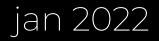
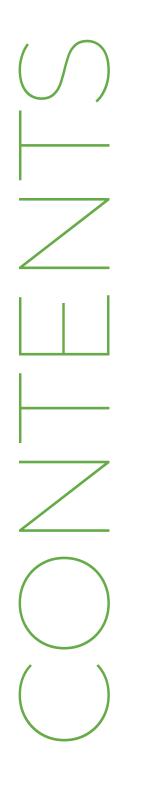
Diagnostics Assessment Framework

Learning Recovery (COVID-19)





01. Executive Summary

02.

Context: why diagnostics

03.

What needs to be assessed

04.

Learning diagnostics

05.

References

06.

Annexures

The onset of COVID-19 and the continued, prolonged school closures have significantly impacted students' learning across the globe. In Pakistan, student learning prior to the pandemic was already substantially low and COVID-19 has worsened the existing learning levels.

School systems across the globe are now attempting to recover their students learning and Pakistan's education system should follow a similar path. Pakistani classrooms cannot operate on a business-as-usual trajectory but instead a deliberate intervention must be made to reorganize and reorient classroom instruction keeping students' learning levels at the center. This Learning Assessment Framework, which presents an outline on identifying the learning lost by assessing foundational student learning outcomes in specific grades, has been designed keeping this context in mind.

CONTEXT

This section lays out the need for Pakistani policy-makers and practitioners to focus on diagnosing learning loss for remediation in the short and medium-term

The onset of COVID-19 and the continued, prolonged school closures have significantly impacted students' learning across the globe. In developing countries like Pakistan, student learning prior to the pandemic was already substantially low and COVID-19 worsened the existing learning levels. School systems across the globe are now attempting to recover students' learning and Pakistan's school system should follow a similar path.

Pakistani classrooms cannot operate on a business-as-usual trajectory but, instead, a deliberate intervention must be made to reorganize and reorient classroom instruction, keeping students learning as the central focus and goal of all efforts. This Framework proposes to identify students' current learning levels in prioritized student learning outcomes (SLOs) for specific grades; knowing where students stand in critical outcomes can help isolate topics and SLOs where students are struggling and subsequently inform schools' remediation policy.

To recover student learning, it is critical to identify what learning has been lost, which begs the question: how much learning has been lost? International research has just begun to evaluate the magnitude of lost learning but a few things are clear: i) The brunt has fallen on low and low-middle income countries where educational quality was already very low; prior to COVID-19, only 1 out of 10 children in low-income countries was able to read a simple story by the age of ten in comparison to 9 out of 10 children in high-income countries (World Bank, 2019). ii) The experiment with remote learning has not been very successful as most remote learning interventions, especially in low-income countries, have lacked a rigorous monitoring mechanism to evaluate children's learning (Conto et. al, 2021); additionally, these interventions have relied on parental engagement and availability of learning materials, both factors that often vary based on household income; for example, in Punjab (Pakistan), 90% of the poorest children live in households without even one child-oriented book (Brossard et al., 2020; Pershad et. al, 2020). As a result, learning has reduced across the globe (McKinsey, 2021; Brookings, 2020) and in Pakistan (ASER, 2021; CGD, 2021).

A key concern that we must grapple with is that these learning losses accumulate over time even after schools resume. There is local evidence of this possibility: research on the fallout of the 2005 earthquake in Pakistan revealed that even after schools reopened, children aged 3-11 scored significantly worse on academic tests (Andrabi et. al, 2021). One potential cause is that when schools reopen and operate as business-as-usual, the curriculum and instruction continue to be misaligned with students' actual learning needs (Angrist et. al, 2021); this leads to compounding the child's learning deficits across grades. There is also evidence that these deficits are distributed unequally, skewed towards struggling students and students from poorest households (Conto et. al, 2021). It is imperative, therefore, that education departments invest and prioritize reorganizing curriculum and instruction and the first part of this task is to design and conduct a diagnostic assessment. The purpose of the proposed diagnostic assessment will be to a) identify students' existing learning levels in prioritized SLOs for specific grades, and b) guide provinces to identify topics and SLOs where students have no/little mastery, which schools can then choose to remediate.

The assessment will assess foundational student learning outcomes (SLOs) for English, Math, Urdu, and Science in Grades 3, 4, 6 and 7. The rationale for selecting these grades is that:

Early primary grades offer a greater chance to bridge learning gaps [Grades 3 & 4]. We know that:

- Younger students were affected more by COVID-19 than older students [ASER 2021; McKinsey 2021; Pratham 2021; CGD Blog 2021]

- A strong foundation in mathematics and reading (in both Urdu and English) during the early grades is key to future success in Mathematics and English, which is also instrumental in the development of workplace skills and knowledge [data on current learning levels in English and Math is present in Annexure A] Grades that are transition points and without the pressure of board exams present greater flexibility of reorganizing instruction based on students' learning levels [Grade 6 and Grade 7]

For each of these four grades, specific topics and SLOs were chosen for the assessment.

This selection process was based on:

Reviewing topics & SLOs identified by wellknown institutions that have worked on/assessed foundational literacy and numeracy skills (ASER, Pakistan; Pratham, India; Early Grade Reading Assessment; Early Grade Mathematics Assessment)

> Topics & SLOs from previous grade(s) critical for current grade-level mastery

03

Results of the March 2020 Grade 5 & Grade 8 Science and Math board exams conducted by FDE in all government schools in Islamabad, the Sindh Achievement Test 2016-17, and the Punjab Examination Commission's Exam Analysis Report 2019, helped identify topics that majority of the students struggled at

> Prioritizing topics and SLOs where student performance can be gauged through oral assessment and those that had the least assessor variability

04

Note: SLOs selected for Grade 3 and Grade 4 constitute foundational SLOs; students in Grade 6 and 7 will also be assessed on these foundational SLOs in English, Math, Urdu & Science alongside additional SLOs critical for their grade-level mastery.

WHAT NEEDS TO BE ASSESSED

Step 1: Centering assessment framework on developing foundational skills

Early years are crucial for developing children's building blocks for learning. If children can master foundational skills like literacy and numeracy in these years, they increase the likelihood of effectively engaging with advanced and complex topics in later grades (Hwa et. al, 2020; Beeharry, 2021).

The case for governments to focus on foundational student learning outcomes was strong even before Covid-19, but evidence from school closures in low-income countries has indicated a reduction in students' foundational skills (Conto et. al, 2021) and therefore, prioritizing foundational learning is paramount to recovering student learning. The proposed diagnostic assessment framework is focused around prioritizing these foundational skills so that children can develop these core skills that will benefit their learning trajectories in the short and long-run.

Step 2: Selecting specific grades for assessment

The rationale for selecting grades 3, 4, 6 and 7 for the proposed diagnostic assessment is:

Early primary grades [grades 3 and 4] offer a greater chance to bridge learning gaps.

a. The structure and organization of the curriculum is such that mastery of skills during foundational grades [grades 1-3] is critical for achievement in the higher grades. Research indicates that a strong foundation in mathematics and reading (in both Urdu and English) during early grades is key to future success in mathematics and language acquisition / development [Data on current learning levels in English and Math in Pakistan is present in Annexure A].

b. Younger students were more affected by COVID-19 than older students [McKinsey, 2021; Pratham, 2021; Brookings, 2020]; In Pakistan's context, younger students were less likely to use smartphones to continue their learning virtually [ASER, 2021] and less likely to watch TeleSchool [CGD, 2021]. The lack of access to phones, television and learning resources could be a potentiating factor; In Punjab (Pakistan), 90% of the poorest children live in households without a single child-oriented book (Brossard et. al, 2020); also, the economic disruption caused by COVID-19 hit hardest on the households with the least resources, thereby, lessening their access to learning materials (Conto et. al, 2021). Another reason could be the relatively low likelihood of younger students' to regulate or self-monitor their learning [Tomasik et. al, 2021].

Grades that are transition points [grades 6 and 7] and without the pressure of standardised highstake exams present greater flexibility for reorganizing instruction based on students' learning levels

Step 3: Identifying and shortlisting prioritized SLOs for selected grades

For each of these four grades, specific competencies, topics and SLOs were chosen for the assessment. This selection process was based on:

- Pakistan's National Curriculum document (2006) and Single National Curriculum I-V (2020). All the prioritized competencies, topics and SLOs have been drawn from these official curriculum documents
- Competencies, topics and SLOs from previous grade(s) critical for current grade-level mastery, identified through official curriculum documents as well as the progression frameworks developed by the Pak Alliance for Math and Science [present in Annexure B]
- Reviewing competencies, topics and SLOs identified by well-known institutions that have worked on/assessed foundational literacy and numeracy skills (ASER, Pakistan; Pratham, India; Early Grade Reading Assessment (EGRA); Early Grade Mathematics Assessment (EGMA); TIMSS 2019 Assessment Framework)
- Results of the March 2020 Grade 5 & Grade 8 Science and Math board exams conducted by the Federal Directorate of Education (FDE) in all government schools in Islamabad, the Sindh Achievement Test 2016-17, and the Punjab Examination Commission's Exam Analysis Report 2019, helped identify topics that the majority of students were struggling with, even prior to the onset of the pandemic
- Prioritizing competencies, topics and SLOs where student performance can be gauged through oral assessment and those that had the least inter-assessor variability (the degree of agreement among independent observers who conduct and mark the assessment).

<u>Note</u>: SLOs selected for Grade 3 and Grade 4 constitute foundational SLOs; students in grades 6 and 7 will also be assessed on these foundational SLOs in English, Math, Urdu, and Science alongside additional non-foundational SLOs critical for their grade-level mastery.

Step 4: Setting clear learning goals

The goal of the assessment framework is to identify student' learning levels in prioritized (foundational and non-foundational) student learning outcomes (SLOs).

All students in Grades 3, 4, 6 and 7 will achieve at least intermediate mastery in prioritized SLOs in selected grades.

The framework proposes the following three mastery scales for the assessment, which the provinces can define based on targets for improved learning outcomes in the respective Education Sector Plans.

	•		•	
Low achievement	•	Intermediate achievement	•	High achievement

The diagnostic assessment will help identify the proportion of the student population who have attained low mastery in prioritized SLOs; this will indicate the competencies, topics and SLOs that students are struggling with and will subsequently guide the development and deployment of a bespoke remediation strategy.

WHAT NEEDS TO BE ASSESSED

The tables below display the prioritized topics for each of the four subjects:

Or ski	al communication ills	Reading and thinking skills	Formal and lexical aspects	
Let	tter recognition	Phonics	Parts of speech	
Intr	roducing ourselves	Reading fluency and comprehension	Punctuation	
Pro	onunciation	Elements of a story	Capitalisation	
•	•	•	Tenses	
•			Types of sentences	
•		•	Transitional devices	

Prioritized topics for English

Diagnostic scheme for English

	Grade 3	Grade 4	Grade 6	Grade 7
Total Student Learning Outcomes (SLOs)	16	18	27	27
Percentage of Foundational SLOs [Grades 1 – 3]	100%	100%	66%	66%
Approximate number of questions	16-19	18-22	27-30	27-30
Verbal vs. written questions	All verbal questions	All verbal questions	All verbal questions	All verbal questions

LEARNING DIAGNOSTICS: ENGLISH (GRADES 3/4)

Area /	Торіс	Foundational Learning C	Dutcomes
Competency		Grade 3	Grade 4
Oral communication skills	Letter recognition, pronunciation and phonics	Articulate the sounds of alphabet letters in random order [Grade 2 SLO] Pronounce and match the initial and the final sound of common words depicted in pictures with their corresponding letters [Grade 2 SLO	Articulate the sounds of alphabet letters in random order [Grade 2 SLO] Pronounce and match the initial and the final sound of common words depicted in pictures with their corresponding letters [Grade 2 SLO Pronounce long and short vowels and diphthongs [Grade 3 SLO]
	Introducing ourselves	Introduce themselves and others [Grade 1 SLO]	Introduce themselves and others [Grade 1 SLO]
Reading and critical thinking skills	Expression, visual cues, reading fluency	Articulate common two to three lettered sight words and words with common spelling patterns [Grade 1 SLO] Articulate three or more lettered sight words [Grade 2 SLO] Read aloud words and simple sentences with reasonable level of accuracy in pronunciation [Grade 2 SLO] Point out/name some common objects in a picture or an illustration. Describe them in a word or two, or a sentence [Grade 2 SLO] Use first and second letter to arrange words in alphabetical order	Articulate common two to three lettered sight words and words with common spelling patterns [Grade 1 SLO] Articulate three or more lettered sight words [Grade 2 SLO] Read aloud words and simple sentences with reasonable level of accuracy in pronunciation [Grade 2 SLO] Point out/name some common objects in a picture or an illustration. Describe them in a word or two, or a sentence [Grade 2 SLO] Use first and second letter to arrange words in alphabetical order
	Comprehension	[Grade 2 SLO] Identify names and characters in a story [Grade 2 SLO]	[Grade 2 SLO] Identify names and characters in a story [Grade 2 SLO]

LEARNING DIAGNOSTICS: ENGLISH (GRADES 3/4)

	_		
Area /	Торіс	Foundational Learning C	outcomes
Competency		Grade 3	Grade 4
	Singular and plural	Match common naming words with pictures [Grade 1 SLO]	Match common naming words with pictures [Grade 1 SLO]
Formal & lexical aspects	g	Identify and change the number of simple naming words by adding or removing "s" and "es" [Grade 2 SLO]	Identify and change the number of simple naming words by adding or removing "s" and "es" [Grade 2 SLO]
		Recognize and use substitution words as subjective case: I, we, you, he, she, it and they [Grade 1 SLO]	Recognize and use substitution words as subjective case: I, we, you, he, she, it and they [Grade 1 SLO]
		Use some describing words showing quality, size and color e.g., soft, big, yellow [Grade 1 SLO]	Use some describing words showing quality, size and color e.g., soft, big, yellow [Grade 1 SLO]
		Identify and match some pairs of describing words showing quality, size and color e.g. soft-hard, big- small, black-white [Grade 2 SLO]	Identify and match some pairs of describing words showing quality, size and color e.g. soft-hard, big- small, black-white [Grade 2 SLO]
	Pronouns		Show possession by using the pronouns mine, yours, his, hers, its, ours, theirs after the nouns [Grade 3 SLO]
	Tenses		Identify and use the structure of simple past tense for completed actions, with or without mention of specific time [Grade 3 SLO]
			Identify and match some pairs of describing words showing quality, size and color e.g. soft-hard, big- small, black-white [Grade 2 SLO]
	Describing words	Recognize, identify, and use a few words showing position and location e.g., to/from, up/down, here/there, in, on, to, with [Grade 2 SLO]	Recognize, identify, and use a few words showing position and location e.g., to/from, up/down, here/there, in, on, to, with [Grade 2 SLO]
		Recognize and apply capitalization to the initial letter of the first word of a sentence, and to the initial letter of the names of people, pets, and places [Grade 2 SLO]	Recognize and apply capitalization to the initial letter of the first word of a sentence, and to the initial letter of the names of people, pets, and places [Grade 2 SLO]
	•	•	

LEARNING DIAGNOSTICS: ENGLISH (GRADES 6/7)

Area /	Торіс	Foundational Learning Ou	utcomes
Competency		Grade 6	Grade 7
Oral communication		Articulate the sounds of alphabet letters in random order [Grade 2 SLO]	Articulate the sounds of alphabet letters in random order [Grade 2 SLO]
skills	Letter recognition, pronunciation and	Pronounce and practice more words with silent letters such as 't' in switch, 'g' in high. [Grade 5 SLO]	Pronounce and practice more words with silent letters such as 't' in switch, 'g' in high [Grade 5 SLO]
	phonics	Pronounce and match the initial and the final sound of common words depicted in pictures with their corresponding letters [Grade 2 SLO]	Pronounce and match the initial and the final sound of common words depicted in pictures with their corresponding letters [Grade 2 SLO
		Pronounce long and short vowels and diphthongs [Grade 3 SLO]	Pronounce long and short vowels and diphthongs [Grade 3 SLO]
	Introducing ourselves	Introduce themselves and others [Grade 1 SLO]	Introduce themselves and others [Grade 1 SLO]
	Expression, visual cues, reading	Articulate common two to three lettered sight words and words with common spelling patterns [Grade 1 SLO]	Articulate common two to three lettered sight words and words with common spelling patterns [Grade 1 SLO]
Reading and critical thinking skills	fluency	Articulate three or more lettered sight words [Grade 2 SLO]	Articulate three or more lettered sight words [Grade 2 SLO]
		Read aloud words and simple sentences with reasonable level of accuracy in pronunciation [Grade 2 SLO]	Read aloud words and simple sentences with reasonable level of accuracy in pronunciation [Grade 2 SLO]
		Read a paragraph to discern: main idea/topic sentence, supporting sentences [Grade 5 SLO]	Read a paragraph to discern: main idea/topic sentence, supporting sentences [Grade 5 SLO]
		Describe events in a picture or an illustration [Grade 3 SLO]	Describe events in a picture or an illustration [Grade 3 SLO]
		Use first and second letter to arrange words in alphabetical order [Grade 2 SLO]	Use first and second letter to arrange words in alphabetical order [Grade 2 SLO]
	Comprehension	Identify names and characters in a story [Grade 2 SLO]	Identify names and characters in a story [Grade 2 SLO]
		Describe setting and characters of a story [Grade 4 SLO]	Describe setting and characters of a story [Grade 4 SLO]
•		•	

LEARNING DIAGNOSTICS: ENGLISH (GRADES 6/7)

	-		
Area /	Торіс	Foundational Learning C	outcomes
Competency		Grade 6	Grade 7
Formal & lexical aspects	Singular and plural	Match common naming words with pictures [Grade 1 SLO] Identify and change the number of simple naming words by adding or removing "s" and "es" [Grade 2 SLO]	Match common naming words with pictures [Grade 1 SLO] Identify and change the number of simple naming words by adding or removing "s" and "es" [Grade 2 SLO]
	Pronouns	Change the number of regular and irregular nouns [Grade 4 SLO] Recognize and use substitution words as subjective case: I, we, you, he, she, it and they [Grade 1 SLO] Show possession by using the pronouns mine, yours, his, hers, its, ours, theirs after the nouns [Grade 3 SLO] Recognise and use the personal pronouns myself, yourself, himself, herself, ourselves, themselves, and itself [Grade 5 SLO] Identify and use the structure of simple past tense for completed actions, with or without mention of specific time [Grade 3 SLO] Recognise and use the structure of past continuous tense for actions that were in progress at some time in the past [Grade 4 SLO] Use some describing words	Change the number of regular and irregular nouns [Grade 4 SLO] Recognize and use substitution words as subjective case: I, we, you, he, she, it and they [Grade 1 SLO] Show possession by using the pronouns mine, yours, his, hers, its, ours, theirs after the nouns [Grade 3 SLO] Recognise and use the personal pronouns myself, yourself, himself, herself, ourselves, themselves, and itself [Grade 5 SLO] Identify and use the structure of simple past tense for completed actions, with or without mention of specific time [Grade 3 SLO] Recognise and use the structure of past continuous tense for actions that were in progress at some time in the past [Grade 4 SLO] Use some describing words
	Describing words	showing quality, size and color e.g., soft, big, yellow [Grade 1 SLO] Identify and match some pairs of describing words showing quality, size and color e.g., soft- hard, big-small, black-white. [Grade 2 SLO] Articulate, identify, and use degrees of regular adjectives [Grade 4 SLO]	showing quality, size and color e.g., soft, big, yellow [Grade 1 SLO] Identify and match some pairs of describing words showing quality, size and color e.g., soft- hard, big-small, black-white. [Grade 2 SLO] Articulate, identify, and use degrees of regular adjectives [Grade 4 SLO]
•	•	•	

LEARNING DIAGNOSTICS: ENGLISH (GRADES 6/7)

Area /	Торіс	Foundational Learning Outcomes		
Competency		Grade 6	Grade 7	
Formal & lexical aspects	Preposition Capitalization	 Recognize, identify, and use a few words showing position and location e.g., to/from, up/down, here/there, in, on, to, with [Grade 2 SLO] Demonstrate use of prepositions showing position, time, movement, and direction [Grade 5 SLO] Recognize and apply capitalization to the initial letter of the first word of a sentence, and to the initial letter of the names of people, pets, and places [Grade 2 SLO] Recognize and apply capitalization to the initial letter of proper nouns: name s of holidays, special events, and groups [Grade 4 SLO] 	Recognize, identify, and use a few words showing position and location e.g., to/from, up/down, here/there, in, on, to, with [Grade 2 SLO] Demonstrate use of prepositions showing position, time, movement, and direction [Grade 5 SLO] Recognize and apply capitalization to the initial letter of the first word of a sentence, and to the initial letter of the names of people, pets, and places [Grade 2 SLO] Recognize and apply capitalization to the initial letter of proper nouns: name s of holidays, special events, and groups [Grade 4 SLO]	

WHAT NEEDS TO BE ASSESSED

Prioritized topics for Urdu

سننا	بولنا	پڑھنا	تقرير	زبان شناسی
حروف تہجی	حروف تہجی	حروف، الفاظ اور جملوں کی پہچان	اپنا تعارف	حروف صحیح اور حروف علت
الفاظ اور جملے	الفاظ اور جملے	حروف، الفاظ اور جملوں کا ادراک	0 0 0 0	واحد جمع
		عبارت کو روانی اور صحیح تلفظ سے پڑھنا		ماضی، حال اور مستقبل
				جملوں کی ساخت / بناوٹ

Diagnostic scheme for Urdu

	Grade 3	Grade 4	Grade 6	Grade 7
Total Student Learning Outcomes (SLOs)	17	19	28	28
Percentage of Foundational SLOs [Grades 1 – 3]	100%	100%	68%	68%
Approximate number of questions	17-20	19-22	28-31	28-31
Verbal vs. written questions	All verbal questions	All verbal questions	All verbal questions	All verbal questions

LEARNING DIAGNOSTICS: URDU (GRADES 3/4)

Prioritized SLOs for Urdu

		•			
	krea /		Foundational L	earning Outcome	S
Com	petency	Gra	ade 3	Grad	e 4
		حروف کی آوازوں کی شناخت کر سکیں Grade 1 SLO	حروف تحجی کی پہچان کر سکیں Grade 1 SLO	حروف کی آوازوں کی شناخت کر سکیں Grade 1 SLO	حروف تحجی کی پہچان کر سکیں Grade 1 SLO
_	سننا	مختصر کہانی سن کر خاص نکات زبانی سنا سکیں Grade 2 SLO	انفرادی آوازوں سے الفاظ بنا سکیں Grade 2 SLO	مختصر کہانی سن کر خاص نکات زبانی سنا سکیں Grade 2 SLO	انفرادی آوازوں سے الفاظ بنا سکیں Grade 2 SLO
_	بولنا	ادا کر سکیں	الفاظ اور سادہ جملے Grade 2 SLO	تصاویر دیکھ کر ان سے متعلق سوالات کے جوابات دیں سکیں Grade 3 SLO	الفاظ اور سادہ جملے ادا کر سکیں Grade 2 SLO
		ایک منٹ میں کم از کم پینتالیس الفاظ پر مشتمل سادہ عبارت روانی سے پڑھ سکیں Grade 1 SLO	حرکات کی تبدیلی سے الفاظ کو درست تلفط سے پڑھ سکیں Grade 1 SLO	ایک منٹ میں کم از کم پینتالیس الفاظ پر مشتمل سادہ عبارت روانی سے پڑھ سکیں Grade 1 SLO	سے الفاظ کو درست تلفط سے پڑھ سکیں Grade 1 SLO
	پڑھنا	سوالات کے جوابات دیں	نظم و نژر کو پڑھ کے ں سکیں Grade 1 SLO	والات کے جوابات دیں	نظم و نژر کو پڑھ کے س سکیں Grade 1 SLO
-	تقرير	دو یا تین جملوں میں اپنا تعارف Grade 1 SLO	اپنے گھر، اسکول اور ماحول کے بارے میں پانچ جملے بول سکیں Grade 2 SLO	دو یا تین جملوں میں اپنا تعارف Grade 1 SLO	اپنے گھر، اسکول اور ماحول کے بارے میں پانچ جملے بول سکیں Grade 2 SLO
		واحد جمع Grade 1 SLO	حروف صحیح اور حروف علت Grade 1 SLO	واحد جمع Grade 1 SLO	حروف صحیح اور حروف علت Grade 1 SLO
	زبان	جملے میں فعل، فاعل اور مفعول کی پہچان کر سکیں Grade 2 SLO	جملے میں اسم، فعل، اور حرف کی پہچان کر سکیں Grade 2 SLO	جملے میں فعل، فاعل اور مفعول کی پہچان کر سکیں Grade 2 SLO	جملے میں اسم، فعل، اور حرف کی پہچان کر سکیں Grade 2 SLO
G	شناس	الفاظ کے متضاد بنا سکیں Grade 2 SLO	جملے میں ماضی، حال اور مستقبل کے لحاظ سے فعل کی پہچان کر سکیں Grade 2 SLO	جملے میں ماضی، حال اور مستقبل کے لحاظ سے فعل کی پہچان کر سکیں Grade 2 SLO کیں	اقراری، انکاری اور استفہامی جملوں میں فرق کر سکیں Grade 2 SLO الفاظ کے متضاد بنا سک Grade 2 SLO

LEARNING DIAGNOSTICS: URDU (GRADES 6/7)

Prioritized SLOs for Urdu

A	Area /	Foundational Learning Outcomes			
Com	npetency	G	rade 6	Grade	7
		حروف کی آوازوں کی شناخت کر سکیں Grade 1 SLO	حروف تحجی کی پہچان کر سکیں Grade 1 SLO	حروف کی آوازوں کی شناخت کر سکیں Grade 1 SLO	حروف تحجی کی پہچان کر سکیں Grade 1 SLO
	سننا	مختصر کہانی سن کر خاص نکات زبانی سنا سکیں Grade 2 SLO	انفرادی آوازوں سے الفاظ بنا سکیں Grade 2 SLO	مختصر کہانی سن کر خاص نکات زبانی سنا سکیں Grade 2 SLO	انفرادی آوازوں سے الفاظ بنا سکیں Grade 2 SLO
		غلط اور صحیح تلفظ میں تفریق کر سکیں Grade 4 SLO	واقعہ یا کہانی سن کر اس کے اجزا سے متعلق معلومات اخذ کر سکیں Grade 3 SLO	غلط اور صحیح تلفظ میں تفریق کر سکیں Grade 4 SLO	واقعہ یا کہانی سن کر اس کے اجزا سے متعلق معلومات اخذ کر سکیں Grade 3 SLO
	بولنا	تصاویر دیکھ کر ان سے متعلق سوالات کے جوابات دیں سکیں Grade 3 SLO	الفاظ اور سادہ جملے ادا کر سکیں Grade 2 SLO	تصاویر دیکھ کر ان سے متعلق سوالات کے جوابات دیں سکیں Grade 3 SLO	الفاظ اور سادہ جملے ادا کر سکیں Grade 2 SLO
	پڑھنا			ایک منٹ میں کم از کم پینتالیس الفاظ پر مشتمل سادہ عبارت روانی سے پڑھ سکیں Grade 1 SLO	حرکات کی تبدیلی سے الفاظ کو درست تلفط سے پڑھ سکیں Grade 1 SLO
				متن کو تفہیم، درست تلفظ اور ادائ سے پڑھ سکیں Grade 1 SLO	نظم و نژر کو پڑھ کے سوالات کے جوابات دیں سکیں Grade 1 SLO
	تقرير	دو یا تین جملوں میں اپنا تعارف Grade 1 SLO	اپنے گھر، اسکول اور ماحول کے بارے میں پانچ جملے بول سکیں Grade 2 SLO	دو یا تین جملوں میں اپنا تعارف Grade 1 SLO	اپنے گھر، اسکول اور ماحول کے بارے میں پانچ جملے بول سکیں Grade 2 SLO

LEARNING DIAGNOSTICS: URDU (GRADES 6/7)

Prioritized SLOs for Urdu

Area /	Foundational Learning Outcomes				
Competency	Gr	ade 6	Grade 7		
	واحد جمع Grade 1 SLO	حروف صحیح اور حروف علت Grade 1 SLO	واحد جمع Grade 1 SLO	حروف صحیح اور حروف علت Grade 1 SLO	
زبان شناسی	جملے میں فعل، فاعل اور مفعول کی پہچان کر سکیں Grade 2 SLO	جملے میں اسم، فعل، اور حرف کی پہچان کر سکیں Grade 2 SLO	جملے میں فعل، فاعل اور مفعول کی پہچان کر سکیں Grade 2 SLO	جملے میں اسم، فعل، اور حرف کی پہچان کر سکیں Grade 2 SLO	
	جملے میں ماضی، حال اور مستقبل کے لحاظ سے فعل کی پہچان کر سکیں Grade 2 SLO	اقراری، انکاری اور استفہامی جملوں میں فرق کر سکیں Grade 2 SLO	جملے میں ماضی، حال اور مستقبل کے لحاظ سے فعل کی پہچان کر سکیں Grade 2 SLO	اقراری، انکاری اور استفہامی جملوں میں فرق کر سکیں Grade 2 SLO	
	واحد کو جمع اور جمع کو واحد میں تبدیل کر کے بتا سکیں Grade 5 SLO	الفاظ کے متضاد بنا سکیں Grade 2 SLO	واحد کو جمع اور جمع کو واحد میں تبدیل کر کے بتا سکیں Grade 5 SLO	الفاظ کے متضاد بنا سکیں Grade 2 SLO	
	غلط فقرات کو درست کر سکیں Grade 5 SLO	علامت، فاعل اور مفعول کا صحیح استعمال کر سکیں Grade 4 SLO	غلط فقرات کو درست کر سکیں Grade 5 SLO	علامت، فاعل اور مفعول کا صحیح استعمال کر سکیں Grade 4 SLO	
	باظ میں فرق کر سکیں	مترادف اور متضاد الف Grade 4 SLO	باظ میں فرق کر سکیں	مترادف اور متضاد الف Grade 4 SLO	

WHAT NEEDS TO BE ASSESSED

Prioritized topics for Mathematics

Number operations	Data and probability	Geometry	Algebra
Number recognition	Time	Identification of basic shapes	Factorization
Addition and subtraction	Measures of central tendency	Lengths	Algebraic expressions
Multiplication and division	Fractions, decimals and percentage	Perimeter, area and volume	Linear equations
Factors and multiples	Information handling		6 6 6

Diagnostic scheme for Mathematics

	Grade 3	Grade 4	Grade 6	Grade 7
Total Student Learning Outcomes (SLOs)	14	24	36	38
Percentage of Foundational SLOs [Grades 1 – 3]	100%	100%	66%	63%
Approximate number of questions	14-17	24-27	36-37	38-39
Verbal vs. written questions	Verbal questions for the following SLO verbs: Read, recognize, compare Written questions for the following SLO verbs: Add, subtract, divide and multiply	Verbal questions for the following SLO verbs: Read, recognize, compare Written questions for the following SLO verbs: Add, subtract, divide and multiply	Verbal questions for the following SLO verbs: Read, recognize, compare Written questions for the following SLO verbs: Find, solve, convert, add, subtract, divide and multiply	Verbal questions for the following SLO verbs: Read, recognize, compare Written questions for the following SLO verbs: Find, solve, convert, add, subtract, divide and multiply

LEARNING DIAGNOSTICS: MATHS (GRADES 3/4)

Area /	Торіс	Foundational Learning Outcomes		
Competency		Grade 3	Grade 4	
		Match the numbers 0-9 with objects [Grade 1 SLO] Identify missing numbers in a	Match the numbers 0-9 with objects [Grade 1 SLO] Identify missing numbers in a	
		sequence from 1-100 [Grade 1 SLO]	sequence from 1-100 [Grade 1 SLO]	
	Number recognition	Read numbers from 1-999 [Grade 1 SLO]	Read numbers from 1-999 [Grade 1 SLO]	
		Identify the smallest and largest number in a given set of numbers [Grade 2 SLO]	Identify the smallest and largest number in a given set of numbers [Grade 2 SLO]	
		Recognize the place value of 3- digit numbers [Grade 2 SLO]	Recognize the place value of 3- digit numbers [Grade 2 SLO]	
Number Operations		Add 3-digit numbers with 3-digit numbers with and without carrying [Grade 2 SLO]	Add 3-digit numbers with 3-digit numbers with and without carrying [Grade 2 SLO]	
	Addition and subtraction		Add 4-digit numbers with 4-digit numbers with and without carrying [Grade 3 SLO]	
		Subtract 3-digit numbers with 3-digit numbers with and without carrying [Grade 2 SLO]	Subtract 3-digit numbers with 3-digit numbers with and without carrying [Grade 2 SLO]	
			Subtract 4-digit numbers with 4-digit numbers with and without carrying [Grade 3 SLO]	
		Multiply 1-digit number by 1-digit number [Grade 2 SLO]	Multiply 1-digit number by 1-digit number [Grade 2 SLO]	
Multiplicatio division	Multiplication and		Multiply 2-digit number by 1-digit number [Grade 3 SLO]	
	division	Divide 1-digit number by 1-digit number [Grade 2 SLO]	Divide 1-digit number by 1-digit number [Grade 2 SLO]	
			Divide 2-digit number by 1-digit number [Grade 3 SLO]	

LEARNING DIAGNOSTICS: MATHS (GRADES 3/4)

Торіс	Foundational Learning	Outcomes
	Grade 3	Grade 4
Pattern recognition	Identify the next shape in the pattern with 2 or 3 elements [Grade 1 SLO]	Identify the next shape in the pattern with 2 or 3 elements [Grade 1 SLO]
Identification of basic shapes	Recognize, identify, and classify basic shapes [Grade 1 SLO] Recognize and name 3-D objects (cubes, cuboids, cylinder, cone, sphere, pyramids) [Grade 2 SLO]	Recognize, identify, and classify basic shapes [Grade 1 SLO] Recognize and name 3-D objects (cubes, cuboids, cylinder, cone, sphere, pyramids) [Grade 2 SLO] Recognize point, line, ray and line segment [Grade 3 SLO]
Length	Compare lengths [Grade 1 SLO]	Compare lengths [Grade 1 SLO] Add and subtract lengths [Grade 3 SLO]
Perimeter and area		Calculate perimeter of square, rectangle and triangle [Grade 3 SLO]
Time	Read time [Grade 1 SLO]	Read time [Grade 1 SLO]
Fractions, decimals and percentages	Recognize fractions like two third, three fourth, four fifth and so on using 2/3, 3/4, etc. [Grade 2 SLO]	Recognize fractions like two third, three fourth, four fifth and so on using 2/3, 3/4, etc. [Grade 2 SLO] Add and subtract fractions with same denominators [Grade 3 SLO] Read and interpret a Carroll diagram and tally charts [Grade 3 SLO]
	Pattern recognition Identification of basic shapes Length Perimeter and area Time Fractions, decimals	Fractions, decimalsGrade 3Grade 3Grade 1Grade 1Grade 1Identification of basic shapesRecognize, identify, and classify basic shapes [Grade 1[Grade 1SuppleRecognize and name 3-D objects (cubes, cuboids, cylinder, cone, sphere, pyramids) [Grade 2Compare lengths [Grade 1Perimeter and areaTimeRead time [Grade 1Fractions, decimalsRecognize fractions like two third, three fourth, four fifth and so on using 2/3, 3/4, etc. [Grade 2SuppleGrade 2SLO1

LEARNING DIAGNOSTICS: MATHS (GRADES 6/7)

Area / Competency	Торіс	Foundational Learning Outcomes Grade 6 Grade 7			
	Number recognition	Match the numbers 0- [Grade 1 SLO]	9 with objects	Match the numbers 0- objects [Grade 1 SLO]	
		Identify missing numb from 1-100 [Grade 1 SLO]	ers in a sequence	Identify missing numb from 1-100 [Grade 1 SLO]	ers in a sequence
		Read numbers from 1 [Grade 2 SLO]	-999	Read numbers from 1- [Grade 2 SLO]	-999
		Read numbers up to 1 [Grade 5 SLO]	. million	Read numbers up to 1 [Grade 5 SLO]	million
		Identify the smallest a a given set of number [Grade 2 SLO]	-	Identify the smallest a a given set of numbers [Grade 2 SLO]	•
		Recognize the place v numbers [Grade 2 SLO]	alue of 3-digit	Recognize the place v numbers [Grade 2 SLO]	alue of 3-digit
		Add 3-digit numbers with 3-digit numbers with and without carrying [Grade 2 SLO]	Subtract 3-digit numbers with 3-digit numbers with and without carrying [Grade 2 SLO]	Add 3-digit numbers with 3-digit numbers with and without carrying [Grade 2 SLO]	Subtract 3-digit numbers with 3-digit numbers with and without carrying [Grade 2 SLO]
Number	Addition and subtraction	Add 4-digit numbers with 4-digit numbers with and without carrying [Grade 3 SLO]	Subtract 4-digit numbers with 4-digit numbers with and without borrowing [Grade 3 SLO]	Add 4-digit numbers with 4-digit numbers with and without carrying [Grade 3 SLO]	Subtract 4-digit numbers with 4-digit numbers with and without borrowing [Grade 3 SLO]
Operations	Multiplication and division	Multiply 1-digit number by 1-digit number [Grade 2 SLO]	Divide 1-digit number by 1-digit number [Grade 2 SLO]	Multiply 1-digit number by 1-digit number [Grade 2 SLO]	Divide 1-digit number by 1-digit number [Grade 2 SLO]
		Multiply 2-digit numbers by 1-digit number [Grade 3 SLO]	Divide 2-digit numbers by 1-digit number [Grade 3 SLO]	Multiply 2-digit numbers by 1-digit number [Grade 3 SLO]	Divide 2-digit numbers by 1-digit number [Grade 3 SLO]
		Multiply 5-digit numbers by a number up to 3- digits [Grade 5 SLO]	Divide 5-digit numbers by up to 2-digit numbers [Grade 5 SLO]	Multiply 5-digit numbers by a number up to 3- digits [Grade 5 SLO]	Divide 5-digit numbers by up to 2-digit numbers [Grade 5 SLO]
	Factors and multiples	Find HCF of three numbers up to 2 digits using prime factorization and division methods [Grade 5 SLO]	Find LCM of four numbers up to 2 digits using prime factorization and division methods [Grade 5 SLO]	Find HCF of three numbers up to 2 digits using prime factorization and division methods [Grade 5 SLO]	Find LCM of four numbers up to 2 digits using prime factorization and division methods [Grade 5 SLO]
				-	

LEARNING DIAGNOSTICS: MATHS (GRADES 6/7)

	s for mathematic	05			
Area / Competency	Торіс	Fc Grad		rning Outcome Grac	
Algebra	Pattern recognition	identify the next shape in the patterns with 2 or 3 elements [Grade 1 SLO]	Recognizing pattern rules and complete number sequences [Grade 4 SLO]	identify the next shape in the patterns with 2 or 3 elements [Grade 1 SLO]	Recognizing pattern rules and complete number sequences [Grade 4 SLO]
	Algebraic expressions			Solve simple linear equations involving fractional and decimal coefficients [Grade 6 SLO]	Add and subtract given algebraic expressions [Grade 6 SLO]
	Identification of basic shapes	Recognize, identify, and classify basic shapes [Grade 1 SLO] Recognize and name		Recognize, identify, and classify basic shapes [Grade 1 SLO] Recognize and name 3	
		cuboids, cylinder, con [Grade 2 SLO]	e, sphere, pyramids)	cuboids, cylinder, cone [Grade 2 SLO]	e, sphere, pyramids)
	Length	Compare lengths [Grade 1 SLO]	Add and subtract lengths [Grade 3 SLO]	Compare lengths [Grade 1 SLO]	Add and subtract lengths [Grade 3 SLO]
Geometry	Angles	Identify different types of angles [Grade 5 SLO]		Identify different types of angles [Grade 5 SLO]	
	Perimeter and area	Calculate perimeter and area of a square, rectangle and triangle [Grade 3/5 SLOs]	Find and differentiate between perimeter and area of a region [Grade 5 SLO]	Calculate perimeter and area of a square, rectangle and triangle [Grade 3/5 SLOs]	Find and differentiate between perimeter and area of a region [Grade 5 SLO]
	Volume and surface area			Find surface area and cuboid [Grade 6 SLO]	volume of cube and
	Time	Read time [Grade 1 SLO]	Convert hours to minutes and vice versa, minutes to seconds and vice cersa [Grade 1 SLO]	Read time [Grade 1 SLO]	Convert hours to minutes and vice versa, minutes to seconds and vice cersa [Grade 1 SLO]
Data and	Fractions, decimals and percentages	Recognize fractions like two third, three fourth, four fifth and so on using 2/3, 3/4 [Grade 2 SLO]	Add and subtract fractions with same denominators [Grade 3 SLO]	Recognize fractions like two third, three fourth, four fifth and so on using 2/3, 3/4 [Grade 2 SLO]	Add and subtract fractions with same denominators [Grade 3 SLO]
probability		Convert percentage to and vice versa [Grade	fraction and to decimal 5 SLO]	Convert percentage to and vice versa. [Grade	fraction and to decimal 5 SLO]
	Information handling	graphs given in horitzontal and vertical forms [Grade 4 SLO]	Find the mean of given numbers [Grade 5 SLO]	graphs given in g horitzontal and [vertical forms [Grade 4 SLO]	Find the mean of given numbers Grade 5 SLO]
	SSMENT FRAMEWOR	Read and interpret a C tally charts [Gradee 3	- •	Read and interpret a Catally charts [Gradee 3]	-

WHAT NEEDS TO BE ASSESSED

Prioritized topics for Science

Life science	Physical science	Earth and space science
Classification and characteristics of living things	Forces and machines	Movement of the Earth
Understanding ourselves	Light	Solar system
Environmental pollution	Electricity and magnetism	
Photosynthesis and respiration in plants	States of matter	
Cellular organization of plants and animals	Elements and compounds	0 0 0 0 0 0 0 0

Diagnostic scheme for **Science**

	Grade 6	Grade 7
Total Student Learning Outcomes (SLOs)	23	29
Percentage of Foundational SLOs [Grades 1 – 3]	48%	41%
Approximate number of questions	23-26	29-32
Verbal vs. written questions	Can be assessed via verbal or written exam	Can be assessed via verbal or written exam

LEARNING DIAGNOSTICS: SCIENCE (GRADES 6/7)

Prioritized SLOs for Science

Fillized SLOS III Science					
Area / Competency	Торіс	Foundational Learning Outcomes Grade 6 Grade 7			
	Resources	Name some natural resources of land, water, and air [Grade 2 SLO]	Suggest ways to save natural resources and endangered animals [Grade 3 SLO]	Name some natural resources of land, water, and air [Grade 2 SLO]	Suggest ways to save natural resources and endangered animals [Grade 3 SLO]
	Understanding ourselves	Name major parts of the body [eyes, nose, mouth, arms, feet, and legs] [Grade 1 SLO]	State functions of major parts of the human body [Grade 4 SLO]	Name major parts of the body [eyes, nose, mouth, arms, feet, and legs] [Grade 1 SLO]	State functions of major parts of the human body [Grade 4 SLO]
	Characteristics	Identify major parts of a plant [Grade 2 SLO]	Identify factors for both animals and plants to survive [Grade 5 SLO]	Identify major parts of a plant [Grade 2 SLO]	Identify factors for both animals and plants to survive [Grade 5 SLO]
Life Sciences	and need of living things	Compare different stages of lifespan of plants and animals from pictures (germination, growth, development, and reproduction) [Grade 3 SLO]	Classify vertebrates into mammals, reptiles, fish, birds, and amphibians based on their characteristics [Grade 5 SLO]	Compare different stages of lifespan of plants and animals from pictures (germination, growth, development, and reproduction) [Grade 3 SLO]	Classify vertebrates into mammals, reptiles, fish, birds, and amphibians based on their characteristics [Grade 5 SLO]
		Identify factors for both to survive [Grade 5 SL		Identify factors for both to survive [Grade 5 SL	-
	Cellular organization of plants and animals			Compare and contrast a plant cell [Grade 6 SLO]	and animal cell with
	Environmental pollution	List different types of pollution (noise, air, water, and land) [Grade 3 SLO]	Differentiate between biodegradable and non-biodegradable materials [Grade 5 SLO]	List different types of pollution (noise, air, water, and land) [Grade 3 SLO]	Differentiate between biodegradable and non-biodegradable materials [Grade 5 SLO]
	Photosynthesis and respiration in plants			Describe the effects of process of photosynthe [Grade 6 SLO]	different factors on the esis

LEARNING DIAGNOSTICS: SCIENCE (GRADES 6/7)

Prioritized SLOs for Science

Thomazed SEGS					
Area / Competency	Торіс	Foundational Learning Outcomes Grade 6 Grade 7			
	Electricity and magnetism	Describe flow of electric current in an electric circuit [Grade 4 SLO]	Describe the relationship between electricity and magnetism in an electromagnetic device [Grade 5 SLO]	Describe flow of electric current in an electric circuit [Grade 4 SLO]	Describe the relationship between electricity and magnetism in an electromagnetic device [Grade 5 SLO]
	Forces and machines	Name and identify different forms of simple machines [Grade 3 SLO]	Recognize that simple machines help make motion easier [Grade 4 SLO]	Name and identify different forms of simple machines [Grade 3 SLO]	Recognize that simple machines help make motion easier [Grade 4 SLO]
		Describe the effects o unbalanced forces on [Grade 5 SLO]	of balanced and the motion of an object	Describe the effects of balanced and unbalanced forces on the motion of an object [Grade 5 SLO]	Describe the function of pulley and gear systems [Grade 6 SLO]
Physical Science	States of matter	Identify matter and its states [Grade 3 SLO]	Explain how one state of matter (solid, liquid, gas) changes into another [Grade 4 SLO]	Identify matter and its states [Grade 3 SLO]	Explain how one state of matter (solid, liquid, gas) changes into another [Grade 4 SLO]
		Describe the role of e condensation in the w [Grade 5 SLO]		Describe the role of ex condensation in the wa [Grade 5 SLO]	
	Elements and compounds			Differentiate between and compounds & mix [Grade 6 SLO]	elements & compounds tures
	Light	Identify sources of light in their homes, school, and surroundings [Grade 2 SLO]	Identify and differentiate between transparent, opaque, and translucent objects in their surroundings [Grade 5 SLO]	Identify sources of light in their homes, school, and surroundings [Grade 2 SLO]	Identify and differentiate between transparent, opaque, and translucent objects in their surroundings [Grade 5 SLO]
				Compare characteristic by a plane mirror and a [Grade 6 SLO]	cs of the images formed a Pinhole camera

LEARNING DIAGNOSTICS: SCIENCE (GRADES 6/7)

Prioritized SLOs for Science

Area / Competency	Торіс	Foundational Learning Outcomes Grade 6 Grade 7		
	Objects in the sky	Identify objects in the sky during day and night [Grade 1 SLO]	Identify objects in the sky during day and night [Grade 1 SLO]	
Earth and space science	Movement of the Earth	Relate the Earth's spin with the occurrence of day and night [Grade 4 SLO]	Relate the Earth's spin with the occurrence of day and night [Grade 4 SLO]	
	Solar system	Describe the solar system and its planetary arrangement showing position of Earth in our solar system [Grade 5 SLO]	Describe the solar system and its planetary arrangement showing position of Earth in our solar system [Grade 5 SLO]	

ASSESSING LEARNING LOSSES

Teachers are best placed to assess their students' learning losses as they have both quantitative and qualitative data on their students' learning. Teachers can also ensure that their students feel comfortable while taking the assessment and they can take the responsibility of reorganizing their instruction (plan and conduct remedials in this case) based on their students' learning levels. Therefore, the recommendation is to:

Conduct diagnostic assessment for a representational set of students at any point in the academic year

Leverage existing assessments on reading and mathematics

Assessment can be based on existing assessments such as ASER's 2021 Assessment, Pratham's Assessment for reading and arithmetic, EGMA, EGRA etc. [Sample assessments are present in Annexure B]

Create diagnostic assessment items on identified topics and SLOs for each of the selected subjects and grades

Train assessors to conduct diagnostic assessments within school hours

A sample assessment structure is present in Annexure C

- Assessment booklet that contains assessment items for each of the grades [3, 4, 6 & 7] and subjects [English, Urdu, Maths, and Science]
- Marking sheet for each grade and subject [Sample marking sheet is in Annexure D]
- Instructional guide for conducting and marking assessment [ASERs instructional guide and a sample instructional guide are in Annexure E]
- A guide on using assessment results to reorganize their instruction (plan and conduct remedials) for all their students

Follow general principles of conducting assessments

To avoid assessor bias, the subject teacher should not identify the students' sample, conduct and mark the assessment A large proportion of the assessment must be administered verbally to ensure assessments can be conducted quickly and easily

Like ASER and Pratham assessments, each SLO should be tested in a way that provides students multiple opportunities to display their SLO mastery

In the case of Maths and Science, the child may respond in any language that s/he chooses (provided of course that the assessor understands the response) Assessments must be short to avoid student fatigue

A comfortable testing environment should be ensured; students should be provided with two attempts before an answer is marked final

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Pak Alliance for Maths and Science. 2022. Policy Brief: Diagnostics for Remediation - an assessment of learning losses due to COVID-19 in Pakistan

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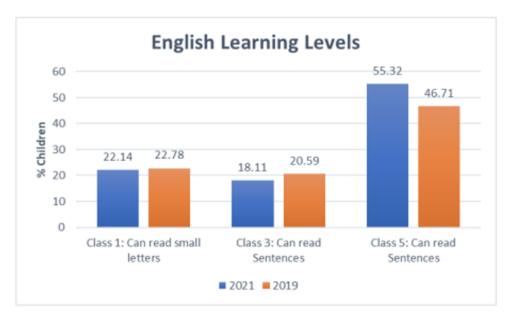
Rationale for assessing English and Math

The Annual Status of Education Report (ASER), Pakistan, is conducted by Idara-e-Taleem-o-Aagahi (ITA) that aims to provide regular, reliable estimates of education status and learning outcomes of children aged 5–16 years in rural districts of Pakistan. After the unprecedented school closures of 2020 and early 2021, the ASER study in 2021 was adapted to measure the impacts of COVID-19. The survey was conducted in 16 rural districts of Pakistan (four each in Balochistan, Khyber Pakhtunkhwa, Punjab, and Sindh provinces). A total of 9,392 households with 25,448 children aged 3–16 years were surveyed, including 21,589 children aged 5–16 years (43 per cent girls, 57 per cent boys). Some key results from this study are present below:



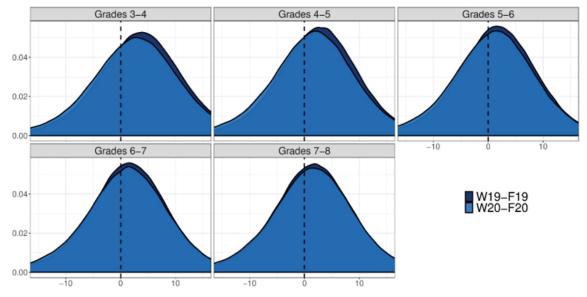
English learning levels

Class 1–5 students achieving English sentence level by year (ASER 2021 Report)



English learning levels in 2019 and 2021 (ASER 2021 Report)

Rationale for assessing English and Math



English learning levels

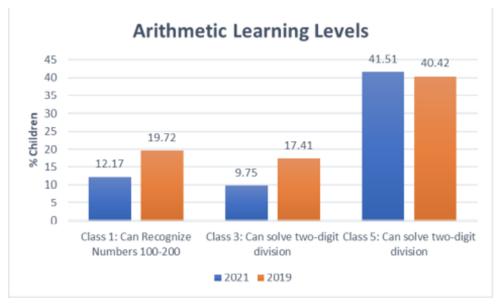
Distribution of Within-student Change from Winter 2019-Fall 2019 vs Winter 2020-Fall 2020 in reading Brookings Dec 2020 Blog (How is COVID-19 affecting student learning)

Rationale for assessing English and Math

Mathematics learning levels

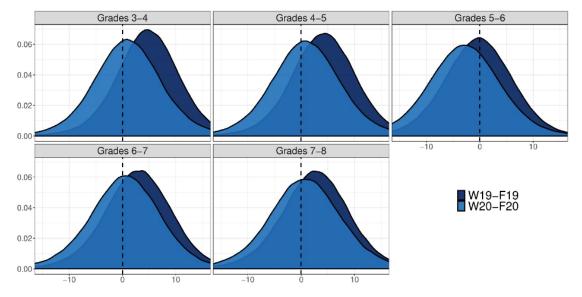


Class 1-5 students achieving Arithmetic division level by year (ASER 2021 Report)



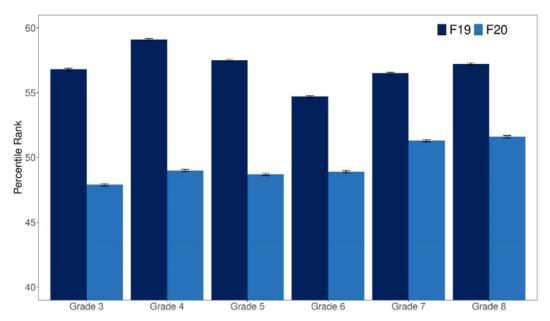
Arithmetic Learning Levels in 2019 and 2020 (ASER 2021 Report)

Rationale for assessing English and Math



Mathematics learning levels

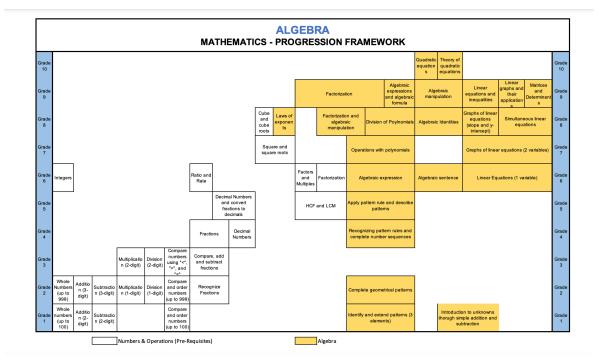
Distribution of Within-student Change from Winter 2019-Fall 2019 vs Winter 2020-Fall 2020 in Arithmetic Brookings Dec 2020 Blog (How is COVID-19 affecting student learning)



MAP Growth Percentiles in Math by Grade Level in Fall 2019 and Fall 2020 Brookings Dec 2020 Blog (How is COVID-19 affecting student learning)

ANNEXURE B

Progression Framework



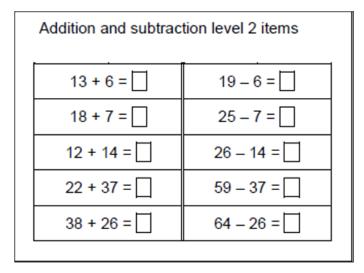
https://mathsandscience.pk/publications/progression-framework/

Sample Assessments

Mathematics (EGMA)

Num	Number Identification items						
2	9	0	12	30			
22	45	39	23	48			
91	33	74	87	65			
108	245	587	731	989			

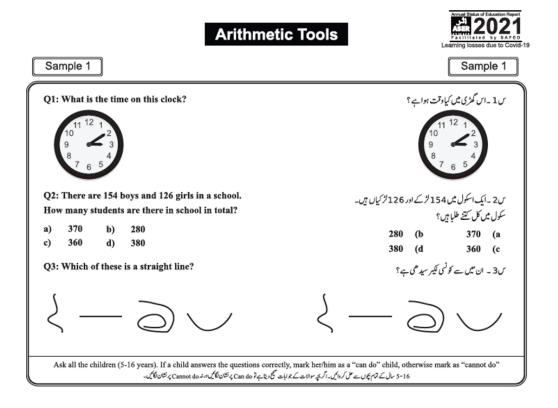
Sample addition and subtraction level 1 items				
1 + 3 =	4 – 1 = 🗌			
3 + 2 =	5 – 2 = 🗌			
6 + 2 = 🗌 8 – 2 = 🗌				
4 + 5 =	9 – 5 = 🗌			
3 + 3 =	6 – 3 =			



Early Grade Mathematics Assessment [2014]

Sample Assessments

Mathematics (ASER)



Samp	le-1					Start from Here	Sample-1
Reco	mber gnition	Reco	nber gnition	Recog	nber gnition	Subtraction	Division
3	-9 9	23	-99 18	108	- <u>200</u> 194	^{2 Digit Subtraction} 87 56 - 45 - 13	4) 20
6	5	37	48	186	178	51 82 - <u>39</u> - <u>56</u>	3) 18
8	4	64	52	167	113	^{3 Digit Subtraction} 395 546 <u>213</u> <u>169</u>	5) 25
2	7	86 99		126 159	145 132	267 619 - 143 - 248	6) 54
From ea	4	numbers n	nust be corr	h the child, ou ect. یک شیکش شراع بیچ کو آ		Ask the child to solve one 2-Digitand one 3-Digit question. Both must be correct. مال کرنے کا اعداد 3 بعداد کا مالیک کی المرابط کی الک مال	Ask child to solve any 1 question. That must be correct. - ニーシャンド たんぴ レーパノー しょう

ASER 2021 Assessment tools

Sample Assessments

Mathematics (Pratham)

Number recognition	Number recognition	Subtraction	Division
	51 83	46 63 <u>- 29 - 39</u>	7)879(
	37 65	47 45 - 28 - 17	6)824(
69	55 26	92 84 - 76 - 57	8) 985(
	91 43	52 66	
5 2	36 27	<u>- 14</u> <u>- 48</u>	4) 517(

Pratham's Assessment

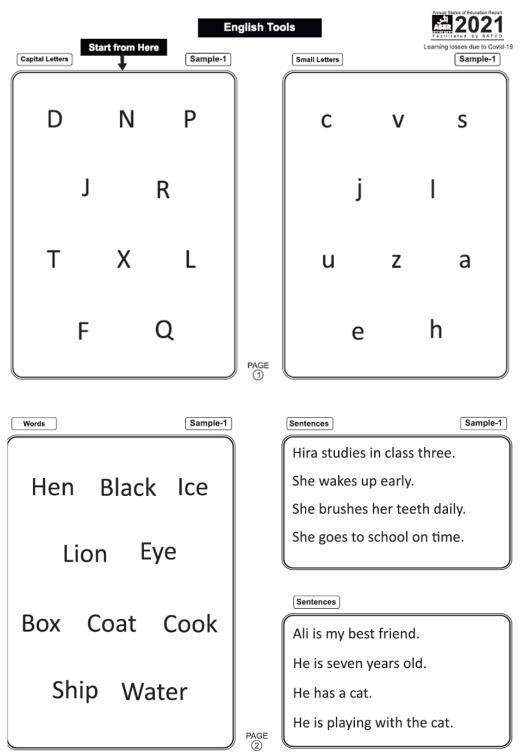
Sample Assessments

English (EGRA)

	JBTASK 2. PHONEMIC AWARENESS						
⊫ T e s t	Read the instructions to the child and conduct the examples.						
	practice. What is the first sound in "m [If the child responds correctly, say:] Very [If the child does not respond correctly, say "mouse" is /mmm/. let's try another one: What is the first s	/ good, the f y]: Listen ag sound in "da	irst sound ain: "mous ay"? "da	se". The firs y"?	t sound in	Read the prompt and then pronounce the word a second time. Pronounce each word slowly.	
	[If the child responds correctly, say]: Very [If the child does not respond correctly, say is /d/.	/ good, the f y]: Listen ag	irst sound ain: "day".	in "day" is / The first so	d/. ound in "day	, ⊃ If the child does not respond	
Rea	dy? Let's begin.					after 3 seconds, mark as "No response" and say the next prompt.	
Read	dy? Let's begin. Item	Answer	Correct	Incorrect	No	after 3 seconds, mark as "No response" and say	
Read		Answer /a/	Correct	Incorrect	No response	after 3 seconds, mark as "No response" and say the next prompt.	
	Item What is the first sound in "at"?		Correct	Incorrect		after 3 seconds, mark as "No response" and say the next prompt.	
1.	Item What is the first sound in "at"? "at"? What is the first sound in "so"?	lal	Correct	Incorrect		after 3 seconds, mark as "No response" and say the next prompt. If the child responds incorrectly or does not respond to the first five words,	
1. 2.	Item What is the first sound in "at"? "at"? What is the first sound in "so"? "so"? What is the first sound in "chalk"? "chalk"? What is the first sound in "very"?	lal Isl	Correct	Incorrect		after 3 seconds, mark as "No response" and say the next prompt. If the child responds incorrectly or does not respond to the first five words, say "Thank you!, discontinue this	
1. 2. 3.	Item What is the first sound in "at"? "at"? What is the first sound in "so"? "so"? What is the first sound in "chalk"? "chalk"?	/a/ /s/ /ch/	Correct	Incorrect		after 3 seconds, mark as "No response" and say the next prompt. If the child responds incorrectly or does not respond to the first five words, say "Thank you!,	
1. 2. 3. 4.	Item What is the first sound in "at"? "at"? What is the first sound in "so"? "so"? What is the first sound in "chalk"? "chalk"? What is the first sound in "very"? "very"? What is the first sound in "car"?	/a/ /s/ /ch/ /v/	Correct	Incorrect		after 3 seconds, mark as "No response" and say the next prompt. If the child responds incorrectly or does not respond to the first five words, say "Thank you!, discontinue this subtask, check the	

Early Grade Reading Assessment 2016

Sample Assessments



English (ASER)

ASER 2021 Assessment tools

Sample Assessments

English (Pratham)



A big tree stood in a garden. It was alone and lonely. One day a bird came and sat on it. The bird held a seed in its beak. It dropped the seed near the tree. A small plant grew there. Soon there was another tree. The big tree was happy.

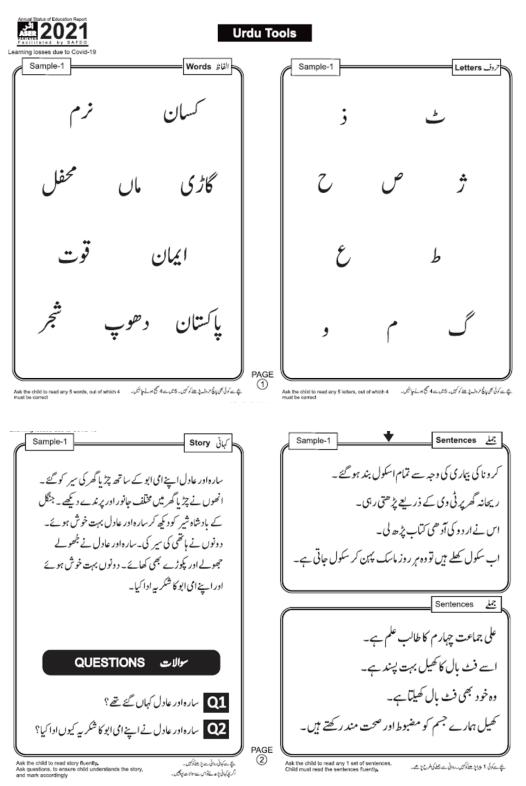
Paragraph

Rani likes her school. Her class is in a big room. Rani has a bag and a book. She also has a pen.

	Lette	ers		/ords
e	d	w	hand	star
			0	bus
	s	с	cat	book
g	h	z	day	few
				old
	1	q	sing	bold

Pratham's Assessment

Sample Assessments



Urdu (ASER)

ASER 2021 Assessment tools

ANNEXURE D

Sample Assessments' Structure

Grade 3, Mathematics

SLO 1 RECOGNIZE NUMBERS FROM 1-99	SLO 2 RECOGNIZE NUMBERS FROM 100 - 999	SLO 3 ADD TWO-DIGIT NUMBERS	SLO 4 SUBTRACT TWO- DIGIT NUMBERS
Question 1	Question 1	Question 1	Question 1
Question 2	Question 2	Question 2	Question 2
Question 3	Question 3	Question 3	Question 3
Question 4	Question 4	Question 4	Question 4
Instruction Box (Urdu)	Instruction Box (Urdu)	Instruction Box (Urdu)	Instruction Box (Urdu)

ANNEXURE E

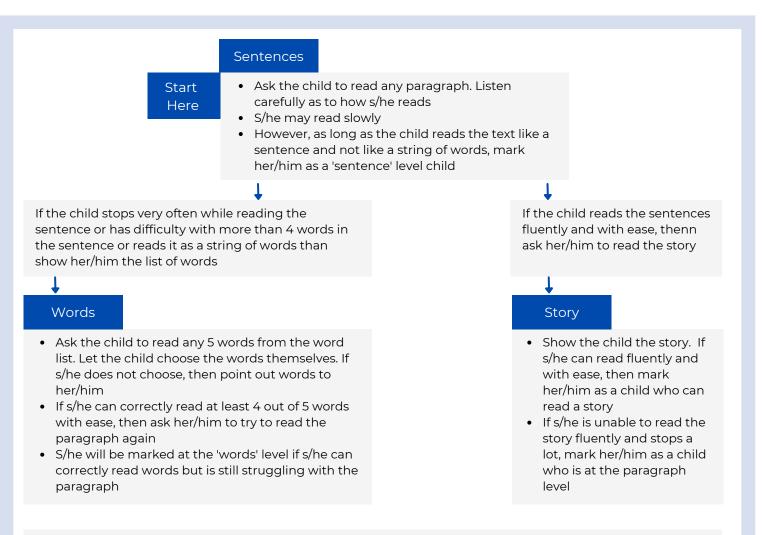
Sample Marking Sheet

Grade 3, Mathematics

S#	Student name	Mark highest level achieved Level 1 Level 2					
		Number recognition 1-9	Number recognition 1-999	Addition 2 digit numbers	Subtraction 2 digit numbers		
1	Ayesha Khalid		\checkmark				
2	Sana Khan			\checkmark			
3	Rabia Farhan			\checkmark			
4	Fatima Jameel				\checkmark		
5	Amna Latif			\checkmark			
6	Zainab Hassan		\checkmark				
7	Aliya Aftab	\checkmark					
8	Maham Naseer		\checkmark				

ANNEXURE F

Assessment Instructional Guides



If s/he cannot correctly read at least 4 out of 5 words she chooses, then show her/him the list of letters

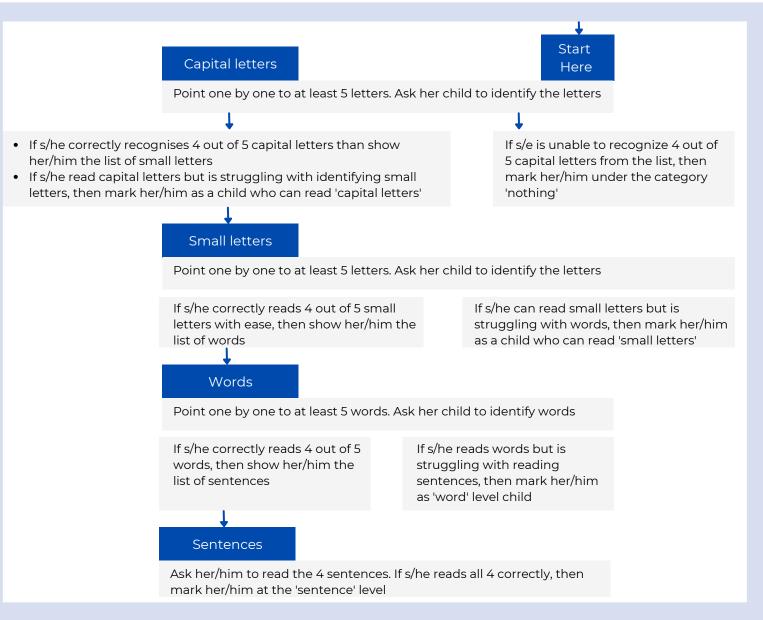


- Ask the child to read any 5 letters from the list. Let her/him choose the letters. the child choose the words themselves. If s/he does not choose, then point out letters to her/him
- If s/he can correctly read at least 4 out of 5 letters with ease, then show her/him the list of words again
- If s/he can read 4 out of 5 letters but cannot read words, then mark her/him as a child who 'can read letters'
- If s/he cannot read 4 out of 5 letters correctly, then mark her a child as a 'beginner'

ASER Assessments 2021 Instructional Guide (Reading, English)

ANNEXURE F

Assessment Instructional Guides



ASER Assessments 2021 Instructional Guide (English)

Conducting assessment

- Assessor opens assessment document to the correct page, and follows script of instructions to the child, without adding unnecessary words
- Assessor marks the marking sheet only for the highest level obtained by the student for each SLO
- Assessor holds marking sheet outside of child's visual range
- If child has worked on the problem for more than 60 seconds and not produced an answer, assessor says, "let us try another one," starts the next problem and marks the item as incorrect.
- The assessor only moves to the next task if the child has completed the previous tasks
- Assessor makes it clear to the child that they may use the paper and pencil to solve the problems but that they do not have to
- If the child uses an inefficient strategy the assessor asks the child if they "know another way of doing the calculation"; if the child continues to use an inefficient strategy the assessor points to the next item and says, "Go on" and marks the item as incorrect
- Assessor thanks the child for their time and reinforces the purpose of the assessment

Diagnostics Assessment Framework

Learning Recovery (COVID-19)

