked whether they believed the experience of the COVID-19 disruption would have a negative, positive or no impact on academic outcomes. Overwhelmingly, the anticipated impact on academic outcomes was negative (Table 6.3), with the majority of students attending schools where the principal anticipated a negative impact on academic outcomes for *all students*. High-achieving students were considered slightly less at risk compared to other groups; 32% of students in Burundi, 55% in Senegal and 62% in Burkina Faso and Côte d'Ivoire attended schools where the principal expected a negative impact on this group. Comparatively, low-achieving students were more likely to be considered at risk, with almost all principals expecting a negative impact on this group.

Students in Burundi, where schools did not close, were least likely to attend a school where the principal expected a negative impact on academic outcomes. However, 47% and 44% of the students in Burundi attended schools where the principal expected there to be a negative impact on low-income and special needs students respectively.

TABLE 6.2 Principals' reports of the duration of school closures due to COVID-19 or other emergency

		Burkina Faso (Student %)	Burundi (Student %)	Côte d'Ivoire (Student %)	Kenya (Student %)	Senegal (Student %)	Zambia (Student %)	MILO Median (Student %)
Closed emergency NOT COVID-19	Remained open	71	100	80	89	77	83	82
	Up to 3 months	24	<1	19	4	17	8	17
	3-6 months	5	0	1	3	4	5	3
	6 months or more	0	0	0	5	2	3	1
Closed because of COVID-19	Remained open	5	100	4	2	4	1	4
	Up to 3 months	63	<1	86	2	49	47	49
	3-6 months	28	0	9	17	37	41	23
	6 months or more	3	0	1	79	10	10	7

Operational circumstances in schools that closed varied across the countries; however, common patterns can be identified, as shown in Table 6.4. Across the MILO countries, many students attended schools that continued to operate in some form. For example, 79% of students in Zambia and 66% in Senegal attended schools where the principal reported that some or all teachers remained onsite.

In the five countries that experienced school closures, schools closed to most students but often remained open to some students. Most commonly, schools remained open to students from selected grades. In Zambia, 69% of students attended schools that remained open to selected grades. Access to school was also frequently maintained for students with special needs

in Zambia, with 30% of students at a school where the principal reported this. Principals less frequently reported that their school stayed open specifically for students at risk or who were children of essential workers.

The System Questionnaire found that school closures affected most of the countries and national plans or policies provided remote learning options. However, across the MILO countries 21% of students attended schools where the principal reported offering remote learning programs to all students. Remote learning programs were most common in Côte d'Ivoire (43%) and Senegal (36%). This is consistent with other research suggesting that in many countries, students were not engaged in remote learning during school closures resulting from the pandemic (Reimers & Schleicher, 2020).

TABLE 6.3 Principals' reports of the expected impact of COVID-19 disruption on academic outcomes

Student groups	Impact	Burkina Faso (Student %)	Burundi (Student %)	Côte d'Ivoire (Student %)	Kenya (Student %)	Senegal (Student %)	Zambia (Student %)	MILO Median (Student %)
All students	Negative	93	39	86	95	90	94	91
	Positive	2	2	2	3	2	3	2
Target grade	Negative	88	38	83	95	64	93	85
	Positive	4	2	2	2	18	4	3
Low-achieving	Negative	92	39	85	89	84	92	87
	Positive	3	3	2	3	4	6	3
High-achieving	Negative	62	32	62	82	55	85	62
	Positive	6	2	4	6	12	4	5
Low-income	Negative	94	47	90	94	92	95	93
	Positive	2	4	2	2	2	3	2
Special needs	Negative	93	44	86	95	86	93	90
	Positive	2	4	2	1	5	4	3
Other first language (not language of instruction)	Negative	86	38	80	87	84	93	85
	Positive	2	3	4	2	2	2	2

Due to the nature of the pandemic, schools may have changed their policies to promote a safer environment for students, as shown in Table 6.5. Across the MILO countries, 97% of students attended schools where the principal

reported increased hygiene facilities and cleaning. Eighty-six per cent and 71% of students attended schools where there was a policy of social distancing between adults and between students respectively.

TABLE 6.4 Principals' reports on operational circumstances during COVID-19 disruption

Operational circumstances	Burkina Faso (Student %)	Burundi (Student %)	Côte d'Ivoire (Student %)	Kenya (Student %)	Senegal (Student %)	Zambia (Student %)	MILO Median (Student %)
Some or all teachers were onsite	44	86	50	24	66	79	58
School buildings remained open to students with special needs	17	92	18	3	30	12	18
School buildings remained open to students considered to be at risk	7	74	11	3	11	8	10
School buildings remained open to students of essential/critical workers	4	78	8	8	15	13	11
School buildings remained open to students from selected grade levels	31	92	13	24	50	69	41
A remote learning program was implemented to support all students	20	16	43	16	36	21	21

Note: This question was specific to those principals who reported their school had closed.

TABLE 6.5 Principals' reports on school policy changes following COVID-19

Policy changes	Burkina Faso (Student %)	Burundi (Student %)	Côte d'Ivoire (Student %)	Kenya (Student %)	Senegal (Student %)	Zambia (Student %)	MILO Median (Student %)
School starting times	35	17	71	40	70	90	55
Break times	24	20	63	50	66	91	56
Students attending fewer days	13	3	46	8	29	68	21
Increased hygiene facilities	91	88	92	99	96	97	94
Increased cleaning	88	88	95	97	95	97	95
Social distancing between students	56	41	94	64	78	96	71
Social distancing between adults	73	53	94	87	85	94	86
Less time spent inside	45	30	83	34	72	93	59
Continued remote learning option	23	9	42	15	34	35	28
Supplementing with remote learning	20	7	40	18	27	37	23

Principals reported changes to school policies and procedures related to supplementing face-to-face teaching with remote instruction or providing continued remote instruction. Twenty-three per cent and 28% of students attended schools where the principal reported either supplementing face-to-face teaching with remote instruction or continued remote learning options respectively. Such changes were most frequent in Côte d'Ivoire, Zambia and Senegal, and were least likely to occur in Burundi (where schools did not close). This is consistent with the operational circumstances reported in Table 6.4.

Unexpected school closures in developing countries are particularly problematic given there are already existing inequities in digital access that become further compounded (Khlaif & Salha, 2020). Principals experienced a number of barriers that limited their school's capacity to deliver remote instruction, as seen in Table 6.6. These barriers may explain the low proportion of students who attended schools with remote learning programs. Students in Burundi were least likely to attend a school where their principal reported barriers to remote instruction, probably due to the absence of school closures.

Across Burkina Faso, Côte d'Ivoire, Kenya, Senegal and Zambia, the most commonly reported barriers to providing remote instruction were that students lacked internet access and access to digital devices, with the majority of principals reporting that students lack of digital devices and/or internet access impacted their school's ability to provide remote instruction to a large extent. A lack of available teachers was the least commonly reported barrier in the five MILO countries.

Table 6.7 examines preparations for remote instruction. Of the six countries, students in Kenya were most likely to attend a school where the principal reported preparations for remote instruction, and that this was due to COVID-19. Across all countries, students were least likely to attend a school where the principal reported that students were trained in video communication or provided access to digital devices in preparing for remote instruction. Note that as indicated in Table 6.4, 21% of students attended schools where the principal reported that remote learning was implemented, and this was most common in Côte d'Ivoire, Senegal and Zambia (see Table 6.5).

TABLE 6.6 Principals' reports on barriers to providing remote instruction

Barriers to providing remote instruction	Burkina Faso (Student %)	Burundi (Student %)	Côte d'Ivoire (Student %)	Kenya (Student %)	Senegal (Student %)	Zambia (Student %)	MILO Median (Student %)
Inability to communicate	73	9	73	76	71	74	73
Students lack digital devices	81	25	84	83	86	80	82
Teachers lack digital devices	69	25	69	64	65	67	66
Students lack internet access	84	25	83	83	89	80	83
Teachers lack internet access	71	25	70	61	64	69	66
Lack of learning materials	77	33	73	74	72	75	74
Difficulty distributing hard-copy	81	24	75	80	77	78	77
Lack of available teachers	41	24	47	57	37	44	43
Lack of teacher experience	72	23	70	67	76	62	68
Concerns to provide equitable teaching	79	25	75	70	79	68	73

Note: This question was specific to those principals who reported their school had closed.

TABLE 6.7 Principals' reports of preparations for remote instruction

Preparations for remote instruction	Timing	Burkina Faso (Student %)	Burundi (Student %)	Côte d'Ivoire (Student %)	Kenya (Student %)	Senegal (Student %)	Zambia (Student %)	MILO Median (Student %)
Train students video communications	Yes, before COVID	0	0	1	2	2	1	1
	Yes, due to COVID	2	0	2	10	4	5	3
Adapt curriculum plans	Yes, before COVID	2	3	3	8	2	7	3
	Yes, due to COVID	7	2	18	20	17	26	18
Students access to digital devices	Yes, before COVID	1	0	3	10	2	4	2
	Yes, due to COVID	3	1	4	19	5	4	4
Staff access to digital devices	Yes, before COVID	1	0	2	16	3	4	2
	Yes, due to COVID	4	1	6	38	11	17	9
Plan for transition	Yes, before COVID	0	1	6	7	3	3	3
	Yes, due to COVID	7	2	10	32	13	24	12

STUDENT DISADVANTAGE

As highlighted in Chapter 5, school shutdowns disproportionately affect the most disadvantaged students (Di Pietro et al., 2020; Wagner & Warren, 2020; UNESCO, 2020b). For example, research suggests that children whose mother tongue is different from the language of instruction have relatively lower achievement (August et al., 2009; Mazawi, 1999; UNESCO, 2016).

Principals reported the number of students (in total and for the target grade) and estimated the percentage of students at their school whose heritage language was not the language of instruction, had special needs, were from low or high-income backgrounds, were of immigrant backgrounds, ethnic minority groups or from refugee backgrounds. This information is presented in Table 6.8.

Students were most likely to attend a school where the principal indicated that more than half the students were from low-income background homes or their heritage language was different from the language of instruction. The majority of principals reported that less than five per cent of students at their school were from a refugee or

internally displaced background, from an ethnic minority or from an immigrant background. Chapter 5 reported that national plans or policies across the MILO countries tended to emphasise support for students with special needs and students from socioeconomically disadvantaged backgrounds (see Table 5.2).

Other relevant factors for examining potential student disadvantage included the school's location (urban or regional area) and whether the school was private or public. The majority of students across the six countries attended a public school (as reported by their principal). In the MILO project, major urban areas are defined as locations of more than 100,000 and are referred to as 'urban'. Non-major urban and rural areas are towns and communities of fewer than 100,000 and for the purposes of this report are referred to as 'rural'. This definition is consistent with other international studies such as SEA-PLM (UNICEF & Southeast Asian Ministers of Education Organization [SEAMEO], 2020) and ICILS (Fraillon et al., 2020). The majority of students were from schools in rural areas, as can be seen in Table 6.9. Twenty-six per cent of students in Côte d'Ivoire and 29% in Senegal were from schools in larger urban areas.

The vast majority of students attended schools where the principal reported that they were concerned with students' academic process and

health and wellbeing to a large extent (Table 6.10). Principals were also almost universally concerned about their staff's and their own ability to cope.

TABLE 6.8 Principals' reports of groups of students within their school

Student groupings	Percentage within school	Burkina Faso (Student %)	Burundi (Student %)	Côte d'Ivoire (Student %)	Kenya (Student %)	Senegal (Student %)	Zambia (Student %)	MILO Median (Student %)
Heritage language	Less than 5%	5	30	5	41	6	37	18
	5 to 50%	3	14	8	12	3	24	10
	More than 50%	92	57	88	47	91	39	72
Special needs	Less than 5%	66	61	69	82	72	68	68
	5 to 50%	27	26	19	18	19	30	22
	More than 50%	7	13	12	0	9	2	8
Low income background	Less than 5%	11	20	8	2	9	3	8
	5 to 50%	42	41	32	24	36	17	34
	More than 50%	47	38	60	73	55	80	58
High income background	Less than 5%	55	39	55	77	52	69	55
	5 to 50%	33	45	36	22	37	30	34
	More than 50%	12	16	9	0	11	1	10
Immigrant background	Less than 5%	85	92	52	93	86	96	89
	5 to 50%	14	7	40	5	13	4	10
	More than 50%	1	1	8	2	1	1	1
Ethnic minority	Less than 5%	85	93	74	83	80	81	82
	5 to 50%	14	7	24	15	19	13	15
	More than 50%	1	0	2	2	2	6	2
Refugee	Less than 5%	85	87	93	90	92	98	91
	5 to 50%	13	11	7	8	7	1	8
	More than 50%	1	1	0	1	1	1	1

TABLE 6.9 School location

Location	Burkina Faso (Student %)	Burundi (Student %)	Côte d'Ivoire (Student %)	Kenya (Student %)	Senegal (Student %)	Zambia (Student %)	MILO Median (Student %)
Rural	87	96	74	93	71	91	89
Urban	13	4	26	7	29	9	11

TABLE 6.10 Principals' reports of concerns following COVID-19

Principals' concerns	Burkina Faso (Student %)	Burundi (Student %)	Côte d'Ivoire (Student %)	Kenya (Student %)	Senegal (Student %)	Zambia (Student %)	MILO Median (Student %)
Own ability to cope	93	85	93	98	88	95	93
Staff ability to cope	93	87	94	95	90	95	94
Students' health and wellbeing	97	90	96	93	95	94	95
Students' academic progress	96	89	97	94	96	96	96

TEACHING AND LEARNING

Teaching and learning during the pandemic involved providing resources for students when schools were closed and implementing strategies to minimise the impact of closures. As students returned to schools, activities and methods for ensuring the health and safety of students and staff were implemented.

It is expected that schools where students have access to better resources for learning are better equipped to deal with the COVID-19 disruption. Access to digital devices and the internet, for example, makes online teaching a possibility and allows students to interact with their teachers and peers in a safe way.

Table 6.11 shows the proportion of students who had access to various resources during the pandemic. Resources could be made available (or suggested) for all or some students, depending on school circumstances. More than half of students attended schools where the principal reported that educational TV or radio was suggested as a resource for students; 81% of students in Côte d'Ivoire and 72% in Senegal attended schools where this was reported by the principal.

Two of the reported main barriers to remote learning were students' lack of access to the internet and/or lack of access to digital devices (see Table 6.6). Across the MILO countries, nine per cent of students attended schools where the principal reported that live virtual lessons or digital materials were available to students.

“Teaching and learning during the pandemic involved providing resources for students when schools were closed and implementing strategies to minimise the impact of closures. As students returned to schools, activities and methods for ensuring the health and safety of students and staff were implemented.”

Furthermore, in countries where this was slightly more likely, it tended to be for some and not all students (likely those with access to devices and/or the internet).

Strategies used to minimise the impact of the pandemic on teaching and learning are listed in Table 6.12. The most common were engaging the broader community and communication between staff and students; 79% of students attended schools where the principal reported these strategies were quite or very important.

Strategies to minimise the impact of the pandemic on teaching and learning were prominent in countries with school closures.

However, even in Burundi about a quarter of students attended schools that implemented pandemic-related strategies. The most common strategies in Burundi were communication

between staff and students, and families; engaging the broader community; additional staff development and distributing learning materials.

TABLE 6.11 Principals' reports on resources for students during COVID-19

Resources	Availability	Burkina Faso (Student %)	Burundi (Student %)	Côte d'Ivoire (Student %)	Kenya (Student %)	Senegal (Student %)	Zambia (Student %)	MILO Median (Student %)
Suggest educational TV/radio	Yes, all students	29	16	53	10	27	17	22
	Yes, some students	27	8	28	42	45	24	28
Hard-copies	Yes, all students	18	26	13	7	18	11	15
	Yes, some students	19	6	10	29	37	46	24
One-to-one support	Yes, all students	2	7	3	3	4	1	3
	Yes, some students	4	2	10	24	21	9	9
Digital materials	Yes, all students	2	3	4	1	3	1	3
	Yes, some students	5	0	3	14	15	6	5
Live virtual lessons	Yes, all students	4	25	8	1	2	5	4
	Yes, some students	4	1	4	9	12	6	5

TABLE 6.12 Principals' reports on strategies minimising impact on teaching and learning

Strategies	Burkina Faso (Student %)	Burundi (Student %)	Côte d'Ivoire (Student %)	Kenya (Student %)	Senegal (Student %)	Zambia (Student %)	MILO Median (Student %)
Encourage educational TV/radio	61	9	61	62	50	56	58
Communication between staff & students	79	25	80	74	81	77	78
Communication between staff & families	56	25	54	39	43	46	44
Engaging broader community	83	25	81	75	82	77	79
Additional staff professional development	54	25	52	37	38	43	41
Distributing learning materials	63	25	66	55	55	56	56
Digital resources for teachers or students	72	17	65	68	61	63	64

TABLE 6.13 Principals' reports on provisions to facilitate regular teaching following COVID-19 disruption

Policy change	Burkina Faso (Student %)	Burundi (Student %)	Côte d'Ivoire (Student %)	Kenya (Student %)	Senegal (Student %)	Zambia (Student %)	MILO Median (Student %)
Additional monitoring of students' health and safety	73	91	83	56	89	81	82
Offer additional support families regarding student wellbeing	44	60	49	31	57	46	48
Provide nutrition for students (eg. Lunch programs)	57	21	34	19	26	14	23
Contact agencies that provide food and other essentials to assist families who need help	9	15	16	17	18	15	15
Spend time going over material previously covered prior or during the disruption	76	58	82	50	87	70	73
Provide extra academic support only to students who have fallen behind	61	26	54	39	63	48	51
Targeted teaching directed to learning areas where student achievement had not progressed to the desired extent	61	36	64	54	74	72	63
Provision of supplementary staff or tutoring to assist in students judged to require additional support	39	25	29	31	46	45	35
Require or encourage more students to repeat a grade level	19	10	21	9	26	48	20

Schools also made provisions for the return to regular teaching following the disruption (Table 6.13). The most common was monitoring students' health and safety; 82% of students attended schools where the principal reported this. Uptake of this provision ranged across the countries, from 56% of students in Kenya to 91% of students in Burundi. The least common provisions for all six countries were contact agencies that could assist families who need help (with food or other essentials) and require or encourage students to repeat a grade level.

Throughout the pandemic, schools undertook activities to support student health and wellbeing. Table 6.14 shows the proportion of students

attending schools where the principal reported these activities. The most common activity was for schools to check-in with students and contact families; 79% and 73% of students attended schools where the principal reported these activities respectively. Students in Senegal, Côte d'Ivoire and Burundi were most likely to attend schools that checked-in with students. Students in Zambia, Côte d'Ivoire and Senegal were most likely to attend schools that contacted families. While home visits were a less frequent activity to support students' health and wellbeing, they were not uncommon. Twenty-three per cent of students across the MILO countries attended schools that reported home visits.

TABLE 6.14 Principals' reports of activities to support student health and wellbeing

Student health and wellbeing activities	Burkina Faso (Student %)	Burundi (Student %)	Côte d'Ivoire (Student %)	Kenya (Student %)	Senegal (Student %)	Zambia (Student %)	MILO Median (Student %)
Check in with students	75	83	84	49	85	74	79
Specific support to students	43	56	53	41	61	69	55
Contact families	58	68	80	57	78	84	73
Provide support from counsellors	25	42	40	42	29	68	41
Home visits	19	18	38	23	23	45	23

ASSESSMENT AND MONITORING DURING THE COVID-19 DISRUPTION

The need to assess learning is heightened following an emergency, as there is more risk of unequal learning progress outside of normal schooling (Reimers & Schleicher, 2020). Classroom and school assessments of student learning during and after emergencies are crucial for guiding education response and recovery, helping identify learning progress, learning loss and learner needs (INEE, 2010; Reimers & Schleicher, 2020). The information garnered from assessments can structure activities and programs to progress learning as the most acute phase of an emergency subsides (Belisle et al., 2016).

Chapter 5 reported that most countries rescheduled assessments and adjusted their content (see Table 5.7). Principals reported on teachers' assessments of student learning during the disruption, feedback to students during the disruption and what impact they expected the pandemic would have on achievement on key groups of students. As shown in Table 6.15, these methods varied substantially across the MILO countries. Most principals reported that each type of assessment, other than online tests, was expected, with around half of students attending schools where the assessments were both expected and required.

The majority of students in Burundi, where schools did not close, attended schools where the principal reported that teachers were expected and required to undertake each of the assessment methods listed, with the exception of online tests. Students in Zambia were also likely to attend a school where the principal reported that the assessment methods were expected and required, again with the exception of online tests. Students in Kenya and Burkina Faso were less likely to attend a school where the principal reported that the assessments were expected and required.

Consistent with Table 6.15 which showed that schools in Burundi and Zambia were mostly likely to expect and require teacher assessment of students, Table 6.16 shows that students in Burundi and Zambia were most likely to attend schools where feedback to students was expected and required, particularly around student schoolwork. Eighty per cent of students in Senegal and 73% in Côte d'Ivoire attended schools where the principal reported that feedback on student schoolwork was expected, but for 27% of these students in Senegal and 23% in Côte d'Ivoire it was not required.

TABLE 6.15 Principals' reports of teachers' assessments of student learning during the disruption

Teacher assessment	Expectation	Burkina Faso (Student %)	Burundi (Student %)	Côte d'Ivoire (Student %)	Kenya (Student %)	Senegal (Student %)	Zambia (Student %)	MILO Median (Student %)
Formative or diagnostic	Expected AND required	38	83	49	31	53	75	51
	Expected NOT required	26	7	21	23	24	8	22
Summative	Expected AND required	42	83	53	36	49	77	51
	Expected NOT required	28	7	16	17	26	7	16
National/regional testing	Expected AND required	44	78	42	29	53	65	49
	Expected NOT required	25	6	24	10	20	9	15
Evaluation of student work	Expected AND required	41	83	37	37	47	67	44
	Expected NOT required	27	7	27	18	29	10	22
Online tests	Expected AND required	5	32	8	23	6	21	15
	Expected NOT required	6	6	16	14	20	8	11
Paper-based tests	Expected AND required	39	82	47	29	52	68	49
	Expected NOT required	20	4	20	22	27	7	20
Performance and practical	Expected AND required	32	77	40	32	47	71	43
	Expected NOT required	27	9	23	15	28	7	19
Keep progress records	Expected AND required	37	86	54	48	49	84	51
	Expected NOT required	30	5	24	13	30	2	19

TABLE 6.16 Principals' reports of expectations for feedback to students

Teacher feedback	Expectation	Burkina Faso (Student %)	Burundi (Student %)	Côte d'Ivoire (Student %)	Kenya (Student %)	Senegal (Student %)	Zambia (Student %)	MILO Median (Student %)
Student schoolwork	Expected AND required	42	84	50	47	53	80	51
	Expected NOT required	23	7	23	14	27	3	19
Informal to parents/guardians	Expected AND required	33	63	38	36	33	68	37
	Expected NOT required	29	15	31	22	37	12	25
Formal report to parents/guardians	Expected AND required	32	69	44	43	35	74	43
	Expected NOT required	30	13	28	13	32	9	20

Endnotes

- 1 The proportion of children and young learners ... at the end of primary ... achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex (United Nations, 2015).
- 2 In 2016 for Zambia
- 3 Contextual data from the historical population for Zambia was not available in a format suitable for direct comparisons of populations. Some contextual data was not available from the Kenyan historical assessment.
- 4 The GPF advisory group on alignment was a working group comprised of psychometricians and subject matter experts who contributed to the development of the Global Proficiency Framework in 2020. The group was convened to formulate a set of alignment criteria to allow assessments to be compared to the GPF in order to determine their suitability for evaluating and reporting against SDG 4.1.1. The alignment criteria are outlined in detail in: USAID, UIS, UK Aid et al. (2020) *Policy Linking Toolkit for Measuring Global Learning Outcomes – Linking assessments to the Global Proficiency Framework*.
- 5 From SDG 4.1.1 Review Panel: March 2021.
- 6 These items were reproduced with permission from CONFEMEN.
- 7 For the purposes of AMPL, this item was classified as “Retrieve information” rather than “Decoding” as consistent with the GPF for reading (USAID et al, 2020a) which lists matching a given word to an illustration as an example of retrieving information.
- 8 The four French-speaking countries were Burkina Faso, Burundi, Côte D'Ivoire and Senegal.
- 9 These items are used with permission from CONFEMEN.
- 10 Zambia's historical assessment was conducted in 2016. All other countries' historical assessments were conducted in 2019.
- 11 Historical results are not reported for Kenya since the 2019 assessment of English in Kenya did not contain a sufficient number of reading comprehension item to align with the reading constructs within the GPF.
- 12 In the MILO project, students were the primary sampled unit. All results from the School Questionnaire are reported using student weights that are representative of the population. Therefore all results from school principals need to be interpreted in numbers of students.
- 13 There is no consensus among researchers and practitioners on which are the best indicators to operationalise SES. Typical children SES indicators are parents' occupation and education level, household income and home possessions. For a review of SES indicators used in educational research and other disciplines such as health, economics and sociology see Osses et al. (forthcoming).
- 14 Results for Kenya have been excluded based on data validation issues
- 15 The population chosen by countries to report against varied from Grade 5 to Grade 7.
- 16 A wealth index for Kenyan students was computed based on common items from the historical assessment and the AMPL. Comparisons for boys over time revealed higher scores on the wealth index in the 2021 population in comparison to the historical population.
- 17 For further information on different learning approaches and the benefits, considerations and enabling conditions, see for example Dabrowski et al. (2020).
- 18 For further recommendations relating to education in emergencies, see the Policy Monitoring tool developed for building resilient education systems (Tarricone et al., 2021).
- 19 Magnitude of item by gender interaction estimates from a facet model. See PISA 2006 Technical Report (OECD, 2009a).
- 20 'Not reached' items were defined as all consecutive missing values at the end of the test, except the first missing value of the missing series which was coded as 'embedded missing' i.e. coded the same as other items that were presented to the student but which did not receive a response. Omitting the 'not reached' items from the item calibration ensures the item difficulties not to be over-estimated.
- 21 The psychometric properties of the reading items administered in Burundi was unexpectedly inconsistent with those of the other countries. In particular, the response patterns in nearly all of the reading items was consistent with high rates of guessing and resulted in very low discrimination. It was therefore decided to exclude Burundi from the international reading item calibration. Burundi student reading proficiency estimations were subsequently based on the international calibration.
- 22 Expected a-posteriori/plausible value (EAP/PV) reliability (Adams, 2005).
- 23 A two-dimensional model with Quadrature estimation with 40 nodes was used.
- 24 So-called weighted likelihood estimates (WLEs) were used as ability estimates in this case (Warm, 1989).
- 25 Conceptual background and application of macros with examples are described in the PISA Data Analysis Manual SPSS®, 2nd edn (OECD, 2009b).