

LARGE-SCALE ASSESSMENT 2024

LSA GRADE 2

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List of Abbreviations/Acronyms

AEO Assistant Education Officer **ALP** Accelerated Learning Programme APF Assessment Policy Framework **ASER** Annual Status of Education Report Audio-Visual ΔV B.A. Bachelor of Arts B_{Sc} Bachelor of Sciences CPD Continuous Professional Development CRO Constructed Response Question Certificate of Teaching DEAs **District Education Authorities** ווח Disbursement Linked Indicator DPS Division Public School **ECE** Early Childhood Education FRO **Extended Response Question** HED Higher Education Department HCF **Highest Common Factor** Information Technology ITSP Innovative Teacher Support Package LCM Least Common Multiple LSA Large Scale Assessment M.A. Master of Arts MCO Multiple Choice Question MEA Monitoring and Evaluation Assistant MSc Master of Sciences NFBE Non-Formal Basic Education NSB Non-Salary Budget L&NFBE Literacy & Non Formal Basic Education **PCTB** Punjab Curriculum and Textbook Board PEC Punjab Examination Commission Punjab Education Foundation

PEIMA Punjab Education Initiative Management Authority PESP III Punjab Education Sector Project III PISA Program for International Student Assessment **PMIU** Programme Monitoring and Implementation Unit PPP Public Private Partnership PPS Probability Proportional-to-Size PRP Pakistan Reading Project PTC Primary Teaching Certificate PTM Parent Teacher Meeting **PWWF** Punjab Workers Welfare Fund RRO Restricted Response Question **QAED** Quaid-e-Azam Academy for Educational Development SAFFD South Asian Forum for Education Development SBA School Based Assessment **SDGs** Sustainable Development Goals School Education Department SED **SPED** Special Education Department SPED(SL) Special Education Department (Slow Learners) SPED(PH) Special Education Department (Physical Handicap) SPED(HI) Special Education Department (Hearing Impaired) School Information System SLO Student Learning Outcome SNC Single National Curriculum SOPs Standard Operating Procedures SRP Sindh Reading Programme Student-Teacher Ratio Technical Assistance TFM Teacher Forum Meeting ToS Table of Specification **WB** World Bank WPM Words per Minute

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MESSAGE FROM CHIEF EXECUTIVE OFFICER, PEC

Under the Assessment Policy Framework (2019), the Large-Scale Assessment (LSA) is one of its fundamental components. It has very distinctive features for all stakeholders in the education sector. In the academic year 2024, on the adoption of a Single National Curriculum (SNC), the LSA 2024 of Grade 2 (oral assessment) was administered. Conduct of students' oral assessment in Grade 2 was first time in the history of PEC. This was done to set up a benchmark of learning for the province.

I am pleased to report that the Punjab Examination Commission (PEC) achieved another milestone of oral assessment, as it strategically broadened its scope in LSA-2024 across all thirty-six districts of Punjab through a robust sampling process including representation schools of SED, PEF, PEIMA, SPED, L&NFBE, PWWB, Private chains and Smart schools. Single National Curriculum (SNC) is implemented in its true letter and spirit in the core areas of literacy, numeracy, and scientific skills by evaluating their English, Mathematics, Science, and Urdu learning. I would like to express my most profound appreciation to my team at PEC for utilizing their expertise for the inclusion of skills addressing Bloom's Taxonomical levels this year, in addition to assessing reading, listening, and speaking and being able to give comprehensive feedback to the allied departments and education system.

I would like to extend my gratitude to the School Education Department (SED), Quaid-e-Azam Academy for Educational Development (QAED), Punjab Curriculum and Textbook Board (PCTB), Programme Monitoring and Implementation Unit (PMIU), District Education Authorities (DEAs), Punjab Education Initiative Management Authority (PEIMA), Special Education Department(SPED), Literacy and Non-Formal Basic Education(L&NFBE) Department, Punjab Worker Welfare Board(PWWB), Private Chains and Schools and Punjab Education Foundation (PEF) for their instrumental role in the development and execution of the LSA. Their expertise and cooperation were invaluable. I would also like to thank the teachers, students, and parents who participated in the LSA. Their cooperation made this project a success. The LSA will be a valuable tool for improving education in Punjab.

I would like to extend my gratitude to Tariq Iqbal, Ex-CEO, Punjab Examination Commission for their leading role in completion of LSA Grade 2. I would also like to thank Ayaz Aqdus Goraya, Director Admin & Finance, Dr Muhammad Azeem, Director Research & Analysis and Dr Nasir Mehmood, Director Assessment & Framework and their team members for their role in achieving successfully this milestone of APF.

I am pleased to inform you that specific excerpts from this report accrediting to curriculum and textbooks, teachers' capacity building through training programs, quality of Public-Private Partnership (PPP) schools, districts performance, and other policy issues and requisite recommendations will be shared with all allied departments and stakeholders, i.e., SED, QAED, PCTB, PMIU, DEAs etc., for future policy considerations and actionable decisions for a holistic quality improvement in education in the province of Punjab. The role of PEC Commission members in the leadership of Chairperson and their decisive role in its implementation is commendable. I am thankful to the support extended by the secretary school education department for implementing the assessment across the Punjab. The Punjab Examination Commission team is highly motivated for their future vision, intending to conduct an oral assessment of Grade 2 again after 2-3 years, for which the results included in this report will be used as the benchmark, against which the academic performance of the students will be gauged in upcoming years. We also intend to align this and the upcoming LSA with the Global Proficiency Framework (GPF) to analyze and report students' proficiency on Sustainable Development Goals (SDGs) Indicator 4.1.1, which is the proportion of students reaching global minimum proficiency in reading and mathematics to compare, aggregate, and track assessment results on a global basis.

Good luck to my PEC team.

Dr Abdul Waheed Raza Chief Executive Officer, PEC

EXECUTIVE SUMMARY

In February 2020, the Government of Punjab replaced the examination system with the new assessment regime, the Assessment Policy Framework (APF) 2019. The APF introduced a set of three complimentary interlinked assessments (system-level, school-level and classroom-level) that cater to all tiers of the system; (i) for improved policy decisions, (ii) school-based changes and, (iii) adjustment in teaching and learning practices. These assessments are of three types in nature: Large Scale Assessment (LSA), School Based Assessment (SBA), and Formative Assessment (FA).

LSA 2024 is the fourth assessment of this nature, following the LSA 2021, LSA 2022 and LSA 2023. However, this is the first LSA conducted for Grade 2. The current LSA also includes results from Private Chain, Private General, SPED, PWWF, DPS, L&NFBE, and Smart schools, in addition to SED, PEF, and PEIMA schools.

This report provides an overview of the design, conduct and results of LSA 2024. The sampling methodology, design of the assessment instruments and background questionnaires along with the analysis techniques used have also been elaborated. The report provides a detailed account of the assessment results as: (i) overall performance of students (ii) a comparison of student scores with teachers (iii) between students of schools of different type of school administrations (SED and non-SED) (iv) between different levels of schools (primary, middle, secondary, and higher secondary) and (v) between different districts. Linear regression has also been run to understand the (iv) relationship of students' scores with other key factors related to teachers, school, and parents using ordinary least squares estimation technique. Feedback data (v) of school-based stakeholders such as teachers and school councils has also been collected. Based on the LSA findings, recommendations for different stakeholders have also been given.

The LSA 2024 for Grade 2 is aligned with the Single National Curriculum (SNC), and hence LSA 2024 results can serve as a baseline for future LSAs of Grade 2.

The LSA 2024, has been designed taking into consideration, international best practices of assessment. A comprehensive development process was followed for assessment development including consultations with private and government school teachers, academics and relevant experts from all government education-related organizations such as QAED, PCTB, PMIU, PEF and PEIMA. The key components and structure for LSA 2024 have been designed by PEC following a rigorous consultative process which includes: composition of the assessment, population coverage, frequency and timing, curriculum coverage, and compilation and reporting of the results.

Data collection under the assessment has been done using two instruments: (1) Assessments (Test papers) for evaluation of Literacy (Urdu and English), Numeracy and General Knowledge Skills (as presented in the Single National Curriculum including subject competencies, key learning areas and learning strands respectively) and (2) Background questionnaires for head -teachers, teachers, school council members, parents and students (to collect information about students, school and classroom pedagogies).

LSA was conducted in a representative stratified sample of 5000 schools across the province. The schools were sampled as per their administrative arrangement: SED, PEF, PEIMA, Private Chain, Private General, SPED Slow Learners, SPED Physical Handicap, SPED Hearing Impaired, PWWF, DPS, L&NFBE, and Smart schools. In the stratified random sample the following was included: (i) both gender (boys and girls), and (ii) all types of schools (i.e., Higher Secondary, Secondary, Middle and Primary).

PEC steered implementation of the LSA 2024 with the help of its core team and staff of SED. For implementation, the test administrators from the public schools were nominated by the concerned DEAs. The field staff was trained by the PEC experts; comprehensive SOPs detailing all steps of conduct were outlined. All papers were marked using on-screen marking system. Universal Business System was contracted for on-screen marking. PEC team also monitored up to 20% marking to ensure validity and reliability of marking data.

Findings highlight that:

- **Overall mean scores** achieved by the students is 82%. Female students achieved 83% while male students achieved 80% overall mean scores.
- **Subject-wise scores** show that female students achieved 83%, 87%, 84% and 80% mean scores in the subjects of English, Mathematics, GK, and Urdu respectively. Whereas male students achieved 79%, 85%, 82% and 77% in the subjects of English, Mathematics, GK, and Urdu respectively.
- Overall students showed similar performance in MCQ and CRQ type questions.
- In **Reading Fluency Assessment**, students of Grade 2 can read on average 91 words in English and 99 words in Urdu.
- In Speaking Assessment, students of Grade 2 can speak continuously on a topic on average for 97 seconds in English and 106 seconds in Urdu.
- In Listening Assessment, students of Grade 3 achieved an overall percentage mean score of 67% in English and 52% in Urdu.
- Overall mean scores achieved by **teachers** is 93%. Overall mean scores of teachers in the subjects is 93%, 95%, 92%, and 92% in English, Mathematics, GK, and Urdu respectively. The overall performance of male and female teachers is almost similar.
- Overall scores of students are 81%, 83%, 81%, 87%, 87%, 82%, 83%, 73%, 87%, and 85% in SED, PEF, PEIMA, Private Chain, Private General, SPED Slow Learner, SPED Physical Handicap, SPED Hearing Impaired, PWWF, and Smart schools, respectively. Subject-wise breakdown of scores shows that:
 - i. In English, students of SED, PEF, PEIMA, Private Chain, Private General, SPED Slow Learner, SPED Physical Handicap, SPED Hearing Impaired, PWWF, and Smart schools scored 81%, 82%, 81%, 89%, 88%, 84%, 83%, 76%, 87%, and 88% respectively.
 - **ii.** In Mathematics, students of SED, PEF, PEIMA, Private Chain, Private General, and SPED Slow Learner, SPED Physical Handicap, SPED Hearing Impaired, PWWF, and Smart schools scored 86%, 87%, 85%, 88%, 89%, 86%, 83%, 81%, 87%, and 87% respectively.
 - **iii.** In Urdu, students of both SED, PEF, PEIMA, Private Chain, Private General, and SPED Slow Learner, SPED Physical Handicap, SPED Hearing Impaired, PWWF, and Smart schools scored 78%, 80%, 79%, 84%, 85%, 77%, 78%, 63%, 87%, and 82% respectively.
 - **iv**. In GK; students of SED, PEF, PEIMA, Private Chain, Private General, and SPED Slow Learner, SPED Physical Handicap, SPED Hearing Impaired, PWWF, and Smart schools scored 83%, 85%, 83%, 86%, 87%, 83%, 90%, 75%, 87%, and 84% respectively.
- **Overall achievement of students** is 81%, 82%, 83% and 83% in primary, middle, secondary, and higher secondary schools, respectively.

The data showed significant impact of parents, teachers, and school related factors on students' achievement:

- Higher academic and professional qualification of teachers, giving regular homework, lesson planning by teachers, and other healthy teaching practices have significant positive impact.
- Availability of basic facilities in school and classrooms, availability of subject-specialist teachers in school, opportunities for students to participate in co-curricular activities, and effective

monitoring of teachers performance also have positive and significant impact on student's learning.

- Other factors having significant positive impact include father's qualification, mother's qualification, parents' active engagement with school, and availability of computer and other study-aids at home.
- Higher provision of Non-Salary Budget (NSB) was not found to have any significant impact on student scores.

In the last chapter of the report, recommendations to key stakeholders based on the findings of the study are provided. The recommendations are intended to facilitate the improvement in provision of education in the province by guiding the response of relevant stakeholders.



INTRODUCTION



Building a strong education system that promotes learning for all is fundamental to the development and economic growth of a country (Clarke and Luna, 2021)¹. The role of 'assessment' through tracking and measuring of this learning cannot be ignored. Developed education systems across the world focus on having a strong centralised assessment mechanism that measures student performance, provides feedback for policy actions and assists in alignment of all actors.

For the province of Punjab, the assessment mechanism is led by the Punjab Examination Commission (PEC). Under its Commission, PEC is mandated to 'design, develop, implement, maintain, monitor and evaluate a system of examination for elementary education (G rade 1-8)². Till 2019, PEC conducted annual curriculum-based examinations for Grades 5 and 8. The examination system from February 2020 was replaced by the new assessment regime, the Assessment Policy Framework (APF)³.

1.1.

The New Assessment System Under the Assessment Policy Framework (APF 2019)

The APF is the overarching framework for assessments in the province focused on serving all purposes of a best practice educational assessment system: (i) tracking changes from one learning point to the other (ii) making informed choices for grade promotions, and (iii) helping teachers make informed decisions to refine teaching practices according to student learning needs⁴.

The new assessment system focuses on introducing transparency and autonomy of teachers. This is a marked change from the previous examination system that focused on the notion of accountability with greater punishments attached with assessment results. The conduct of high-stake examinations previously led to the creation of an unfriendly learning environment at the school level; leading to continuous pressure on teachers to achieve results with students resorting to more rote learning and cheating.

The APF eliminates these concerns by introducing a set of three complimentary interlinked systems that cater to all tiers of the system; (1) system level through provision of feedback for improved policy decisions (2) school-level feedback for school-based changes and, (3) classroom-level consistent feedback for the teacher to continuously change and improve teaching and learning practices.

All of the three systems while are complimentary in nature are diverse in design, purpose, methodology and use of assessment results. The key objectives and three -tiered system is given in Box 1.1.

The envisioned system under APF can be classified into two types:

Large Scale Assessments (LSA) (International, National and Regional Level)- to assess the overall performance of a large group of students across various schools in the province, providing data for educational policymaking, resource allocation, and accountability purposes.

SchoolBased Assessments (SBA) (Summative and Formative)- to track students' progress at different intervals to refine teaching instructions and classroom assessments to provide real-time information to aid teaching and learning process in classrooms.

Objectives of APF and the Three Systems of Assessment

The Assessment Policy Framework aims to:

- help establish a systematic way of developing, implementing and utilizing assessments for teaching and learning process.
- assist and bridge information gaps by providing a platform to all stakeholders for discussion and use of assessment results for improved practices
- help the province to adopt internationally recognised best assessments practices appropriate to the context of the province of Punjab.

The APF Three-Tiered System Establishment:

The institutionalization of the system leads to the following.

- Sample-Based Large Scale Assessments (LSA),
- Summative School-Based Assessments (SBA) and
- Formative Assessments (FA)

SYSTEM LEVEL The **system level LSA** focuses on assessing: elementary level curriculum of key subjects and skills, early grade assessment of literacy and numeracy, and need-based assessments.

SCHOOL LEVEL The **school level SBA** is a term-wise curriculum based assessments conducted by schools themselves. Test papers were constructed using centralised item banks (developed by PEC).

CLASSROOOM LEVEL The **classroom level FA** is consistent testing by teachers during and after lessons periodically.

These are an evaluation of students on a continuous basis on an SLO/unit/topic/subtopic etc.

Clarke, M. and Luna, B.D. (2021). Primer on Large Scale Assessments of Educational Achievement. National Assessments of Educational Achievement; Washington, DC: World Bank. https://openknowledge.worldbank.org/handle/10986/35494 License: CC BY 3.0 IG0

² PEC. (2010). The Punjab Examination Commission Act 2010. Can be accessed at: https://pec.edu.pk/system/files/THE_PUNJAB_EXAMI_NATION_COMMISSION_ACT_2010.pdf

³ APF (2019). Assessment Policy Framework. School Education Department (SED), Government of Punjab. Notification of February 3, 2020. Can be accessed at: https://pec.punjab.gov.pk/system/files/Notification%20of%20APF%202020_0.pdf#overlaycontext=node/113

⁴ PESP III (2019). Assessment Policy Framework Guiding Report. The Third Punjab Education Sector Project Technical Assistance, Cambridge Education. In collaboration with the Punjab Examination Commission (PEC), 2019.

1.2.

Implementation of the Large-Scale Assessment (LSA)

Large Scale Assessments (LSA) provide information on overall levels of student achievement in the system for a particular curriculum area and at a particular grade level.

Literature shows us that these assessments vary globally in terms of (i) school grades and age levels tested, (ii) population coverage, (iii) subjects and skills coverage, (iv) frequency (v) test administration, (vi) collection of background data and (vii) reporting and use of results⁵.

The assessment has a two-fold purpose as per its intended design:

- To assess core Literacy, Numeracy and Scientific Skills through subjects of English, Urdu, Mathematics and GK of students of Grade 2;
- To collect background information on external factors influencing the learning of students.

LSA 2024 provides the system with overall feedback on overall student performance of Grade 2 for improvements in teacher development and training, curriculum and textbooks and related policy considerations.

The assessment has been conducted in a representative stratified sample of 5000 schools in all 36 districts of the province. LSA 2024 has been designed following international best practices and a comprehensive development process including private and government school teachers, academicians and relevant experts from all government education departments such as the Quaid- e-Azam Academy of Educational Development (QAED), Punjab Curriculum and Textbook Board (PCTB), Programme Monitoring and Implementation Unit (PMIU), Punjab Education Foundation (PEF) and the Punjab Education Initiative and Management Authority (PEIMA).

Key questions that LSAs address

Extract taken from Greanery and Kallaghan, 2008

LSAs can provide support in policy decisions by addressing some key questions:

- How well are students learning in the education system? Are they meeting specific learning standards?
- Are there particular strengths and weaknesses in student knowledge and skills?
- Do particular subgroups perform worse than others? Are there disparities, for example, between the performance of boys and girls or students from different language groups?
- What factors are associated with student achievement? To what extent does student achievement vary with the characteristics of the learning environment (teacher knowledge and preparation, school resources etc.) or with student's home circumstances?
- Does student achievement change over time? What factors are linked to changes in student achievement over time?

1.3. Structure of the LSA Under APF 2019

The APF provides the overall structure for all system -level LSAs. The key components and structure have been developed by PEC following a rigorous consultative process. The final structure of the assessment has been drafted taking into account the best international assessment models conducted globally; the Programme for International Student Assessment (PISA), Trends in International Maths and Science Study (TIMSS) and the Progress in International Reading Literacy Study (PIRLS)⁶.

Key components of the LSA include:

- Composition of Assessment:
 - **a**. Assessment of Literacy, Numeracy, and GK skills at primary level and cover additional subjects as directed by SED.
 - **b** . Assessment of knowledge and key skills of core subjects at the middle level and cover additional subjects as directed by SED.
- **Population Coverage:** The assessments cover selected students through a representative stratified sample of schools, students, teachers and any other target audiences/points as per the assessment requirements.

- Frequency and Timing: The assessments are conducted at regular intervals (alternate years). PEC implements the LSA in a way that the pilot study of a grade is administered along with the main study. Hence, LSA for a specific grade is conducted simultaneously with the pilot testing of another grade.
- Curriculum Coverage:
 - **a.** Literacy skills (English and Urdu languages), Numeracy (Mathematical skills), and GK skills for primary level.
 - **b**. Selected (prioritized) and measurable SLOs in core subjects at the middle level.
- Output: LSA aims to achieve the following:
 - a. scores for Literacy, Numeracy, and GK for primary schools' sampled students.
 - **b**. scores in core subjects' knowledge and key skills/disciplines/ competencies assessed for sampled students from middle schools.
 - c. identification of factors influencing teaching and learning experiences.
- Reporting of Results: Reporting of students' and teachers' scores in form of percentage and mean scores.

1.4.

Guide to the Report

LSA 2024 Main Findings report provides the key insight and evidence gained on student s' and teachers' performance for Grade 2. The report is organised into the following chapters:

<u>Chapter 1</u> provides an introduction to the implementation and structure of the Large Scale Assessment under the Assessment Policy Framework.

Chapter 2 provides an outline of the methodology followed in the development of LSA 2024. It enumerates the sampling methodology, assessment instruments, background data - collection instruments and the analysis techniques used.

Chapter 3 details the assessment results. A specific section on key highlights is already given at the start of the report in the Executive Summary. The detailed assessment data is further divided into three parts:

- a. overall performance of students including a comparison of scores with teachers and between students of different school administration types (SED and non-SED);
- **b.** relationship of students' scores with key areas;
- **c.** feedback from various actors such as teachers, parents, and school councils.

Chapter 4 provision of recommendations to different departments for utilization of LSA findings.

⁵Ibid. Reference 1

⁶PESP III. (2020). Large Scale Assessment (LSA) for Grade 5 Assessment Framework. The Third Punjab Education Sector Project, T echnical Assistance, Cambridge Education. In collaboration with the Punjab Examination Commission (PEC), 2020.



METHODOLOGY





The LSA 2024 was conducted across 36 districts of Punjab.

The assessment is conducted on the Single National Curriculum (SNC) centered on the Student Learning Objectives (SLOs) previously developed and revised after implementation of Single National Curriculum (SNC) by the Punjab Education Sector Project (PESP III) team.

2.1.

Methodological Approach

Target Population: The total population of this study consists of 5000 schools under which 50,000 students have been assessed in 36 districts.

2.1.1. Sampling Methodology

Stratified random sampling based on probability proportional to size (PPS) was used for conducting this LSA.

Composition of Sample:

Various types of schools are included as per their administrative arrangement: SED, PEF, PEIMA, DPS, L&NFBE, Private Chain, Private General, SPED Slow Learner, SPED Physical Handicap, SPED Hearing Impaired, PWWF and Smart schools. The sample selected has the following characteristics:

- a) Gender (Boys and Girls Schools)
- b) Type of school (Primary, Middle, High and Higher Secondary Schools)
- c) Location (Rural and Urban areas)

In the data

- 1. Schools with less than 10 students are excluded.
- 2. Mosque schools are not part of the sample.
- 3. Co-education schools are categorised into boys or girls' schools according to the number of girls and boys students, i.e., the schools with more girls than boys are categorised as girls' schools and vice versa.
- 4. If the school has less than ten students after its categorisation on the basis of gender, it is excluded from the sample.
- 5. High schools are considered Secondary schools.

In the sample, each district of the province was stratified into multiple sub-strata, namely by urban and rural stratum, school type (i.e., Higher Secondary, Secondary, Middle and Primary) and boys and girls schools.

Considering the characteristic variability for which estimates needed to be prepared, population distribution and reliability constraints, different sample sizes for each type of school were computed and fixed.

The following sample sizes were selected to provide reliable estimates of key variables at both district (SED schools) and provincial levels (PEIMA and PEF schools):

Table 1a: Sample Size of Schools for LSA 2024

SCHOOL ADMINISTRATION TYPE	NUMBER OF SCHOOLS	STUDENTS (10 per school)
SED	3730	37300
PEIMA	144	1440
PEF	828	8280
L&NFBE	52	520
PRIVATE CHAIN	32	320
PRIVATE GENERAL	68	680
SPED (SLOW LEARNERS)	25	250
SPED (PHYSICALLY HANDICAPPED)	4	40
SPED (HEARING IMPAIRED)	14	140
DPS	51	510
PWWF	17	170
SMART SCHOOLS	35	350
TOTAL	5000	50000

Table 1b: District-Wise Data: Number of Schools

			D:	ISTRICT	WISE NU	MBER	OF S	CHOO	LS				
	SED	PEF	PEIMA	PRIVATE CHAIN	PRIVATE GENERAL	SPED (PH)	SPED (SL)	SPED (HI)	DPS	L&NFBE	SMART	PWWF	TOTAL
ATTOCK	73	7	1	1	2	(111)	1	(111)	1		1		87
BAHAWALNAGAR	138	25	6	1	2		1		2	2	1		178
BAHAWALPUR	96	21	9	1	2		1			2	1		133
BHAKKAR	82	24	3	1	2	1	1		2	3	1		120
CHAKWAL	43	21	1	1	2		1		2	1	1		73
CHINIOT	72	25	1							2			100
D.G. KHAN	114	25	3	1	2				2	2	1		150
FAISALABAD	193	24	7	1	2		1		2	2	1	2	235
GUJRANWALA	129	20	7	1	2		1		2	3	1	4	170
GUJRAT	102	25	1	1	2			1	2	1	1		136
HAFIZABAD	45	2	1	1	2		1		1	2	1		56
JHANG	122	27	7	1	2		1			2	1		163
JHELUM	43	2	1	1	2				1		1	1	52
KASUR	123	27	6	1	2			2	2		1		164
KHANEWAL	143	26	4	1	2		1	1	1		1		180
KHUSHAB	50	25	2	1	2		1	1	2		1	2	87
LAHORE	149	27	2		1				1		1	2	185
LAYYAH	95	30	2	1	2				2	1	1		134
LODHRAN	65	27	2	1	2		1	2	1		1		102
M.B. DIN	76	27	1	1	2		1		1		1		100
MIANWALI	83	24	2	1	2		1			2	1		116
MULTAN	131	25	6	1	2	1	1		2	2	1	2	174
MUZAFFARGARH	141	25	13	1	2		1			3	1		187
NANKANA SAHIB	63	23	1	1	2		1		1	1	1		94
NAROWAL	77	25	6	1	2		1	1	1	1	1		116
OKARA	128	23	8	1	2	1	1	2	2	2	1		171
PAKPATTAN	97	29	3	1	2		1		2	1	1		137
RY KHAN	166	24	7	1	2					2	1		203
RAJANPUR	70	28	5	1	2				2	2	1		111
RAWALPINDI	103	23	3	1	1	1	1		2	1	1		137
SAHIWAL	104	25	2	1	2		1		2	1	1		139
SARGODHA	155	26	5	1	2		1		2	3	1		196
SHEIKHUPURA	103	24	7	1	2			1	2	3	1	4	148
SIALKOT	111	29	4	1	2			1	2		1		151
T.T.SINGH	130	24	4		2		1		2	2	1		164
VEHARI	115	24	3		2			1	2	3	1		151
TOTAL	3730	828	144	32	68	4	25	14	51	52	35	17	5000

2.1.2. Assessment Instruments

LSA 2024 assessment uses two instruments:

Assessments (Test Papers)

 for literacy (Urdu and English), Numeracy, and Science Skills

Background Questionnaires

- for head teachers, teachers, school council members, students, and students' parents.

Type of Assessment Instruments

The assessments (test papers) are further divided by type. For LSA 2024, the students of Grade 2 have been tested using 4 types of instruments:

Table 2: Type of Assessments Conducted under LSA 2024

Sr No.	Type of Assessment Instrument	Skills Assessed		
1	Listening (Oral)	Literacy (English and Urdu)		
2	Reading Fluency (Oral)	Literacy (English and Urdu)		
3	Speaking (Oral)	Literacy (English and Urdu)		
4	Curriculum/SLO Knowledge (Written)	Literacy (English and Urdu), Numeracy (Mathematics), and General Knowledge (GK)		

Curriculum Content and Cognitive Levels Assessed

The LSA 2024 focuses on assessing literacy, numeracy skills and understanding of different scientific concepts and their application in daily life as presented in the Single National Curriculum. This includes competencies, key learning areas and learning strands respectively. A brief description of each area⁷ includes:

⁷ Ibid. Reference 6

Table 3: Summary of Content Coverage

	Literacy
Description	 i. Literacy is the ability to identify, understand, interpret, create, communicate, and compute, using printed and written materials associated with varying contexts. ii. It involves a continuum of learning enabling individuals to achieve their goals, develop their knowledge and potential, and participate fully in their community and wider society. iii. With the knowledge of words, grammar and visuals, literacy has two major processes: (a) comprehending texts through listening, reading and viewing (b) composing texts through speaking, writing and creating.
Coverage Under LSA	LSA 2024 has assessed the knowledge, understanding, application level, and higher order thinking skills related to the two processes (excluding viewing and speaking) along with knowledge of words and grammar.
	Numeracy
Description	 i. Numeracy is the ability to use numbers and solve problems in real life. It means having the confidence and skill to use numbers and mathematical approaches in all aspects of life. ii. It is organised into six interrelated elements: (a) estimating and calculating with whole numbers (b) recognising and using patterns and relationships (c) using fractions, decimals, percentages, ratios and rates (d) using spatial reasoning (e) interpreting statistical information (f) using measurement.
Coverage Under LSA	LSA 2024 has assessed the knowledge, understanding, application level, and higher order thinking skills related to the above six topics.
	GKSkills
Description	 i. The term 'General Knowledge' is defined as a set of broadly transferable abilities and knowledge appropriate to many disciplines and widely used in daily life. ii. Understanding various concepts related to science and society and their application in daily life is very important for students. It helps them understand the world, nurture their curiosity, and develop essential skills, including inquiry, observation, prediction, analysis, reasoning, and explanation. iii. Primary Science is both a process of inquiry and a body of knowledge. The development of scientific skills and attitudes is inextricably linked to the development of ideas in science. As students' ideas evolve, an understanding of the nature of science needs to be acquired along with its relationship to technology, society and the environment. iv. The curriculum of GK is divided into two key learning areas: (a) social (b) science

Coverage Under LSA

LSA 2024 assessed the knowledge, understanding, application level, and higher order thinking skills related to the three areas of primary Science. Technology and Technical Information content involves hands-on experience (operate, use, practise, assemble, prepare) and could not be assessed through the paper-pencil test. Therefore, the list of Science student-learning outcomes (SLOs) does not contain outcomes that are technology-based.

PEC followed a consultative process with Punjab Curriculum and Textbook Board (PCTB), Quaid e Azam Academy for Educational Development (QAED) along with practicing teachers from private and public schools to prioritize SLOs for Literacy (English and Urdu), Numeracy (Mathematics) and General Knowledge (GK). All SLOs included have undergone a thorough review process by the experts. Final selection of SLOs under SNC was done through a series of workshops in 2022.

LSA 2024 includes:

Targeted SLOs for the Basic Concepts of Grade 2

These were selected by practicing teachers and assessment experts as they are considered the minimum benchmarks/ foundational knowledge needed for promotion to the next Grade.

SLOs Needed to Align with the International Benchmarks for Literacy and Numeracy

Practicing teachers and assessment experts studied the national curricula for Literacy and Numeracy of three countries, namely Australia, Canada and Bangladesh, and noted the common topics/concepts. The prevalence of common topics/ concepts in the curricula of different countries indicates the significance of these topics as fundamental to the primary level education system.

Quality assurance of Assessment Instruments

All assessments have undergone quality controls set by PEC. The validity and reliability of the assessment has been checked under the institutional processes and protocols set by the organisation that are aligned with best practices of international assessment agencies .

2.1.3. Background Data-Collection on Influencing Factors

The LSA 2024 focuses on understanding all factors that affect students' performance.

While the assessment instruments are designed to collect information on academic performance, additional factors such as socioeconomic status, household set -up, interests in learning, etc., are equally important. For this purpose, comprehensive background questionnaires are used in the LSA that can provide information about school and classroom pedagogy.

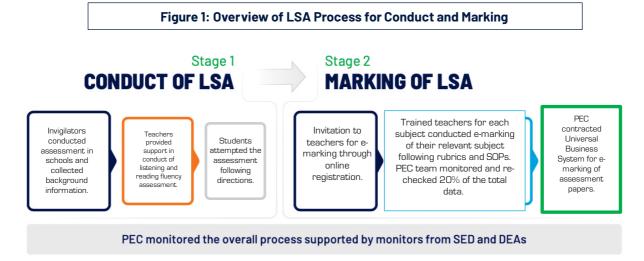
Information under the assessment has been collected at three levels which are as follow s:

- Home-Related factors
- School-Related factors
- Classroom-Related factors

2.1.4. Standard Operating Procedures (SOPs) for Conduct and Marking of LSA

PEC has led the implementation of LSA 2024 with its core team and staff of SED. Test administrators nominated from schools were the major actors engaged in conduct of the assessment at the school level. To assist the administration team, comprehensive SOPs detailing steps for conduct and marking of assessment were developed. The SOPs were finalised following a consultative process with all internal wings at PEC (research, administration, finance and IT wings). For scanning of instruments and e-marking, Universal Business System was contracted.

The SOPs provide defined roles and responsibilities for each stakeholder engaged in conduct and marking activities. Figure 1 provides an illustrative overview.



PEC trained all the test administration teams about their supervisory responsibilities in schools through a 1-day workshop. The trainings were carried out across the 36 districts.

Required material packs were provided with detailed instructions for students and test administrators to ensure smooth conduct of assessment.

Similarly, all teachers engaged in the marking of the assessment were provided training for use of the rubrics and related materials.

2.1.5. Quality Assurance Parameters of Assessment

For quality assurance, PEC and SED developed a robust monitoring system to observe the conduct of assessments in the field and marking at central marking centre. A monitoring plan

was drafted with detailed instruments to ensure smooth and fair conduct across the sample of schools.

O During the Conduct of Assessment:

- a. PEC along with monitors from the SED and the 36 District Education Authorities (DEAs) conducted spot checks and visits across the province.
- b. PEC created a provincial control room to assist the test administrators and monitors and resolve all issues arising in the field.

O During the Marking of Assessment:

- a. PEC team monitored 50% of scanning and cropping to ensure visibility of each part of written questions for valid and reliable e-marking.
- b. PEC team rechecked 20% of the e-marked instruments to ensure data quality and reliability.

Results from the monitoring highlight that the assessment was successfully completed across the province with no major issues. The processes laid out for the assessment were fully followed by all stakeholders engaged in the assessment conduct.

2.1.6 Data Analysis

LSA data has been analysed using appropriate statistical techniques relevant to the nature of the variables. These include using:

- Descriptive Analysis
- Regression Analysis

The analysis results are explained in detail in Chapter 3 of this report. The descriptive analysis has been divided into various sections, i.e., overall student s' mean scores, overall teacher's mean scores, teachers' and students' comparative mean scores, and comparison of mean scores based on types of school administration and school levels.

Linear regression has been used to assess the relationship between students' performance and factors related to schools, teachers, head teachers and parent's background.

Categorical variables were analyzed by creating dummy variables. However, some categorical variables were treated as continuous variables, e.g., educational qualification was converted into continuous variable by using years of education completed.

It is pertinent to note that only significant results are included in the analysis unless there is a valid reason or inference from results that are not statistically significant.



FINDINGS



SECTION 1 FINDINGS

LSA 2024 is conducted in 5000 schools of SED, PEF, PEIMA, DPS, L&NFBE, Private Chain, Private General, SPED Slow Learner, SPED Physical Handicap, SPED Hearing Impaired, PWWF and Smart schools. The results of the assessment are given in detail in this chapter. The descriptive analysis has been divided into various sections, i.e., overall student mean scores, overall teacher's mean scores, comparison of teachers' and students' mean scores, and comparison of mean scores based on types of school administration and school levels. Moreover, linear regression has been used to assess the relationship between student performance and factors related to schools, teachers, head teachers and parent's background . It is pertinent to note that only significant results (α =0.05) are included in the analysis unless there is a valid reason or inference from results that are not statistically significant.

The first section of the chapter presents the descriptive analysis of students' and teachers' performance from different perspectives .

3.1.

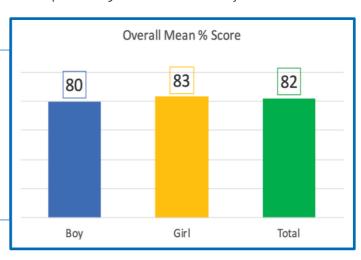
Performance of Students

3.1.1 Overall Performance of Students

The figure below shows the overall mean percentage scores achieved by students.



Results show that overall students attained a score of 82% in the assessment. Girls scored 3% higher than boys.

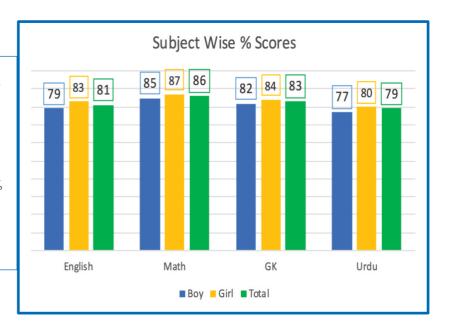


3.1.2 Subject Wise Performance of Students

The figure below shows the subject-wise mean percentage scores under the curriculum of Mathematics, GK, Urdu and English.

Figure 3: Overall Students' Performance Achieved per Subject

Findings show that girls have performed better than boys across all subjects. Female students scored 4% higher in English, 3% in Urdu, and 2% higher in Mathematics and GK.

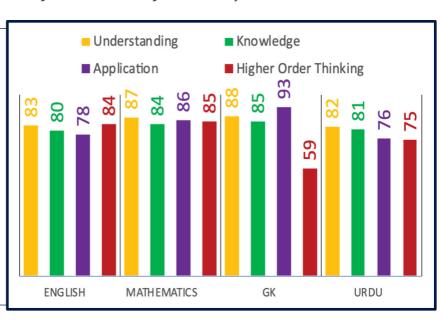


3.1.3 Student Performance Under Targeted Cognitive Domains

The figure below shows the breakdown of scores achieved in key cognitive domains of Application, Compehension, Knowledge, and Higher Order Thinking for each subject.

Figure 4: Overall Students' Performance Based on Cognitive Domains

In English, performance was relatively poor in questions testing application and knowledge. In GK, performance was poor in higher order thinking, while in Urdu students performed poorly in application and higher order thinking. In Mathematics, students scored lower in knowledge related questions.



Gender-Wise Student Performance Under Targeted Cognitive Domains

Figures below show the gender wise breakdown of scores achieved in key cognitive domains of Application, Compehension, Knowledge, and Higher Order Thinking for each subject.

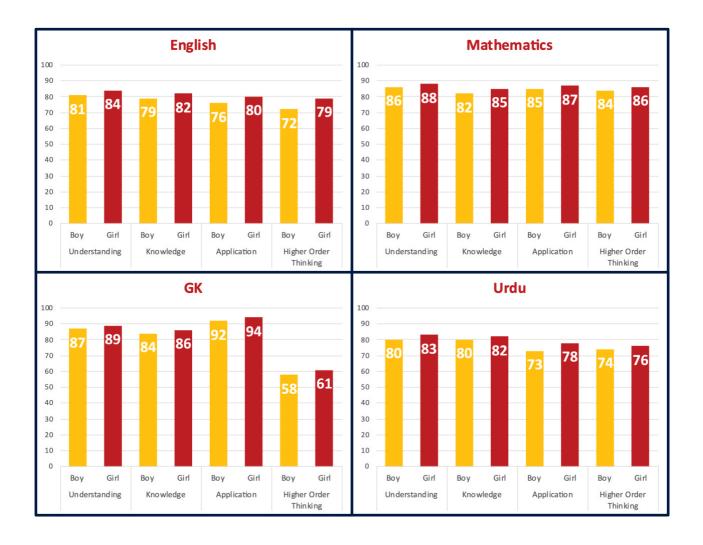


Figure 5: Students' Gender-Wise Performance in Cognitive Domains

English: performance of girls is higher in all domains. In higher order thinking questions, the difference in scores is 7% while in other two domains it is 3-4%.

Mathematics: the performance by girls is better than boys in all domains.

GK: girls scored higher in all domains.

Urdu: performance of girls was higher in all domains. The difference in scores is highest in application questions, of about 5%.

3.1.4 Topic-Wise Performance of Students

Grade 2 students were tested on numeracy and literacy skills, and understanding of GK concepts as per the division of the content areas into different standards/ components/ strands given in the Single National Curriculum (SNC). The topic wise performance of the students in the 2024 assessment is given below:

Table 4: Overall Student Performance Achieved According to Topics

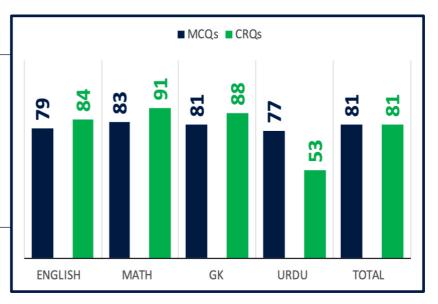
Subject / Topic	Average % Scores				
Engl	lish				
Listening	67%				
Reading and critical thinking skills	80%				
Formal and lexical aspects of language	81%				
Writing skills	83%				
Mather	natics				
Arithmetic	87%				
Measurements	85%				
Geometry	80%				
GK					
Social knowledge	84%				
Science knowledge	69%				
Uro	lu				
Listening	85%				
Reading	82%				
Speaking	84%				
Writing	79%				
Creative writing	54%				
Language cognition	79%				
Life skills	82%				

3.1.5 Overall Student Performance Based on Item Type

The following figure shows the percentage of correct responses by the students in multiple-choice questions (MCQs) and constructed response questions (CRQs).

Figure 6: Overall Students' Performance by Item Type

The scores show that students scored higher in CRQs in all subjects except Urdu.



3.1.6 Student Performance in SLOs

The table below shows the subject-wise SLOs in which the performance of students was poor. Students' mean scores in these SLOs were below 50%.

Table 5: SLOs With Weak Performance of Students

GKSLOs				
Higher Order Thinking	Identify different kinds of leaves found around them.			
Understanding	Recognize that animals that live on land are different in features from those that live in water.			
Understanding	Recognize that clean water should be used for drinking and cooking purposes			
Understanding	Identify major parts of a plant. (root, stem, leaf and flower)			

	English SLOs				
Application	Identify initial and final consonant clusters.				
Higher Order Thinking	Construct simple sentences of three/four to five/six words using correct apitalization, punctuation and spelling.				
Application	ldentify and recognize the rules for the use of a, an and the.				
	Mathematics SLOs				
Application	Solve real life number stories involving multiplication.				
Higher Order Thinking	Solve real life situations (using Pakistani currency as well) involving addition, subtraction, multiplication, and division. Give reasons for choosing the correct operation.				
	Urdu SLOs				
Higher Order Thinking	ساجی ضروریات کے مطابق مختصر ہدایات تحریر کر سکی ک مثلاً کوڑا کر کٹ یہاں نہ چھینکیں وغیر ہ				
Remembering	جملوں میں ماضی ،حال اور مستقبل کے لحاظ سے فعل کی بیجپان کر کے بتا سکیں۔				
Application	ماحول ہے متعلق کسی موضوع پر خو د سے پانچ سے سات جملے لکھ شکیس۔				

3.1.7 Student Performance in Reading Fluency

Reading fluency is gaining recognition as an essential element of every reading programme. Keeping in view the critical need to build reading skills in students and make them independent readers, LSA 2024 has assessed Grade 2 reading fluency skills. Reading fluency assessment has been carried out in Urdu and English. It mainly focuses on the rate of reading, measured as words per minute (WPM). To assess reading fluency, each student was given a paragraph to read, and the test administrator recorded the number of words read by the student in a minute. In addition, some words were highlighted in the paragraph to assess the accuracy (correct pronunciation). Reading fluency is calculated by taking the total number of words read in one minute and subtracting the number of errors:

Total Words Read — Errors — Words Per Minute

According to Urdu reading standards developed under the Pakistan Reading Project (PRP), at Grade 2 level, a student should read text at a rate of 100 to 140 correct words per minute.¹²

Similarly, under the reading competency of the Single National Curriculum (SNC) for Urdu, one of the learning outcomes states that students should be able to "read with accuracy at least 100 words per minute." For native English speakers, the rate is 100 to 150¹⁴ words per minute whereas a pilot study informed that in Punjab, the rate for English (WPM) falls between 40 and 80¹⁵ words.

¹² SRP. (2015): 'Reading Performance Standards and Compliance: ECE to Grade 5' – Urdu Reading (2015). Pakistan Reading Project and Sindh Reading Programme (SRP) by USAID and Government of Sindh.

¹³ MOFEPT (2020). Single National Curriculum (SNC) 2020 – Urdu. Page No. 39

¹⁴ Rasinski, T. & Padak, N. (2005). 3-Minute Reading Assessments. New York, NY: Scholastic Inc.

¹⁵ PEC (2020): 'Large Scale Assessment - Item analysis report 2019 -20'. The Third Punjab Education Sector Project, Technical Assistance, Cambridge Education. In collaboration with the Punjab Examination Commission (PEC), 2020.

Figure 7: Average Student Scores Achieved in Reading Fluency

In Urdu, the average word count achieved by students is 99 while for English the average word count is 91. Boys have outperformed girls in both subjects.

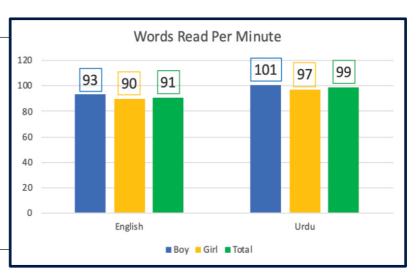
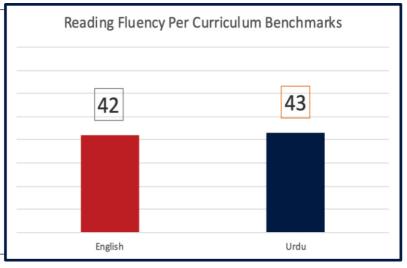


Figure 8: Performance of Students in Reading Fluency per Curriculum Benchmarks

This figure shows the percentage of students who read 70 words or above per minute in Urdu, and 50 words or above per minute in English, as defined in SNC.

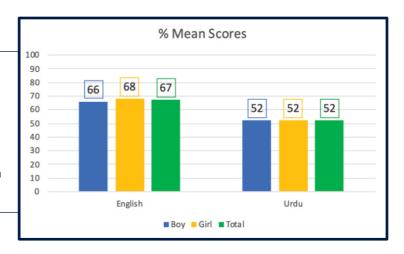


3.1.8 Student Performance in Listening Skills

The figure below shows the gender wise breakdown of % mean scores achieved in listening assessment of English and Urdu.



On average, both girls and boys have achieved similar scores in Urdu, while girls have performed better than boys in English.

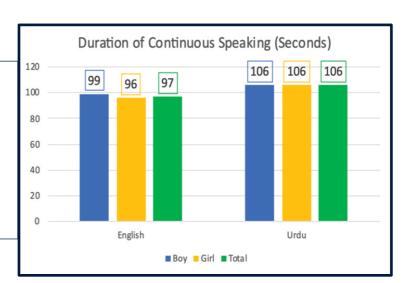


3.1.9 Student Performance in Speaking Skills

Speaking is an important component of learning. A student's ability to speak on a topic has a major impact on building communication skills required inside and outside the classroom. In LSA 2024, an initiative to assess speaking skills of the students was undertaken. Each participating student was asked to speak continuously on a given topic, and the duration of the speech was recorded.

Figure 10: Performance of Students in Speaking Assessment

The results show that the performance of boys is better than girls in the speaking assessment of English.



3.2.

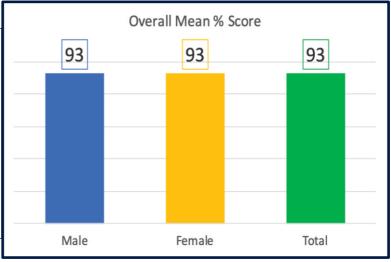
Performance of Teachers

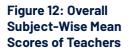
3.2.1 Subject Wise Performance of Teachers

The figures below show the gender wise breakdown of overall % mean scores as well as subject wise mean scores of teachers

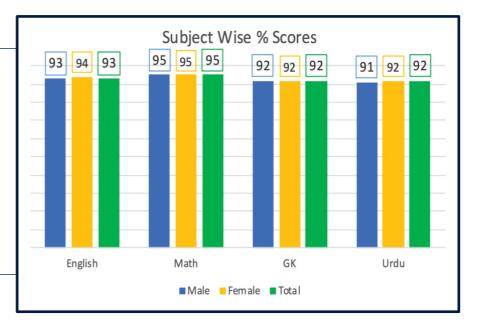


The figure shows the overall mean scores achieved by teachers. Scores were similar across genders.





The figure shows the subject-wise mean percentage scores in the subjects of Mathematics, Science, Urdu and English.

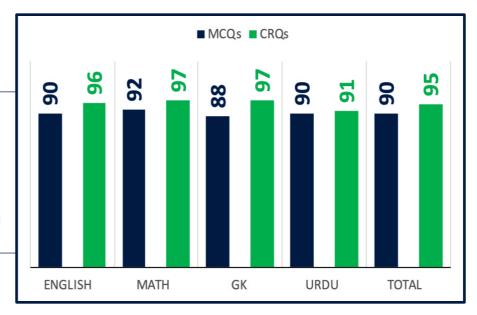


3.2.2 Item-Type Wise Performance of Teachers

The following figure show the percentage of correct responses by the teachers in multiple-choice questions (MCQs) and constructed response questions (CRQs).



The results show that the scores in CRQs have been higher as compared to MCQs.

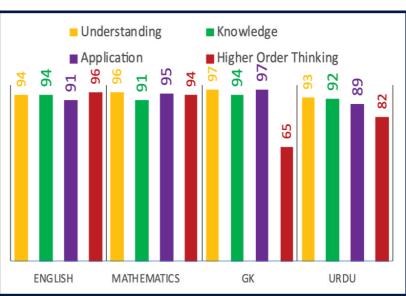


3.2.3 Teachers Performance Under Targeted Cognitive Domains

The figure below shows the breakdown of scores achieved in key cognitive domains of Application, Compehension and Knowledge for each subject.

Figure 14: Overall Teachers' Performance in Cognitive Domains

In English and Mathematics, performance was relatively poor in questions testing knowledge. In GK and Urdu, performance was poor in higher order thinking related questions.



3.3. Performance of Students and Teachers

Overall scores of teachers and students in all four subjects were used to compare the performance of students and teachers.

3.3.1 Gender-Wise Performance of Teachers and Students

The figure below shows a comparison between overall mean scores of teachers and students.

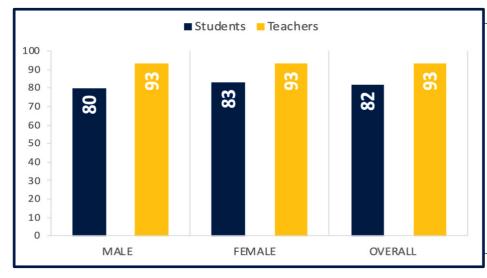


Figure 15: Overall Comparison of Mean Scores Achieved by Teachers and Students

Results show that teachers' overall performance is higher than that of the students by 11%.

3.3.2 Subject-Wise Performance of Teachers and Students

The figure below shows a comparison between subject wise mean scores of teachers and students.

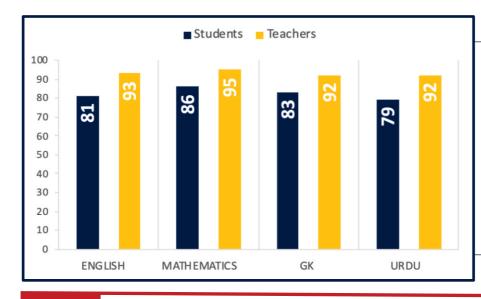


Figure 16: Overall Comparison of Subject-Wise Mean Scores of Teachers and Students

Results show that the difference in scores across all four subjects is between 09-13%.

3.4.

Performance by School Administration

3.4.1 Student's Performance by School Administration

The following figure shows the overall mean score percentage of SED, PEF, PEIMA, L&NFBE, Private Chain, Private General, SPED(SL), SPED(PH), SPED(HI), DPS, PWWF, and Smart schools.

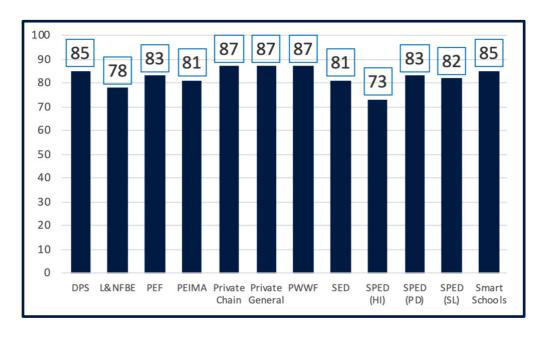


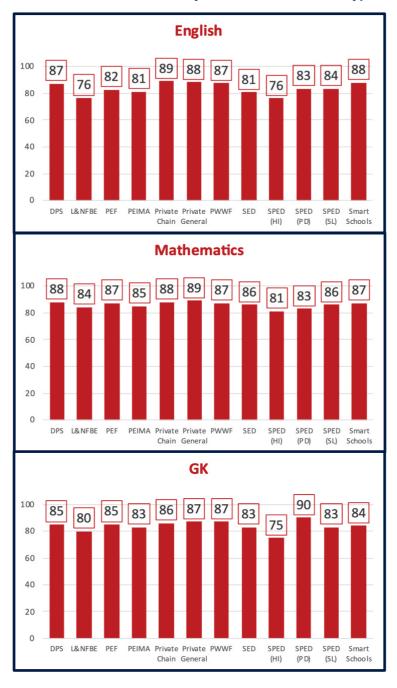
Figure 17: Overall Students' Performance by School Administrations Type

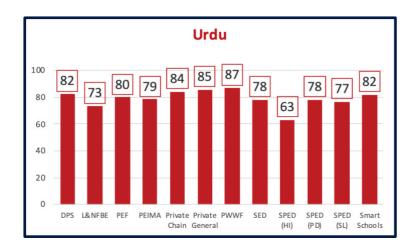
Overall, Private Chain, Private General, and PWWF schools are the highest performing schools followed by DPS and Smart schools.

3.4.2 Subject-Wise Student's Performance by School Administration

The following figures show the subject wise performance of SED, PEF, PEIMA, L&NFBE, Private Chain, Private General, SPED (SL), SPED (PH), SPED (HI), DPS, PWWF, and Smart schools.

Figure 18: Subject-wise Students' Performance by School Administration Type





Overall, Private schools have outperformed other schools in Mathematics and English, SPED (PD) schools have outperformed others in GK, while PWWF schools have performed better in Urdu.

3.4.3 Teachers' Performance by School Administration

The following figure shows the overall mean score percentage of SED, PEF, PEIMA, L&NFBE, Private Chain, Private General, SPED (SL), SPED (PH), SPED (HI), DPS, PWWF, Smart schools.

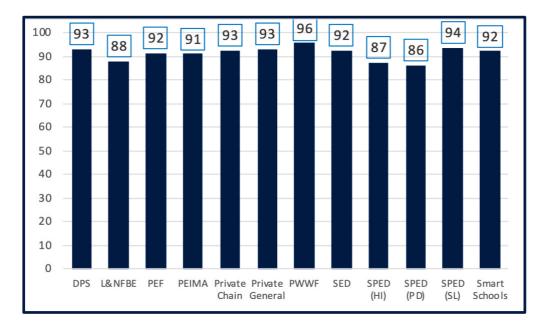


Figure 19: Overall Teachers' Performance by School Administrations Type

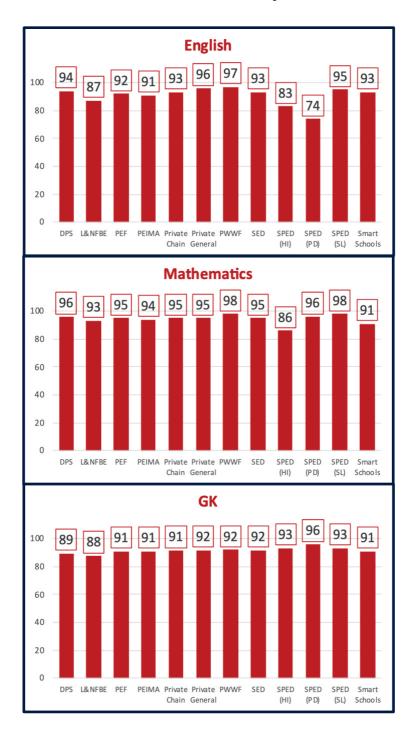
Results show that teachers of PWWF, SPED (SL), DPS, and Private schools have better understanding of subject knowledge. This also translates in the scores of students, as the students of these schools are performing better than other schools.

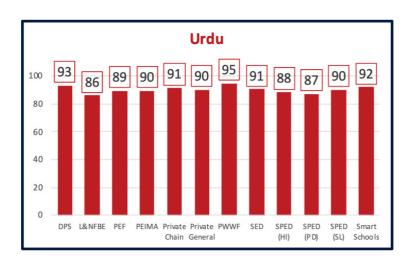
3.4.4 Subject-Wise Teachers' Performance by School Administration

The following figures show the subject wise performance of SED, PEF, PEIMA, L&NFBE, Private Chain, Private General, SPED(SL), SPED(PH), SPED(HI), DPS, and PWWF schools.

Figure 20: Subject-wise Teachers' Performance in SED, PEF and PEIMA Administered Schools

The figures show that the teachers of PWWF have outperformed others in all subjects.





3.5.

Performance of Different Levels of Schools

3.5.1 Students' Performance by School Level

The following figures show the performance comparison of Primary, Middle, Secondary, and Higher Secondary schools based on students' scores.

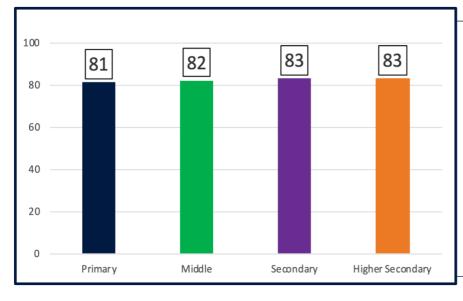


Figure 21: Overall Students' Performance in Primary, Middle, Secondary and Higher Secondary Schools

The figure shows the overall mean score percentage of Primary, Middle, Secondary, and Higher Secondary schools.

3.5.2 Teachers' Performance by School Level

The following figures show the performance comparison of Primary, Middle, Secondary, and Higher Secondary schools based on teachers' scores.

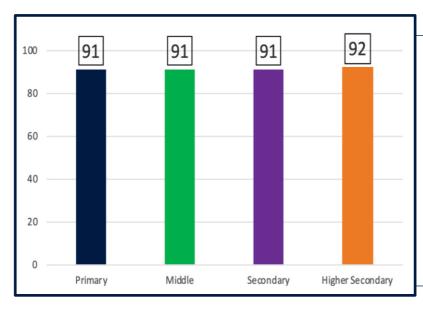


Figure 22: Overall Teachers' Performance in Primary, Middle, Secondary and Higher Secondary Schools

The figure shows the overall teachers' performance in Primary, Middle, Secondary, and Higher Secondary schools.

3.6.

Relationship Between Students' Scores and Individual Attributes

Students' scores have been regressed on several variables of interest to see the relationship between their performance and factors such as schools, teachers, head teachers and parent's background. Multiple linear regression was employed to assess the relationship between variables. The coefficients were estimated using the ordinary least squares method. Categorical data was analyzed by creating dummy variables. Only significant and positive results have been provided in the chart below.

Table 6: Relationship between student scores and individual attributes

SCORE INCREASING FACTORS O Higher academic qualification O Higher professional qualification O Job satisfaction of teachers O Assign group work to students O Encourage students to ask questions O Give regular homework and provide feedback O Keep parents informed about student performance O Lesson planning

School Facilities	 Subject specialist teachers Adequate number of teachers Access to library Opportunities for students to participate in co-curricular activities Access to playground Secure environment in school Provision of basic facilities (electricity, water, washrooms)
School Leadership	 Head teacher mentors and guides class teachers Head teachers keeps engagement with parents
Parents Engagement and Home Related Factors	 Father's higher qualification Mother's higher qualification Correcting child's mistakes Supportive and healthy environment at home Discussing study related issues with the child Parents staying in touch with school about child's performance Allocation of study time at home Access to resources at home Child follows school timings Access to tuition Access to books other than syllabus Access to mobile and computer at home

- O Provision of non-salary budget (NSB) was not found to have any significant relationship with the performance of schools.
- O Higher academic qualification of teachers was found to be significantly associated with higher academic scores of students.
- O Higher professional qualification of teachers was found to be significantly associated with higher academic scores of students.
- O Parent's higher qualification was found to be significantly associated with higher academic scores of students.

3.7. Performance Comparison of Districts

The tables below show the performance of districts based on the subject-wise performance of students and teachers.

Table 7: Students' District, Subject and Gender wise Mean Percentage Scores

Stud	dents Dis	trict, Sub	ject and	Gender v	vise Mear	Percent	age of Sc	ores	
District	Ma	ath	G	K	Ur	du	Eng	glish	Overell
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Overall
ATTOCK	87	87	84	85	75	78	81	86	82
BAHAWALNAGAR	83	83	81	83	70	73	79	85	79
BAHAWALPUR	87	89	84	86	78	81	82	85	83
BHAKKAR	81	83	79	82	68	72	72	77	75
CHAKWAL	86	87	83	84	77	81	81	84	82
CHINIOT	85	85	83	83	76	79	77	78	80
DERA GHAZI KHAN	89	90	85	83	84	85	85	86	85
FAISALABAD	85	86	81	84	76	80	78	83	81
GUJRANWALA	86	88	84	85	77	82	81	85	83
GUJRAT	86	90	83	86	76	83	75	81	82
HAFIZABAD	85	86	81	83	72	83	77	83	81
JHANG	85	87	81	84	77	81	79	82	82
JHELUM	84	88	81	84	71	77	77	84	81
KASUR	85	87	80	84	71	76	79	86	80
KHANEWAL	87	87	82	85	78	81	79	82	82
KHUSHAB	85	88	81	85	78	82	80	85	82
LAHORE	84	86	84	85	78	81	80	84	83
LAYYAH	84	83	86	86	82	84	83	83	84
LODHRAN	86	87	83	85	79	82	80	84	83
MANDI BAHA UD DIN	86	88	84	85	78	83	78	84	83
MIANWALI	84	86	81	85	75	79	75	80	80
MULTAN	91	92	86	89	83	87	85	88	87
MUZAFFARGARH	88	89	86	87	84	86	85	86	86
NANKANA SAHIB	89	89	86	86	78	84	83	84	84
NAROWAL	88	91	86	88	80	85	84	89	86
OKARA	84	86	80	83	75	78	77	82	80
PAKPATTAN	86	85	82	83	77	80	80	82	82
RAHIMYAR KHAN	88	89	84	86	79	80	82	83	83
RAJANPUR	90	91	87	88	83	85	86	88	87
RAWALPINDI	87	87	83	84	74	78	80	84	81
SAHIWAL	84	86	80	83	74	78	75	79	80
SARGODHA	83	86	80	82	72	78	75	80	79
SHEIKHUPURA	86	88	82	85	77	83	80	85	83
SIALKOT	87	89	84	86	78	83	81	84	83
TOBA TEK SINGH	81	83	77	80	71	74	72	75	76
VEHARI	83	86	80	84	72	81	76	82	80

Table 8: Teachers' District, Subject and Gender wise Mean Percentage Scores

Te	Teachers District, Subject and Gender wise Mean Percentage of Scores								
District	Ma	ath	G	iK	Ur	du	Eng	lish	Overall
	Male	Female	Male	Female	Male	Female	Male	Female	Overall
ATTOCK	97	93	87	85	82	76	94	94	89
BAHAWALNAGAR	86	90	89	91	82	81	88	93	88
BAHAWALPUR	97	97	91	91	92	94	94	94	94
BHAKKAR	96	94	93	90	87	87	95	91	91
CHAKWAL	97	97	95	92	88	92	91	95	94
CHINIOT	97	95	92	93	93	94	96	94	94
DERA GHAZI KHAN	96	97	93	88	94	93	95	93	93
FAISALABAD	96	97	92	93	95	95	95	95	95
GUJRANWALA	93	96	92	92	89	90	94	96	93
GUJRAT	94	97	94	93	92	95	92	91	93
HAFIZABAD	93	96	92	91	91	94	94	92	93
JHANG	96	96	92	93	94	94	92	95	94
JHELUM	100	94	97	91	97	85	92	96	93
KASUR	95	94	91	91	80	81	94	93	89
KHANEWAL	98	95	91	92	91	93	95	95	94
KHUSHAB	96	94	94	92	95	93	98	95	95
LAHORE	97	94	96	94	90	94	96	94	94
LAYYAH	92	92	94	94	94	94	95	95	94
LODHRAN	96	94	93	91	94	93	92	95	93
MANDI BAHA UD DIN	97	97	95	90	97	95	92	94	94
MIANWALI	98	96	94	91	92	94	92	92	93
MULTAN	98	97	93	92	91	95	95	96	94
MUZAFFARGARH	95	94	91	91	92	93	94	90	92
NANKANA SAHIB	100	97	91	93	85	93	95	92	93
NAROWAL	98	96	93	93	91	92	94	95	94
OKARA	94	95	91	91	93	92	94	95	93
PAKPATTAN	97	95	92	90	93	94	94	93	93
RAHIMYAR KHAN	95	97	92	93	95	90	96	94	93
RAJANPUR	95	96	90	93	90	89	91	94	92
RAWALPINDI	95	96	91	92	81	89	96	95	92
SAHIWAL	96	95	92	92	95	93	91	95	93
SARGODHA	95	96	94	92	92	93	93	95	94
SHEIKHUPURA	96	95	91	91	94	91	95	94	93
SIALKOT	96	95	92	91	92	92	87	94	92
TOBA TEK SINGH	94	97	92	92	90	93	90	95	93
VEHARI	95	96	91	92	89	94	92	92	93

SECTION 2 FEEDBACK DATA

3.8. Infrastructure and Resources Available

The figure below details the level of infrastructure, study -aids, and other resources available in schools.

Resource Category	Availability in %age Schools	Resource Category	Availability in %age Schools
Adequate Number of Classrooms	56	Security Arrangements	87
Adequate Grade 4 Employees	48	SNC Copies	88
Adequate Number of Teachers	45	Subject Specialist - English	87
Clean Drinking Water	96	Subject Specialist - Science	89
Electricity	99	Subject Specialist - Urdu	94
Furniture	85	Subject Specialist – Math	89
Language Kit	24	Teacher's Guide	92
Library	55	Washroom	94
Math Kit	50	Washroom (Teachers)	90
Playground	65	White Board	98
Complete School Boundary	92	School Main Gate	91
Science Kit	43		

Table 9: Infrastructure and Resource Availability Situation in Schools

It was found that majority of the school lack libraries, science kits, math kits, language kits, science rooms, and playgrounds. The number of classrooms is also inadequate in about 50% of the schools. There is also a serious shortage of teachers and grade 4 employees. Many schools lack subject specialist teachers.

3.9.

Co-Curricular Activities

The figure below details the level of focus and attention given to various co-curricular activities conducted by schools.

Category	Conducted in %age Schools
Educational/Entertainment Tours	15
Drama/Meena Bazar	43
Art Competitions	29
GK Quiz	44
Plantation Drives	27
Recitation Competitions	60
Debates Competitions	58
Sports Competitions	55
Hamd o Naat Competitions	66
Literary Competitions	51

Table 10: Co-curricular Activities Organized in Schools.

Although most of the schools are organizing some form of extra-curricular activities, it has been found that many schools have ignored some of the crucial extra-curricular activities which are necessary for the academic and personal development of a student.

3.10.

Parents' Feedback and Demographics

3.10.1 Satisfaction with School

Parents were asked a series of questions to assess their level of satisfaction with the school and gather their feedback on ways to improve school performance.

• A large majority of parents was satisfied with the school's performance (65%). The major reasons for parent dissatisfaction were the shortage or absence of teachers and lack of basic facilities at school.

Table 11: Major Reasons for Parents' Dissatisfaction with School

Major Reasons for Dissatisfaction with School	% Age of Parents
Shortage of Teachers	29
Lack of Basic Facilities	16
Teachers' Absence from School	7
Lack of Study Aids	6
Dissatisfaction with Teaching Methods Used	6

3.10.2 Suggestions for Improvement

Parents were asked to provide suggestions for improvement in schools. Majority of them wanted schools to have a hard-working head teacher, provision of basic facilities, and to engage parents in school's activities.

Table 12: Parents' Suggestions for School Improvement

Suggestions	% Age of Parents
Need to have a hard-working and decisive head teacher.	47
Hard-working teachers	15
Provision of basic facilities in school	12
Need for timely distribution of textbooks to the students.	8
Need of engaging parents in school activities.	8
Pleasant environment at school	7
Need for regular visits by higher authorities.	3

3.10.3 School Absenteeism

The responses show that a major reason for student absenteeism include illness, crop harvesting, siblings care, and labour, to meet family needs. As most of the students belong to farming families (32%), there is a need for formal school vacations to coincide with the harvesting season, so students do not have to take leave from school.

Table 13: Major Reasons for Student Absenteeism

Reasons for Student Absenteeism	% Age of Students
Illness	64
Crop Harvesting Season	25
Siblings Care	23
Labour	7
Lack of Resources	5
Fighting at Home	3

3.10.4 Education Level

It was found that the majority of parents are not very well qualified, and a large number are completely illiterate. Only about 11% of the parents have attained education above matriculation. Similar results were found in case of mother's education where 27% of mothers are completely illiterate.

Table 14: Guardian's Education

Guardian's Education	% Age of Parents
Illiterate	20
Literate	11
Primary	15
Middle	11
Matric	29
Intermediate	6
BA or Higher	8

Table 15: Father's Education

Father's Education	% Age of Parents
Illiterate	20
Literate	10
Primary	21
Middle	14
Matric	24
Intermediate	5
BA or Higher	6

Table 16: Mother's Education

Mother's Education	% Age of Parents
Illiterate	27
Literate	22
Primary	19
Middle	12
Matric	12
Intermediate	4
BA or Higher	4

3.10.5 Parents' Occupation

Majority of parents are farmers (32%), followed by shopkeepers and traders (22%). 18% hold private jobs while 11% work in government sector. Majority of mothers are unemployed (31%).

Table 17: Father's Occupation

Major Occupations	% Age of Parents
Farmer	32
Shopkeeper/Trader	22
Private Job	18
Government Job	11
Unemployed	5

Table 18: Mother's Occupation

Major Occupations	% Age of Parents
Government Job	6
Private Job	9
Sewing	21
Shopkeeper/Trader	17
Unemployed	31

3.10.6 Parents' Income

The analysis of income level of parents shows that most of them are quite poor. Above 50% of the households have incomes much less than the official minimum pay announced by the government. This is the main reason that most of the children have to take leave from school and contribute to the family income through their labour.

Table 19: Father's Income

Income	% Age of Parents
Less than 5000	9
5000-10000	22
10001-20000	40
20001-40000	20
40000+	5

Table 20: Mother's Income

Income	% Age of Parents
Less than 5000	19
5000-10000	23
10001-20000	16
20001-40000	5
40000+	3
N/A	34

3.10.7 Language Used with Child

Majority of parents talk to their children in Punjabi (44%) followed by Urdu (31%). 22% use other local languages.

Table 21: Language Used at Home with Child

Language Used at Home	% Age of Parents
Punjabi	44
Local	22
Urdu	31
English	2

3.10.8 Resources Available at Home

The resource situation is not satisfactory as most of the households are poor with barely enough income to meet their basic needs.

Table 22: Resources Available at Home

Resources Available at Home	% Age of Parents
Computer	6
Car	7
Study Table/Chair	11
Internet/Cable	12
Gas	29
Motorcycle	44
TV	35
Mobile	37
Water	67
Electricity	76

3.11.

Teachers' Feedback

Teachers were asked a series of questions to understand their perceptions on key areas related to the school system that affect student performance.

3.11.1 Qualification

Majority of the teachers have completed their master's degree, followed by bachelors. Around 10% have completed MS or MPhil degrees, while the number of PHD teachers is negligible.

Table 23: Academic Qualification of Teachers

Academic	% Age of Teachers					
Qualification	MATHS GK ENGLISH URDU					
Matric	8	8	6	8		
Intermediate	14	14	13	14		
Bachelors	19	20	17	18		
Masters	49	49	54	52		
MS/MPhil	9	9	10	8		
PhD	0	1	1	1		

Table 24: Professional Qualification of Teachers

Professional				
Qualification	MATHS	GK	ENGLISH	URDU
PTC	11	12	8	11
CT	3	4	3	4
Diploma (Education)	3	3	2	2
B.Ed.	43	43	46	37
M.Ed.	17	17	19	16
MA (Education)	5	5	5	4
MPhil (Education)	14	13	13	23
PhD (Education)	4	5	4	4

3.11.2 Experience and Training

Majority of the teachers are young and inexperienced. Regular trainings are required to instill the required skills in them. This also highlights the need for training of senior teachers, so they can stay updated with modern teaching techniques used by young teachers.

Table 25: Teaching Experience of Teachers

Teaching	% Age of Teachers					
Experience	MATHS	HS GK ENGLISH URDU				
1-5	30	31	29	27		
6-10	33	32	35	31		
11-15	13	12	15	15		
15-20	6	7	7	7		
20+	18	19	14	19		

Table 26: Training Situation of Teachers

Training Situation		
Number of Subject-Related Training Course Completed	60% have completed two or more.	
Induction Training	70% have completed their induction training.	

3.11.3 Opinion About Textbooks

Teachers were asked to provide their feedback on current textbooks being used in Grade 2 classrooms and majority of them were satisfied with the content.

Table 27: Teacher Feedback on Textbooks

The content in the books is given		% Age in agreement			
The content in the woons is given	Math	GK	English	Urdu	
In accordance with SLOs	92	91	91	92	
According to the students' age and class	80	81	72	79	
In simple language	84	86	78	84	
With interesting activities	87	87	83	87	
With appropriate exercises	92	91	88	91	
With appropriate font size	89	90	88	90	
With interesting pictures	92	91	90	92	
With local examples	88	89	87	90	

3.11.4 Assistant Education Officer (AEO) Inspections

Under the digital Continuous Professional Development CPD program (i.e. distant learning school-based training programmes) of QAED, AEOs are to conduct two classroom visits per month. Responses of teachers over the frequency of these visits are as below:

Table 28: Frequency of AEO Inspections

Frequency of AEO Inspections	% Age of AEOs
Once in a month	33
Twice in a month	52
Once in two months	7
Do not visit the class room	7

Majority of AEOs visit schools twice a month.

Table 29: Behavior of AEO

Behavior of AEO	% Age of AEOs
Professional	72
Extremely Strict / Bossy	7
Humiliating	2
Kind	18

Table 30: Feedback on AEO Visit

Feedback on AEO Visit	% Age of AEOs
AEOs provide feedback after observation	92
The feedback given by AEOs helps improve teaching	90
AEOs conduct monthly forum meeting	85

Majority of teachers stated that they receive feedback from AEOs after each observation visit, and they were also positive over the usability of this feedback in improving teaching.

3.11.5 Teaching Practices Used in Classroom

Teachers were asked a series of questions on their current teaching practices. The results show that majority of the teachers employ practices like using study aids in the classrooms, assigning group work to students, allowing questions during lecture, giving homework based on the taught lecture, and behaving in a friendly manner in the classroom.

Table 31: Teaching Practices in Classroom

Teaching Practices Used in Classroom	% Age in Agreement			
reaching tractices oscum classiooni	Math	GK	English	Urdu
Teach according to SLOs	96	95	95	96
Use E-Learning Punjab's videos during lecture	71	70	70	73
Make lesson plans	95	89	93	88
Utilize teacher's guide to design class activities	94	95	90	91
Use of Urdu Language in Instruction	85	85	77	89
Use of Local Languages in Instruction	8	7	8	5
Use of English Language in Instruction	7	9	10	6
Assign Group Work	96	96	96	97
Ask Questions While Teaching	98	98	98	99
Provide Opportunities to Students to Ask Questions While Teaching	98	98	98	99
Give Homework Related to the Lesson	97	98	95	98
Provide written feedback on homework	96	96	95	97

3.11.6 Methods Used by Teachers to Assess Classroom Learning

The teachers assess classroom learning based on oral and written questioning, giving homework, and involvement in classroom learning.

Table 32: Methods to Assess Learning

Methods Used by Teachers to Assess Classroom		% Age of	Teachers	
Learning	Math	GK	English	Urdu
Oral (Question/Answers)	97	98	97	98
Written	95	95	93	96
Homework	95	94	93	95
Involvement in Classroom Activities	94	93	92	94

3.11.7 Engagement with Parents

To understand engagement with parents, teachers were asked questions over their involvement in school matters.

Responses show that 80% of the teachers discuss students' progress with their parents on a monthly basis. Other discussion areas are given below:

Table 33: Areas Discussed by Teachers with Parents

Areas Discussed by Teachers with Parents	% Age of Teachers
Student's Absenteeism	82
Co-curricular Activities	78
Students' Performance in Studies	87
School Discipline	79
Student's Psychological Issues	73
Student's Health	78
Student's Food Issues	69
Student's Behavior	83
Student's Security	75

3.11.8 Involvement in School Administration

Teachers were asked questions about their involvement in administration activities in school. 92% of the teachers get involved in solving student's problems. Other responses are given below:

Table 34: Teachers Engagement in School Administration

Engagement of Teachers in School Administration	% Age of Teachers
Involvement in Solving Students' Problems	98
Discussion with Fellow Teachers to Improve Sudents' Learning	97
Meeting with Parents to Discuss Students' Issues	95
Handle School Administration	82

3.11.9 Feedback by Teachers on Head Teacher's Performance

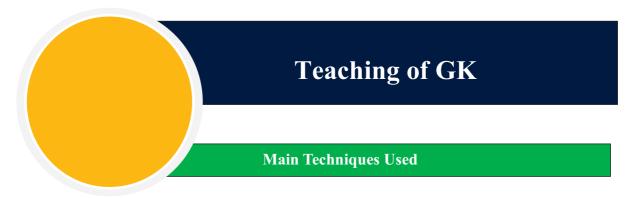
Teachers were asked questions about the performance of the Head Teachers of their schools.

Table 35: Teachers' Feedback on Head Teacher's Performance

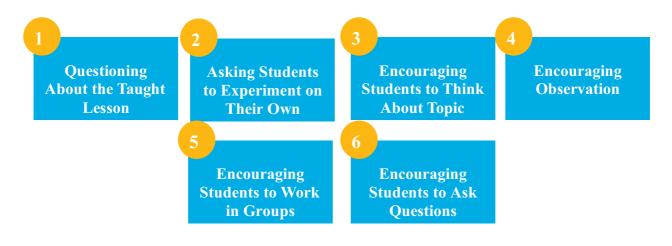
Feedback of Teachers on Head Teacher's Performance	% Age of Teachers
Head teacher always follows the rules and regulations of the school.	97
Head teacher always makes an effort to bring improvement in the school.	97
Head teacher always guides teachers in their teaching.	96

3.11.10 Main Teaching Practices Used by Teachers

Teachers were asked about their knowledge and experiences in teaching of the four subjects tested under the assessment i.e. English, Mathematics, Urdu and GK. Responses are given below:

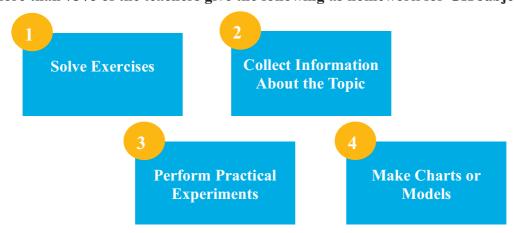


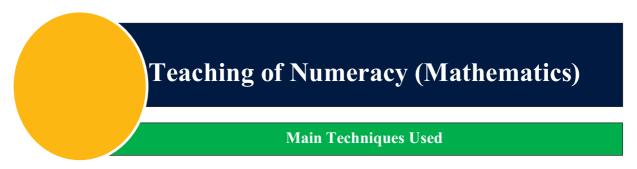
Majority of the teachers (about 88% to 99%) use the following techniques for teaching GK:



Major Homework Practices Used by Teachers

More than 75% of the teachers give the following as homework for GK subject:



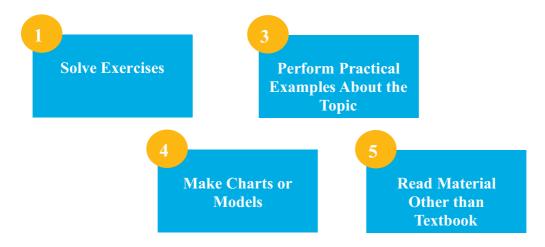


Majority of the teachers (more than 85%) use the following technique for teaching Mathematics:



Major Homework Practices Used by Teachers

Majority of the teachers (more than 75%) give the following as homework for Mathematics:



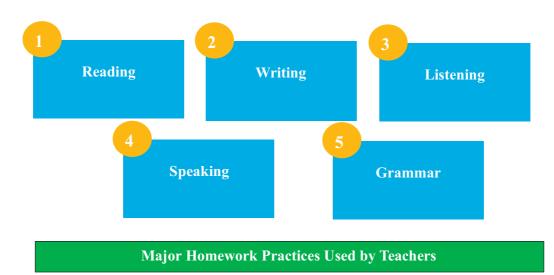


Majority of the teachers use the following techniques for teaching English:

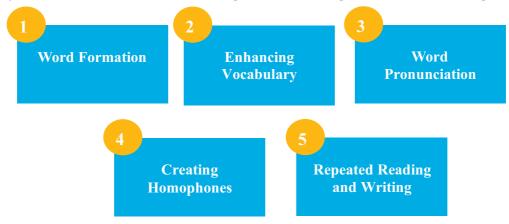


Major Competencies Focused by Teachers

97% of the teachers focus on teaching the following competencies:



Majority of the teachers (more than 90%) give the following as homework for English:



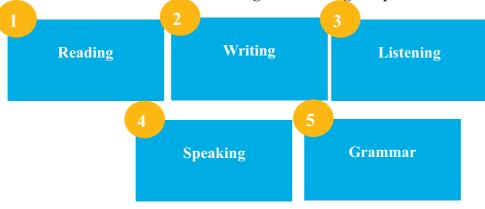


Majority of the teachers use the following techniques for teaching Urdu:



Major Competencies Focused by Teachers

95% of the teachers focus on teaching the following competencies:



Major Homework Practices Used by Teachers

Majority of the teachers (above 95%) give the following as homework for Urdu:



3.11.11 Difficult Topics for Teachers

More than 80% of teachers find the topics in the GK textbook easy. Breakdown of responses is given below.

Table 36: Topic wise Difficulty Level in GK

Topic-wise Difficulty Level in GK	% Age of Teachers Found it Easy	% Age of Teachers Found it Difficult
Pakistan: Our Country	92	5
Cities and Villages	96	3
Rights and Responsibilities	95	4
Religious Festivals	96	3
Environment	95	4
Resources	92	6
Water	96	2
Plants	96	3
Animals	95	3
Agriculture and Cattle	92	7
Protection of Earth's Resources	89	10
Heat and Light	93	5
Helping Others	96	2
Occupations	94	4
Respecting Others	96	3
Forgiving Others	94	4
Impartiality	89	10

More than 80% of teachers find the topics in the Mathematics textbook easy. Breakdown of responses is given below. They reported some difficulty in Geometry and Data Handling related questions.

Table 37: Topic wise Difficulty Level in Numeracy

Topic-wise Difficulty Level in Mathematics	% Age of Teachers Found it Easy	% Age of Teachers Found it Difficult
Whole numbers	95	4
Addition and subtraction	96	3
Multiplication and division	95	4
Measurement: Length, mass and capacity	88	12
Fractions	92	7
Measurements and time	93	6
Geometry	86	14

More than 70% of teachers find the topics in the English textbook easy. Breakdown of responses is given below. They reported some difficulty in handling topics related to creative writing and oral communication.

Table 38: Topic wise Difficulty Level in English

Topic-wise Difficulty Level in English	% Age of Teachers Found it Easy	% Age of Teachers Found it Difficult
Phonetics	83	16
Poems	92	7
Comprehension	87	12
Grammar	86	14
Sentence making	87	12
Vocabulary building	85	14
Creative writing	77	22
Oral communication	88	11
Listening and speaking skills	89	10
Dictation	90	9

More than 80% of teachers find the topics in the Urdu textbook easy. Breakdown of responses is given below. They reported some difficulty in handling topics related to creative writing, grammar, and comprehension.

Table 39: Topic wise Difficulty Level in Urdu

Topic-wise Difficulty Level in Urdu	% Age of Teachers Found it Easy	% Age of Teachers Found it Difficult
پڑھائی۔نٹرپڑھانا	94	5
پڑھائی۔نظم پڑھانا	95	4
تفہیم	83	16
قواعد	85	14
جملہ سازی	91	8
تخليقي لكهائي	87	9
خط یا درخواست	88	11
بولنے اور پڑ ہنے کی صلاحیت	95	5
املاء	94	5

3.12.

School Council's Feedback

School councils were also asked to provide their inputs on their involvement in key areas of the school.

3.12.1 Council Functional or Dysfunctional

Council members were asked questions to judge whether the councils were working or not. Following table provides an overview of the number of meetings members of school councils have done in schools per month. It was found that almost half of the councils meet at least once in a month.

Table 40: Extent to which School Council is Functional

Council Functional or Not	% Age of Schools
Fully Functional	67
Mostly Functional	29
To some extent	2
Council is Dysfunctional	1

Table 41: Frequency of School Council Meetings

Number of Council Meetings During a Month	% Age of Schools
1	51
2	35
3	6
3 +	5

3.12.2 Areas of Discussion in Council Meetings

In the meetings, key issues are discussed with the following frequency:

Table 42: Areas of Discussion in Council Meetings

Areas of Discussion in Council Meetings	% Age Discussed
School Infrastructure	89
Students' Performance	95
Community's Participation in School Affairs	74
Budget Utilization	92
Financial Assistance of Poor Students (shoes, uniform)	81
Books and AV-Aids for school	76
Sports Competitions in School	71
Students' Discipline	94
Increase Student Enrollment	89
Students' Health	89

3.12.3 School Council's Participatory Activities

The different activities in which the school council participates are given in the table below.

Table 43: Council's Participatory Activities

School Council's Activities	% Age of Schools
Improve School Discipline	58
School Construction Activity	40
Planning for the use of NSB funds	55
Solve Students' Problems	54
Hiring of Temporary Teachers	23
Flood / Earthquake Measures	8

3.12.4 Suggestions for Strengthening Council Functioning

The suggestions given by different council members for further strengthening the functioning of school councils are as follows:

Table 44: Suggestions to Strengthen the Role of Councils

Suggestions to Strengthen the Role of Councils	% Age of Responses by Members
Increased Cooperation with Teachers	56
Increasing Members of the Council	13
Training Each Member	37
Assigning Responsibilities to Each Member	49
Improving the Teaching Environment	33
Collecting funds for the school	27

3.12.5 Suggestions by School Council for Utilisation of NSB Funds

The suggestions given by different council members for usage of the NSB funds are:

Table 45: Suggestions for Usage of NSB Funds

Suggestions for Usage of NSB Funds	% Age of Responses by Members
Improving the Teaching Process	69
Awarding Teachers with Prizes/Incentives	11
Building Repair and Maintenance	48
Provision of Financial Support to Needy Children	47
Awarding Students with Prizes/Incentives	31
Organizing of Sports Activities for Children	25
Recruitment of Temporary Teachers	31
Purchasing Study Aids	23
Training Teachers	13



RECOMMENDATIONS



In order to guide policy and improvement efforts, some recommendations have been prepared based on the findings of the report. In order to bring improvement in the system, a collaborative effort is needed by all stakeholders at the provincial, district and school levels.

4.1.

School Education Department (SED)

- Teachers of all subjects should be encouraged to improve their academic and professional credentials by continuing their formal education in addition to pursuing other targeted programs and short courses.
- Young and inexperienced teachers should be provided with ample trainings to build their skillset.
- Senior and relatively experienced teachers should also be encouraged to engage in training programs in order to keep their teaching skills updated with the modern trends.
- In order to meet the training needs of the teachers and support them in their pursuit of academic improvement, QAED can start short courses and other targeted programs through district QAEDs.
- CPD programs can be further enhanced in scope and targeted areas, in order to meet the capacity building needs of the teachers at primary and elementary levels.
- The serious lack of subject-specialist teachers needs to be addressed with appointment of new teachers.
- Lesson planning is a very effective technique and should be made compulsory for all teachers. With the support of QAED, PCTB and PEC, lesson plans can be provided in a digital format via the school information system (SIS) to ensure availability and consistent utilisation.
- Teachers should be required to engage in a mandatory reading of supplementary books and other reading materials in order to improve their subject knowledge.
- School councils can be used more effectively by assigning responsibilities to each member and increasing cooperation with teachers as highlighted in the report.
- The report has found that majority of students lack access to basic resources at home (computer, mobile, internet, books, study furniture). SED should explore ways to bridge this gap between students.
- Program are needed to raise awareness and develop necessary attitudes in parents so that they are better able to follow up on their child's studies.
- A supportive and healthy home environment is crucial to a child's success in studies, as shown in the findings. Steps need to be taken to create this realization among parents.
- Parent recommendations for school improvement should be met by ensuring professional and well qualified headteachers and provision of basic facilities in schools.
- The findings show that a large number of schools lack access to basic facilities. This calls for a comprehensive audit of resources and facilities available at each school in order to ensure their provision.
- Further in-depth diagnostic studies are required to study the weak areas identified in this report, so that improvements can be made by providing teachers with the required training.

4.2.

Quaid-e-Azam Academy for Educational Development (QAED)

- As majority of teachers are young and inexperienced, they should be provided ample training opportunities to build their skillset.
- Head teachers should be provided leadership trainings with a focus on managerial and interpersonal skills for effective engagement with the parents, council members, teachers and the wider community.
- Special programs need to be designed in order to keep the senior and more experienced teachers updated with the modern teaching practices.
- Detailed lesson plans should be developed based on the SNC. The plans should follow one standard template and be shared with all the schools in both print and digital formats. The usage of lesson plan should also be included in the school-based CPD programme (i.e., Innovative Teacher Support Package (ITSP)).
- QAED should develop training programs keeping in view the gender-based differences in teachers' performance in different subjects as highlighted in this report.
- Targeted subject-specific trainings should be given to teachers in each district. LSA findings can be used to provide teachers with topic-specific trainings in core subjects of GK, Mathematics, English and Urdu, keeping in view the identified difficult topics.

4.3

Punjab Curriculum & Textbook Board (PCTB)

- PCTB may share data on weak SLOs with book developers for addition of simple and understandable content in books with sufficient number of examples.
- Textbooks should be provided with supplementary materials in a timely manner to ensure proper use in schools.
- LSA data received on difficult topics identified by teachers and students needs to be studied for developing improvement strategies.
- The results of the listening and speaking assessment should be examined for addition of relevant exercises and practice content in the textbooks.

4.4.

Program Monitoring and Implementation Unit (PMIU)

• The real-time school monitoring data should be regularly shared with teachers and head teachers in order to improve their practices.

- AEO must ensure specified number of inspections per month and must visit classrooms as part of the inspection.
- Missing infrastructure facilities, study-aids, and other resources should be identified in every school and the required support needs to be provided.

4.5.

District Education Authorities (DEAs)

- AEOs may ensure specified number of inspections per month and should also visit classrooms as part of the inspection.
- AEO must guide teachers about including different positive practices in their teaching.
 Teachers should be encouraged to use lesson plans, study guides, and other study -aids in their teaching.
- Monitoring needs to be done to ensure teachers' timely and regular participation in CPD trainings and use of lesson plans.
- AEOs must guide teachers about using E-Learning Punjab's resources as majority of teachers are not utilizing them.

4.6.

Schools

- The scope of co-curricular activities should be widened to include different kinds of activities in order to enable holistic development of students.
- Schools should promote positive norms and behaviours among students through collaborative learning, group activities, sharing of lunch boxes and fund raising activities.
- Head teachers should maintain regular two-way communication with the parents of students. Usage of different social media apps, e.g., WhatsApp groups, can also be considered.
- Head teachers should involve school councils to reach parents of students and develop linkages and feedback mechanisms for improving students' academic performance.
- Appropriate homework needs to be assigned to students with setting up of a proper setup of checking homework and seeing student responses.
- Regular engagements with parents are to be done through PTMs and informal sessions to ensure involvement in school activities.
- Head teachers should actively guide teachers in their lesson planning and lecture delivery.
- Head teacher should develop a detailed list of all the missing infrastructure, study -aids and other resources in the school. The list should be shared with the AEOs and MEA on their visits, as well as in the school council meetings.

• Teachers should try their best to maintain regular communication with parents, especially with the parents of academically weak students.

4.7.

Parents

- A supportive and healthy home environment is crucial to a child's success in studies. Steps need to be taken to create this realization among parents.
- Parents must regularly check up on the performance and behavior of the students with both the teachers as well as the head teacher.
- Parents should also get involved in the daily homework and other academic activities of the child.
- Effort should be made to fix a minimum number of daily study hours of the child at home as it has been linked with improvement in student performance.
- Students should be encouraged to read material other than the course books as it improves student performance.





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