MEASURING THE IMPACT OF COVID-19 ON EDUCATION IN PAKISTAN

By

Idara-e-Taleem-o-Aagahi

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Acronyms

ASER	Annual Status of Education Report
COVID-19	Novel Coronavirus 2019
ITA	Idara-e-Taleem-o-Aagahi
KP	Khyber Pakhtunkhwa
PSU	Primary Sampling Unit
PTV	Pakistan Television
SOP	Standard Operating Procedures
UNICEF	United Nations Children's Fund

Foreword

The massive disruptions caused by the COVID-19 pandemic severely affected the education and prospects of children, with school closures extending for more than a year in the context of an already weak education system.

With children at home, governments were quick to respond. In Punjab, Taleem Ghar distance learning was launched on 1 April 2020, and was soon followed by the TeleSchool learning platform on national television, supported by private digital education providers. Emergency cash transfers through the Ehsaas programme quickly reached over 5 million households. Government education departments as well as civil society organizations such as Idara-e-Taleem-o-Aagahi set up WhatsApp groups and community models of learning.

Despite these efforts, the majority of children were not able to continue learning, and furthermore, there is limited evidence on the extent to which new distance learning programmes reached and benefited children, or on its impacts on their learning. It was thus decided to conduct a survey measuring learning losses and assessing the efficacy of technology-enabled tools for education by adapting the research tools used for the long-running Annual Status of Education Report in Pakistan.

The resulting study answers a number of critical questions. Have many children dropped out of school due to changed economic circumstances? How have repeated school closures or the loss of a full year's schooling affected learning at different grade levels? By reflecting on the findings of the study we can understand more clearly the weaknesses and strengths of our education system, what needs to change and how, and how to prepare for future disruptions and make education systems more resilient, including reflections on the role of EdTech in the future of education and schooling

We are grateful to the school education departments of Balochistan, KP, Punjab and Sindh for their support in implementing the survey. We are also indebted to UNICEF Pakistan for their continued support and guidance. In particular, we thank Noreen Hasan, Education Specialist at UNICEF Pakistan, and Frank van Cappelle, Education Specialist at the UNICEF Regional Office for South Asia, for their invaluable feedback, and Fatima Raja for editing the report. We extend our thanks to the ITA team – Aqeel Awan, Sehar Saeed and Mohammad Fiaz under the leadership of Baela Jamil – for their hard work in designing and conducting this unique study, even during pandemic conditions.

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Executive Summary

The COVID-19 pandemic has severely impacted on global efforts to ensure that all children receive quality education. Pakistan is no exception. School closures to limit the spread of COVID-19 have directly impacted an estimated 40 million school-going learners from pre-primary to higher-secondary levels, in a context where school enrolment, completion and quality of learning are already low, especially for girls.

To understand the extent of the issue and to develop a body of evidence to inform future policy directions, UNICEF Pakistan has supported a study on "Measuring the Impact of COVID-19 on Education in Pakistan", focusing particularly on learning losses due to school closures and the measures taken to support learning for school-going children.

The Annual Status of Education Report (ASER), Pakistan, conducted by Idara-e-Taleem-o-Aagahi (ITA) is the country's largest citizen-led household-based survey and 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). Using ASER tools mapped to Sustainable Development Goal 4.1.1.a, learning assessments for language (English and Urdu/Sindhi/Pashto) and arithmetic competencies was conducted for children aged 5–16 years. Additionally, 457 government schools and 198 private schools were surveyed to assess their capacity and readiness to adhere to government guidelines on safe school reopening..

The districts included in the survey are Quetta, Bolan, Gwadar and Awaran from Balochistan; Peshawar, Chitral, South Waziristan and Torghar from KP; Muzaffargarh, Sheikhupura, Bhakkar and Jhelum from Punjab; and Karachi-Malir, Sukkur, Tharparkar and Dadu from Sindh.

Key findings

- Learning levels are highest in surveyed districts of Punjab, followed by KP and Sindh, and are lowest in Balochistan, while learning losses are highest in surveyed districts of Balochistan, followed by Punjab, Sindh and KP. Low-performing and high-performing districts on the Alif Ailaan ranking from 2017 have experienced the greatest learning losses.

- Girls experienced greater learning losses than boys during the COVID-19 school closures across nearly all competencies and classes. This served to halt or even reverse an existing increasing trend in learning outcomes for girls who had, in some cases, outdid boys.

- Children who attend government schools show greater decline in learning than private schools during the period in which school closures occurred. These declines are particularly acute in lower classes (Classes 1 and 3).

- Learning outcomes improve with maternal education and with household wealth.

- About 60 per cent of children currently enrolled in school spent less than an hour a day on their studies during school closures.

- While 40 per cent of children with smartphones in the home used these for learning, younger children receive less time to access these than older children. 55 per cent of children do not feel confident to study on their own if school closures reoccur.

- About 32% of children reported that they watched educational broadcasts through PTV's Tele-School programs. While Tele-School's outreach is notable, its impact is unclear. The study also reveals that among households with access to television, 54.5% responded to not have used PTV Teleschool as a support to children's learning. This illustrates the differences that exist between individuals and social groups not only in terms of access to technologies but also in terms of their capacity to benefit from the use of technology, with low 'digital literacy' and/or low "digital motivation".

- Social Protection outreach to HHs increased from 2019 to 2021 for the sixteen districts from 10.4% to 11.4% through the BISP, Ehsaas, Punjab Social Protection Authority (PSPA) and Akhuwat programs. Given the expansion of targeted social protection instruments for education over COVID-19 period from early years to primary, secondary and post-secondary, this could be an important linkage to offset learning and access deprivation to those most in need (ensuring at least 50% are girls) through a lifelong approach.

Conclusions and recommendations

This study shows that school closures have led to a learning crisis for primary-school children. Younger children who have not yet built a foundation for learning, are more vulnerable to learning losses. Pakistan's crisis of learning is rooted in a deeper crisis of equity, girls as well as children from lower wealth backgrounds and certain geographical regions suffer the greatest learning losses in Pakistan.

Based on the findings of this study, it is recommended that:

- Policies and programmes must be devised to support the learning of all children and focusing on young children and girls.
- The factors that lead to education inequities must be tackled, such as through social protection programmes for girls' education and targeted support for children in the poorest households using low-tech and no-tech modalities.
- A new social compact for learning is needed to build connections between families, communities, and schools to collectively support children's schooling.
- EdTech should be explored for its potential to provide solutions for innovative learning.

1.   INTRODUCTION

The COVID-19 pandemic has transformed society and exacerbated social and economic inequalities. As part of efforts to curb its spread, governments around the world have suspended face-to-face teaching in schools, affecting some 95 per cent of the world's student population – the largest disruption to education in history.[1] UNESCO data from April 2020 suggests that 1.6 billion learners around the world were affected by school closures due to COVID-19, and 188 countries closed down schools.[2]

Pakistan was among the first countries in the world to institute widespread school closures as a result of COVID-19. In Sindh province, schools were closed from 27 February 2020, while the rest of the country soon followed suit from 14 March 2020. Reopening was staggered, with Classes 9–12 reopening on 15 September 2020, followed by Classes 6–8 on 23 September and nursery to Class 5 on 30 September. Following the third wave of the pandemic (April to May 2021), all children, regardless of whether they were enrolled in private or public schools, began attending on alternate days.

Even before the pandemic, Pakistan was facing a crisis in education, with 32 per cent of children aged 5-16 years estimated to be out of school,[3] and poor learning outcomes for those who are in education. The closure of education institutions due to COVID-19 has directly impacted on 40 million school-going learners[4] from pre-primary and primary to higher secondary levels and magnified the risks and vulnerabilities of an already weak education system.

The suspension of face-to-face instruction has led to concerns about the consequences for student learning. Data on this question are limited, and evidence on learning loss during lockdown has been slow to emerge. Unlike sectors such as the economy or health, school systems usually do not post data at short intervals. Schools and teachers have struggled to adopt online solutions for instruction, let alone for assessment and accountability.[5] Earlier crises have shown that the effects of school closures can persist for many years: following the 2005 earthquake in Pakistan, an entire cohort of students aged 3–15 had lower academic scores four years later, despite substantial remediation efforts.[6] While school closures have been effective in supporting efforts at social distancing, they may well have serious consequences for schooling and learning.

While previous research from other countries has examined the impacts of summer recess on learning, or disruptions from events such as extreme weather or teacher strikes,[7] COVID-19 presents an unprecedented challenge. Its concurrent effects on the economy render parents less equipped to provide learning support.[8] The health and mortality risk of the pandemic incurs further psychological costs, as does the toll of social

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[1] United Nations, 2020.
[2] UNESCO, 2020. Available at: https://en.unesco.org/covid19/educationresponse/
[3] Pakistan Social & Living Standards Measurement (PSLM) Survey, 2019/2020.
[4] MoFEPT, 2020.
[5] Kuhfeld et al., 2020.
[6] Andrabi, Daniels & Das, 2020.
[7] Downey, Von Hippel & Broh, 2004.
[8] Adams-Prassl et al., 2020.

isolation.[9] Family violence is projected to rise, putting already vulnerable students at increased risk.[10] When schools are closed, new learning does not take place and what has already been learned is likely to be forgotten. Furthermore, efforts to mitigate school closures are likely to be a function of the remote learning modalities governments are able to supply, who is able to access these modalities, and how effective these modalities are.

The Annual Status of Education Report (ASER) Pakistan, prepared by Idara-e-Taleem-o-Aagahi (ITA), is the largest citizen-led household-based survey, which is conducted regularly to provide reliable assessment-based estimates of education status and learning outcomes of children aged 5–16 years residing in rural districts of Pakistan. The methodology is based on ASER studies conducted across the South Asia region. In 2020 a large-scale survey could not be conducted due to the outbreak of COVID-19 and it was decided, in consultation with UNICEF, to conduct a limited survey specifically to assess the impacts of the pandemic on learning.

This UNICEF-supported study represents one of the first attempts to quantify learning loss from COVID-19 using the model developed by ASER, in which children are assessed in three basic competencies: Reading (Urdu/Sindhi/Pashto), English and Arithmetic, across 16 districts using a representative sample.

Province	Districts
Balochistan	Quetta Awaran Gwadar Bolan
Khyber Pakhtunkhwa (KP)	Peshawar South Waziristan Torghar Chitral
Punjab	Jhelum Bhakkar Muzaffargarh Sheikhupura
Sindh	Karachi-Malir Sukkur Tharparkar Dadu

The household-based study collects information on children's assessment and enrolment as well as information on:
- hours spent studying during school closures
- subjects that are difficult to study on their own
- study materials received from school during the closure period
- learning support and resources received from teachers during school closures
- digital devices used for learning
- time allocated for different activities on digital resources
- preparedness of the children on their own if schools were to shut down again.

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[9] Brooks et al., 2020.
[10] Pereda & Diaz-Faes, 2020.

1.1.　　Study objectives

In light of Article 25-A of the Constitution of Pakistan guaranteeing free and compulsory education for all children, and the country's commitment to achieve Sustainable Development Goal 4 (Ensure inclusive and equitable quality education), there is an urgent need to understand how the pandemic may further exacerbate existing inequalities. This requires disaggregated and focused evidence on the most vulnerable groups to assist governments as they grapple with responding to the pandemic. The crisis also offers an important reflection point for education leaders to question existing learning losses and explore new, evidence-based approaches to accelerate the delivery of quality education to more than a billion children worldwide.

The objectives of this study are:

- To measure the percent change in dropout due to COVID-19 lockdowns.
- To measure learning losses incurred due to COVID-19 disruptions using the assessment tools developed by ASER Pakistan.
- To identify the challenges faced by school-going children during school closures.
- To identify the extent to which factors like parental education and wealth index of households allow children to access technology and, therefore, to continue learning during the COVID-19 pandemic.
- To assess the (in-)adequacy of school facilities to prevent the spread of COVID-19.

1.2.　　Literature review

Studies to measure the impact of COVID-19 on education posit that the pre-pandemic design of education is a classroom-centred process where teachers and students are both physically present.[11] The sudden shutdown of those physical spaces, and the lack of adequate resources for virtual learning[12] is thus assumed to have disrupted the continuation of learning, in the absence of which retaining learned knowledge becomes a challenge.[13] Furthermore, the household space, where children may be engaged in household chores, surrogate caregiving, odd jobs and other tasks,[14] are not typically conducive to learning.[15] Thus, it may be theorised that school closures result in learning losses for school-going children.

The existing literature emphasises the gendered impact of the pandemic.[16] First, the interference of household activities in children's study time results in gendered learning losses. A study by the Malala Fund[17] shows that while both boys and girls want to invest time in continuing their education during school closures, girls are often tasked with more household chores, reducing their study time. Boys are engaged less in household chores

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[11] Engzell, Frey & Verhagen, 2020.
[12] Akmal et al., 2020; ASER, 2019.
[13] Geven & Hasan, 2020; Dorn et al., 2021; Engzell, Frey & Verhagen, 2020.
[14] Malala Fund, 2020.
[15] Geven & Hasan, 2020.
[16] Burzynska & Contreras, 2020.
[17] Malala Fund, 2020.

and also have more leisure time. Consequently, the impact of school closures on learning is expected to be higher for girls than for boys.

Enrolment losses are also believed to be gendered. The income shock that most working families have experienced due to the pandemic,[18] is expected to lead many households to revisit and adjust their priorities. Following the lockdown in mid-March 2020, many working families in Pakistan experienced a cash crunch, the impact of which was more severe for households with informal employment compared to those with formal employment.[19] Much like the government's austerity approach, which cuts an already meagre education budget first, many Pakistani households also reduce investments in children's education when hard times befall them. Studies argue that since girls' education is not considered a long-term investment in Pakistan, they are the first to lose their enrolment status.[20]

1.3. Research gaps

ASER's prior research has shown that in Pakistan many children, both those enrolled in school and those who are out of school, fail to score well in foundational learning assessments, i.e. of languages and basic arithmetic. However, there is a dearth of literature that focuses specifically on the impacts of COVID-19 on foundational literacy and numeracy.

This study aims to fill the gap in Pakistan by measuring the losses incurred in foundational literacy and numeracy. In particular, it aims to show the impact/losses incurred during and at the end of primary school.

1.4. Study hypotheses

Hypothesis 1: Compared to the learning levels in 2019, in 2021 there are statistically significant overall learning losses in foundational literacy and numeracy – Grade 2 language and arithmetic – at primary levels.

Hypothesis 2: Compared to boys, learning losses for girls are significantly higher than for boys between 2019 and 2021.

Hypothesis 3: Compared to children enrolled in private institutions, those enrolled in government schools experience significantly higher learning losses between 2019 and 2021.

Hypothesis 4: Household factors such as mothers' education and household wealth index have a statistically significant impact on learning levels.

Hypothesis 5: The household learning environment during school closures had a statistically significant impact on learning.

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[18] Geven & Hasan, 2020; Akmal et al., 2020.
[19] Malala Fund, 2020.
[20] Kattan et al., 2021; Burzynska & Contreras, 2020; Malala Fund, 2020.

2. METHODOLOGY

The study was designed as a household-based study with a mixed method data collection methodology with both quantitative and qualitative approaches.

2.1. Study field

The survey was conducted in 16 rural districts, four from each of Pakistan's four provinces.

The districts were sampled using Alif Ailaan's 2017 district rankings,[21] which were developed using ASER findings. Alif Ailaan created these ranking using three indicators: learning quality, retention and gender parity in education. For this study, the rankings were divided into three categories: low-performing districts, medium-performing districts and high-performing districts. One district was randomly selected from the high-performing category, while the remaining three were selected randomly from the medium- and low-performing categories. A condition was added here that no districts should border another, to ensure geographical spread.

Figure 1: Districts selected for study

- Low performing districts
- Medium performing districts
- High performing districts

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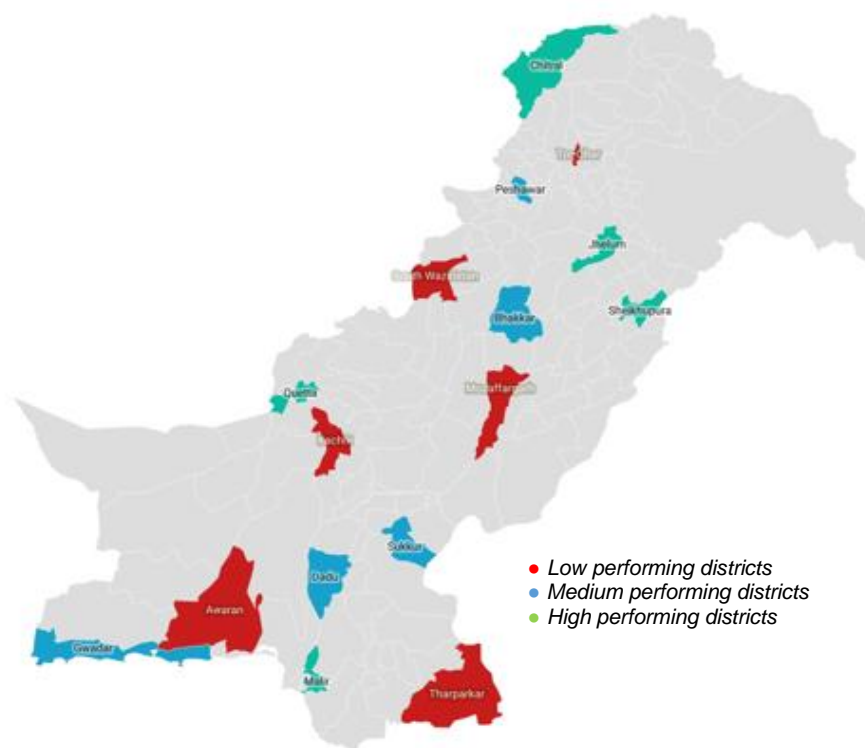
[21] Alif Ailaan, 2017.

Province	Districts
Balochistan	Quetta Awaran Gwadar Bolan
Khyber Pakhtunkhwa (KP)	Peshawar South Waziristan Torghar Chitral
Punjab	Jhelum Bhakkar Muzaffargarh Sheikhupura
Sindh	Karachi-Malir Sukkur Tharparkar Dadu

2.2.   Sampling

The total population of this survey consists of 16 rural districts of Pakistan.

The sampling frame was developed using a village list, data from the Population Census 2017 based on the total number of households, and the total population of each village in the list.

In view of the variability of key variables, population distribution and field resources, a sample of 600 households pertaining to 20 households from each village was used.

A two-stage sample design was adopted:

- First stage: 30 villages were selected using the provisional village directory of the 2017 census.
- Second stage: 20 households were selected in each of the 30 selected villages.

The allocation plan was as follows:

Districts	Villages per district	Households per village
16	30	20

The sample primary sampling units (PSUs) were considered sufficient to produce reliable estimates with a 5 per cent margin of error at 95 per cent confidence level. Villages in districts were taken as PSUs.

Sample PSUs were selected using the probability proportional to size (PPS) method. Every year, 20 villages from the previous year are retained and 10 new villages are added. Ten villages are dropped from the previous year's list and 10 new villages are added from the population census village directory. The 10 new villages are also chosen using PPS. The 20 old villages and 10 new villages give us a "rotating panel" of villages, which generates a better estimate of changes.

Households were treated as secondary sampling units (SSUs). Based on actual households in each PSU, 20 households were selected. This was achieved by dividing each village into four parts. In each of the four parts, started from the central location and every fifth household on the left-hand side going in a circular fashion was picked, till five households are selected from each part.

One government school (mandatory) and one private school (optional) was selected from each village to assess school readiness for COVID-19.

2.3.   Survey tools

This household-based study was conducted across 16 rural districts selected using two-stage stratified sampling. The questionnaire for households aimed to capture the impact that school closures in Pakistan have had on learning levels and enrolment. It is hypothesized that school closures would have made learning especially difficult for girls, who are engaged in household chores more than boys, as well as for children belonging to households where wealth, technology, and parental education as resources for home-based learning are less readily available.

Along with the household survey, one government and one private school from each village was also surveyed with regard to school facilities, teacher attendance and budget allocations, with a separate section added to monitor precautions undertaken during COVID-19 when alternate-day schooling was being observed.

Existing ASER tools for measuring learning including English, Urdu/Sindhi/Pashto and Arithmetic were adapted using the textbooks for 2020 for the current study. The International Common Assessment for Numeracy open-source tool,[22] which enables internationally comparable results, informed the development of the adapted Arithmetic tool. The adapted tools were shared with curriculum departments of all provinces for feedback and suggestions.

The instructions provided to the data collection team on identifying households and conducting the survey are provided in the Annex.

2.4.   Survey process

The survey process began with provincial trainings. District-level partners were engaged to fully realize the objective of a "citizen-led" assessment. Three provincial trainings (one each for Punjab and KP and one for Sindh and Balochistan) were conducted for master trainers selected from the study districts. The master trainers were trained on what to do in a village, how to select households, how to introduce oneself, how to conduct the assessment and gather household data, and what to do in a school. The master trainers then conducted trainings in their home districts with 60 volunteer surveyors (two volunteers per village).

The survey was conducted across the 16 study districts between mid-March and mid-April 2021.

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[22] https://palnetwork.org/ican/

In each village, the volunteers began by familiarizing themselves with the village boundaries and its residential areas, talking to people and drawing a rough sketch of the village to help identify households for the survey. In the households, the respondent was usually the elder or the head of the household. Information on household indicators, children's educational status and parental education was obtained from the respondent. Children aged 5–16 years were engaged only for assessment, and a few additional questions on learning during COVID-19. Assessments were conducted one on one. The questionnaires and assessment protocols are provided in the Annex.

Data collection was monitored through two channels. Firstly, partner organizations were required to monitor their volunteers. Secondly, ITA monitored conducted random spot checks. The data submitted by volunteers was checked, first by the master trainers, and then by ITA monitors at the office. Only after these quality controls and checks was a booklet approved for data entry. Data entry was performed using a customized ASER software designed to facilitate quality data collection and entry.

Adherence to strict standards of research ethics was ensured. From pre-testing to training, data collection, monitoring, data analysis and report writing, standardized ethical protocols were followed. New questions were tested for sensitivity through internal discussions, consultations, and pre-testing before they were launched to the larger public, so any sensitive question was adequately amended or even removed. During the training sessions for enumerators, one session was devoted to research ethics. Enumerators also received training on how to introduce themselves to residents and how to conduct themselves, and on ensuring that all participating households understood that participation was completely voluntary, no harm will would come from refusing to participate, and that if they chose to participate, all identifying information would be kept fully confidential and the responses analysed collectively to estimate aggregates. This process was fully ensured during data collection monitoring. In addition to these standard protocols for the ASER survey, the training, and data collection in 2021 ensured that COVID-19 protocols were strictly followed.

Data analysis

Once data entry was completed, ASER research analysts performed data cleaning and analysis. Analysis was performed only on clean datasets using the STATA software.

The data analysis centred around the children's assessments which were analysed by age, by class, gender, institution, parental education, household wealth index, and the availability of and access to technology during school closures.

The findings from the 16 districts in this study were compared to those from the same 16 districts in previous ASER surveys. This enabled the research team to develop a comprehensive picture of the state of learning during COVID-19 and the impact of the pandemic on education in Pakistan.

3.   FINDINGS

The study uses the ASER assessment tool to highlight the severity of learning losses at foundational levels, providing an important body of evidence for future education policymaking.

Learning quality for three subjects – Reading (Urdu/Sindhi/Pashto),[23] Arithmetic and English – was assessed using the ASER tools. Each subject has its own competency levels which are designed to measure the Grade 2 competence of children aged 5–16 years.

The ASER assessments in the 16 districts covered in this study are compared with the findings from the same districts in ASER 2019.

For each subject, learning levels for 2021 are reviewed for children in school and for out-of-school children, followed by a deeper dive into learning at Class 3 and Class 5 levels.

Trends in learning from 2015 to 2021 are then presented to visualize the progress made prior to the pandemic, and to highlight learning losses during the pandemic. A similar comparison is made between learning in 2019 and 2021 for children in Classes 1, 3 and 5.

T-tests have been performed for all comparisons to evaluate the significance of the difference from 2019 to 2021, making the analysis more robust and statistically reliable.

While the primary purpose of ASER is to understand the educational status and learning levels of children, the survey also collects data on other indicators for deeper insight into the reasons for the findings on education status and learning levels. This includes child-specific data on age, gender and type of institution attended, as well as household wealth and parental education as a determinant or influencing factor for children's learning.

Thus, a child's enrolment and learning levels are seen as functions of gender, type of institution, mothers' and fathers' education and household indicators. In 2020, enrolment and learning are further affected by school closures for the COVID-19 pandemic, and the study seeks to examine these effects.

3.1.   Household and child profiles

Key points
- *9,392 households with 25,448 children aged 3–16 years were surveyed in 16 districts of Pakistan.*
- *Assessments of English, Arithmetic, and Reading (Urdu) were conducted at Grade 2 level for 21,589 children aged 5–16 years.*

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[23] Reading assessments were conducted in Urdu, Sindhi or Pashto language depending on the province. In the remainder of this report where only Urdu, the national language is referred to, this should be considered shorthand for the three languages.

- *58 per cent of boys aged 3–5 years are enrolled in school or preschool compared to 42 per cent of girls. While 61 per cent of boys aged 6–16 years are enrolled, only 29 per cent of girls are in school.*
- *In the poorest households, 90 per cent of mothers and 73 per cent of fathers have had no education.*
- *While 8.5 per cent of the poorest households have access to a smartphone, only 2.8 per cent have internet access, 2.4 per cent have access to a television and 0.5 per cent have access to a computer.*

The report is based on a survey of 9,392 households, in which the educational status of 25,448 children aged 3–16 years was examined.

The survey was conducted in 16 districts, four districts in each of Pakistan's four provinces. Each of the four provinces accounted for 25 per cent of the children surveyed.

Table 1: Percentage distribution of surveyed children across sampled districts

	BALOCHISTAN	KP	PUNJAB	SINDH	Total
Awaran	25.89				6.72
Bhakkar			22.99		5.86
Bolan	27.58				7.16
Chitral		16.35			4.01
Dadu				24.10	5.79
Gwadar	19.76				5.13
Jhelum			19.58		4.99
Karachi Malir				26.35	6.33
Mithi				23.07	5.54
Muzaffargarh			25.50		6.50
Peshawar		29.46			7.23
Quetta	26.78				6.96
Sheikhupura			31.93		8.13
South Waziristan		25.74			6.31
Sukkur				26.48	6.36
Torghar		28.45			6.98
Total	**100**	**100**	**100**	**100**	**100**

Assessments of English, Arithmetic, and Reading (Urdu) were conducted at Grade-2 level for 21,589 children aged 5–16 years.

Additionally, questions were asked on parental education. For that purpose, within these 9,392 households, 9,566 mothers were assessed.

The team also surveyed 456 government schools and 198 private schools to assess school facilities and their capacity to support education and implement official standard operating procedures (SOPs) to prevent the spread of COVID-19.

Table 2: Survey coverage

Category	Sample Size
Households	9,392
Children (aged 3–16)	25,448
Children (aged 5–16)	21,589
Mothers	9,566
Government schools	456
Private schools	198

The average age of children included in this study is 8.6 years, with a standard deviation of 3.7. As such, the statistical majority of children (67 per cent) fall between 5 and 12 years of age, both included.

On average, surveyed households have three children aged 3–16. Of these children, 43 per cent are girls while 57 per cent are boys.

Figure 2: Age and gender distribution of surveyed children
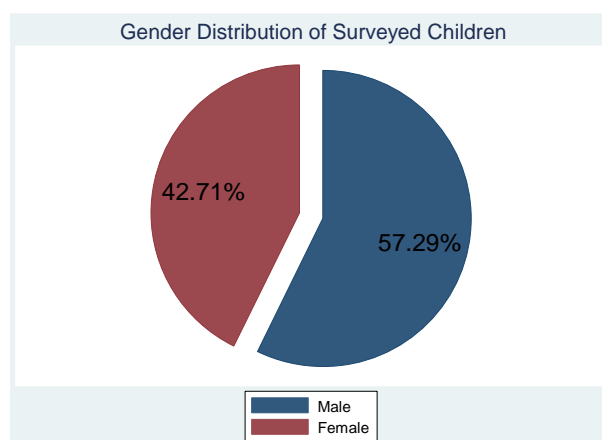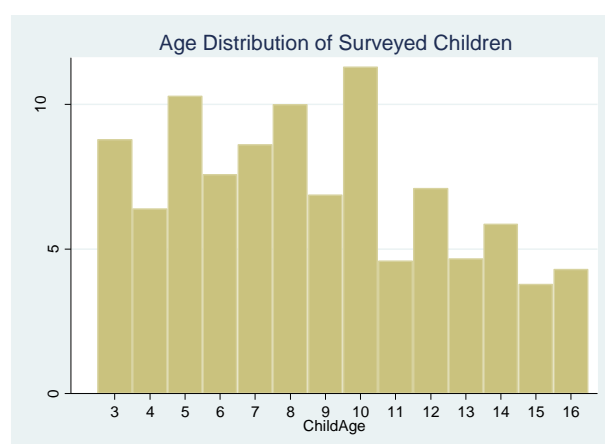
Enrollment and dropout status of surveyed children
At 36.5 per cent, enrollment levels are lower for children of preschool age (3–5 years) compared to those aged 6–16 years (82 per cent).

Pakistan's longstanding gender-related inequities in education are broadly reflected in the surveyed children. For both age groups – 3–5 year olds and 6–16 year olds – enrolment for boys (58 per cent and 61 per cent) is significantly higher than for girls (42 per cent and 39 per cent). The percentages of boys who have dropped out and those who have never enrolled are also lower than for girls.

Figure 3: Enrolment status of surveyed children

EDUCATIONAL STATUS OF SURVEYED CHILDREN

■ Currently Enrolled   ■ Never Enrolled   ■ Dropped Out

% CHILDREN

AGE 3 TO 5: 0.45, 63.06, 36.5
AGE 6 TO 16: 6.4, 11.8, 81.8
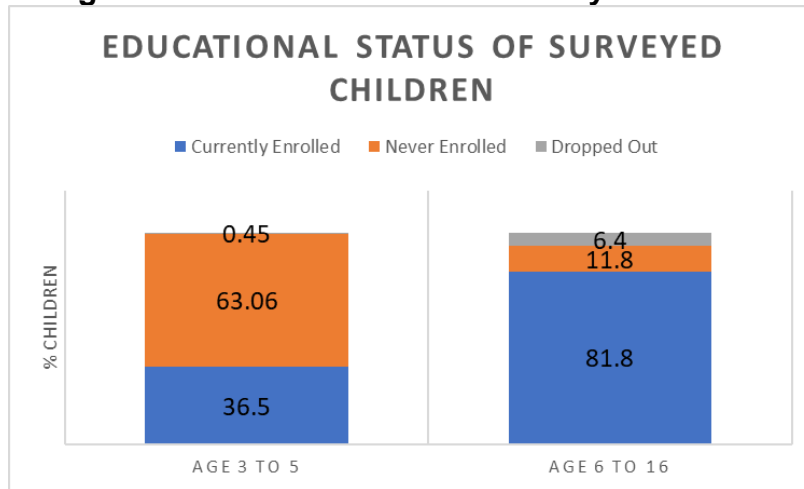
Figure 4: Enrolment status by gender

EDUCATION STATUS BY GENDER

% Children

Currently Enrolled — Boys: 58.3 / 61.1, Girls: 41.7 / 38.9
Never Enrolled — Boys: 52.2 / 46.4, Girls: 47.8 / 53.6
Dropped Out — Boys: 48.3 / 42.1, Girls: 51.7 / 57.9

■ Age 3 to 5   ■ Age 6 to 16
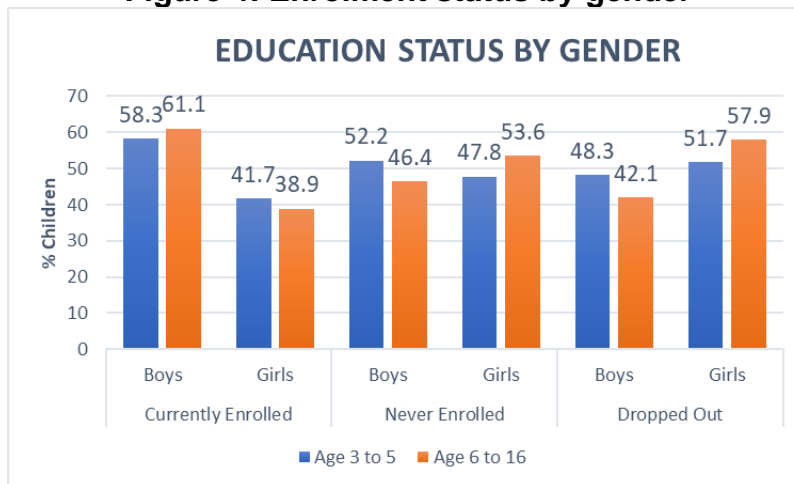
While the majority of currently enrolled boys and girls attend government schools (83 per cent), about 16 per cent are enrolled in private institutions, 0.8 per cent in madrassas and the remaining 0.2 per cent in other non-formal education centres or schools.

Figure 5: Currently enrolled children by type of institution

Institute Type of Currently Enrolled Children

Government Institute: 83
Private Institute: 15.9
Madrassa: .803
Other Institute: .236
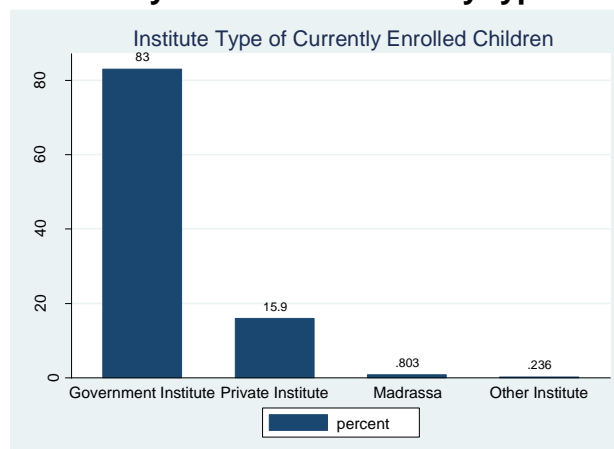
■ percent

About 6 per cent of surveyed children have dropped out of school, 5 per cent before the COVID-19 period and 1 per cent during the pandemic. Thus, in terms of percentage change during the COVID-19 period, dropouts increased by 20 per cent. The gender difference in dropouts was insignificant, possibly because boys were made to leave education to provide financial support to their families, while girls dropped out because their education was considered an unnecessary "expenditure".

The proportion of children who dropped out during the pandemic increases with level of education. Thus while 14 per cent of children who dropped out at primary level did so during the pandemic, this proportion rises to 24 per cent of children who dropped out at elementary (middle) level, and 38 per cent of those who dropped out at matriculation (secondary) level.

Figure 6: Enrolment status, education level and time of dropout
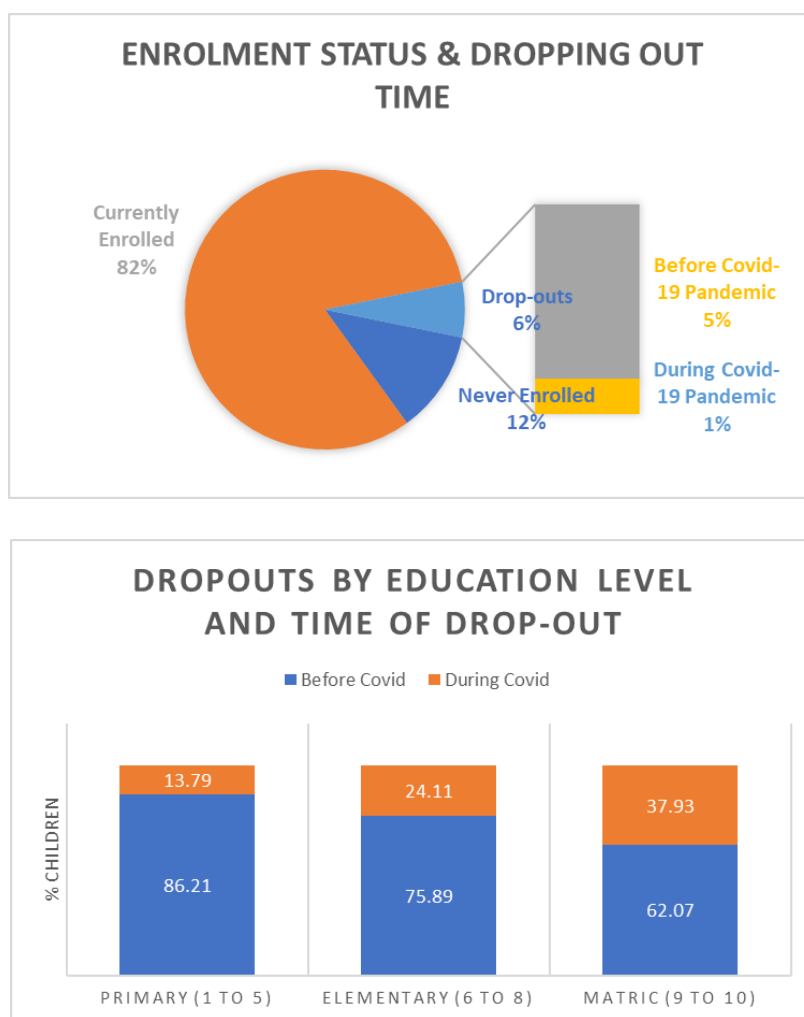
Family and household factors affecting children's education

A child's learning is affected by various household factors ranging from house infrastructure and facilities to parental education.

The type of house in which a child lives is a component of the household wealth index, which correlates to learning outcomes. The study divided houses into three types: kutcha (hut; walls and roof of earth, organic materials, etc), semi-pucca (walls of pucca materials but roof of kutcha materials) and pucca (walls and roof of durable materials such as brick or cement). About 39 per cent of the households surveyed live in kutcha houses, 42 per cent in semi-pucca and only 20 per cent in pucca houses.

Figure 7: Surveyed housing types
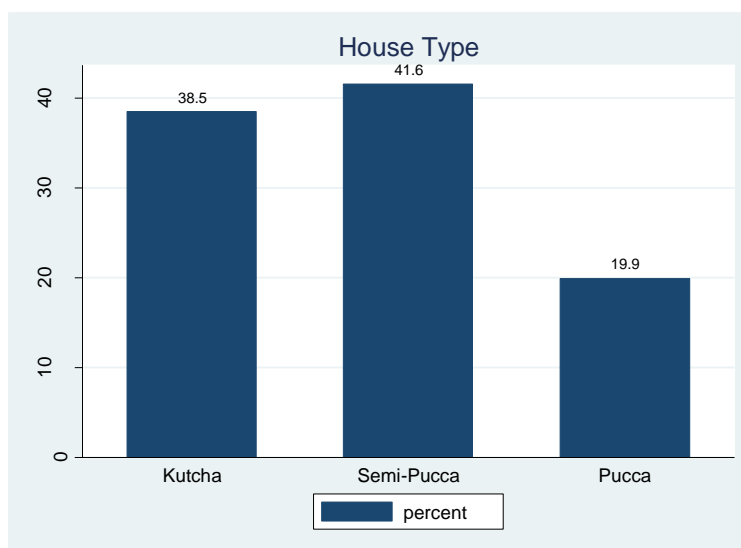
Parental education, especially mothers' education, is theoretically a strong factor in children's education.[24] During school closures parents may find themselves required to support their children's learning. The study found that fathers are generally more educated than mothers: while 50 per cent of fathers are reported to have no education, the figure rises to 69 per cent of mothers. Similarly, while only 2 per cent of mothers have completed undergraduate education, 6 per cent of fathers are college graduates.

Parental education levels vary by household wealth index. Parents belonging to wealthier households are generally more educated compared to parents in poorer households. Nevertheless, even in the highest wealth quartile, over half (55 per cent) of mothers are reported to have no education, compared to a third (33 per cent) of fathers. In the poorest wealth quartile, 90 per cent of mothers and 73 per cent of fathers are reported to have had no education.

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[24] See for example: Saba & Khan 2013; Hernandez et al., 2014.

Figure 8: Parental education levels

Parents' Education

Education Level	Mothers' Education	Fathers' Education
No Education	68.94	50.1
Primary or Below	11.58	12.35
Elementary (6-8)	6.3	8.2
Matric (9-10)	7.17	16.51
Intermediate (11-12)	3.67	6.82
Graduate level (13-16)	2.33	6.02
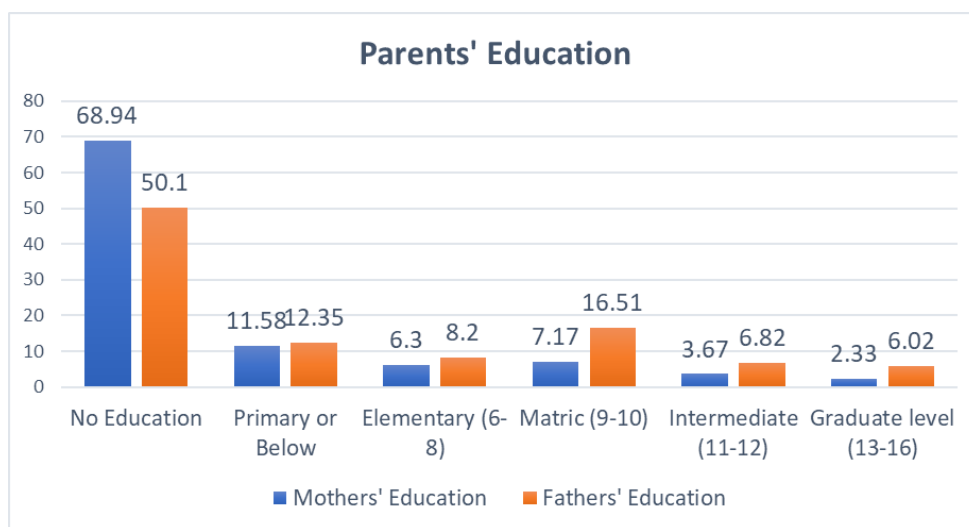
Figure 9: Parental education by wealth index

Mothers Education by Wealth Index

Wealth Quartile 1
- No Education: 90
- Primary or Below: 4.2
- Elementary (6-8): 2.3
- Matric (9-10): 1.7
- Intermediate (11-12): 1
- Graduate Level (13-16): .76

Wealth Quartile 2
- No Education: 78
- Primary or Below: 9.3
- Elementary (6-8): 4.4
- Matric (9-10): 4.4
- Intermediate (11-12): 2.1
- Graduate Level (13-16): 2.1

Wealth Quartile 3
- No Education: 65
- Primary or Below: 13
- Elementary (6-8): 6.7
- Matric (9-10): 8.8
- Intermediate (11-12): 3.6
- Graduate Level (13-16): 3.5

Wealth Quartile 4
- No Education: 55
- Primary or Below: 15
- Elementary (6-8): 7.4
- Matric (9-10): 13
- Intermediate (11-12): 5.5
- Graduate Level (13-16): 4.2

Percentage of Mothers
Graphs by 4 quantiles of scores

Fathers Education by Wealth Index

Wealth Quartile 1
- No Education: 73
- Primary or Below: 6.7
- Elementary (6-8): 5.2
- Matric (9-10): 8.9
- Intermediate (11-12): 2.7
- Graduate Level (13-16): 3.1

Wealth Quartile 2
- No Education: 55
- Primary or Below: 11
- Elementary (6-8): 7.6
- Matric (9-10): 15
- Intermediate (11-12): 6.4
- Graduate Level (13-16): 5.5

Wealth Quartile 3
- No Education: 41
- Primary or Below: 14
- Elementary (6-8): 9.2
- Matric (9-10): 20
- Intermediate (11-12): 7.5
- Graduate Level (13-16): 8.4

Wealth Quartile 4
- No Education: 33
- Primary or Below: 15
- Elementary (6-8): 8.7
- Matric (9-10): 23
- Intermediate (11-12): 9.8
- Graduate Level (13-16): 11

Percentage of Fathers
Graphs by 4 quantiles of scores

Wealth also correlates to the availability of technology in households, which itself is important for distance learning during school closures. Poorer households have far lower access to technology than their wealthier counterparts. Thus, only 0.5 per cent of the poorest households have access to a computer and 2.4 per cent to a television and 2.8 per cent have internet access. Access to smartphones is, however, a little higher amongst the poorest households; 8.5 per cent are reported to have a smartphone.

By contrast, the wealthiest households have near-universal access to television (97 per cent) and smartphones (96 per cent). Even in this group, less than half (45 per cent) have internet access.[25]

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[25] The question referred to home internet connections and did not include mobile data connections.

Figure 10: Household technology by wealth index

Household Technology by Wealth Index
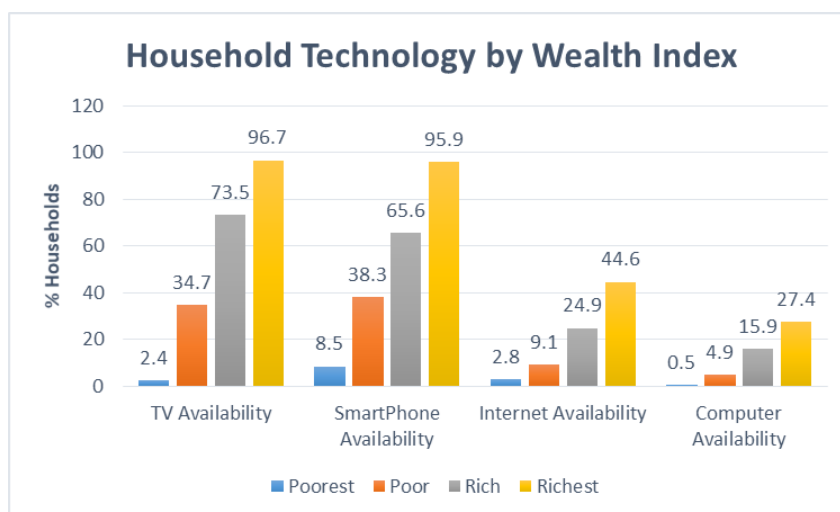
In 2019, the ASER study found that 10 per cent of the surveyed households were recipients of support from social safety nets (such as the Benazir Income Support Programme, Ehsaas, Pakistan Poverty Alleviation Fund, Akhuwat or others). In 2021 the percentage of households benefiting from these forms of support has risen to 11 per cent.

Figure 11: Social safety net beneficiaries

RECIPIENT OF SOCIAL SAFETY NETS

*CATEGORIES: EHSAAS, BISP, PFPA, AKHUWAT, OTHER
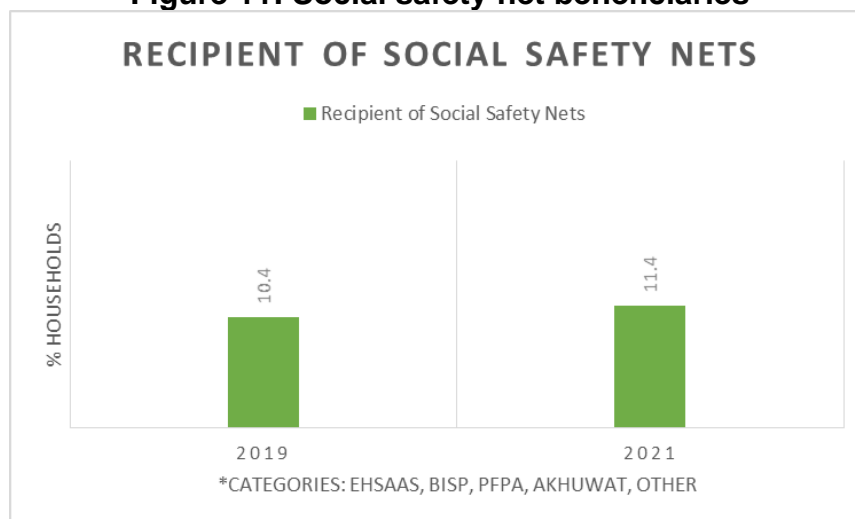
Household stresses due to the pandemic

The COVID-19 pandemic has created both financial and psychological stresses for caregivers. Financial stress on vulnerable households causes parents more likely to take children out of education, whether to reduce expenditures or to contribute financially to household incomes. Psychological stress renders parents less able to support their children's education.

About 77 per cent of household heads report that their earnings have been affected by the COVID-19 lockdowns, while 65 per cent report that their psychological wellbeing has been affected by the COVID-19 pandemic.

Figure 12: Social safety net beneficiaries
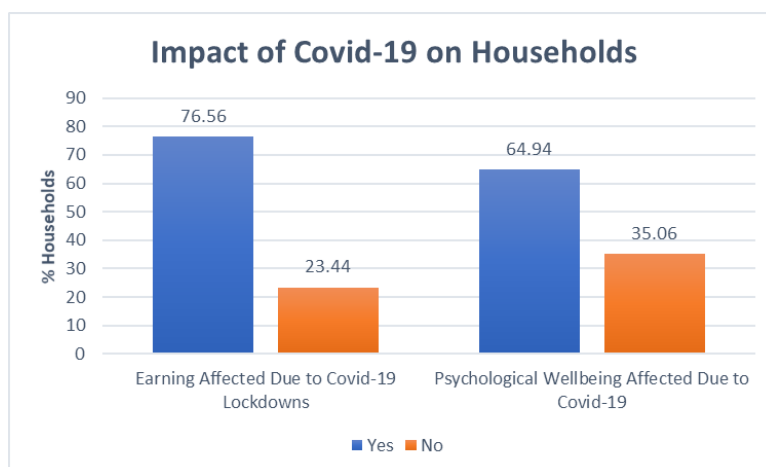
3.2.　Reading (Urdu/Sindhi/Pashto) learning outcomes

Key points

- *Less than 30 per cent of children can read a story in Urdu at Grade 2 level. Among out-of-school children this falls to below 6 per cent.*
- *The proportion of children in Classes 1–5 who are able to read a story in Urdu rose from 15 per cent in 2015 to 24 per cent in 2019, but subsequently declined to 22 per cent in 2021.*
- *The proportion of children in Class 1 who can read Urdu words has declined from 26 per cent in 2019 to 18 per cent in 2021.*
- *The proportion of children in Class 3 who can read a story at Grade 2 level has declined from 19 per cent in 2019 to 15 per cent in 2021.*
- *The proportion of children in Class 5 who can read a story at Grade 2 level has declined only slightly, from 57 per cent in 2019 to 56 per cent in 2021.*

Reading (Urdu) competency is measured across five levels: beginner/nothing, letters, words, sentences and story reading.

Reading (Urdu/Sindhi/Pashto) learning levels by enrolment status

Overall, in 2021, findings from the 16 districts show that less than 30 per cent of children can read an Urdu-language story at Grade 2 level. The proportion for out-of-school children is significantly lower, at below 6 per cent, compared to 32 per cent for children enrolled in school.

Conversely, children who are out of school are substantially more likely to have beginner or no reading competency in Urdu (72 per cent) compared to children who are in school (10 per cent).

The study assessed reading levels at Class 3 and Class 5 levels in 2021. Unsurprisingly, children in Class 5 have significantly higher levels of learning than those in Class 3, however even these levels are concerning. About 46 per cent of children in Class 5 cannot

read an Urdu story at Grade 2 level. Of children in Class 3, 85 per cent cannot read a story at Grade 2 level.

Figure 13: Reading (Urdu/Sindhi/Pashto) learning levels by enrolment status
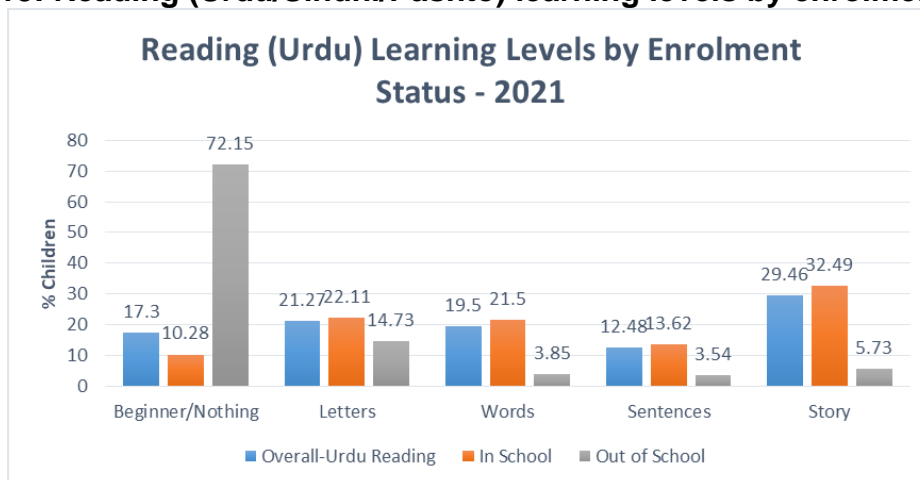
Figure 14: Reading (Urdu/Sindhi/Pashto) learning levels by class
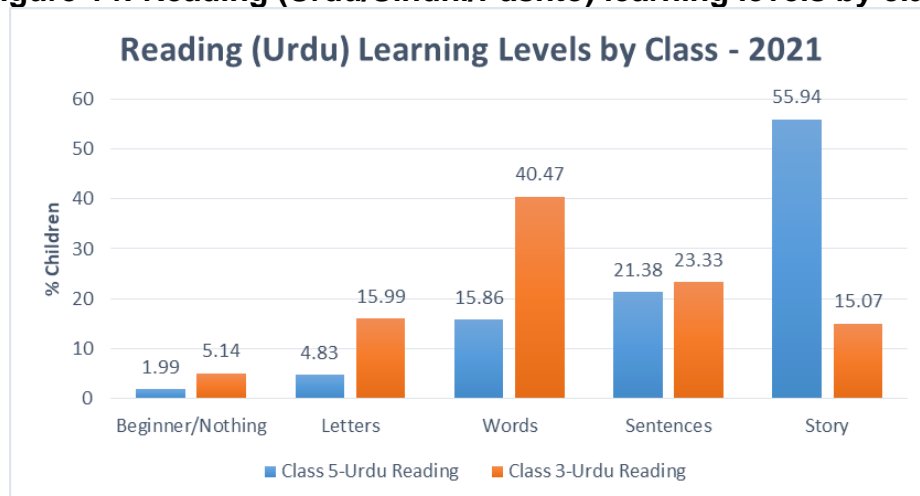
Trends in Reading (Urdu/Sindhi/Pashto) learning levels

A comparison of Urdu learning of children in Classes 1–5 from 2015 to 2021 shows that while learning levels were improving from 2015 to 2019, there was a decline between 2019 and 2021. Between 2015 and 2019, the percentage of children in Classes 1–5 who were able to read a story easily increased from 15 per cent to 24 per cent, but in 2021 this dropped to 22 per cent.

Figure 15: Class 1–5 students achieving Reading (Urdu/Sindhi/Pashto) story level by year
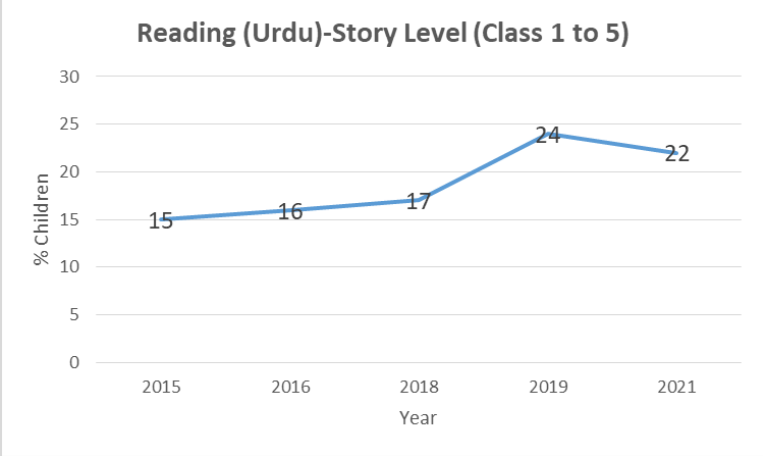
Between 2019 and 2021, children in Class 1 face greater challenges even with lower competencies, i.e., reading words. In 2019, 26 per cent of children in Class 1 could read words, in 2021, this proportion has come down to 18 per cent.

Similarly, while in 2019, 19 per cent children in Class 3 could read a story at Grade 2 level, but in 2021, this figure has come down to 15 per cent.

Learning losses in Class 5 are less than in the lower classes. This may be because the assessment tools being used are at Grade 2 level and a student who has gained this level of knowledge, and perhaps even built on its foundations in higher classes, is less likely to lose foundational knowledge compared to children who have not yet had this opportunity.

A t-test to assess whether the learning losses between 2019 and 2021 are statistically significant for children in Classes 1–5 shows a p-value of 0.02. This indicates a 95 per cent confidence level that Reading (Urdu) learning losses at this level are statistically significant.

Figure 16: Reading (Urdu/Sindhi/Pashto) learning levels in 2019 and 2021
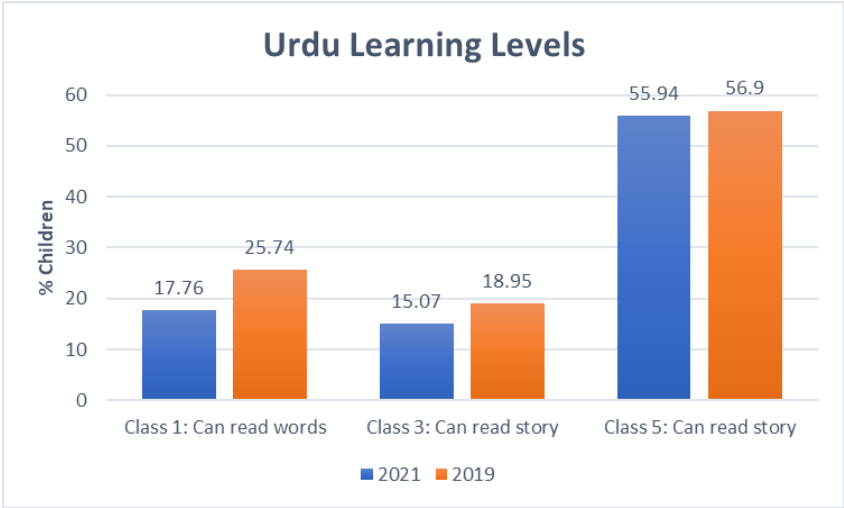
3.3.   Arithmetic learning outcomes

Key points
- *Of children enrolled in school, 24 per cent can do simple two-digit division sums and 18 per cent can do subtraction sums, while of those who are out of school, the percentages are 5 per cent and 4 per cent respectively.*
- *In 2015, 9 per cent of children in Classes 1–5 could solve two-digit division sums. This increased to 20 per cent by 2019, however in 2021 there was a decline to 16 per cent.*
- *The proportion of children in Class 1 who can recognize numbers from 100 to 200 has declined from 20 per cent in 2019 to 12 per cent in 2021.*
- *The proportion of children in Class 3 who can do two-digit division has declined from 17 per cent in 2019 to below 10 per cent in 2021.*
- *The proportion of children in Class 5 who can do two-digit division has improved slightly from 40.4 per cent in 2019 to 41.5 per cent in 2021.*

Arithmetic competency is measured across six levels: beginner/nothing, recognition of numbers 1–9, recognition of numbers 10–99, recognition of numbers 100–999, ability to perform subtraction and ability to divide two-digit numbers by one digit at Grade 2 level.

Arithmetic learning levels by enrolment status

In 2021, the Arithmetic learning outcomes of in-school children are significantly higher than those of out-of-school children. Of children in school, 24 per cent can do division and 18 per cent can do subtraction sums, whereas of children who are out of school, only 5 per cent can do division and 4 per cent can do subtraction. However, even of children in school, 15 per cent are complete beginners or have no Arithmetic learning, not even the ability to recognize the numerals 1–9.

Figure 17: Arithmetic learning levels by enrolment status
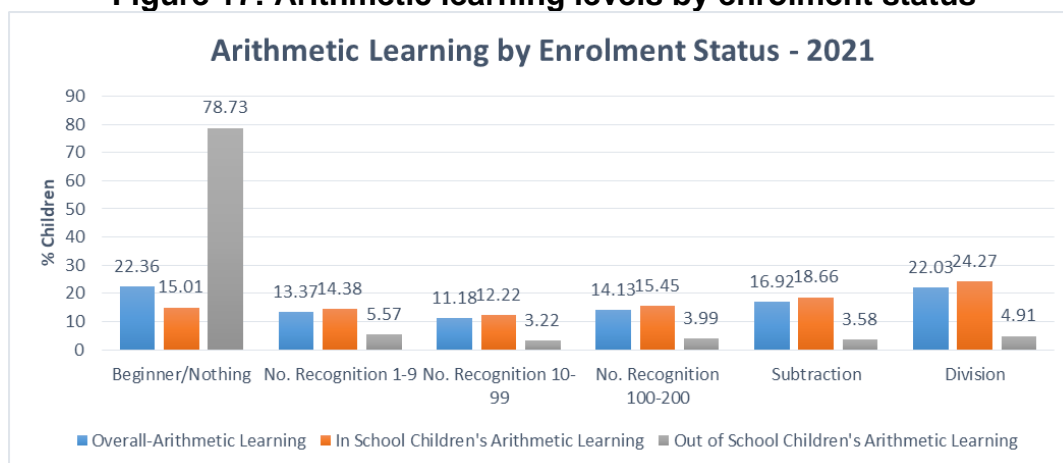
For enrolled children in Class 3, only 9.7 per cent per cent of children can solve two-digit division in 2021, while 41.5 per cent of children in Class 5 can perform these sums. Even at Class 5 level, 59 per cent of children cannot solve a Grade 2 level two-digit division sum.

Figure 18: Arithmetic learning levels by class
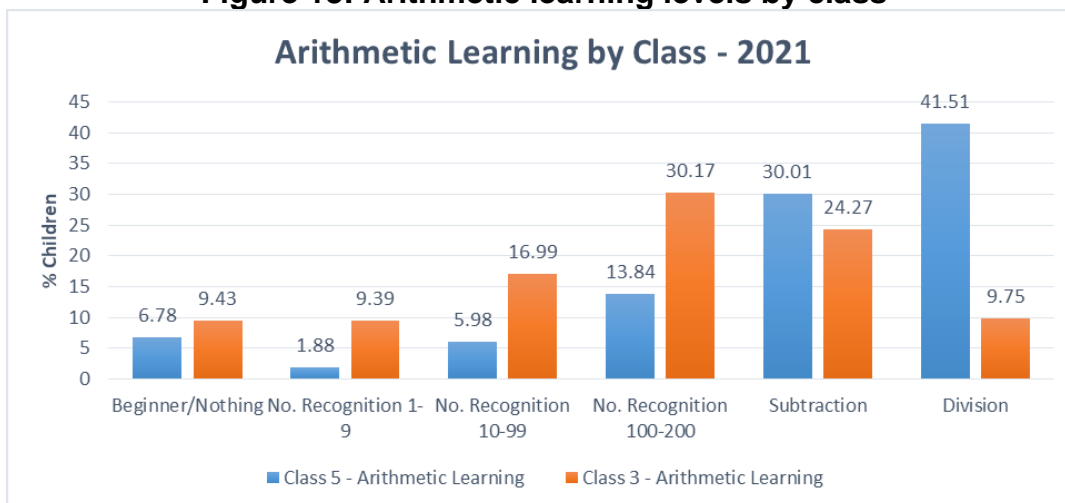
Trends in Arithmetic learning levels

While in 2015 only 9 per cent of children in Classes 1–5 belonging to the studied districts could solve two-digit division sums, by 2019 this proportion had steadily increased to 20 per cent. In 2021, however, there is a decline and only 16 per cent children in these classes can solve a two-digit division sum at Grade 2 level. This is lower even than in 2018.

Figure 19: Class 1–5 students achieving Arithmetic division level by year
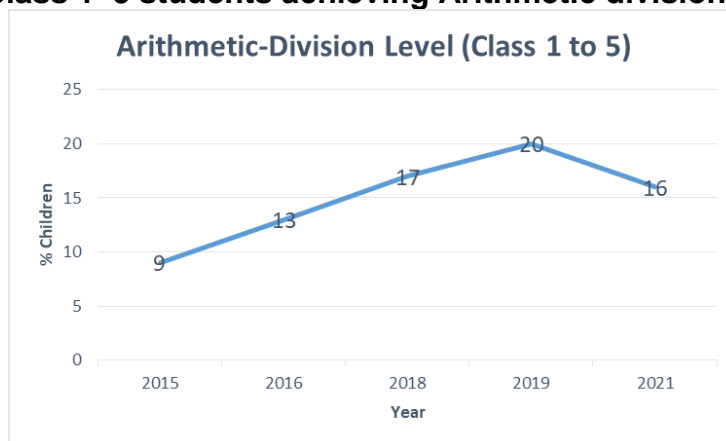
Children in Class 1 struggle even with lower Arithmetic competencies (such as number recognition) while those in Class 3 have experienced learning losses in two-digit division which they learn in Class 2.

In 2019, almost 20 per cent of children in Class 1 could recognize numbers from 100 to 200, but in 2021, this proportion has dropped to 12 per cent. In 2019, 17 per cent of children in Class 3 could do two-digit division at Grade 2 level, but in 2021 this has fallen to below 10 per cent. At Class 5 level, however, there is a slight (1 per cent) gain in children who can perform these sums.

A t-test conducted on the change in Arithmetic learning levels for children in Classes 1–5 between 2019 and 2021 yielded a p-value of 0.00, indicating a confidence level of 95 per cent that statistically significant learning losses in Arithmetic have occurred at primary-school level.

Figure 20: Arithmetic learning levels in 2019 and 2021
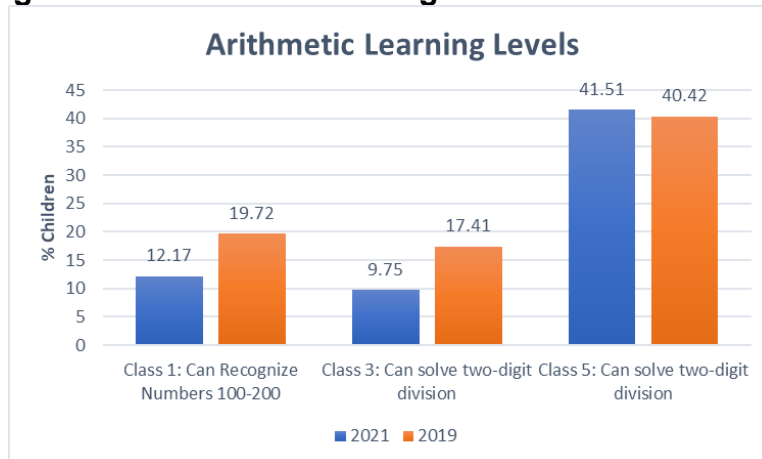
3.4.　　　English learning outcomes

Key points

- *About 6 per cent of out-of-school children can read sentences in English at Grade 2 level, compared to 34 per cent of those enrolled in school.*
- *The proportion of children in Classes 1–5 who are able to read sentences in English rose from 12 per cent in 2015 to 23 per cent in 2019, but subsequently stagnated at 23 per cent in 2021.*
- *The proportion of children in Class 1 who can read lowercase English letters has declined from 23 per cent in 2019 to 22 per cent in 2021.*
- *The proportion of children in Class 3 who can read English sentences at Grade-2 level has declined from 21 per cent in 2019 to 18 per cent in 2021.*
- *The proportion of children in Class 5 who can read English sentences rose from 47 per cent in 2019 to 55 per cent in 2021.*

English competency is measured by reading ability across five levels: beginner/nothing, recognition of capital letters, recognition of lower-case letters, recognition of words and ability to read sentences at Grade 2 level.

English learning levels by enrolment status

In 2021, the English learning outcomes of in-school children are significantly higher than those of out-of-school children. Of children in school, 34 per cent can read sentences in English compared to 6 per cent of children who are out of school. Nevertheless, nearly a fifth (17 per cent) of children in school are complete beginners or have no English learning whatsoever.

While 55 per cent of children enrolled in Class 5 can read sentences in English at Grade 2 level, only 18 per cent of Class 3 children can do the same. A high percentage of children in both classes cannot read sentences at this level.

Figure 21: English learning levels by enrolment status
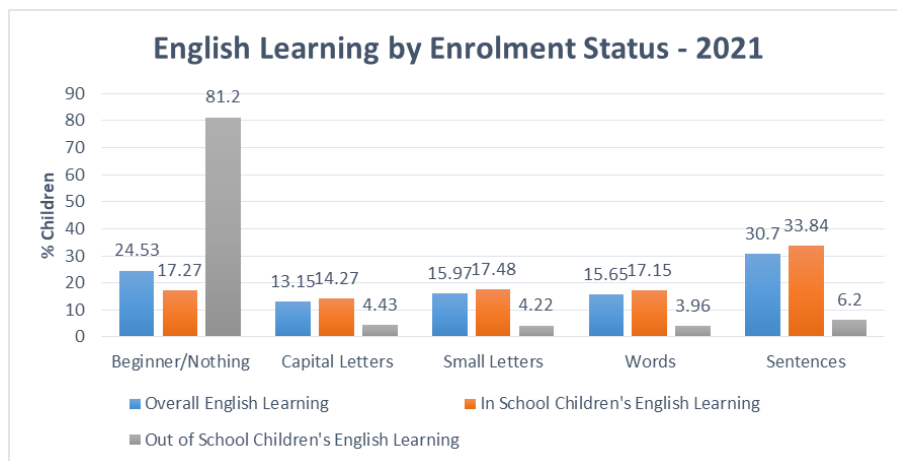
Figure 22: English learning levels by class
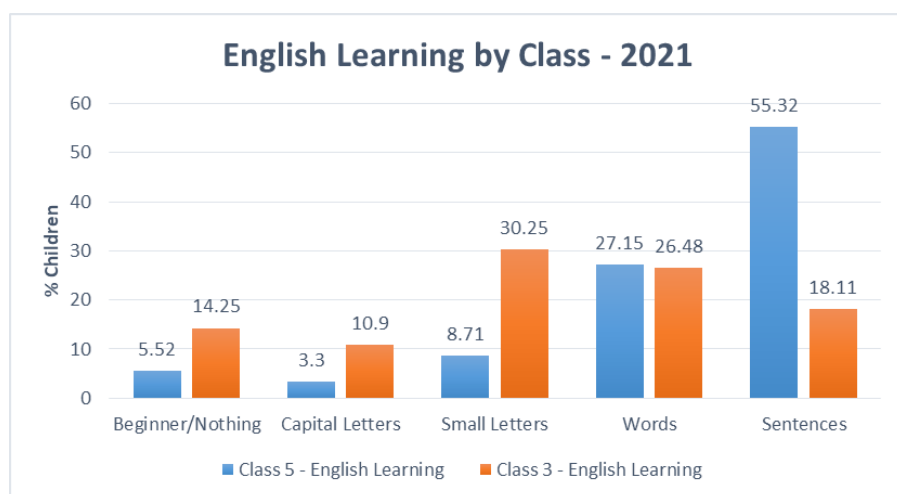
Trends in English learning levels

Between 2015 and 2019, the competency of children in Classes 1–5 at reading sentences in English improved from 12 per cent to 23 per cent. In 2021, there is no improvement or decline in this figure, which stands at 23 per cent. However, improvements in English learning have varied, with a decline observed between 2016 and 2018 and a very sharp rise between 2018 and 2019.

Figure 23: Class 1–5 students achieving English sentence level by year
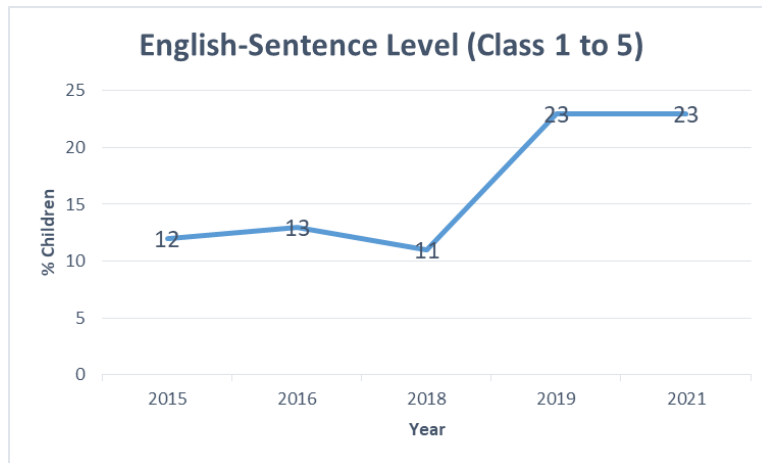
In 2019, 23 per cent of children in Class 1 could read lowercase letters in English compared to 22 per cent in 2021. Similarly, 21 per cent of children in Class 3 could read sentences at Grade 2 level in 2019, falling to 18 per cent in 2021. In Class 5, however, the results change to learning gains, from 47 per cent in 2019 to 55 per cent in 2021.

A t-test to evaluate the differences in learning levels finds that higher primary-level classes show learning gains while for lower classes the results are statistically insignificant. However, a deeper analysis shows that when English learning outcomes are compared for girls attending government schools with their male peers or with children attending private schools, the losses from 2019 to 2021 become statistically significant with a 95 per cent confidence level.

Figure 24: English learning levels in 2019 and 2021
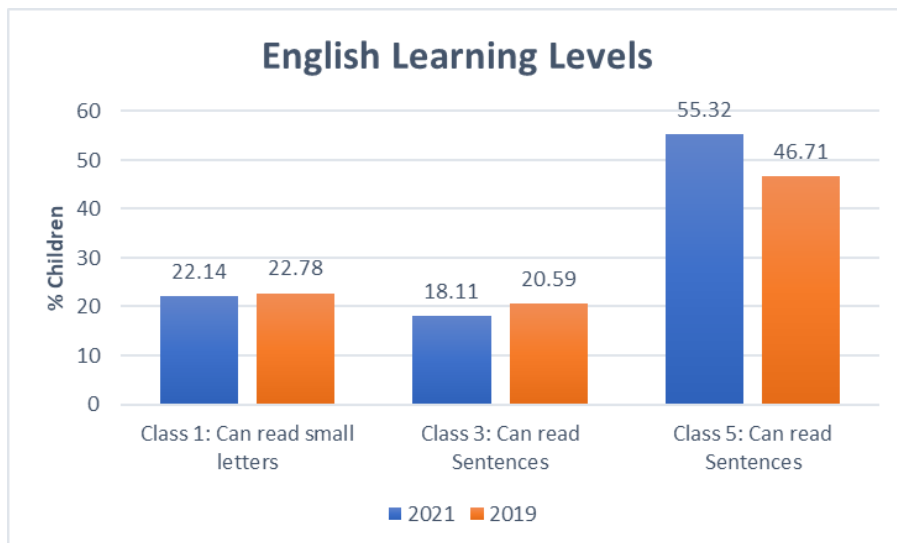
3.5.   Learning losses by province and district category

Key points
- *Learning levels are highest in surveyed districts of Punjab, followed by KP and Sindh, and are lowest in Balochistan.*
- *Learning losses are highest in surveyed districts of Balochistan, followed by Punjab and Sindh, and lowest in KP.*
- *Low-performing and high-performing districts on the Alif Ailaan ranking from 2017 have experienced the greatest learning losses.*

Learning levels by province
Learning levels across the three subjects are highest in surveyed districts of Punjab followed by KP, Sindh and finally in Balochistan. However, learning losses follow a different trend. While districts of Balochistan show the highest learning losses between 2019 and 2021, these are followed by districts of Punjab, Sindh and finally KP.

However, this province-wise analysis should be read with care since the sampling frame does not allow generalizing four districts to the whole province.

Figure 25: Urdu/Sindhi/Pashto learning by province
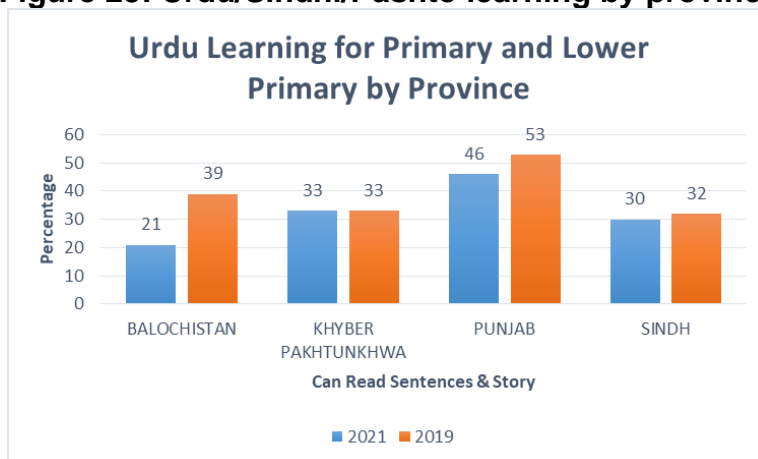
Figure 26: Arithmetic learning by province
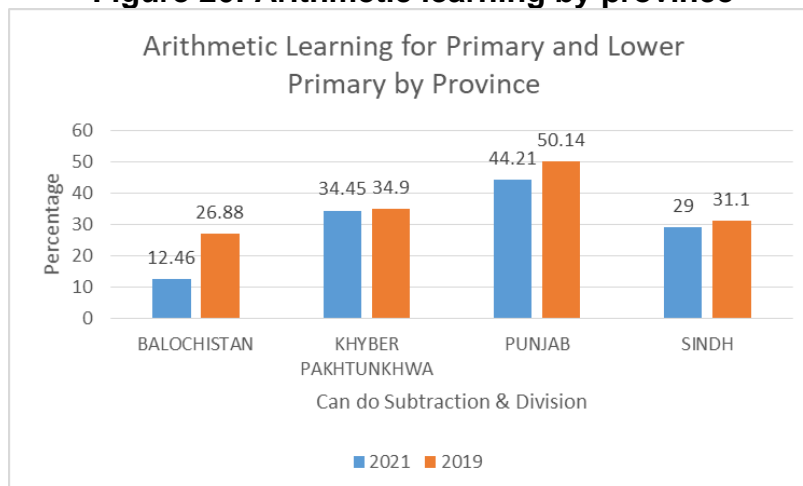
Figure 27: English learning by province
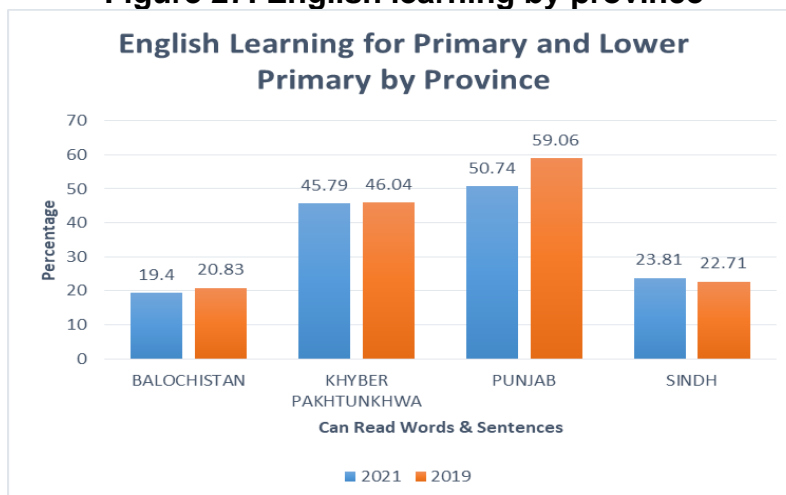
Learning levels by Alif Ailaan district category

The surveyed districts were divided into three categories based on the Alif Ailaan 2017 ranking, which takes into account learning quality, retention and gender parity in education. The survey shows that children in low- and high-performing districts on the ranking have experienced the greatest learning losses, while medium-performing districts show only marginal learning losses. The loss in terms of percentage change is higher for districts, which are also the ones where a higher percentage of households fall in the poorest or poor categories of wealth index.

Table 3: Household wealth by Alif Ailaan district category

Alif Ailaan category	Household wealth			
	Wealth quartile 1	Wealth quartile 2	Wealth quartile 3	Wealth quartile 4
High-performing districts	8.56	25.09	34.37	31.98
Medium-performing districts	17.00	28.03	34.41	20.56
Low-performing districts	42.87	22.28	22.63	12.22
Total	**25.19**	**24.90**	**29.62**	**20.28**

Figure 28: Learning losses by district category
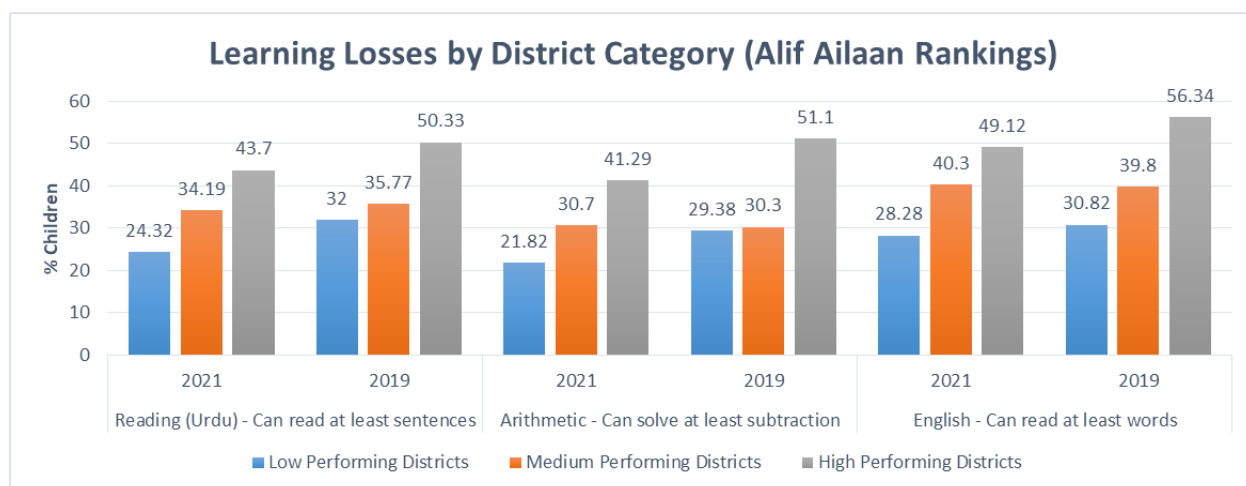
3.6. Learning losses by gender

Key points

- *Girls experienced greater learning losses than boys during the COVID-19 school closures across nearly all competencies and classes.*
- *Class 1 girls experienced a decline in Reading (Urdu) from 28 per cent in 2019 to 16 per cent in 2021, while boys declined from 25 per cent in 2019 to 19 per cent in 2021.*
- *Class 3 girls experienced a decline in reading Urdu stories from 21 per cent in 2019 to 14 per cent, and boys from 17.5 per cent to 16 per cent.*
- *In 2015, 9 per cent of girls were able to solve division sums compared to 10 per cent of boys. This rose to 22 per cent of girls and 19 per cent of boys in 2019. In 2021, both genders experienced losses, with a greater decline for girls (to 16 per cent) than for boys (15 per cent).*
- *Arithmetic levels for both girls and boys declined between 2019 and 2021. In Class 1, 21 per cent of boys and 19 per cent of girls could recognize numbers from 100 to 200 in 2019, but this figure fell to 12 per cent for both genders in 2021. While 16 per cent of boys and 19 per cent of girls in Class 3 could do two-digit division in 2019, this dropped to 11 per cent for girls and 9 per cent for boys in 2021.*
- *In 2015, 11 per cent of girls were able to read English sentences compared to 12 per cent of boys. This rose to 25 per cent of girls and 22 per cent of boys in 2019. For girls, learning levels declined in 2021 to 23 per cent, while boys saw an improvement to 23 per cent.*

Learning outcomes for girls and boys

In 2021, learning outcomes for girls (combining enrolled with never enrolled and dropouts) are generally much lower than for boys. While 31 per cent of boys in this group can read a story in Urdu, 23 per cent can perform two-digit division and 32 per cent can read English sentences, for girls these figures are 27 per cent, 21 per cent and 28 per cent, respectively.

Figure 29: Urdu/Sindhi/Pashto learning levels by gender
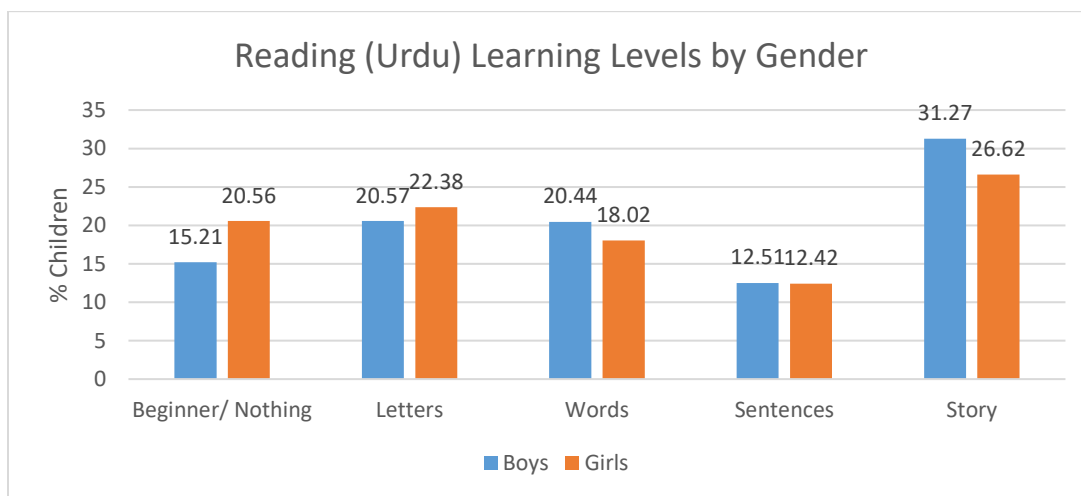
Figure 30: Arithmetic learning levels by gender
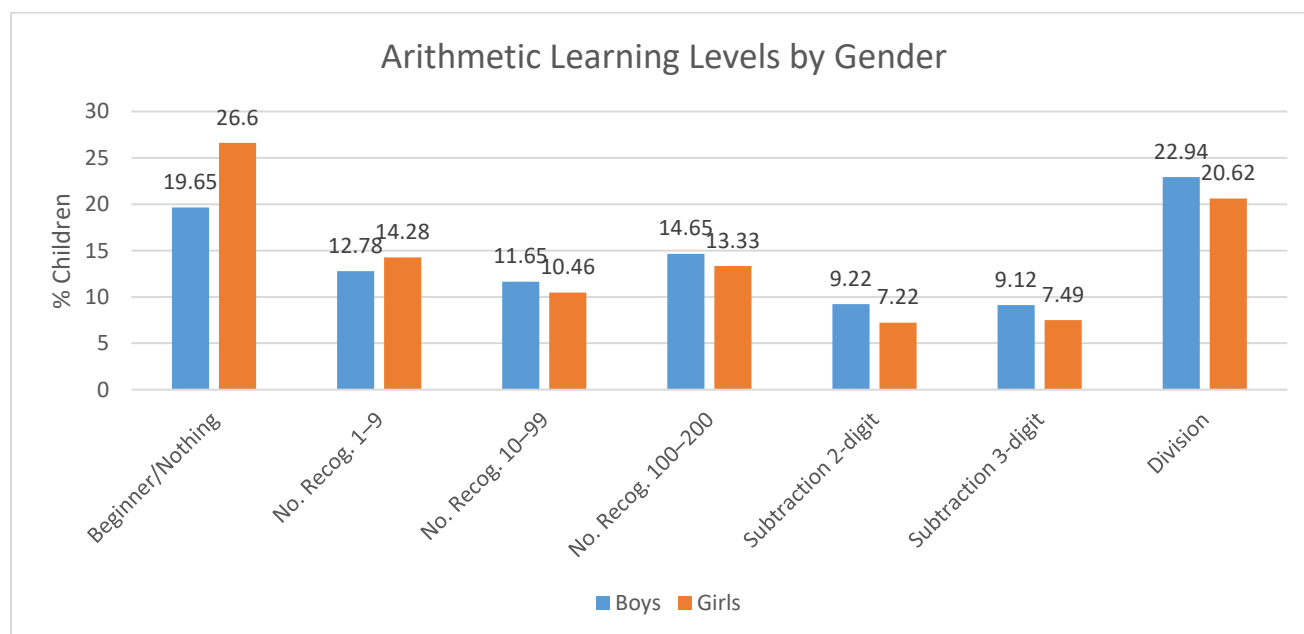
Figure 31: English learning levels by gender

English Learning Levels by Gender
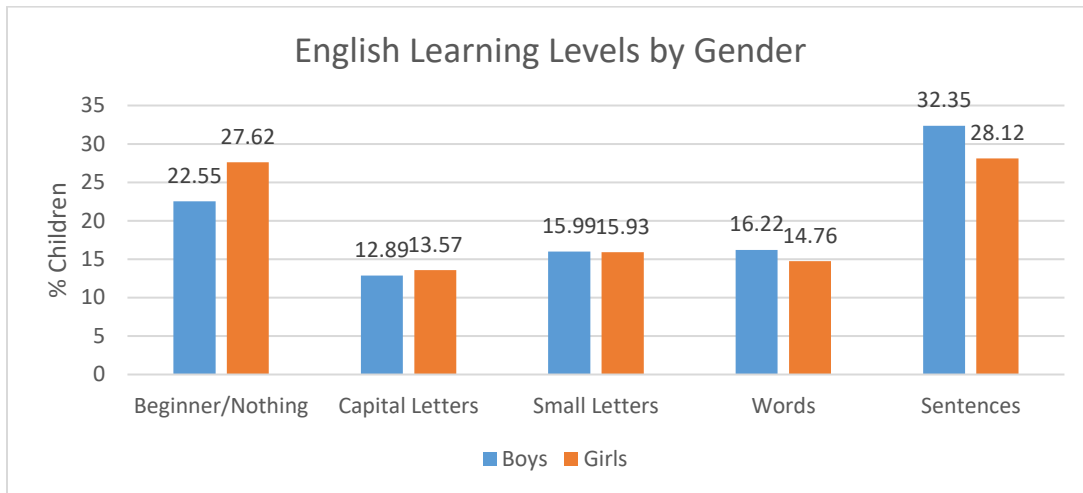
Gender differences in Reading (Urdu/Sindhi/Pashto) learning level trends

Girls and boys enrolled in Classes 1–5 show similar trends in Reading (Urdu) between 2015 to 2021. While both genders have experienced a decline in learning levels from 2019 to 2021, the loss for girls is slightly greater (1 percentage point).

Figure 32: Class 1–5 students achieving Reading (Urdu/Sindhi/Pashto) story level by year and gender

READING (URDU)-STORY LEVEL LEARNING (CLASS 1 TO 5) BY GENDER
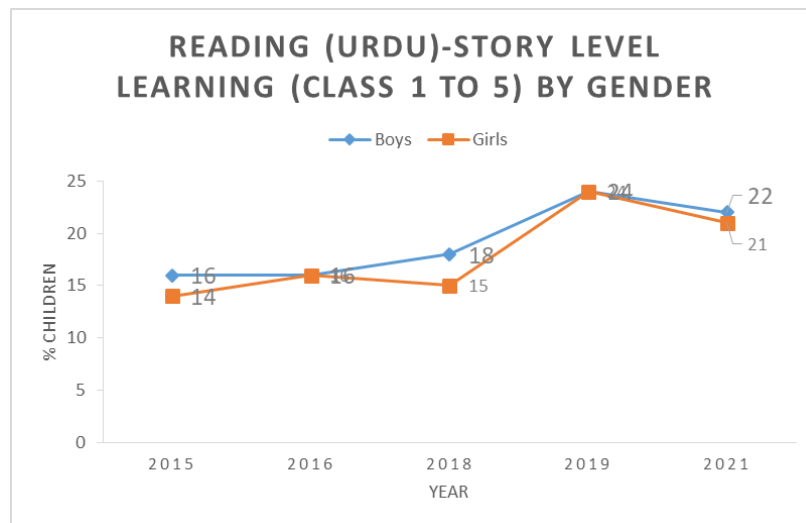
In 2019, enrolled girls were doing slightly better than boys in the 16 districts, at primary and below primary level. Girls in 2021 appear to have experienced learning losses in two ways. Firstly, their learning outcomes compared to 2019 have dropped, and secondly, their outcomes compared to boys is lower in 2021. in 2019, almost 28 per cent of girls in Class 1 could read words in Urdu, compared to 25 per cent of boys. In 2021, both genders show some losses, but these are more severe for girls: 16 per cent of girls in Class 1 can read words compared to 19 per cent of boys. Similarly, girls in Class 3 have experienced greater learning losses than boys in reading a story at Grade 2 level, with a decline of 7 percentage points and less than 2 percentage points respectively.

A t-test was applied using 2019 boys' learning outcomes as base and comparing 2021 boys, 2019 girls and 2021 girls. This showed that the difference is statistically significant with a 95 per cent confidence level.

Figure 33: Urdu/Sindhi/Pashto learning by gender for currently enrolled students
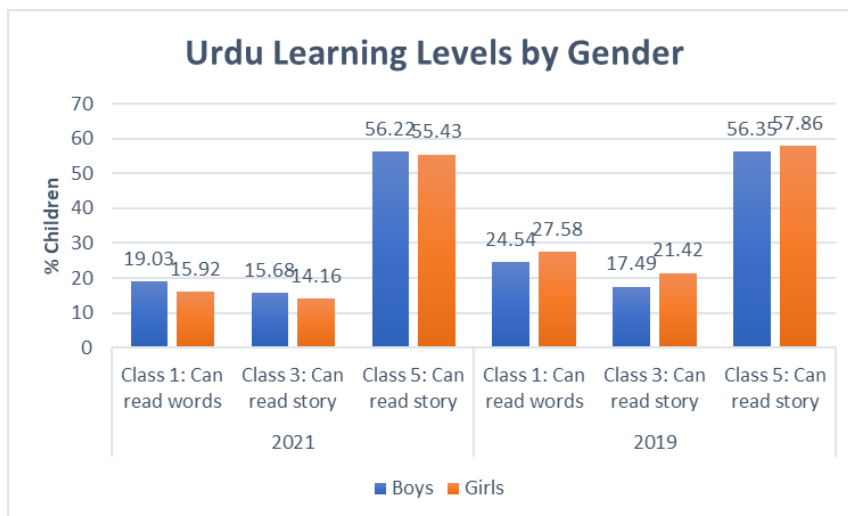
Gender differences in Arithmetic learning level trends

While in 2015, 9 per cent of girls were able to solve two-digit division sums compared to 10 per cent of boys, this rose to 22 per cent of girls and 19 per cent of boys in 2019. In 2021, both genders experienced losses in arithmetic learning, however the decline was greater for girls (6 percentage points to 16 per cent) than for boys (4 percentage points to 15 per cent).

Figure 34: Class 1–5 students achieving Arithmatic division level by year and gender
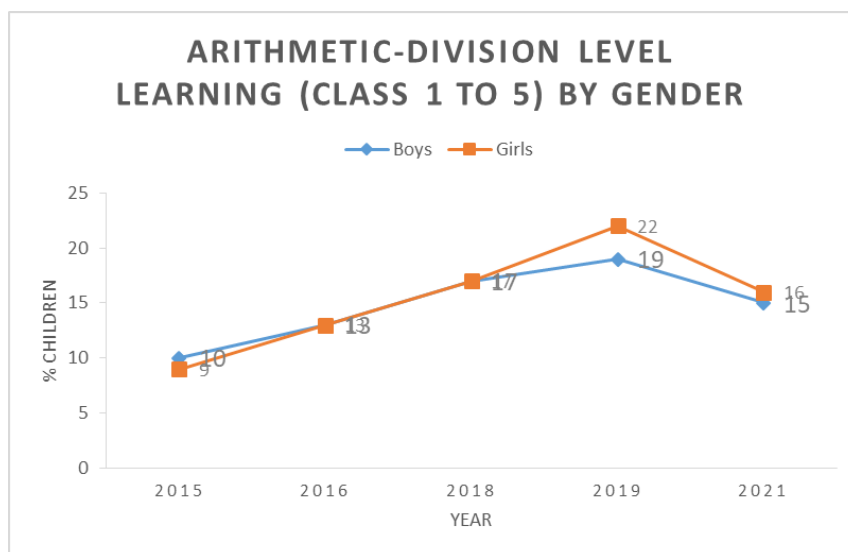
The Arithmetic competency levels of both girls and boys declined between 2019 and 2021. In Class 1, 21 per cent of boys and 19 per cent of girls could recognize numbers from 100 to 200 in 2019, but this figure has fallen to 12 per cent for both genders. Similarly, 16 per cent of boys and 19 per cent of girls in Class 3 could do two-digit division in 2019,

but this dropped to 9 per cent for boys and 11 per cent for girls. There is a similar decline for girls and boys in Class 5.

A t-test was performed using boys' scores from 2019 as base, and compared with 2019 girls', 2021 boys' and 2021 girls' learning levels. The statistical difference for girls in 2019 is not significant, however, the statistical difference for boys in 2021 and for girls in 2021 is significant at 95 per cent confidence level. Thus, the learning losses in Arithmetic are far more severe for girls than for boys.

Figure 35: Arithmetic learning by gender for currently enrolled students
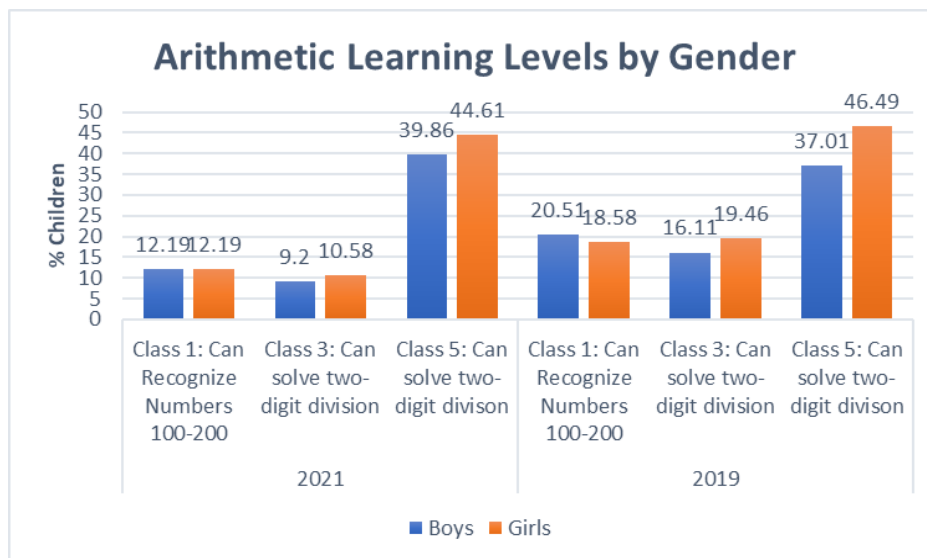
Gender differences in English learning level trends
In 2015, 11 per cent of girls and 12 per cent of boys were able to read a sentence in English. This rose to 25 per cent of girls and 22 per cent of boys in 2019, however this was followed by a decline for girls of 3 percentage points in 2021, while for boys the proportion rose slightly by a single percentage point. Thus learning losses in English have impacted on girls more severely than on boys.

Figure 36: Class 1–5 students achieving English sentence level by year and gender
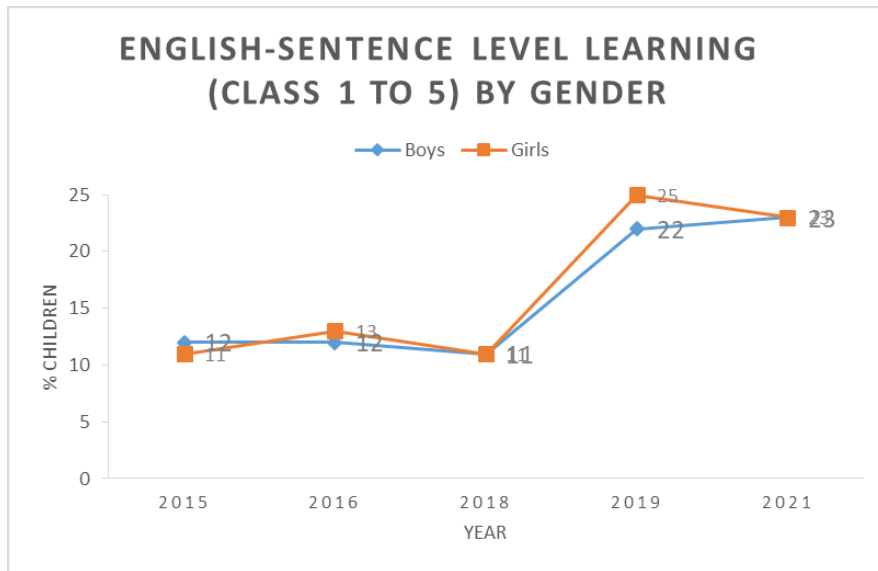
Earlier findings showed that English learning levels between 2019 and 2021 reflect a slight improvement for higher classes and is insignificant for lower ones. A similar pattern is observed for gender when boys' learning levels in 2019 are taken as the base.

Figure 37: English learning by gender for currently enrolled students
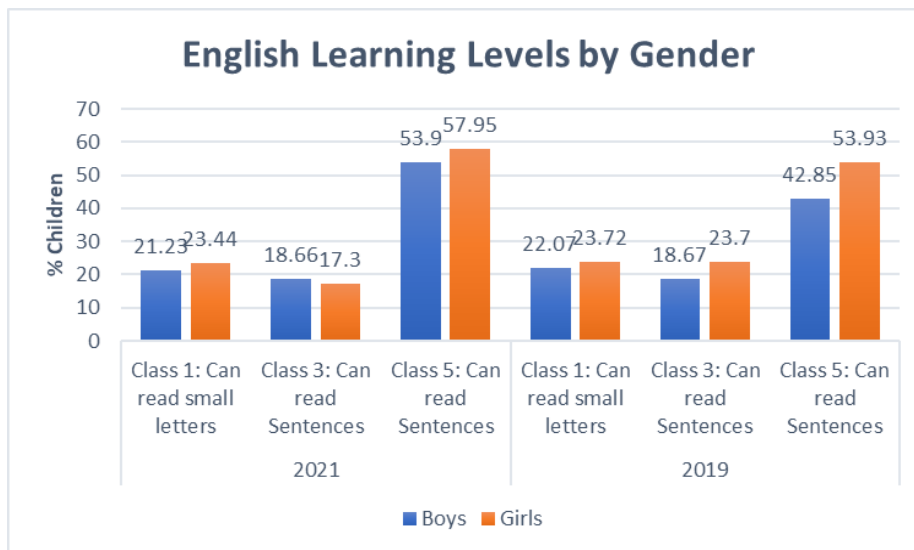
3.7.   Learning losses by type of institution

Key points
- *Children who attend government schools show greater decline in learning than private schools between 2019 and 2021. These declines are particularly acute in lower classes (Classes 1 and 3).*
- *In 2019, 23 per cent of government-school children and 34 per cent of private-school children in Class 1 could read words in Urdu. In 2021, this dropped to 15 per cent and 30 per cent respectively.*
- *For Class 5 children attending government schools, reading ability fell from 55 per cent in 2019 to 53 per cent in 2021. For their private-school counterparts, reading ability improved from 67 per cent in 2019 to 70 per cent in 2021.*
- *Between 2019 and 2021, number recognition fell amongst Class 1 children in government schools from 18 per cent to 10 per cent, and among private school children from 26 per cent to 24 per cent.*
- *For Class 3 children attending government schools, Arithmetic ability fell from 15 per cent in 2019 to 7 per cent in 2021 and for those in private school from 28 per cent in 2019 to 25 per cent in 2021. Class 5 children in government schools saw a slight improvement from 38 per cent to 39 per cent, while those in private schools saw a decline from 57 per cent to 55 per cent.*
- *Between 2019 and 2021, recognition of English lowercase letters declined amongst Class 1 children in government schools from 20 per cent to 22 per cent, put improved amongst private school children from 25 per cent to 33 per cent.*
- *For Class 3 children attending government schools, the ability to read an English sentence fell from 18.5 per cent in 2019 to 16 per cent in 2021 and improved in private schools from 30 per cent to 32. Class 5 children in government schools saw an improvement from 43 per cent to 52 per cent, while those in private schools saw an improvement from 71 per cent to 76 per cent.*

Learning levels and learning losses vary by type of institution (private school or government school).

Differences in Reading (Urdu/Sindhi/Pashto) learning levels by institution
In 2019, 23 per cent of government-school children and 34 per cent of private-school children in Class 1 could read words in Urdu. In 2021, this dropped to 15 per cent for children attending government schools and 30 per cent for children attending private school, showing greater decline for government-school children from an already lower baseline.

Similarly, in 2019, 16 per cent of children enrolled in Class 3 at government schools could read an Urdu story at Grade 2 level, compared to 13 per cent in 2021. In private schools, Reading (Urdu) at this level stood at 34 per cent for children in Class 3 and dropped to 28 per cent in 2021.

For children in Class 5, story reading ability stood at 55 per cent in government schools in 2019 but dropped to 53 per cent in 2021. For Class 5 children attending private schools, however, story reading actually rose, from 67 per cent in 2019 to 70 per cent in 2021.

With government school children in 2019 taken as the base, t-test significance testing finds that government schools and private schools in 2021 show statistically significant learning losses at 95 per cent significance level.

Figure 38: Urdu/Sindhi/Pashto learning levels by institution type
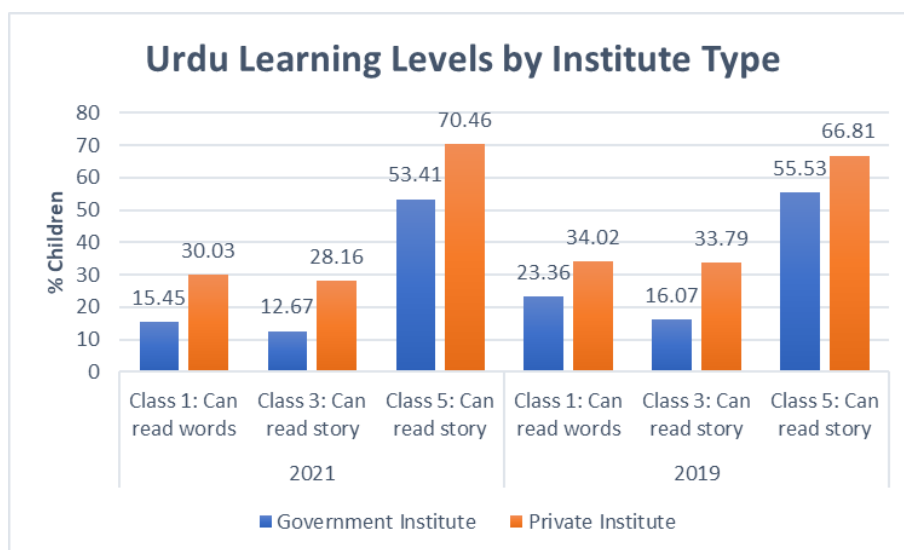
Differences by institution in Arithmetic learning levels

Arithmetic learning levels at Classes 1, 3 and 5 all show learning losses in both government and private schools. However, these losses are more severe for government schools than for the private schools. These declines are particularly acute in the lower classes. Among Class 1 students attending government schools, number recognition declines from nearly 18 per cent to 10 per cent, compared to a decline from 26 per cent to 24 per cent in private schools. Similarly, the ability to perform two-digit division in Class 3 declines from 15 per cent to 7 per cent in government schools and from 28 per cent to 25 per cent in private schools. By contrast, ability to perform division actually improves slightly in Class 5 in government schools, from 38 per cent in 2019 to 39 per cent in 2021, while private schools see a decline from 57 per cent to 55 per cent.

This distinction also manifests in the statistical significance testing where the government schools' learning losses are significant but the private schools' losses are not.

Figure 39: Arithmetic learning levels by institution type
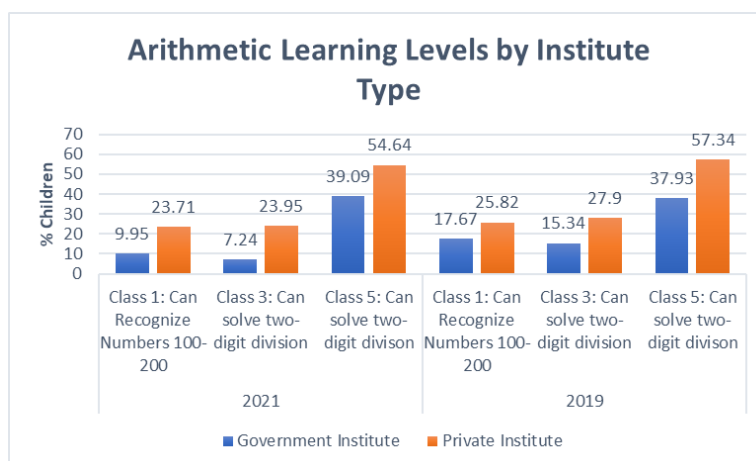
Differences by institution in English learning levels

Disaggregating the data by type of institution provides some clarity about the results for English learning seen in earlier sections. Private schools show overall gains at primary level from 2019 to 2021. However, government schools show learning losses in the lower classes (from 22 per cent to 20 per cent in Class 1 and from 18.5 per cent to 16 per cent in Class 3) while in Class 5 there are gains in learning (from 71 per cent to 76 per cent). Losses in English learning are significant for girls enrolled in government schools compared to boys enrolled in government schools, girls in private schools and boys in private schools.

Figure 40: English learning levels by institution type
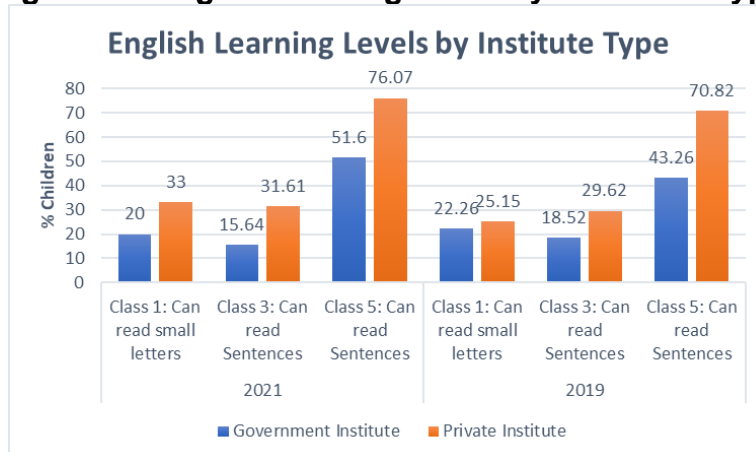
3.8.   Learning levels by mothers' education

Key points
- *There is a direct causal relationship between mother's education and learning outcomes of children in Reading (Urdu), Arithmetic and English.*

The literature suggests that as mothers' education improves, the learning outcomes of children also improve.[26]

For Reading (Urdu), Arithmetic and English, the learning outcomes of children improve as the education levels of mothers improve. There is thus a direct causal relationship between mothers' education and children's learning outcomes.

Table 4: Reading (Urdu/Sindhi/Pashto) level by mother's education

Reading (Urdu/Sindhi/Pashto) level	Mothers' education						Total
	No education	Primary or below	Elementary (6–8)	Matric (9–10)	Intermediate (11–12)	Graduate (13–16)	
Beginner/Nothing	19.35	16.85	13.03	12.60	12.44	6.48	17.45
Letters	24.07	18.80	15.81	14.72	12.60	14.51	21.37
Words	20.35	18.95	17.88	18.54	15.22	23.83	19.73
Sentences	11.89	13.06	15.45	13.41	14.73	13.21	12.56
Story	24.34	32.33	37.83	40.73	45.01	41.97	28.88
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Table 5: Arithmetic level by mother's education

Arithmetic level	Mother's education						Total
	No education	Primary or below	Elementary (6–8)	Matric (9–10)	Intermediate (11–12)	Graduate (13–16)	
Beginner/Nothing	22.30	23.89	22.35	21.45	22.08	11.66	22.16
Number recognition 1–9	15.87	12.89	8.24	7.99	6.43	7.51	13.75
Number recognition 10–99	12.20	9.05	10.23	8.81	9.23	12.69	11.29
Number Recognition 100–200	15.72	11.36	8.96	12.40	10.87	17.36	14.27
Subtraction 2-digit	8.57	8.24	11.13	10.69	9.88	5.70	8.86
Subtraction 3-digit	8.19	9.10	8.87	8.65	8.73	11.40	8.49
Division	17.16	25.47	30.23	30.02	32.78	33.68	21.18
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Table 6: English level by mother's education

English level	Mother's education						Total
	No education	Primary or below	Elementary (6–8)	Matric (9–10)	Intermediate (11–12)	Graduate (13–16)	
Beginner/Nothing	26.37	23.71	19.91	18.05	15.93	9.59	24.07
Capital letters	15.30	11.93	9.59	8.70	7.22	11.40	13.52
Small letters	17.64	15.16	13.85	13.98	11.99	15.80	16.49
Words	15.99	16.13	16.92	15.61	16.42	19.95	16.16
Sentences	24.71	33.08	39.73	43.66	48.44	43.26	29.76
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

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[26] See for example: Saba & Khan 2013; Hernandez et al., 2014.

3.9.   Learning levels by household wealth index

Key points
- *Learning outcomes for children in Reading (Urdu), Arithmetic and English improve with household wealth.*

Households with greater wealth can afford the privilege of quality education for their children, and their household resources tend to provide better learning environments.[27] An assessment of learning outcomes by wealth index shows that learning outcomes for each subject improve with the household wealth index.

Table 7: Reading (Urdu/Sindhi/Pashto) level by wealth index

Reading (Urdu/Sindhi/Pashto) level	Wealth quartile				
	1	2	3	4	Total
Beginner/Nothing	21.77	16.68	17.79	14.72	17.67
Letters	27.02	22.67	22.30	19.72	22.81
Words	24.47	20.70	17.22	17.40	19.66
Sentences	9.22	12.30	12.17	13.70	11.92
Story	17.53	27.65	30.53	34.47	27.94
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Table 8: Arithmetic level by wealth index

Arithmetic level	Wealth quartile				
	1	2	3	4	Total
Beginner/Nothing	25.81	20.45	20.59	16.85	20.83
Number recognition 1–9	15.11	14.22	15.45	13.07	14.54
Number recognition 10–99	16.01	11.31	10.19	9.92	11.65
Number recognition 100–200	15.21	17.03	14.69	13.17	15.04
Subtraction 2-digit	8.20	7.68	8.93	9.85	8.67
Subtraction 3-digit	6.81	8.38	8.22	9.12	8.16
Division	12.85	20.93	21.92	28.03	21.10
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Table 9: English level by wealth index

English level	Wealth quartile				
	1	2	3	4	Total
Beginner/Nothing	32.69	26.79	24.44	18.21	25.37
Capital letters	14.81	13.53	14.38	13.20	14.00
Small letters	17.07	14.53	16.92	16.09	16.17
Words	15.30	15.74	14.00	17.11	15.41
Sentences	20.13	29.40	30.26	35.39	29.05
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

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[27] Human Rights Watch, 2021; Katz & Rideout, 2021.

3.10. Learning during COVID-19 school closures

Key points

- *About 60 per cent of children currently enrolled in school spent less than an hour a day on their studies during school closures.*
- *47 per cent of children said that they struggled to study English, 41 per cent to study Arithmetic and 19 per cent to study Urdu on their own.*
- *While 32 per cent of children report watching PTV's TeleSchool programmes only 2 per cent of them belong to the poorest wealth quartile. 63 per cent of children report receiving learning support from family members and 17 per cent from paid tuitions. Only 1.6 per cent receive support from radio.*
- *31 per cent of children report that their school provides them with learning material while 51 per cent say that the school made no contact with them during the school closure period.*
- *About 40 per cent of children in households with smartphones can access them for studying, and 6 per cent have access to computers. Younger children (aged 3–5 years) have 1.5 hours of access while those aged 6–16 years have two hours of access.*
- *55 per cent of children do not feel confident to study on their own if school closures reoccur.*

Parental education and household wealth index point to the kind of learning environment children have at homes during school closures. To gain a more nuanced understanding of how children continued learning, the challenges they faced and the support available to them, children who were currently enrolled in school (aged 5–16 years) were asked direct questions on learning during COVID-19.

Learning independently

About 60 per cent of currently enrolled children aged 5–16 years report that they cannot give even a single hour of the day to their studies. At school, children study 4–5 hours a day, but during the school closure only about 3 per cent of children say they are able to allocate that length of time to their studies. Not being able to give proper time to their studies has direct impacts on children's performance.

Furthermore, children may not feel comfortable studying every subject on their own: even if they are able to give due time to their studies, learning may be better for some subjects than others. When questioned about which subjects they find difficult to study on their own, 47 per cent identify English, 19 per cent Urdu and 41 per cent Arithmetic.

Figure 41: Average time spent on studies by children during school closures
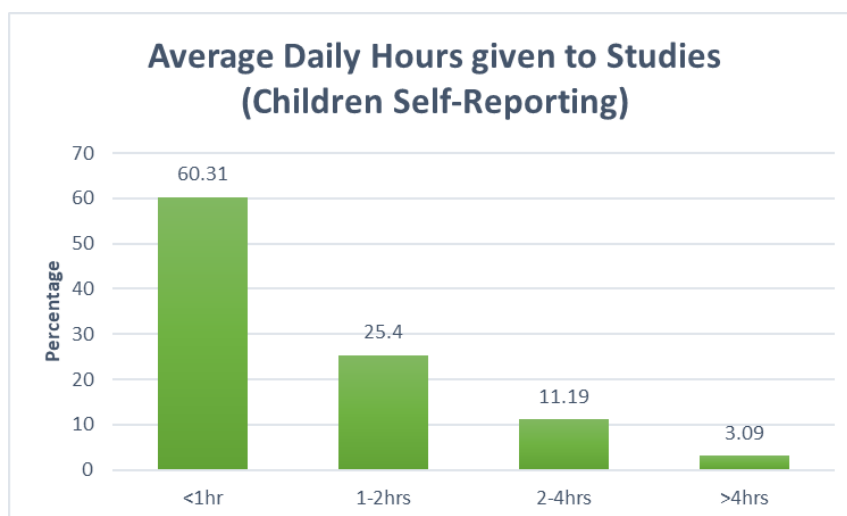
Figure 42: Subjects that children found difficult to study on their own
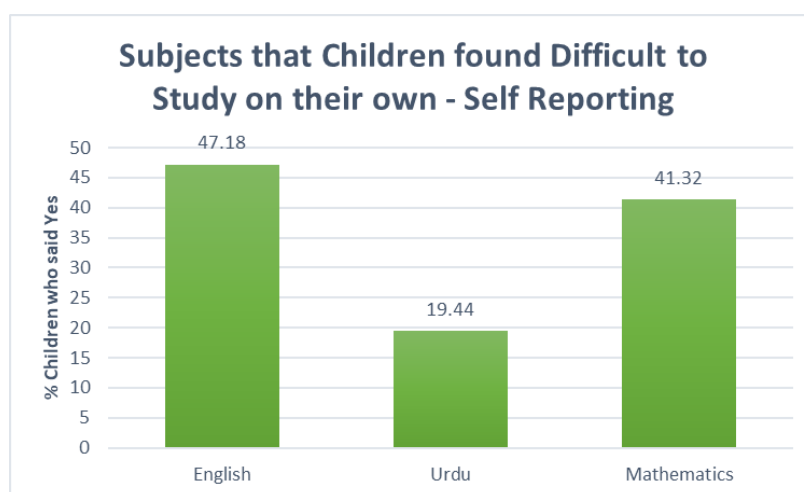
The question of time to study and subjects children find difficult to study theoretically offers a causal explanation of learning losses. When a t-test was conducted to test the statistical relationship between these variables and learning outcomes, a statistically significant relationship between the variables was found with a 95 per cent confidence level. Thus, assessments of children who give less time to their studies are more likely to show low outcomes.

This holds across the three assessed subjects. Children who report that they find Urdu difficult to study on their own are significantly more likely to show lower learning levels in Urdu compared to those who do not find Urdu difficult to study on their own. This also holds for English and Arithmetic. This statistical significance testing provides robustness and reliability to the analysis in this study and helps to explain why learning levels have dropped during school closures.

Support for learning

Not being able to go to school means that children must find support elsewhere if they are to continue learning. Measures taken by the government to provide this learning support during the pandemic include Pakistan Television (PTV) and radio learning programmes.

About 32 per cent of children report that they watch PTV's TeleSchool programmes but only 1.6 per cent report the use of radio for learning. Family (63 per cent) and paid tuitions (17 per cent) are significant sources of learning support.

The reach of PTV TeleSchool is also limited by household wealth. Having access to a television is the basic requirement, and indeed children in richer households are more likely to watch TeleSchool compared with the poorest. Although government efforts to roll out TeleSchool programming within the first four weeks of school closure has provided an avenue to continue learning this the benefit is disproportionately for wealthier households. With only 2 per cent of beneficiaries belonging to the lowest wealth quartile, this reflects the inability of learning support to reach the most vulnerable – and those who are most in need.

Moreover, the other main sources of learning support – family support (62 per cent of children) and paid tuitions (17 per cent) – are dependent on family education and financial resources and are also likely to be limited for children belonging to the lowest wealth quartile. However, family support in learning is a valuable resource, as children who reported relying on it for continuing learning during school closures had better learning outcomes than children who did not rely on family support.

Interestingly, of the households that have access to television sets, a majority (54.5 per cent) responded that they do not get any support from PTV TeleSchool. This highlights the gap between an available, accessible medium of learning and the ability of households to capitalize on it, which may benefit from awareness-raising interventions with parents and communities in the event of future school closures.

Figure 43: Type of learning support used during school closures
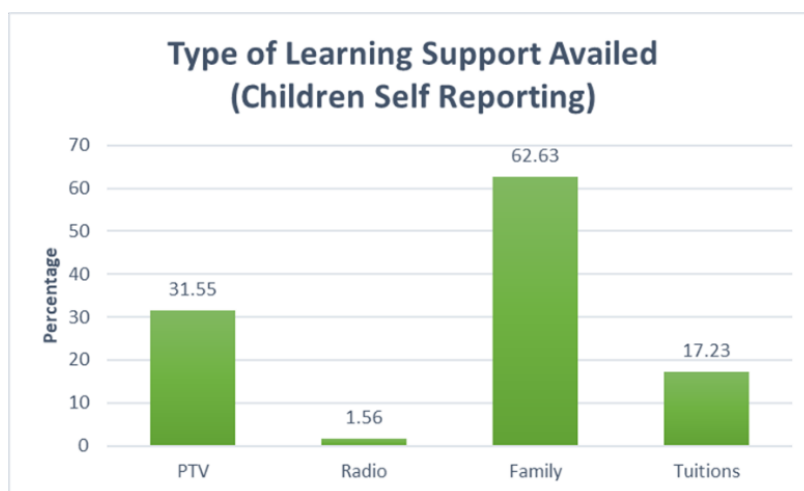
Figure 44: Households where children took learning support from PTV TeleSchool by wealth index

Households where children took learning support from PTV's Teleschool by wealth index
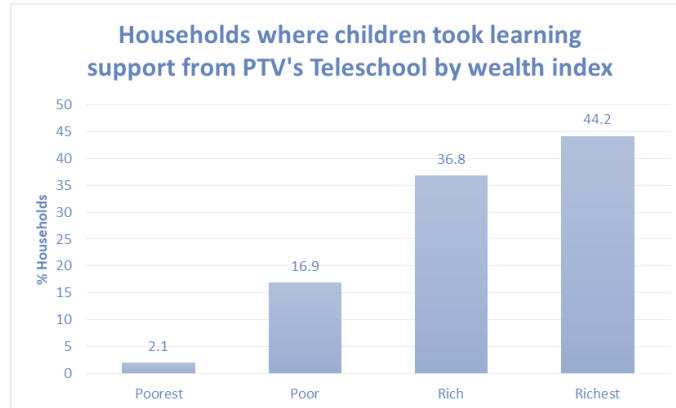
Learning support from schools

Despite the closures, schools are expected to continue to provide learning support to children. Only 31 per cent of children agree that school provides them with learning material to make it easy for them to continue learning during shutdowns. Similarly, 59 per cent say that the school made no contact with them to ensure continuity of learning during the school closure period.

Figure 45: Children who received learning materials from schools

Did School provide Learning Material? (Children Self-reporting)
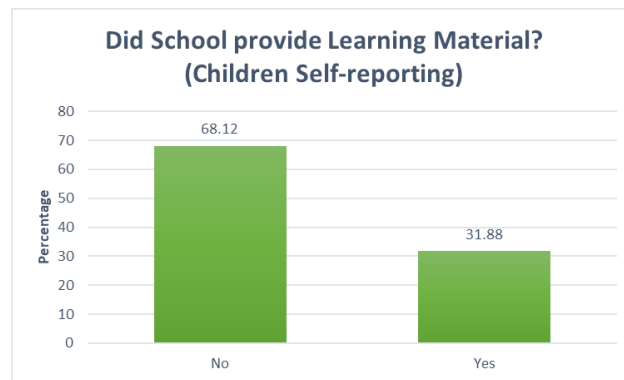
Figure 46: How often school management reached out to provide learning support

How often did School Management reach for providing Learning Support? (Children self reporting)

Use of technology for learning

Besides television and the radio, children were asked whether they have access to computers or smartphone etc for learning during school closures, whether to attend online classes or to access online learning resources.

About 40 per cent of children in households with smartphones have some access to the devices for studying, while only 6 per cent of children in households where computers or laptops are available have access to these devices. The latter devices are far less common in rural communities, and moreover households with multiple school-going children cannot provide computers to all children.

On average, children aged 3–5 years report that they have 1.5 hours of access to technology, while children aged 6–16 have two hours of access. This age-wise difference in access to technology for studies is statistically significant.

Figure 47: Technology used for study and access to technology for study
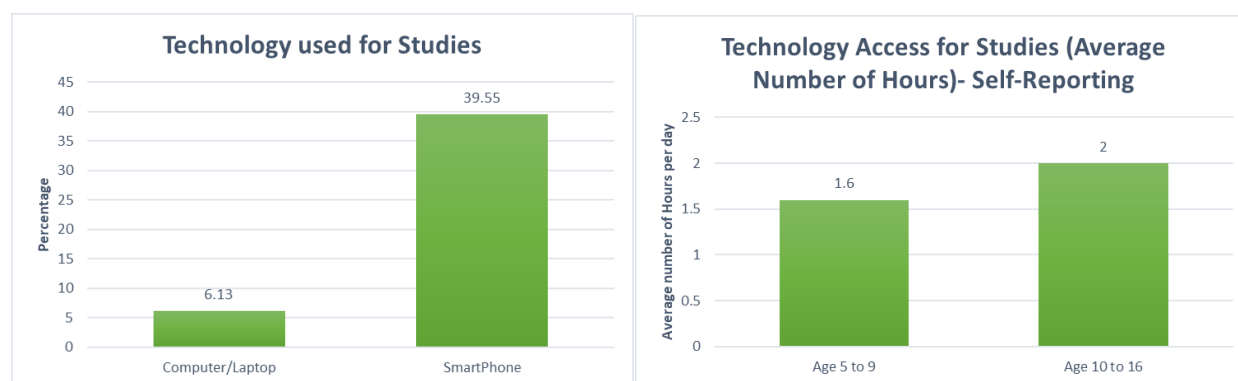
After exploring the time they give to their studies, the resources they avail, the support provided by the school and their access to technology, children were asked if they feel confident that they can study on their own if schools were to shut down again. The majority (over 54 per cent) say that they do not feel confident to study on their own.

Figure 48: Children's confidence in studying on their own if schools shut down again
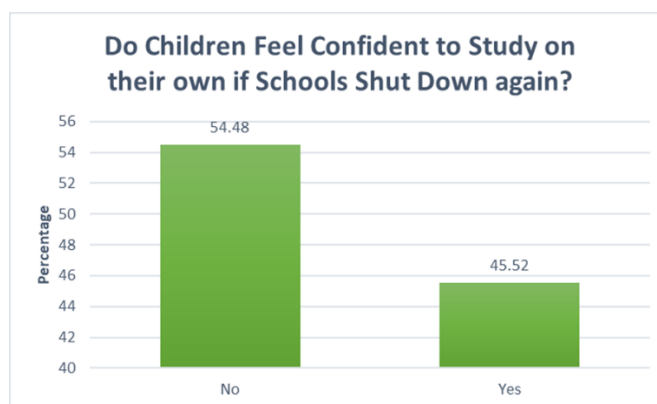
3.11.   School readiness for safe reopening

Key points
- *Between 2019 and 2021, sanitation and drinking water*
- *facilities have declined in both government and private schools.*
- *A fifth of both government and private schools lack functioning handwashing facilities with soap in 2021.*
- *Fewer government schools have functioning computer laboratories in 2021 than in 2019 (declining from 73.5 per cent to 62 per cent), while private schools have seen an increase (from 19.2 per cent to 28.5 per cent).*
- *54 per cent of private schools and 30 per cent of government are providing alternate-day schooling.*
- *Mask-wearing is enforced in 61 per cent of government schools and 87 per cent of private schools.*

There is a disparity among the facilities available in government and private schools and technology access remains limited. Moreover, many schools lack the facilities required to implement the safe school reopening guidelines issued by the government. Indeed, in many cases, there is a decline in available facilities (such as those related to sanitation) from the previous ASER survey in 2019.

Accordingly, the study includes an assessment of private and government school capacity to safely remain open and prevent the spread of COVID-19 by following government guidelines.

- Sanitation facilities: From 2019 to 2021, usable toilet facilities have declined from 74.3 per cent to 69.6 per cent in government schools and 96 per cent to 95 per cent in private schools.
- Handwashing facilities: In 2021, 20 per cent of both government and private schools have handwashing sinks which lack running water or soap.
- Drinking water: Availability of drinking water has declined since 2019, from 74 per cent to 70 per cent in government schools and from 98.6 per cent to 82 per cent in private schools.
- Computer lab: Fewer government schools have functional computer laboratories in 2021 than they did in 2019, with a decline from 15.7 per cent to 11.3 per cent. Private schools have seen an increase, from 19.2 per cent in 2019 to 28.5 per cent in 2021.
- Alternate-day schooling: Only 54 per cent of private schools and 30 per cent of government schools report having adopted alternate-day schooling.
- COVID-19 awareness materials: About 59 per cent of government schools and 82 per cent of private schools report having put COVID-19 awareness and IEC materials on school walls and noticeboards.
- Mask wearing: About 61 per cent of government schools and 87 per cent of private schools report that they are enforcing mask-wearing inside schools.
- Temperature checks: About 39 per cent of government schools and 55 per cent of private schools report conducting temperature checks at the school entrance.

- Social distancing inside classrooms: About 64 per cent of government schools and 56 per cent of private schools report that they are ensuring at least 3 feet distance in classrooms.
- Isolation rooms: In total, 22 per cent of government schools and 45 per cent of private schools report having designated a separate isolation room for suspected cases of COVID-19.

The lack of strict enforcement of COVID-19 SOPs in schools (particularly government institutions) demands urgent attention from government and decision-makers, alongside improved non-pharmaceutical interventions, emergency preparedness drills and countrywide school health and hygiene programmes.

Figure 49: Implementation of COVID-19 SOPs in schools
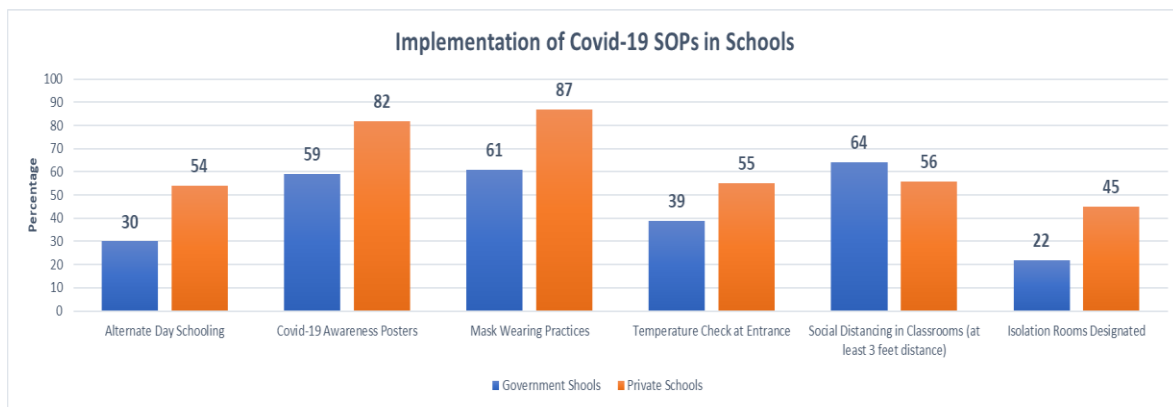
4.   CONCLUSION

4.1.   Discussion of results

Key points

- *School closures have led to a learning crisis for primary school children.*
- *Younger children who have not yet built a foundation for learning are more vulnerable to learning losses.*
- *Pakistan's crisis of learning is rooted in a crisis of equity.*
- *Research-driven, child-centred, socially embedded, blended learning solutions can help address the crisis of learning.*

This study aimed to assess the extent to which the constitutional right to education (Article 25-A) and Pakistan's commitment to education (SDG-4) has been affected by the COVID-19 pandemic. It evaluated learning losses incurred due to school closures using the ASER assessment tool and identified the extent to which factors like parental education and wealth index of households and access to technology enabled children to continue learning.

Figure 50: Learning levels for Classes 1–5 from 2015 to 2021
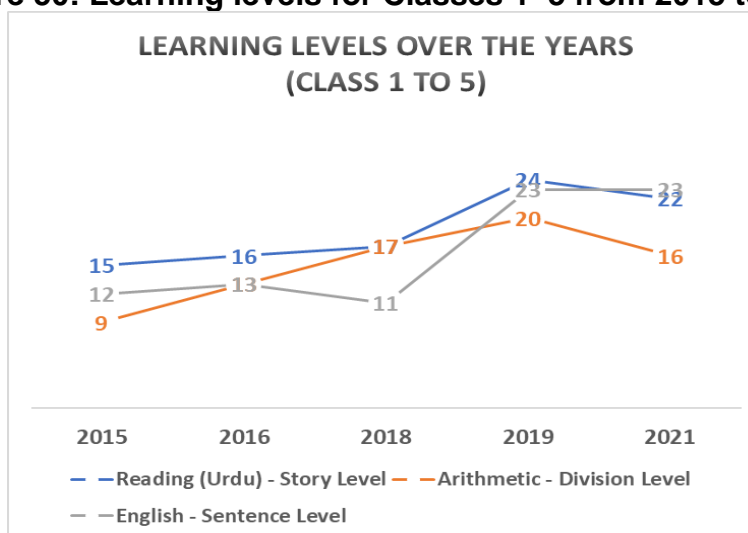
School closures have contributed to a learning crisis for primary school children
The study reveals statistically significant learning losses at primary and lower primary level. While between 2015 and 2019, the percentage of primary-school children who can read an Urdu story at Grade 2 level had increased from 15 per cent to 24 per cent, this dropped in 2021 to 22 per cent. Similarly, the percentage of children who can solve an Arithmetic problem with two-digit division increased from 9 per cent to 20 per cent before dropping to 16 per cent in 2021. The percentage of children who can read English sentences rose from 12 per cent to 23 per cent and then stagnated in 2021.

Younger children who have not yet built a foundation for learning are more vulnerable to learning losses

Learning losses are more severe for children in Class 3 than those in Class 5. In Class 3, the percentage of children who can read a story in Urdu has decreased from 19 per cent in 2019 to 15 per cent in 2021. Similarly, the percentage of children who can solve a two-digit division sum has decreased from 17 per cent in 2019 to 10 per cent in 2021.

When remote learning was introduced, younger children struggled more, with lower levels of access to technology in the household. Younger children also need significantly more support from teachers and parents, because they are less able to learn independently. While parental support is visible in our findings (despite the indubitable psychological impacts of the pandemic), lesser access to technology and even reduced support from the teachers and school management made learning during COVID more difficult for children in class 3, who have not yet built significantly on the foundational learning of class 2, compared to children in class 5.

This points to the inadequacies of the policy responses for this group of children, and the need for greater teacher (and parental) support for younger learners.

Pakistan's crisis of learning is rooted in a crisis of equity

Learning losses are more severe for children who are marginalized, whether due to gender, wealth, or geographical location. When girls are given an opportunity to learn, they are able to match and even outperform boys. However, if this right is taken away, factors such as the burdens of household chores and lower access to technology for learning can cause them to fall behind. This study shows that while between 2015 and 2019, enrolled girls in primary and lower primary level were able to catch up to, or even outperform, boys, in 2021, they experienced greater learning losses than boys.

While digital inequalities existed before the pandemic, children in poorer households found it disproportionally harder to access learning resources once technological means became the primary or only means to do so during school closures. The clear link between wealth and access to technology is also reflected in the lower learning outcomes of children from lower wealth quartiles.

Similarly, while learning levels in Punjab are better than in the other provinces, learning losses are highest in Balochistan. In short, the pandemic has only highlighted that the drivers of change in the society are rooted in ensuring equity at all levels.

Research-driven, child-centred, socially embedded, blended learning solutions can help address the crisis of learning

While the study reveals a gloomy picture of learning losses, when parents are active stakeholders in their children's education and households have better facilities, especially technological access, children are able to retain learning to a greater degree.

Engaging with parents can help them make their households more conducive to learning and remain actively involved in their children's learning processes. This can be achieved through equity-driven and child-centred EdTech solutions which can enable recovery from the learning losses due to the COVID-19 pandemic and help to address the pre-existing learning crisis.

EdTech solutions can also lead to better learning by changing students from passive recipients of information to active, engaged users utilizing hybrid learning (access to course content; timing flexibility; access to alternative education choices) and media (TV;

radio; project-based learning pedagogies), as well as mobile-based online and offline learning apps, with the flexibility to meet, track and support their individual learning needs and progress.

4.2.   Recommendations

Key points

- *Support the learning of all children while focusing on young children and girls.*
- *Bridge learning inequities.*
- *Create a new social compact for learning.*
- *Draw on EdTech for innovative learning.*

Support the learning of all children while focusing on young children and girls
The study shows that it is at the foundational years of schooling that learning losses are more severe, with higher learning losses for children in Class 3 than for those in Class 5.

Policy interventions that specifically target younger children amidst a recognition of the need of all children for childcare, parental engagement and social emotional support can impart sustainable learning to children. To address the higher learning losses experienced by girls, support must be provided from the early years of learning to ensure that dropouts are progressively reduced and to break the cycle of early marriage.

Bridge learning inequities
Our analysis reveals significantly higher learning outcomes for wealthier income quartiles, which may be partly due to higher literacy at home, ability to afford learning resources and tutoring, as well as higher access to and use of technology for learning. By addressing economic poverty, social protection programmes aim to reduce the learning inequality of children belonging to vulnerable households.

A mix of empirical and community-based targeting methods should be employed to reach the poorest of the poor, including no-tech (such as printed learning kits) and low-tech learning solutions. Moreover, indigenous solutions to increase access, such as by encouraging households with televisions and radio to reach out to those who do not have access in their communities, can help to create community learning clusters accessing learning materials collectively and ensuring no child is left behind. Such engagement in group learning would not only increase coverage but also encourage families to support community learning spaces.

Social protection outreach to households has increased between 2019 and 2021. Given the expansion of targeted social protection instruments for education during the COVID-19 period, this could be an important means to offset learning and access deprivation to those most in need (ensuring at least 50 per cent of beneficiaries are girls) using a lifelong approach.

Create a new social compact for learning
During school closures, 63 per cent of children depended on family support for learning, highlighting an important existing learning infrastructure which be leveraged through a learning compact between homes and schools and enable learning even when formal avenues are closed and, for instance, educating parents to ensure their children spend a sufficient amount of time learning and are provided the resources they need.

During the school closures, educated parents, elder siblings and community members disseminated informal learning resources to support children at home. By establishing a

compact between them and schools, children's learning can be accelerated in a post-COVID world.

This will require workshops to empower, upskill and inform these family and community supports, and awareness campaigns on parents' role in education. Incorporating the education of adolescent girls will help delay marriage and foster intergenerational learning.

Draw on EdTech for innovative learning

Nearly a third of households used PTV TeleSchool programming during school closures. The benefit of this can be maximized by targeting subjects that children find difficult to study on their own, i.e. English (47 per cent) and mathematics (41 per cent), with steady support for Urdu/Sindhi/Pashto, and interspersed with opportunities for life-skills and social emotional learning. Learning outcomes for these subjects can be specifically addressed to study the effectiveness of TeleSchool support, learning apps and other EdTech options.

A large proportion of children have access to some form of computing device for studying, or are in households where such devices are available, if not currently made available for the child's study. This confirms that households in rural areas are not dead spaces and have access to technology[28] – indeed, the Pakistan Demographic and Health Survey found in 2017/2018 that 92 per cent of households have access to (smart or basic) mobile phones, a figure which is likely to have since increased.

Even basic mobile phones without internet connectivity can be used for continuing education through phone calls and SMS, facilitated by teachers.[29] Through public-private partnerships, more avenues can be explored utilizing technology to offer children a variety of learning programmes that are more interactive and offer engagement, and thus help to address Pakistan's learning crisis which has been exacerbated by the pandemic.

[28] A UNICEF ROSA (March, 2020b) analysis of data from the Pakistan Demographic and Health Survey 2017/2018 confirms this. It shows that household TV access is at 48 per cent in rural areas and 86 per cent in urban areas and ranges from 11–86 per cent by province/territory; radio is 7 per cent in rural and 5 per cent in urban areas ranging between 4–33 per cent by province/territory; while 92 per cent of rural households and 98 per cent of urban households have access to a mobile phone, or 79–98 per cent by province/territory.
[29] UNICEF ROSA, 2020a.

Figure 51: Six smart buys to offset Pakistan's learning crisis

Focus on Foundational Learning Embedded in SEL & Inclusion

A NEW COMPACT for Learning Across Schools & Homes
Students Teachers & Parents with Skills, Agency & Trust

Above All
Coherence & Coordination

National, Sub-National & Local Coordination Across Education & Social Protection Sectors
Getting to the Last Child!

Hi Quality Evidence on What Works & How ?
SMART & HOLISTIC BUYS! Informing Public, Policy, Budgets & Practice

Actions for Learning For ALL

Optimize EdTech through a Spectrum Approach – HTHT

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Annex: Survey guide

What to do in the village

- **Contact Village Elder**: Introduce yourself to the village elder, councillor and/or to other senior members of the Panchayat. As you walk to reach the village elder, Panchayat or Councillor, talk to different people and ask about the village. Tell them about ASER. This initial walking and talking may take more than an hour. Get the approximate number of households in the village from the Councillor.

The next step is to identify the households:

- Talk to people: How many different hamlets/sections are in the village? Where are they located? What is the social composition of the households in each hamlet/section? What is the estimate of households in each hamlet/section? How many government and private schools are in the village? Tell them about ASER.

It is often helpful to first draw all the roads or paths coming into the village and going out of the village. It helps to first draw a rough sketch on the ground so that people around you can see what is being done. Mark hamlets, schools, households etc. with landmarks. With the help of the community members, identify different hamlets and their centre point.

HOW TO SELECT HOUSEHOLDS

- In the entire village, information will be collected for 20 randomly selected households.

- Go to each hamlet/section. Try to find the central point in that habitation. Stand facing the houses in the centre of the habitation. Visit every 5th house from the left-hand side in the habitation (e.g. 1st house, 11th house, 16th house, etc.). Get information about the household and children following instructions in the next section.

  - House Closed: If the selected house is closed or if there is nobody at home, note that down on your compilation sheet as "House Closed". This household DOES NOT count as a surveyed household. Move to the next/adjacent open house. Continue until you have 5 households in each hamlet/section in which there were inhabitants.

  - No Response: If a household refuses to participate, note that down on your compilation sheet as "No Response". However, as above, this household DOES NOT count as a surveyed household. Move on to the next house. Continue until you have 5 households in each hamlet/section in which not only were the inhabitants present, but they also participated in the survey.

  - No Children: If there are no children or no children in the age group of 3–16 years in a household but there are inhabitants, INCLUDE THAT HOUSEHOLD. Take all the relevant information like the name of the family head, age and education related information of the mothers, if any. Such a household WILL COUNT as one of the 5 surveyed households in each hamlet/section.

Stop after you have completed 5 households in each hamlet/section. If you have reached the end of the section before 5 households are sampled, go around again using the same every 5th household on the left-hand side rule. If a surveyed household gets selected again, then go to the next household. Continue the survey till you have 5 households in the section.

- Now move to the next selected hamlet/section. Follow the same process.
- Make sure that you go to households ONLY WHEN children are likely to be at home. This means that the day of the household survey should be a Sunday or holiday.
- If every house is turning out to be a No Response house, think about your team and strategy. It may be because there are two male members going to the houses hence refused permission.

How to sample HHs in a hamlet

How to sample HHs in a hamlet in a village?
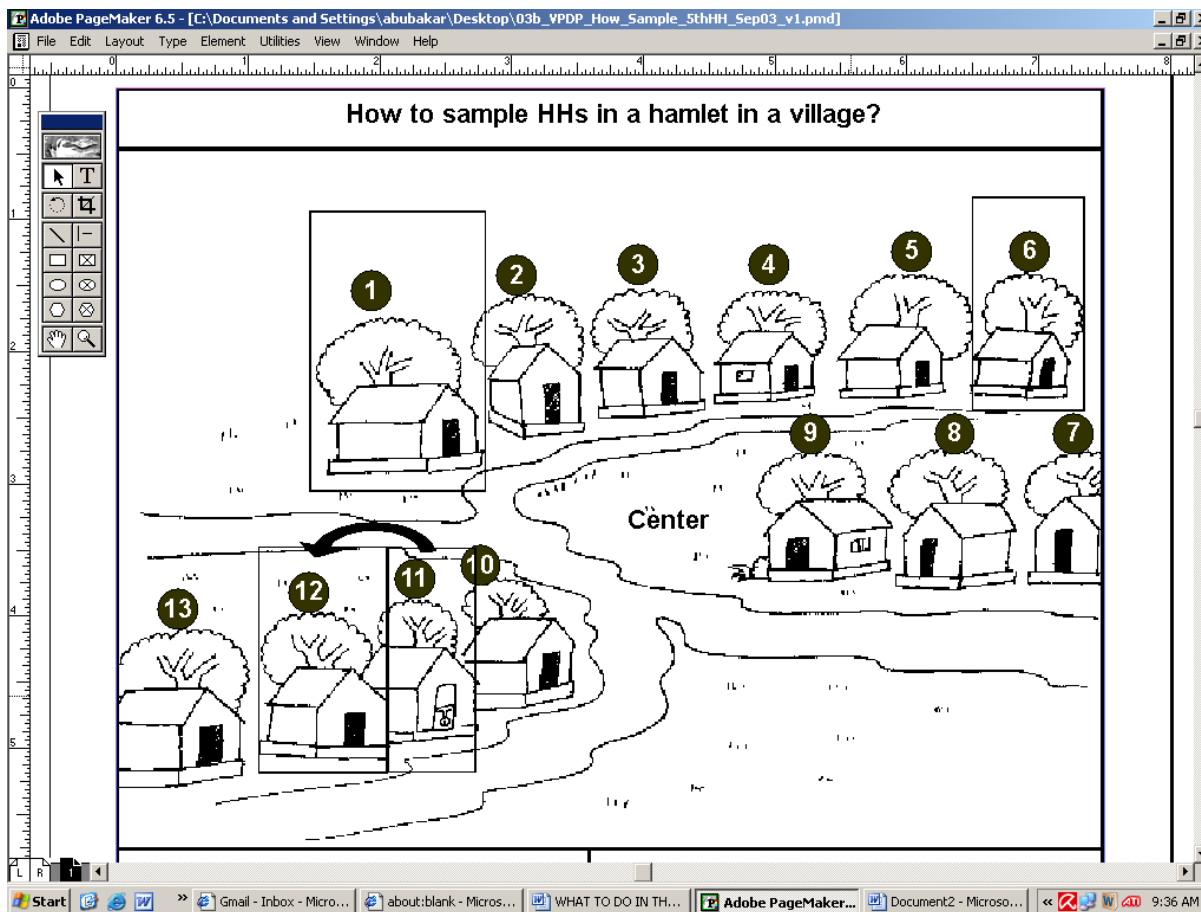
Instructions:

1. Find central point in a hamlet. Stand facing the dwellings.

2. Survey every **5th HH** (household) occurring on the **Left Hand Side**.

3. In case of a locked HH or if there is nobody at home, note that down as '**House Closed**' and move to the next open house.

4. If a HH refuses to participate, note that down as '**No Response**' and move to the next HH.

5. If there are no children or no children in the age group of 3-16 years in a HH but there are inhabitants, include that HH.

6. If you reach the end of the hamlet before five (5) HHs are sampled, go around again using the "every 5th HH rule".

In the 5th HH ask how many 'chulhas/kitchens' are there? If there are more than 1, then randomly select any one of the 'chulhas/kitchens'. After completing survey in this house proceed to the next 5th HH.
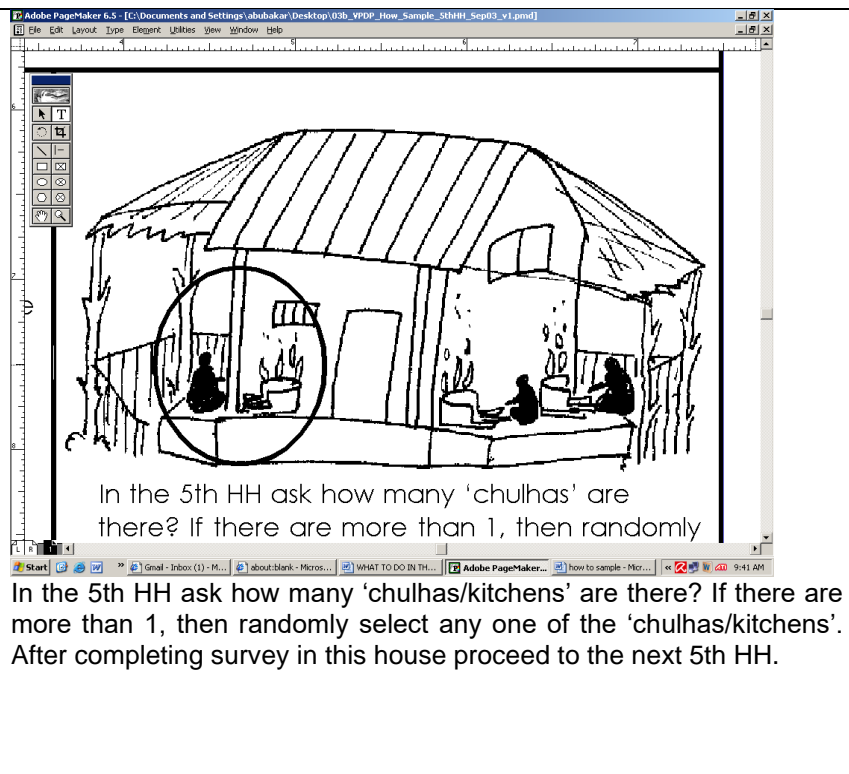
What to do in each household

Basics of the household sheet: Following is some basic information required to be filled in the household sheet before the start of the survey.

- **Household ID:** Write the household number (e.g. 1, 2, 3,……..20)
- **Gender of the respondent**: Mark the gender of the respondent male, female or other. Tick only one option
- **Is respondent the head of the household?** Ask if the respondent is also the head of the household and mark the response in yes or no.
- **Name of Family Head:** write down the name of **Family head.**
- **Mother tongue:** Ask the respondent of *mother tongue of the children of the household* and write it down.
- **Religion:** Ask the religion of the respondent and write it down. Be very respectful and polite in asking this question.
- **Date and Time:** Write down the date, day, start & end time on the day of the survey visit.
- **Surveyors:** Write down the names of the surveyors.
- **Village identification:** Carefully fill out the relevant name of the village, tehsil/taluka, district and province.

In Each Sampled Household: We will note information about the household and all the children (3-16 years), their mother and father who live in the household on a regular basis.

Household with multiple kitchens: If there is more than one kitchen (chulhas) in the selected household, then randomly select any one of the kitchens in the household and record the total number of family members who eat from that chosen kitchen.

- **Children 3 to 4:** On the household sheet, note down child's name, age, whether they are attending Kachi or any other form of pre-school centre. **We will NOT test children who are under 5 years of age.**

  - Ask all children in this age group their current schooling status, meaning whether the child is currently enrolled in kachi or any other school, dropped out of school or was never enrolled in any school.
  - Ask all (enrolled and dropped out) children if they take any private supplementary tuition (paid classes in addition to regular school).
  - Also ask the enrolled children if they go to the specific school which you have/will be surveying.

- **Children 5 to 16**: On the Household sheet, note down child's name, age, gender and all other details.

  - Ask the current schooling status of each child, i.e. whether the child is currently enrolled in school, dropped out of school or was never enrolled in any school.
  - If the child is enrolled then note down the class which the child is attending at the time of the survey and the type of school each child is going to, i.e. government, private, madrassah or any other type of school.
  - Ask all (enrolled and dropped out) children if they take any private supplementary tuition (paid classes in addition to regular school).

  - Also ask the enrolled children if they go to the specific school which you have/will be surveying.
  - **All children in this age group (5 to 16) will be tested in basic reading, arithmetic and English.** (We know that younger children will not be able to read much or do sums but still follow the same process for all children so as to keep the process uniform). Ensure that the child is comfortable before and during the test and that sufficient time is given to each child.
  - **Covid-19 Specific household questions**: The following questions will be asked from the head of the household.

- What level of threat do you think coronavirus poses to you and your family?
- Was your earning affected due to lockdown?
- Has your emotional well-being been affected due to Covid-19 and lockdown?
- Do you wear mask while going outside?
- Do you maintain a distance of 6-feet from other people when outside?
- Do you wash your hands frequently for 20 seconds with soap?

- **Parents' Education: Following information regarding parents education will also be recorded**
  - Total number of Children (0-16)
  - Whether mother and/or father have gone to school?
  - Mother and/or father's education (Highest class completed)
  - Do not take information if the father is dead.

Out of school children (drop outs and never enrolled children)

- Ask the child if s/he has dropped out and the last class that was passed. Also ask for the reason of dropping out or being never enrolled (such as law and order, poverty, flood, school building shifted by government or others).

- Even the dropped out and never enrolled children aged 5 to 16 have to be tested.

OTHER THINGS TO REMEMBER:

- **Non-resident children**: Do not survey children who are visiting their relatives and friends in the sampled village.

- **Older children**: Often older girls and boys (in the age group 11 to 16) may not be thought of as children. Be sensitive to this issue and therefore avoid using words like "children".

- **Children out of the village:** If there are children in the family but who are not present in the village during the survey, do not take their details.

- **Mothers under or 16 years of age**: Often in villages, you can come across mothers who are less than 16 years of age. Information on them will be collected as a mother as well as a child between the age 5 to 16 years, and they will also be tested in all three assessments.

*Many children may come up to you and want to be included in the process out of curiosity. Do not discourage these children. You can interact with them. But concentrate on the fact that data must be noted down **ONLY** for children from households that have been randomly selected.*

Household Indicators: All information on household indicators is to be recorded based, as much as possible, on observation and evidence. However, if for some reason you cannot observe it note down what is reported by the household**.** This information is being collected in order to link education status of the child with household economic conditions.
 Type of house the child lives in: Types of houses are defined as follows:
- Kutcha House: The walls and/or roof of which are made of material other than those mentioned here, such as un-burnt bricks, bamboos, mud, grass, reeds, thatch, loosely packed stones, etc.
- Semi -Pucca house: A house that has fixed walls made up of pucca material but roof is made up of the material other than those used for pucca house.
- Pucca House: A pucca house is one, which has walls and roof made of the following material.
  Wall material: Burnt bricks, stones (packed with lime or cement), cement concrete, timber, ekra etc.
  Roof Material: Tiles, GCI (Galvanised Corrugated Iron) sheets, asbestos cement sheet, RBC (Reinforced Brick Concrete), RCC (Reinforced Cement Concrete) and timber etc.

House Ownership: Mark yes or no regarding the ownership of the house.
Type of house the child lives in: Types of houses are defined as follows:

- **Kutcha House:** The walls and/or roof of which are made of material other than those mentioned here, such as un-burnt bricks, bamboos, mud, grass, reeds, thatch, loosely packed stones, etc**.**
- **Semi -Pucca house:** A house that has fixed walls made up of pucca material but roof is made up of the material other than those used for pucca house.
- **Pucca House:** A pucca house is one, which has walls and roof made of the following material. Wall material: Burnt bricks, stones (packed with lime or cement), cement concrete, timber, ekra etc. Roof Material: Tiles, GCI (Galvanised Corrugated Iron) sheets, asbestos cement sheet, RBC (Reinforced Brick Concrete), RCC (Reinforced Cement Concrete) and timber etc.

HH Members with the Same Kitchen: Write down the **number of male, female and other identifying members** eating from the same kitchen. This includes children also. Write a total in under total household members.

For assessing the household risk to Covid-19, respectfully ask the participant to respond to the following questions

Total rooms in the household: write the number of rooms excluding toilets.

Ventilation: ventilation means do the rooms have windows or exhaust fans to let air cross through. If all rooms have windows or exhaust fans, mark "all rooms"; if majority of the rooms have it, mark "most rooms"; if only some rooms have ventilation system, mark "some rooms"; finally if no rooms have ventilation, mark "none".

Number of functional toilets in the household: a functional toilet is one which has running water available, and proper drainage and households use it in everyday routine. Note down the number of functional toilets.

Source of clean drinking water: ask the participants how they get clean drinking water and mark the appropriate response. If the response is not given in the options, write it down in the "other" option.

Electricity Connection: Mark yes or no by observing if the household has wires/electric meters and fittings or not.

Solar Panel: Mark yes or no by observing if the household has solar panel facility available

Television – TV in the household: Mark yes if the household has a TV set otherwise mark No.

Radio: Mark yes if the household has a Radio set otherwise mark No

Computer/Laptop/Tablet: Mark yes if the household has either computer, laptop or tablet, otherwise no.

Internet Connection: Mar yes if the household has internet connection available, otherwise No.

Means of Communication: Mark yes if the household has simple phone, smartphone, and can do SMS and use WhatsApp, in the respective 'yes' boxes.

Vehicle owned by the households (Mention in numbers): Mention the number under the label "car" and "motorbike" if it is owned by the household.

Social-Safety Net Recipients:

Are you recipient of any cash transfer/safety-net cash/Interest Free Loans from **Benazir Income Support Program**? If you have received any cash then mark 'Yes' otherwise mark 'No'.

Are you recipient of any cash transfer/safety-net cash/Interest Free Loans from **Ehsaas**? If you have received any cash then mark 'Yes' otherwise mark 'No'.

Are you recipient of any cash transfer/safety-net cash/Interest Free Loans from **Punjab Social Protection Authority**? If you have received any cash then mark 'Yes' otherwise mark 'No'.

Are you recipient of any cash transfer/safety-net cash/Interest Free Loans from **Akhuwat**? If you have received any cash then mark 'Yes' otherwise mark 'No'.

HOW TO TEST READING?

Sentences

Start Here

- Ask the child to read any paragraph. Listen carefully as to how s/he reads.
- S/he may read slowly.
- However, as long as the child reads the text like a sentence and not like a string of words, mark her/him as a 'sentence' level child.

If the child stops very often while reading the sentence or has difficulty with more than 4 words in the sentence or reads it as a string of words than show her/him the list of words.

If the child reads the sentences fluently and with ease, then ask her/him to read the story.

Words

- Ask the child to read any 5 words from the word list. Let the child choose the words themselves. If s/he does not choose, then point out words to her/him.
- If s/he can correctly read at least 4 out of 5 words with ease, then ask her/him to try to read the paragraph again.
- S/he will be marked at the 'words' level if s/he can correctly read words but is still struggling with the paragraph.

Story

- Show the child the story. If s/he can read fluently and with ease, then mark her/him as a child who can read a story. The child who has been able to read a story, should be asked two questions about the story and be marked accordingly.
- If she is unable to read the story fluently and stops a lot, mark her/him as a child who is at the paragraph level.

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

Letters

- Ask the child to read any 5 letters from the list. Let her/him choose the letters. If s/he does not choose then point out letters to her/him.
- If s/he can correctly recognize 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 as a child as a 'beginner'.

HOW TO TEST ARITHMETIC?

Start Here

Subtraction
- Show the child the subtraction problems. S/he can choose, if not you can point.
- Ask her/him to write and solve the problems. Observe to see if s/he does it in the correct written numerical form.
- Ask her/him to do a second one.

If s/he cannot do both subtraction problems, then give her/him the number recognition (100-200) task.

If s/he does both the subtraction problems correctly, ask her/him to do a division problem.

Number Recognition (100-200)
- Point one by one to at least 5 numbers. Child can also choose.
- Ask her/him to identify the numbers.
- If s/he can correctly identify at least 4 out of 5 numbers then mark her/him as a child who can 'recognize numbers from 100-200.

If s/he cannot recognize 4 out of 5 numbers from 100-200, then give her/him the number recognition 10-99 task.

Division (2 digit by 1 digit)
- Show the child the division problems. S/he can choose one out of the rest.
- Ask her/him to write and solve the problem.
- Observe and see if s/he is able to correctly solve the problem, and then mark her/him as a child who can do 'division'.
- If s/he is unable to solve a division problem correctly, mark her/him as a child who can do 'subtraction'.

Number Recognition (10-99)
- Point one by one to at least 5 numbers. Child can also choose.
- Ask her/him to identify the numbers.
- If s/he can correctly identify at least 4 out of 5 numbers then mark her/him as a child who can 'recognize numbers from 10-99.

If s/he cannot recognize 4 out of 5 numbers from 10-99,then give her/him the number recognition 1-9 task.

Number Recognition (1-9)
- Point one by one to at least 5 numbers. Child can also choose.
- Ask her/him to identify numbers.
- If s/he can correctly identify at least 4 out of 5 numbers then mark her/him as a child who can 'recognize numbers from 1-9'
- If not then mark her/him at the level 'nothing'.

Word Problems

Show word problems to all children (5-16 years). S/he has to answer all three questions.

- Ask her/him to tell the time in the clock, if S/he answers correctly then mark as "can tell" otherwise mark as "cannot tell".
- Ask her/him to solve the problem # 2 and #3 on a piece of paper.
- Watch what s/he does.
- If s/he is able to follow the right method and solve with the right answer, then mark her/him as a "can do" for each word problem otherwise mark her/him as "cannot do".
- Ask at least one child from each household to do at least one word-problem at the back of the household sheet.

HOW TO TEST ENGLISH?

How to test English?

Start Here

Capital Letters

Point one by one to at least 5 letters. Ask the child to identify the letters.

- If s/he correctly recognizes 4 out of 5 capital letters then show her/him the list of small letters.
- If s/he reads capital letters but is struggling with identifying small letters, then mark her/him as a child who can read 'capital letters'.

If s/he is unable to recognize 4 out of 5 capital letters from the list, then mark her/him under the category 'nothing'.

Small Letters

Point one by one to at least 5 letters. Ask her/him to identify the letters.

If s/he can recognize 4 out of 5 small letters with ease, then show her/him the list of words.

If s/he reads small letters but is struggling with words, then mark her/him as a child who can read 'small letters'

Words

Point one by one to at least 5 words. Ask her/him to identify words.

If s/he correctly reads 4 out of 5 words, then show her/him the list of sentences.

If s/he reads words but is struggling with reading sentences, then mark her/him as 'word' level child.

Sentences

Ask her/him to read the 4 sentences. If s/he reads all 4 correctly, then mark her/him at the 'sentence level'.

Bonus Questions

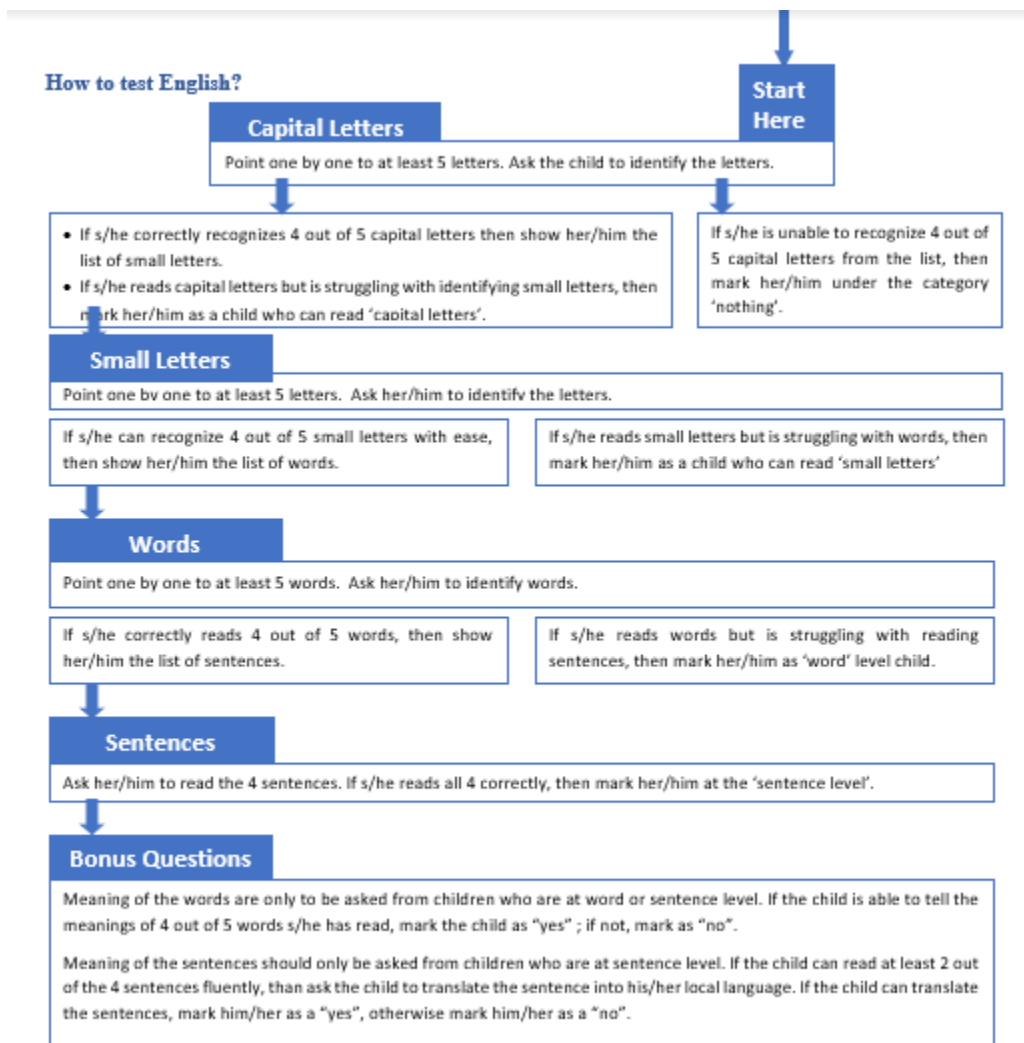Meaning of the words are only to be asked from children who are at word or sentence level. If the child is able to tell the meanings of 4 out of 5 words s/he has read, mark the child as "yes" ; if not, mark as "no".

Meaning of the sentences should only be asked from children who are at sentence level. If the child can read at least 2 out of the 4 sentences fluently, than ask the child to translate the sentence into his/her local language. If the child can translate the sentences, mark him/her as a "yes", otherwise mark him/her as a "no".

HOW TO TEST GENERAL KNOWLEDGE?

ENGLISH

This section should only be asked from children who are at "Word" level on English Tool.

a) Ask the child to see the picture and then ask two questions from the child. Mark "yes" if the child answer correctly, otherwise mark as "no".

b) Ask the child to complete the sentences by identifying the picture of the items drawn on the sample. If a child answers any two correctly, mark him/her "yes", otherwise "no".

LEARNING DURING COVID-19

This section has questions on learning during covid-19. It is in continuation of section (I) "child's information". Continuation must be maintained in marking the responses. Child's 1 responses on learning during Covid-19 should come in front of Child 1 from "child's information section". Similarly for child 2 and other children as well, the continuity has to be maintained in the order of information.

Child's name: Note the child's name again.

Hours spent studying during school closure period: Ask the child how many hours per day on average did the child spend studying during the schools shut down period and mark the most relevant option.

Difficult subjects to study on their own: ask the child which subject they found difficult to study on their own during the schools shut down period. Mark the relevant option. If the child says, they had no difficulty studying any subject, mark none.

Study material received from School: ask the child if they received any study resources or material from the school during the school shut down period. Mark yes if they did otherwise No.

Learning Support from teachers during schools closure: Ask the child how often did schools teachers or anyone from the school management reach out to them for providing learning support or resources. Mark the most appropriate response.

Learning Support sources: Ask the child if they used any of the following resources to continue learning during Covid-19: PTV's tele-school; government's radio school; digital resources from the school; other privately accessed digital resources; paid tuitions/academy; family members and friends/neighbours. Mark all the relevant options.

Digital Devices used for Learning during Covid-19: Ask the child which digital devices they used for learning during Covid-19/schools shut down: computer/laptop; Smartphone; TV; Radio. Mark all relevant options

Time allocated for different activities on digital resources: ask the average number of hours the child spent with digital resources of the household doing "online learning", "playing games" and "other entertainment (music/movies, etc.)

Which activities took most of your time during Covid-19? Rank the responses from 1 to 5. 1 is took most amount of time, and 5 is took least amount of time. For example, if the child says, household chores took most of their time, mark it 1. Then care work, so mark it 2. Then if they say they spent some time studying, mark it 3. Then idle, 4 and playing games took least time so mark it 5.

Does the child feel prepared for studying on their own if schools were to shut down again? Mark yes or no based on the child's response.

What to do in a school

GENERAL INSTRUCTIONS:
Mention the name of the Target Village on the top.

- Take permission from Head Masters/Mistress or Teacher of respective Class before observing the class.
- Visit any **government school** in the village with classes from Class 1 to 10 or High School. If there is no High school in the village, then go to a middle school, in case middle school is not available than go to a primary school. In the top box of the Observation Sheet, tick according to the school type. If there is no government school in the village, **than go to the nearest Government School located in a nearby village.**
- If there a village has a Boy's High School and a Girl's High School, preference should be given to the girl's school.
- Meet the Head Master/Head Mistress (if the Head Master/Mistress (HM) is absent, then meet the senior most teacher of the school) and take the following information:
  - Record the name of the School, name of the village, name of Tehsil/Taluka, District/Agency and the Province.
  - Tick the respective box for type of school i.e. High, Middle, Primary or Others.
  - Tick type of school (by enrolment):
    - Boys and Girls School
    - Boys only School
    - Girls only School
  - Tick Medium of School
    - English
    - Urdu
    - Pashto
    - Sindhi
    - Arabic
    - Or any other medium
  - EMIS/BEMIS/SEMIS Code: write the EMIS/BEMIS/SEMIS code of the school.
  - Write down school since (Establishment Year).
  - If it is a private school, as if the school is affiliated with any NGO.
  - Note the **Time of Entry** into the school and **Time of Exit** from School.
  - Date of visit: write the date of survey
  - Day of visit: write the day of survey
  - Name of surveyors: write the names of both surveyors

When at the school, ask the Head Master for the **enrolment register** or any official document on the enrolment in that school.

What to do in Government/Private School?
Children's Enrolment & Attendance: (Section I)

1. ASK for the registers of all the Classes and fill in the **enrolment. If there is more than one section for same class,** add the enrolment of all the sections and write accordingly.
2. Make sure the HM has introduced you to the teacher. If not, introduce yourself and ASER. Request for his/her permission to collect information on the classroom.
3. MOVE AROUND the class/area where children are seated and take down their attendance **class-wise** by **counting** them YOURSELF. You may need to seek help from the teachers to distinguish children class-wise as they are normally found seated in mixed groups. In such a case, ask children from each standard to raise their hands. Count the number of raised hands and accordingly fill the same in the observation sheet, class-wise. Please note that you should **only** COUNT those children who are physically present in the class.
4. You can fill this information after you have collected all information from school records and registers. But make sure you do the head count of children enrolled in the school yourself also.
5. Ask head teacher about school fee, separately for each class and record it in the relevant box.

Class Room Observations (Observe and Ask if required): (Section II)

1. This section is to be filled for Class 2 and Class 8 only (in case of a primary school, do class 2 only). If there is more than one section for a class, then randomly choose any one. Write down the Class with whom these classes are sitting.
2. Is there a usable black/white board in the class? Yes/No – write yourself on the black/white board to find out.
3. OBSERVE if children have their textbooks at least of one subject, ask the children to show English textbook or that of Urdu to make a correct assessment.
4. Apart from the textbooks, OBSERVE if there is any other supplementary material (e.g. books, charts on the wall, board games, etc.) in the room. Mark accordingly for each class you observe.
5. OBSERVE where the Class is sitting (room, veranda, outdoor) and fill accordingly.

Health and Disability (Observe and Ask if required): (Section III)
Request the Head Teacher to provide information on health and disability section and tick relevant.
a) Do you have children with disability in your school?
b) If yes, how many? Ask for total number and gender wise information.
c) Type of Disability (Tick relevant)
d) Do you have special facilities / personnel available? (Tick relevant)

Teachers: (Section IV – Govt. School Sheet & Section III –Pvt. School Sheet)
1. Request the Head Teacher to provide you information on teachers in the school. Collect and note down the information on:

   a. Number of sanctioned teaching posts *(Only for Government school).*
   b. Number of teachers appointed (male and female both).
   c. Regular/Government teachers (male and female both) do not include the Head Master.
   d. ECE teacher/ECE assistant: If the school has ECE teacher or assistant.
   e. Contract/Para teachers: If the school has para-teachers or teachers appointed by the School Management Committee (SMC), local government, or community. Mark that separately.
   f. Number of Teachers present on the day of the survey.
   g. Number of Teachers living in this village, if applicable.
   h. Also ask each category of teachers (Head Teacher, regular teachers, para-teachers) whether they reside in the village or a neighbouring village. Count the number of teachers residing in the same visited village and write this number in the observation sheet.

No. of Qualified Teaching Staff: (Section V – Govt. School Sheet & Section VI - Pvt. School Sheet)
Qualifications of teachers should be incorporated separately in the form of their:
• Educational Levels i.e. Below Matric, Matric, FA/F.Sc, BA, B.Sc, MA/M.Sc, M.Phil or any other. Count teachers for their respective highest educational level and mention the count in the respective boxes.
• Professional Qualification i.e. none, CT, PTC, B.Ed, M.Ed, Others etc. Count teachers for their respective professional qualifications and mention the count in the respective boxes.
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Note: Total numbers of teachers must be equal to total number of appointed teachers.
No. of Teachers who got training in the last Year (July 2017 –Till Date): (Section VI – Govt. School Sheet)
This requires you to enlist number of teachers who got any training in the previous year, see the date mentioned above to count what is meant by one year. If yes, determine the time period for the training e.g. None, less than 15 days, 15-30 days, and more than 30 days.
Facilities in the School: (Section VII – Govt. School Sheet & Pvt. School Sheet)
Count yourself and write down:
• Total numbers of rooms in the school
• Total number of Class rooms being used by children (count yourself)

Tick the relevant:
Is there a complete boundary wall / fence?
Is there a playground in the school?

Does the school have an electricity connection?
Does the school have solar panels?
Does the school have a working library?
Does the school have smart Boards?
Is there useable furniture available in this school?
Running water available in handwashing sinks?
Soap/Handwash available in handwashing sinks?
Are there useable toilets / latrines for students?
Are there separate toilets for girls and boys?
Running water available in toilets?
Are Disinfectants available for cleaning?
Are Toilets Clean?
Clean Drinking water available for students?
Isolation room Available?
First Aid Equipment Available
Covid-19 Tests done in school by the government?

Alternate day Schooling?
Awareness posters/IEC material displayed in school?
Temperature check at entrance?
Hand sanitization at entrance?
Masks wore by teachers and students at school?
Hand sanitizer available inside or outside every classroom for students
School policy on suspected Covid-19 cases:
       a. Move them to isolation room
       b. Send the person home immediately
       c. Call nearby health facility
       d. Call Covid-19 helpline
       e. No policy
       f. Other
School's Leave policy for Confirmed Positive Cases:
       a. Continue learning/teaching from home
       b. 14-days leave
       c. Return back to school only after a negative Covid test
       d. No policy
       e. Other
Is there a computer lab?
Is internet available in the school?
If yes, internet available in:
       a. computer labs?
       b. offices?
       c. classrooms?

Write the answer:
Total number of rooms in the school (count yourself)
Total number of classrooms being used by students (count yourself)
Average size of the classroom (in square feet)
Seating Arrangement (in feet)
No. of Handwashing sinks without running water (count yourself)
No. of handwashing sinks without soap/handwash (count yourself)
No. of Handwashing sinks (outside toilets)
No. of Handwashing sinks (inside toilets)
No. of Wuzu taps
No. of Toilets for Teachers only
No. of Toilets for Students only
No. of Toilets without running water (count yourself)
No. of Covid-19 Tests done in school
No. of Positive cases Identified

Page No 2 (Only for Government School Sheet)

- Record Name of the School, name of the village, name of Tehsil/Taluka, District/Agency and the Province.
- Record Name of Head Teacher/Principal, School phone number and Head Teacher/Principal mobile number.
- The Head Master should be requested to provide information for this section. In the absence of the Head Master, ask Senior Most teacher OR the person who is in charge of the school to provide information for this section.

SMC/SC/PTA Information: (Section VIII– Govt. School Sheet)
- Is SMC/SC/PTA/PTC/PTSMC active? Yes or No
- Write the total number of members.
- Write the number of active members.
- Write amount in bank
- Write last meeting date

School Fund Information: (Section IX – Govt. School Sheet)
1. For this section, note down information for July 2018 to June 2019.
2. Get funds information for **SMC/SC/PTA/PTC/PTSMC FUNDS, FAAROG-E-TALEEM FUND, TUCK SHOP FUND, RENT FOR CYCLE STAND, AND SCHOOL CONSTRUCTION.** You can write down the name of other source of funds in the additional space given if there are any.
3. Ask if the school got a fund. If yes, then note down the amount and when this fund was received, write down the **month and year** in which fund was received. If the person answering this section says that he/she is going to receive the fund in the future, then mark "no".
4. If the fund was received ask if the school has spent the entire fund? Yes, No, Do not know.
5. There are instructions under this section asking where the school fund was spent? Mark which is relevant.
6. Ask the person answering this section about the fund in a way that the person does not feel threatened or uncomfortable. If the person refuses to answer or is hesitant to answer this section, then do not force the person and move on to the next section. The remaining questions of this section should be left BLANK.

School Fund Information: (Section X – Govt. School Sheet)
This section is similar to section IX other than the date by which you are required to record the information for school fund. Record the information for school fund from July 2019 to date of survey.

School Fund Information: (Section XI and Section XII – Govt. School Sheet)
Below the fund section, also mark the relevant fields that inquire whether the fund was spend on utilities such as class room construction, school uniform, repair of computer etc.

Only for Private School Sheet
School Fund Information: (Section V – Pvt. School Sheet)
1. For this section, note down information for July 2018 to June 2019 and July 2019 to date.
2. Write down the name of the person who provided the information.
3. If the school gets any funds from Government/ Private Individual/NGO, mark yes or no accordingly.
4. If the school got a fund, then note down the **amount** and when this fund was received, write down the **month and year** in which fund was received. If the person answering this section says that he/she is going to receive the Fund in the future, then mark "no". Also write the name of the Department/Organization giving the fund.
5. If the school received a fund, then note down where that fund was spent or used.
6. Ask the person answering this section about the fund in a way that the person does not feel threatened or uncomfortable. If the person refuses to answer or is hesitant to answer this section, then do not force the person and move on to the next section. The remaining questions of this section should be left BLANK.
- Note the **time of exit** from the school.