



**LARGE SCALE
ASSESSMENT**

**LSA GRADE 3
2024**

LARGE-SCALE ASSESSMENT 2024

LSA GRADE 3

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List of Abbreviations/ Acronyms

AEO	Assistant Education Officer	PEIMA	Punjab Education Initiative Management Authority
ALP	Accelerated Learning Programme	PESP III	Punjab Education Sector Project III
APF	Assessment Policy Framework	PISA	Program for International Student Assessment
ASER	Annual Status of Education Report	PMIU	Programme Monitoring and Implementation Unit
AV	Audio-Visual	PPP	Public Private Partnership
B.A.	Bachelor of Arts	PPS	Probability Proportional-to-Size
B Sc	Bachelor of Sciences	PRP	Pakistan Reading Project
CPD	Continuous Professional Development	PTC	Primary Teaching Certificate
CRQ	Constructed Response Question	PTM	Parent Teacher Meeting
CT	Certificate of Teaching	PWWF	Punjab Workers Welfare Fund
DEAs	District Education Authorities	RRQ	Restricted Response Question
DLI	Disbursement Linked Indicator	QAED	Quaid-e-Azam Academy for Educational Development
DPS	Division Public School	SAFED	South Asian Forum for Education Development
ECE	Early Childhood Education	SBA	School Based Assessment
ERQ	Extended Response Question	SDGs	Sustainable Development Goals
HED	Higher Education Department	SED	School Education Department
HCF	Highest Common Factor	SPED	Special Education Department
IT	Information Technology	SPED(SL)	Special Education Department (Slow Learners)
ITSP	Innovative Teacher Support Package	SPED(PH)	Special Education Department (Physical Handicap)
LCM	Least Common Multiple	SPED(HI)	Special Education Department (Hearing Impaired)
LSA	Large Scale Assessment	SIS	School Information System
M.A.	Master of Arts	SLO	Student Learning Outcome
MCQ	Multiple Choice Question	SNC	Single National Curriculum
MEA	Monitoring and Evaluation Assistant	SOPs	Standard Operating Procedures
MSc	Master of Sciences	SRP	Sindh Reading Programme
NFBE	Non-Formal Basic Education	STR	Student-Teacher Ratio
NSB	Non-Salary Budget	TA	Technical Assistance
L&NFBE	Literacy & Non Formal Basic Education	TFM	Teacher Forum Meeting
PCTB	Punjab Curriculum and Textbook Board	ToS	Table of Specification
PEC	Punjab Examination Commission	WB	World Bank
PEF	Punjab Education Foundation	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 3 was administered. 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, 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 3. I would also like to thank Ayaz Aqduş 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 assessment of Grade 3 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 3. 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 3 is aligned with the Single National Curriculum (SNC), and hence LSA 2024 results can serve as a baseline for future LSAs of Grade 3.

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, 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 65%. Female students achieved 66% while male students achieved 64% overall mean scores.
- **Subject-wise scores** show that female students achieved 66%, 76%, 58% and 62% mean scores in the subjects of English, Mathematics, GK, and Urdu respectively. Whereas male students achieved 63%, 75%, 58% and 58% in the subjects of English, Mathematics, GK, and Urdu respectively.
- In English and Urdu, students scored higher in **MCQs**, while in Mathematics and GK, scores in **CRQs** were greater than **MCQs**.
- In **Reading Fluency Assessment**, students of Grade 3 can read on average 94 words in English and 112 words in Urdu.
- In **Speaking Assessment**, students of Grade 3 can speak continuously on a topic on average for 99 seconds in English and 104 seconds in Urdu.
- In **Listening Assessment**, students of Grade 3 achieved an overall percentage mean score of 69% in English and 77% in Urdu.
- Overall mean scores achieved by **teachers** is 75%. Overall mean scores of teachers in the subjects is 73%, 84%, 71%, and 73% in English, Mathematics, GK, and Urdu respectively. The overall performance of male and female teachers is similar.
- Overall scores of students are 65%, 63%, 63%, 65%, 64%, 62%, 62%, 56%, 65%, and 65% 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 65%, 61%, 63%, 67%, 64%, 63%, 62%, 62%, 63%, and 67% 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 76%, 74%, 74%, 75%, 75%, 71%, 70%, 69%, 74%, and 76% 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 59%, 62%, 60%, 64%, 64%, 56%, 56%, 47%, 62%, and 62% 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 58%, 56%, 56%, 52%, 53%, 57%, 60%, 45%, 59%, and 51% respectively.
- **Overall achievement of students** is 64%, 65%, 65% and 64% 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 (Grade 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 policy-making, 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).

CLASSROOM 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/sub-topic etc.

¹ 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 IGO

² PEC. (2010). The Punjab Examination Commission Act 2010. Can be accessed at: https://pec.edu.pk/system/files/THE_PUNJAB_EXAMINATION_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 Science Skills through subjects of English, Urdu, Mathematics and GK of students of Grade 3;
- 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 3 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.
- **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 3. The report is organised into the following chapters:

Chapter 1 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 influencing factors;
- c. feedback from various actors such as teachers, parents, and school councils.

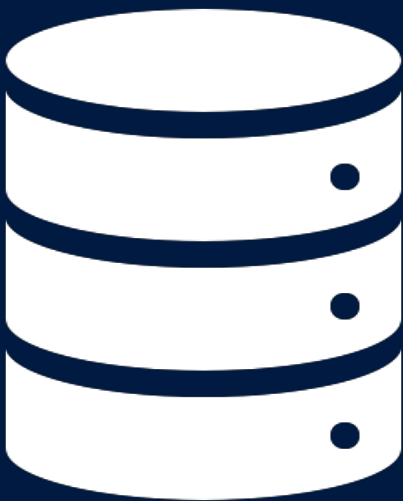
Chapter 4 provision of recommendations to different departments for utilization of LSA findings.

⁵Ibid. Reference 1

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



METHODOLOGY



2

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

DISTRICT WISE NUMBER OF SCHOOLS													
	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		1		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
JHELMUM	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 3 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:

⁷Ibid. 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.
GK Skills	
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 3

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.

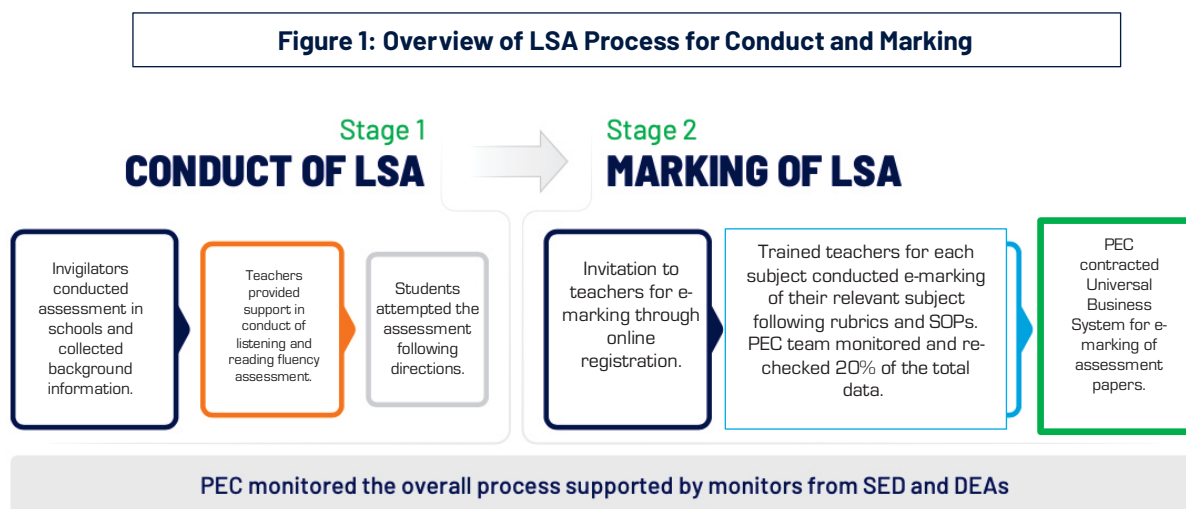
Information under the assessment has been collected at three levels which are as follow s:

- 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.

- **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.

- **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, comparison of teachers' and students' 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.

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



3

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 ($\alpha=0.05$) 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.

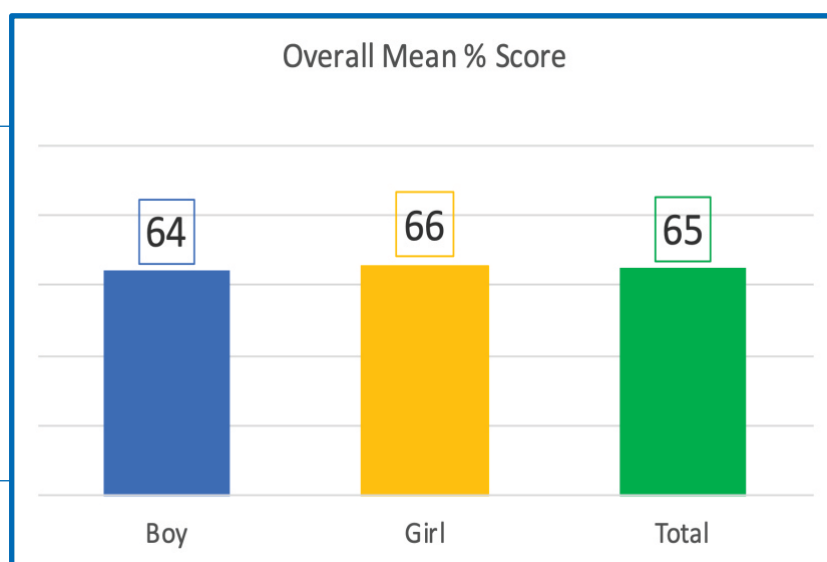
Performance of Students

3.1.1 Overall Performance of Students

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

Figure 2: Overall Mean Scores Achieved by the Students

Results show that students attained an overall mean score of 65% in the assessment. Girls scored 2% higher as compared to boys.

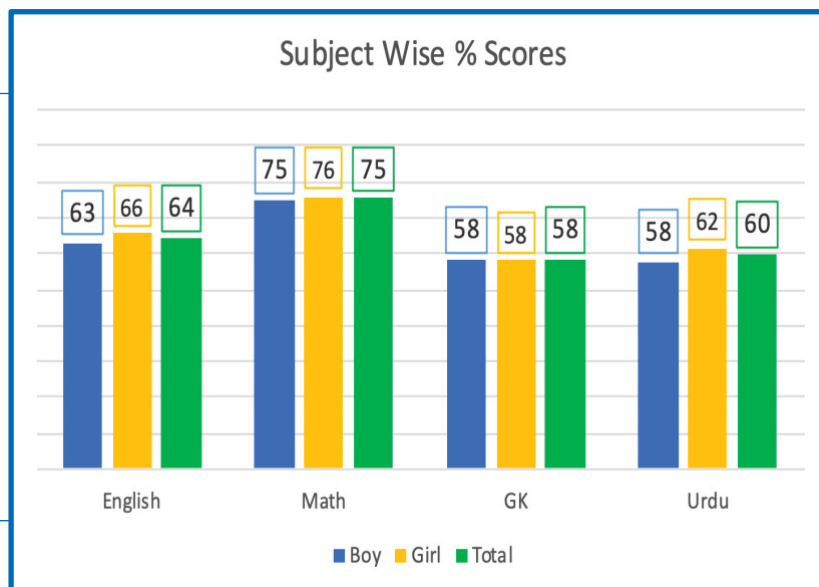


3.1.2 Subject Wise Performance of Students

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 except GK, in which scores are level. Female students scored 3% higher in English, 4% in Urdu, and 1% higher in Mathematics.

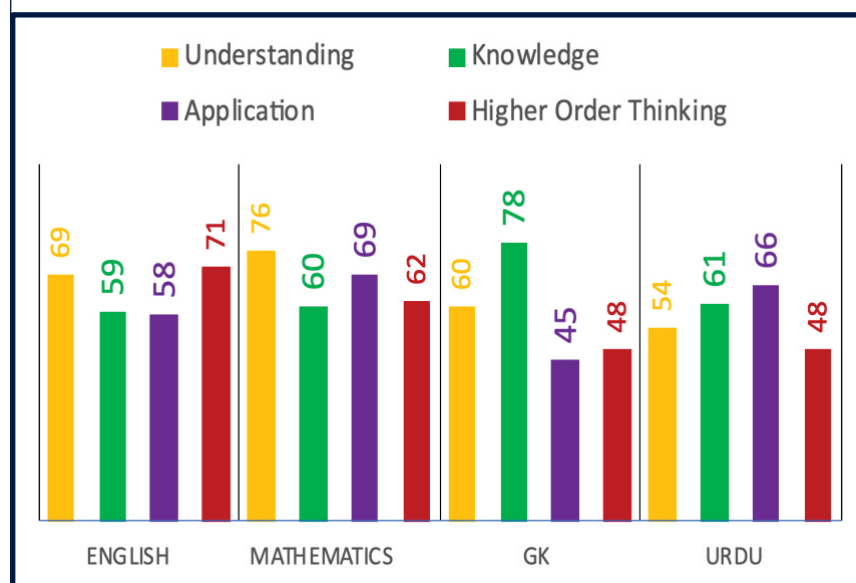


3.1.3 Student Performance Under Targeted Cognitive Domains

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

Figure 4: Overall Students' Performance Based on Cognitive Domains

In English, performance was relatively weak in questions testing application and knowledge. In Mathematics, students found knowledge and higher-order thinking related questions as challenging. In GK, performance was poor in all domains except knowledge, while in Urdu students performed poorly in understanding and higher order thinking.



Gender Wise Student Performance Under Targeted Cognitive Domains

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

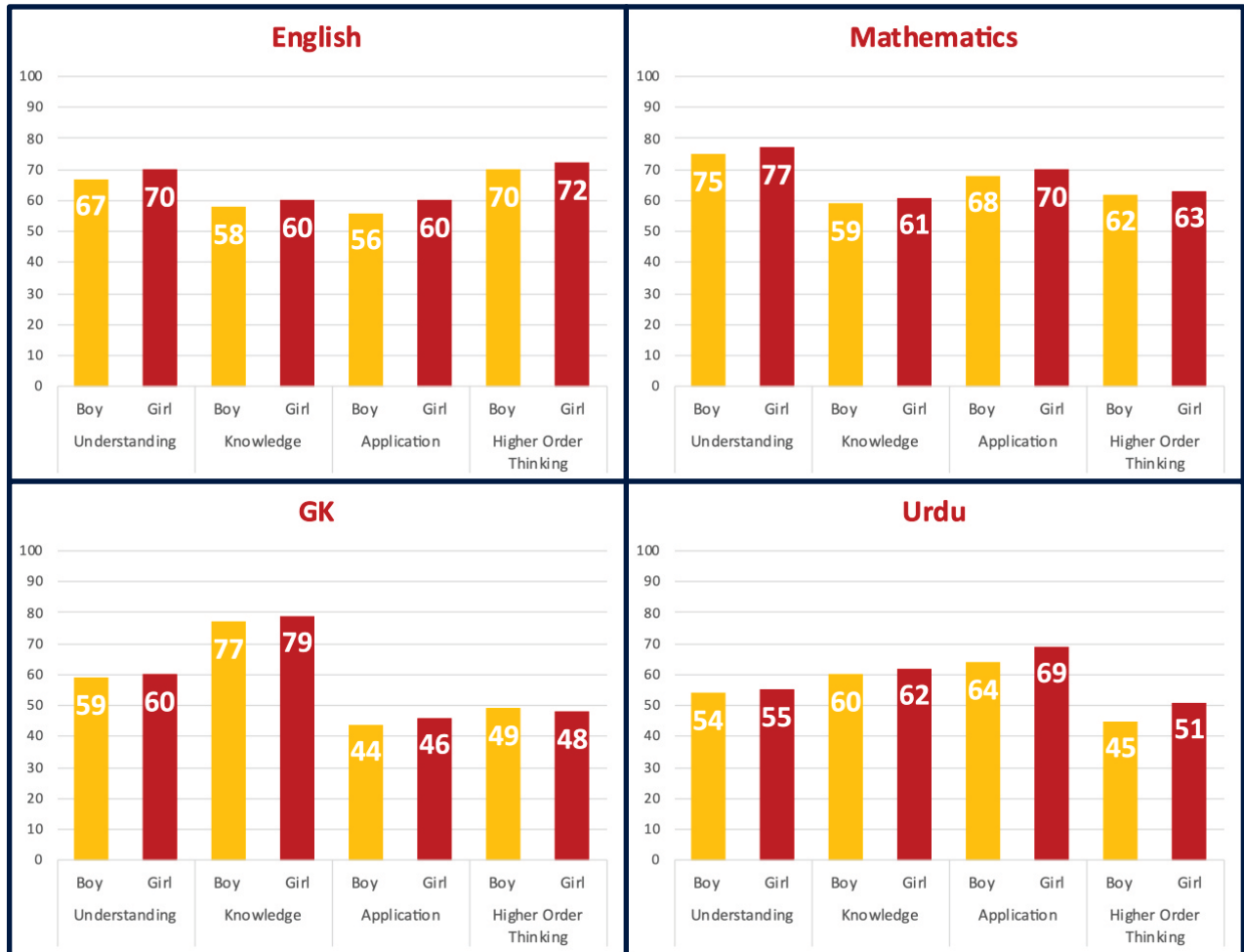


Figure 5: Students' Gender-Wise Performance in Cognitive Domains

English: performance of girls is higher in all domains. In application related questions, the difference in scores is 4% while in other two domains it is 2-3%.

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

GK: girls scored higher in all domains except higher order thinking.

Urdu: performance of girls was higher in all domains. The difference in scores is highest in higher order thinking questions, of about 6%.

3.1.4 Topic Wise Performance of Students

Grade 3 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

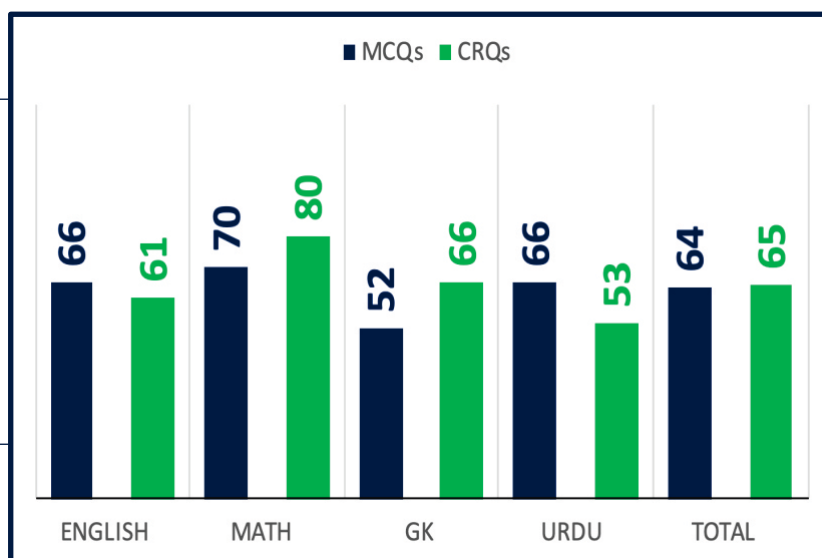
Subject / Topic	Average % Scores
English	
Oral communication	65%
Reading and critical thinking skills	58%
Grammar and lexical aspects	66%
Writing skills	61%
Mathematics	
Arithmetic	72%
Measurements	60%
Geometry	88%
Information handling	86%
GK	
Social knowledge	66%
Science knowledge	53%
Urdu	
Listening	67%
Reading	63%
Speaking	62%
Writing	57%
Creative writing	44%
Language cognition	47%
Appreciation and criticism	51%
Life skills	71%

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

In English and Urdu, students have scored higher in MCQs, while in Mathematics and GK, scores in CRQs are greater than MCQs.



3.1.6 Students' 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	
Application	Identify the environmental factors (temperature, light, water) that support life in a habitat.
Application	Identify the ways human activities affect the natural habitats.
Understanding	Identify the remaining cardinal directions with respect to East and West, namely, South and North.
Higher Order Thinking	Recognize basic difference between states of matter, such as water through physically observable properties (e.g., shape and size).
Application	Identify natural resources (plants, animals, water, air, land, forests and soil) human resources (farmers, builders, painters etc.) capital resources (trucks, computers, factory buildings etc.).
Understanding	Identify feelings of people in different conflicting situations.

English SLOs	
Remembering	Read aloud for accurate reproduction of sounds of letters and words.
Application	Use appropriate expressions in conversation to articulate, recognize and use some formulaic expressions.
Remembering	Recognize naming words as nouns. Demonstrate use of some nouns (from immediate and extended environment).
Understanding	Recognize and generate rhyming strings in writing.
Remembering	Apply strategies to comprehend questions for appropriate response by marking key words, verbs and tenses in a variety of question types: factual, personal response, interpretive.
Mathematics SLOs	
Understanding	Represent addition of fractions through figures.
Application	Solve real life number stories involving multiplication.
Remembering	Use standard metric units of length (kilometer, meter, and centimeter) including abbreviations.
Urdu SLOs	
Understanding	تصاویر دیکھ کر ان سے متعلق سوالات کے جوابات دے سکیں۔
Understanding	نظم و نثر کو پڑھ کے سوالات کے درست جوابات دے سکیں۔
Understanding	تذکیر و تانیث کا فرق جملوں میں واضح کر سکیں۔
Remembering	اسم ضمیر کی نشاندہی کر سکیں۔
Remembering	اسم معرفہ اور اسم نکرہ کی پہچان کر کے بتا سکیں۔

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 3 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 3 level, a student should read text at a rate of 100 to 140 correct words per minute.¹²

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 70 words per minute.”¹³ 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.

Figure 7: Average Student Scores Achieved in Reading Fluency

In Urdu, the average word count achieved by students is 112 while for English the average word count is 94. Boys have outperformed girls in both subjects.

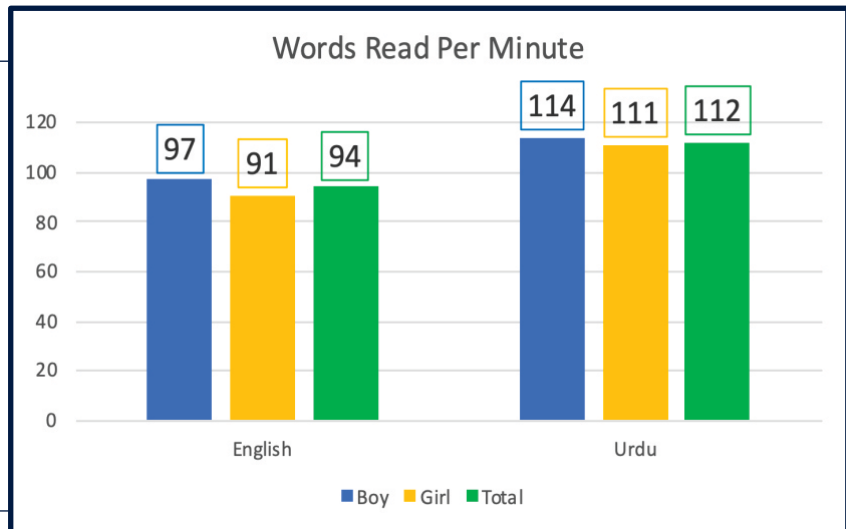
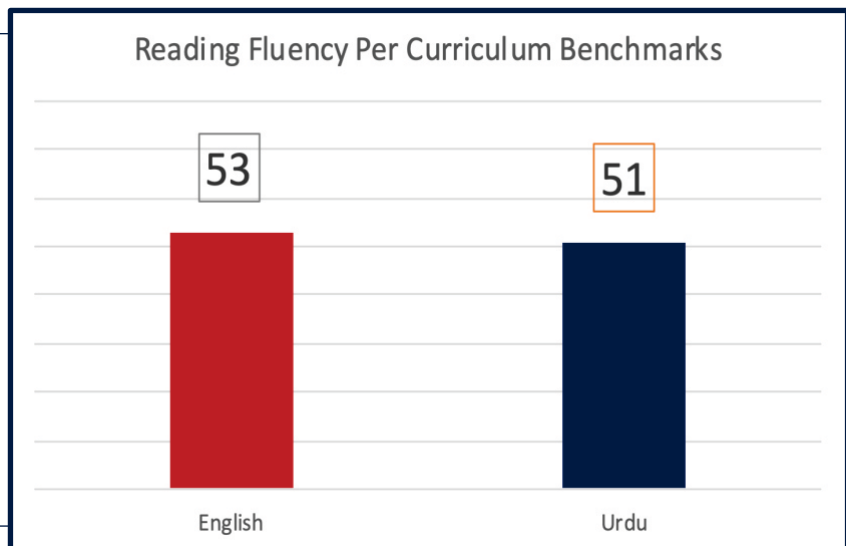


Figure 8: Performance of Students in Reading Fluency per Curriculum Benchmarks

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.

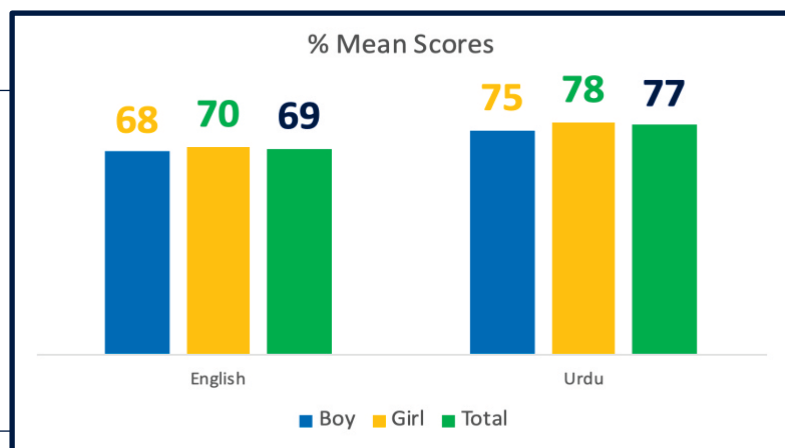


3.1.8 Student Performance in Listening Skills

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

Figure 9: Performance of Students in Listening Assessment

On average, girls have performed better than boys in both subjects.



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.

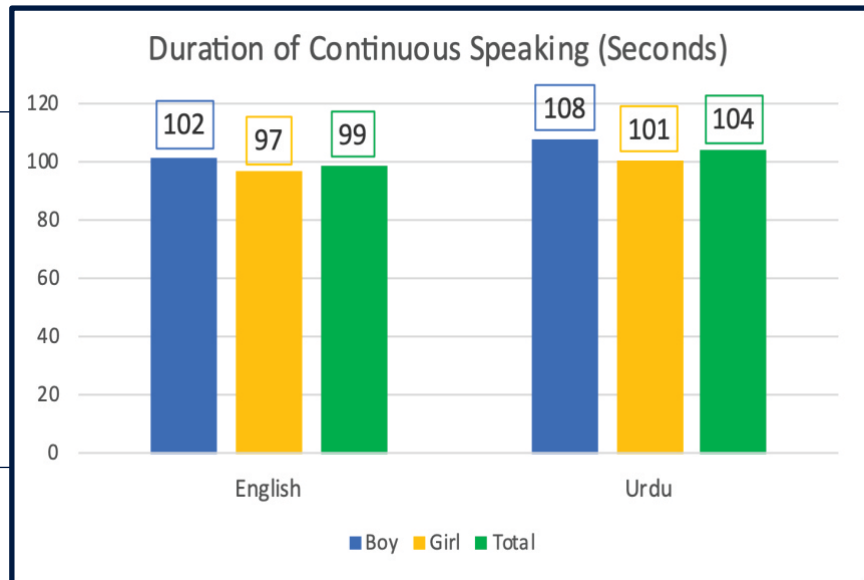
¹⁵ PEC (2020). 'Large Scale Assessment - Item analysis report 2019 -20'. The Third Punjab Education Sector Project, Technical Assistance, Cambridge Education. In collaboration with the Punjab Examination Commission (PEC), 2020.

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 both subjects.



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.

Figure 11: Overall Mean Scores of Teachers

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

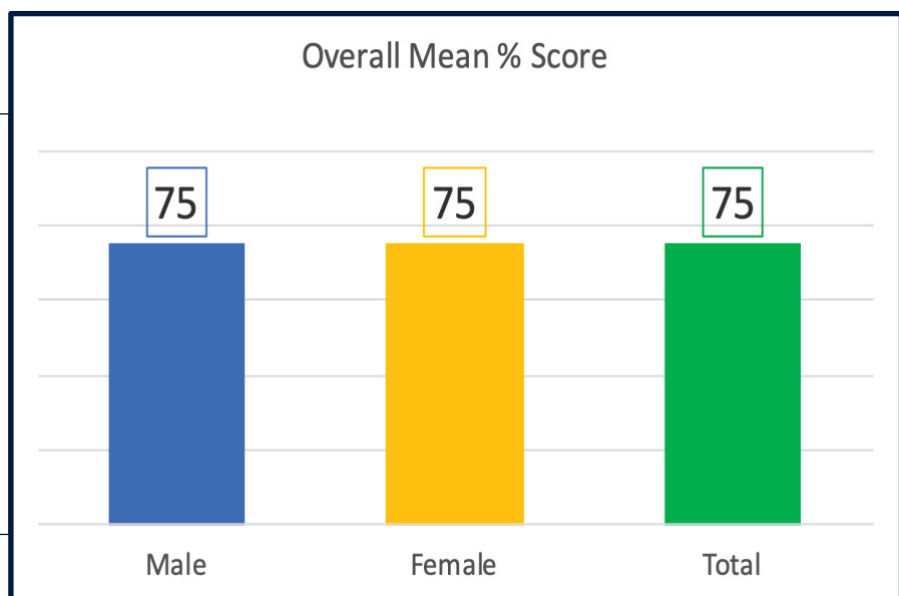
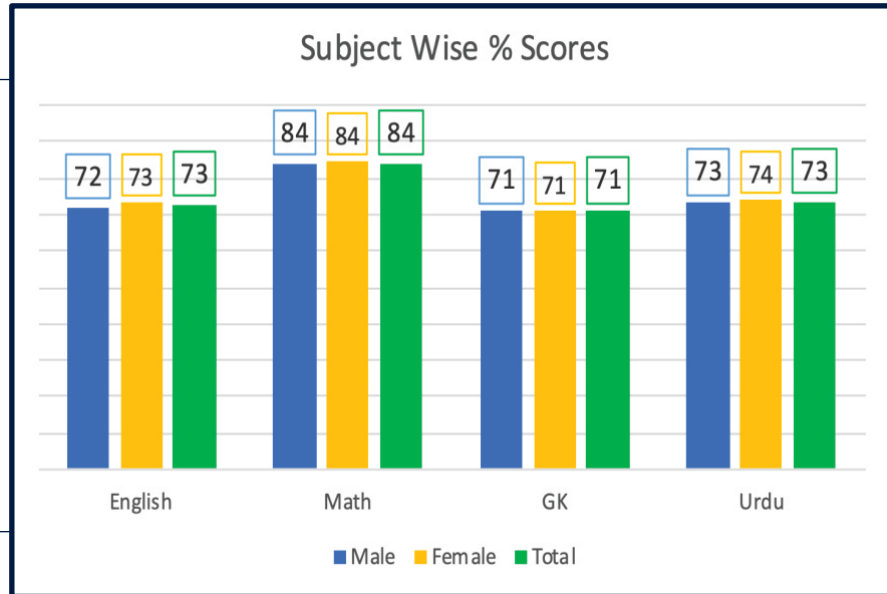


Figure 12: Overall Subject-Wise Mean Scores of Teachers

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

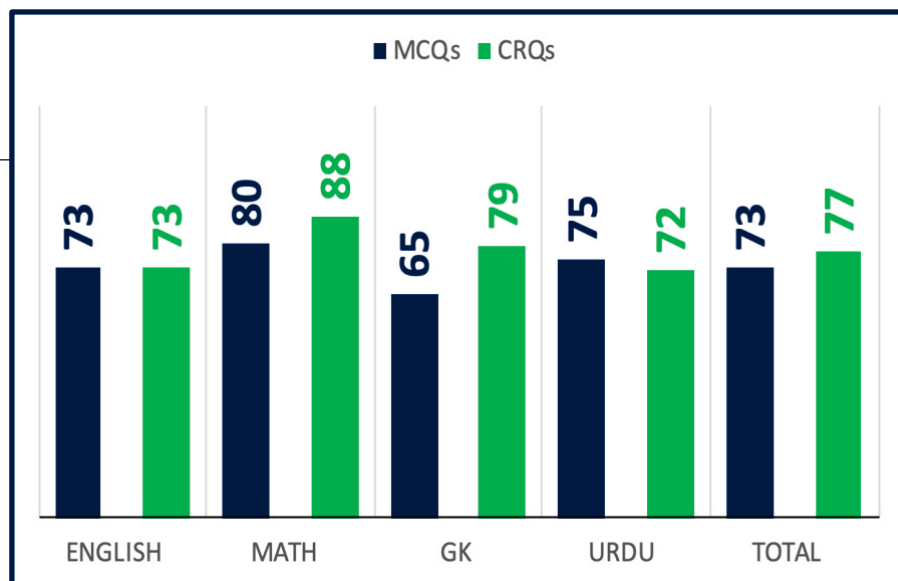


3.2.2 Item-Type Wise Performance of Teachers

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

Figure 13: Item Type-Wise Performance

Students scored higher in MCQs as compared to CRQs in Urdu, while in Mathematics and GK, scores in CRQs are greater.

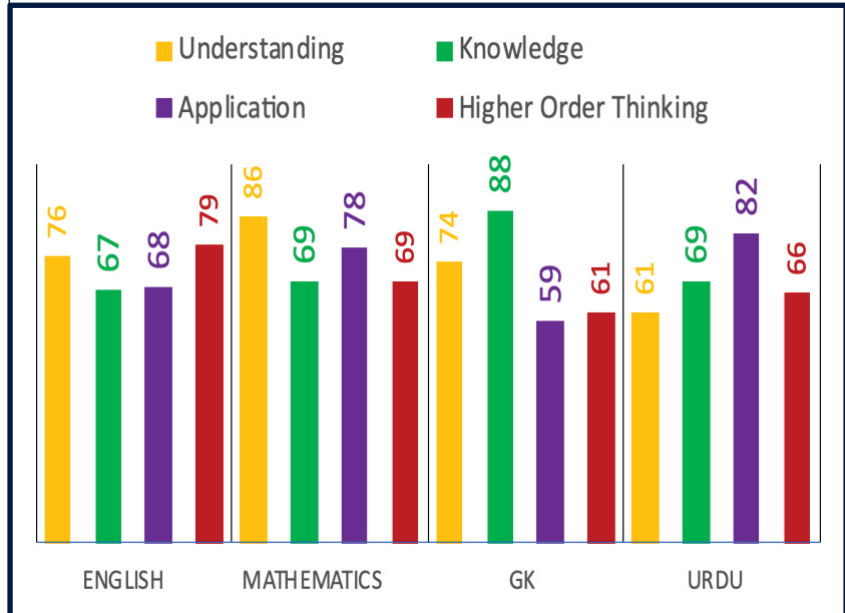


3.2.3 Teachers Performance Under Targeted Cognitive Domains

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, performance was relatively poor in questions testing application and knowledge. In Mathematics, teachers found difficulty in knowledge and higher-order thinking related questions. In GK, performance was poor in application and higher order thinking, while in Urdu teachers performed poorly in understanding domain.



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.

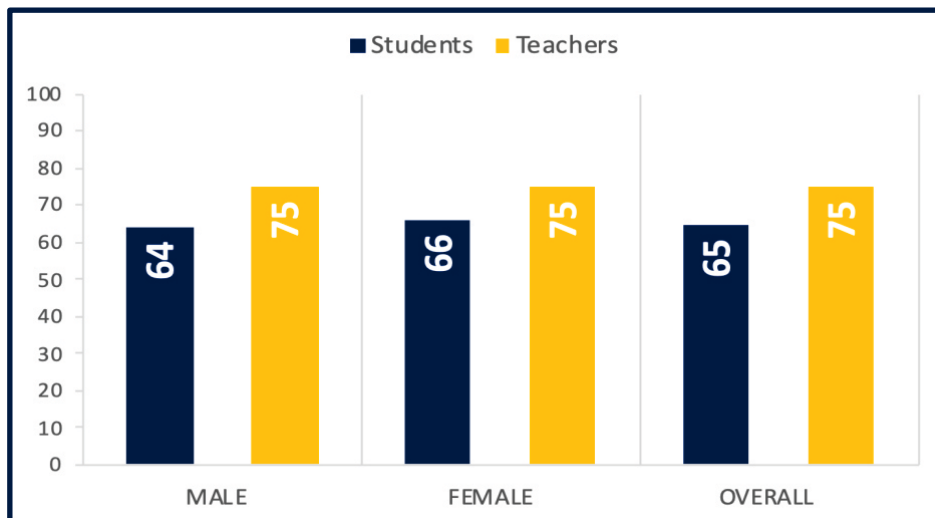


Figure 15: Overall Comparison of Mean Scores Achieved by Teachers and Students

Results show that teachers' overall performance is higher than that of the students by 10%.

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.

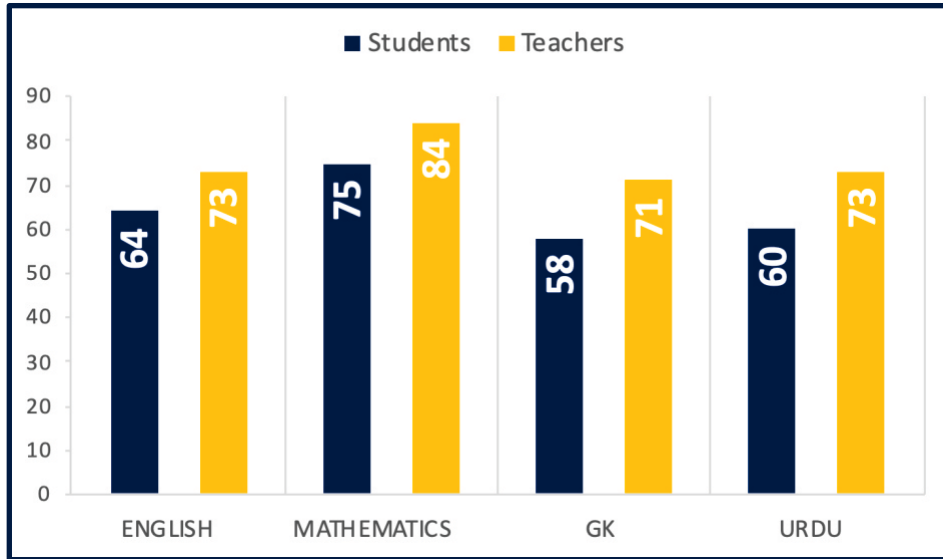


Figure 16: Overall Comparison of Subject-Wise Mean Scores of Teachers and Students

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, PWWF, SED (SL), SED (PH), SED (HI), DPS, PWWF, and Smart schools.

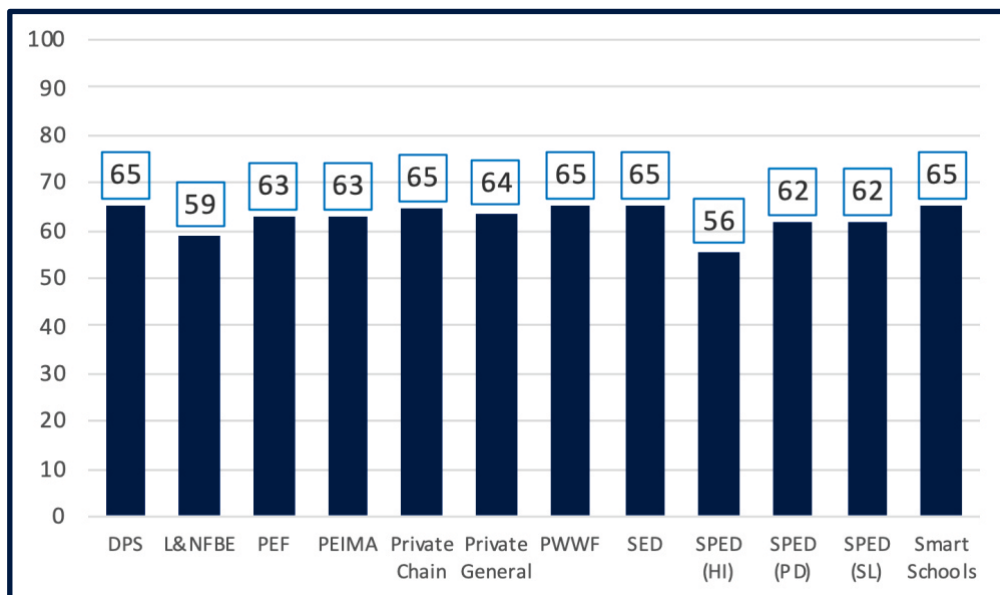


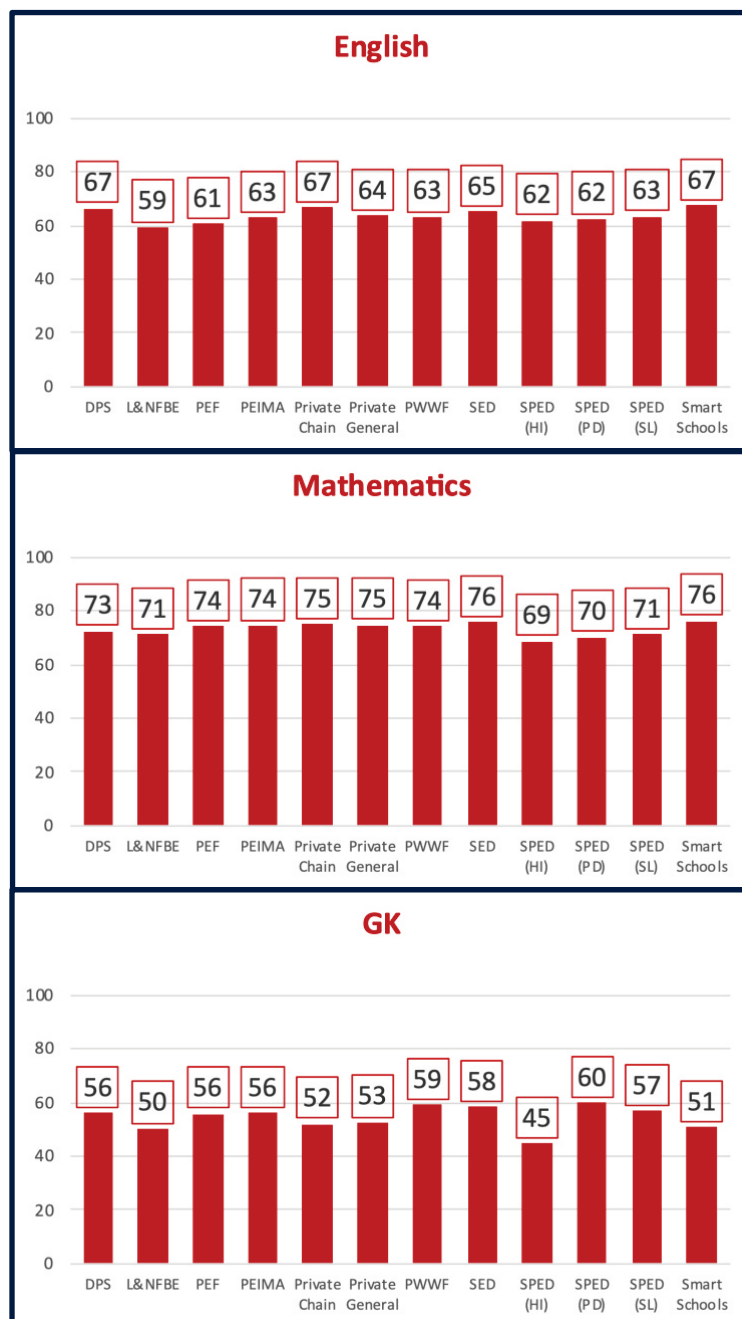
Figure 17: Overall Students' Performance by School Administrations Type

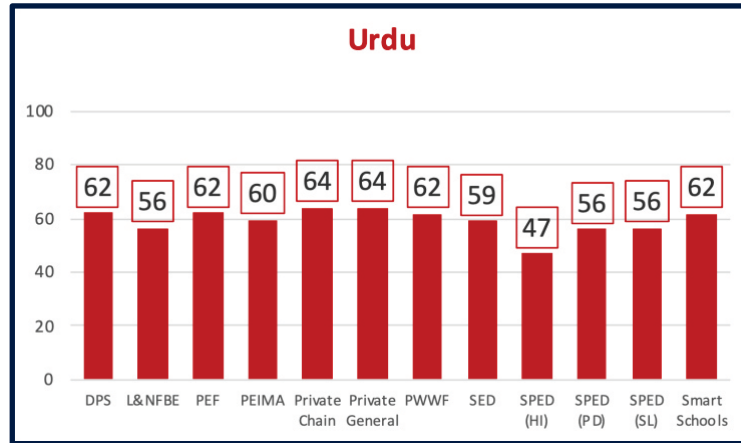
Overall, SED, DPS, Private Chain, PWWF and Smart schools performed better than others.

of SED, PEF, PEIMA, L&NFBE, Private

The following figures show the subject wise performance 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 Chain, DPS, and Smart Schools outperformed others in English, SED and Smart Schools outperformed others in Mathematics, SPED (PH) scored highest in GK, while Private schools 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.

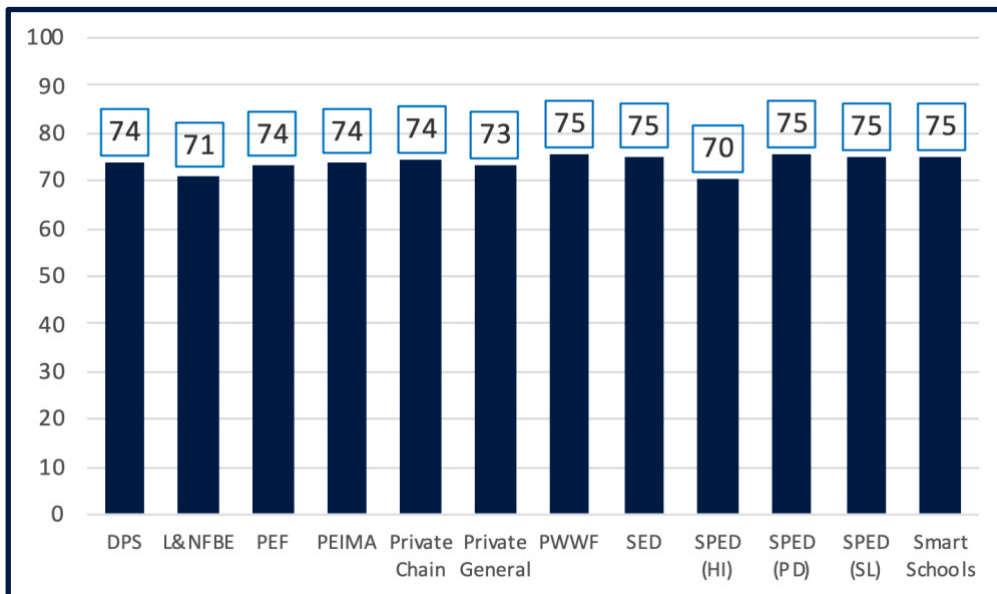


Figure 19: Overall Teachers' Performance by School Administrations Type

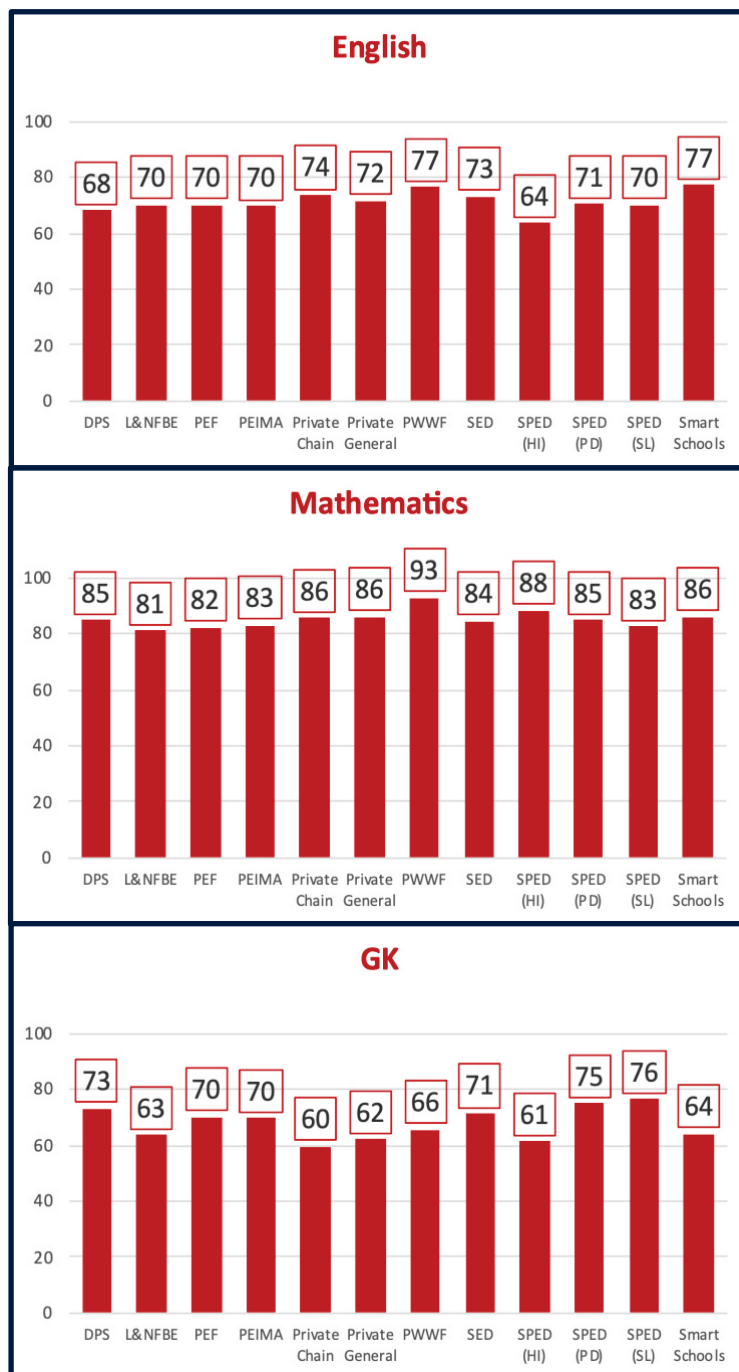
Results show that teachers of PWWF, SED, SPED (SL), SPED (PD), and Smart schools have better understanding of subject knowledge.

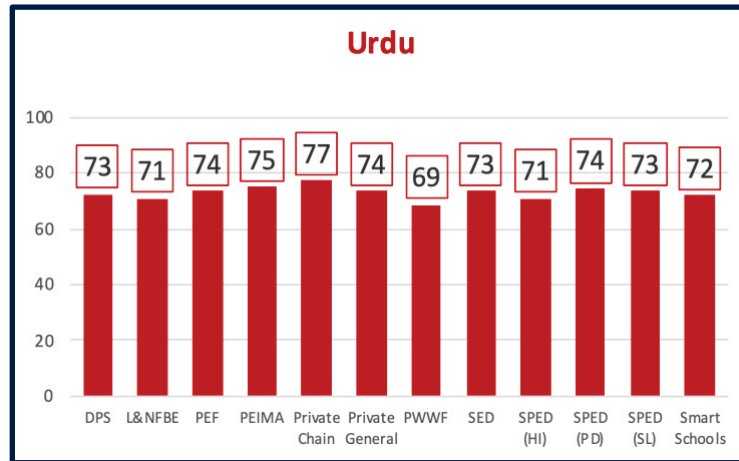
3.4.4 Subject-Wise Teachers' Performance by School Administration

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 English and Mathematics. Teachers of SPED (SL) schools scored highest in GK, while teachers of Private Chain performed better in Urdu.





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.

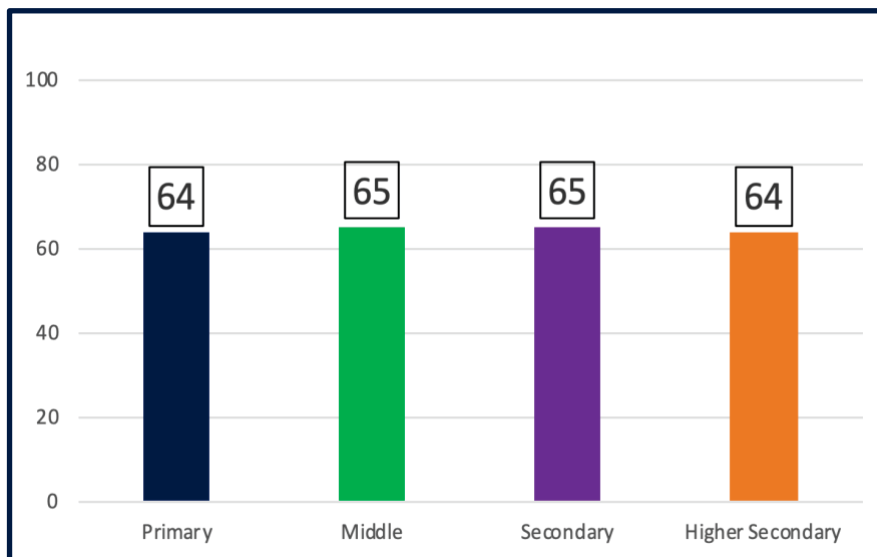


Figure 21: Overall Students' Performance in Primary, Middle, Secondary and Higher Secondary Schools

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.

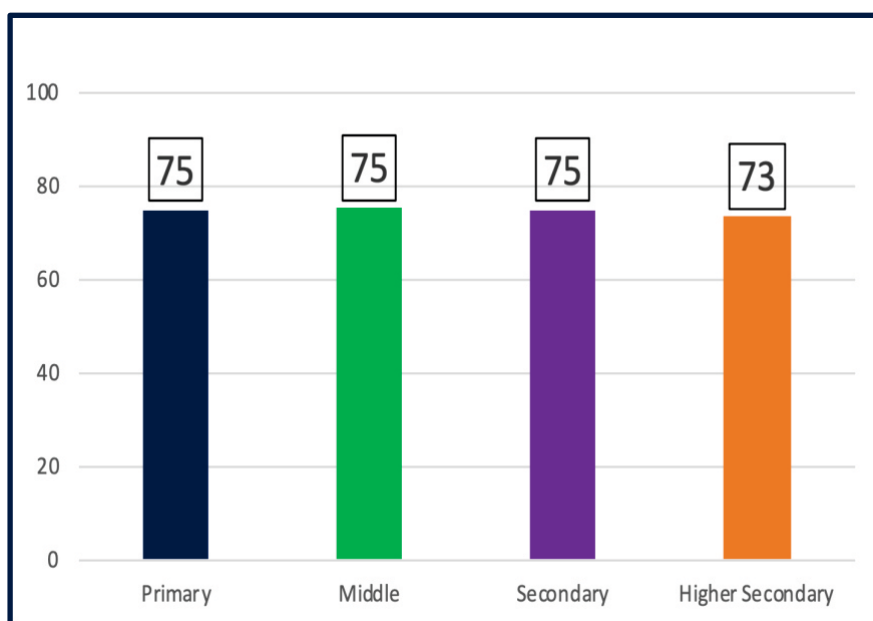


Figure 22: Overall Teachers' Performance in Primary, Middle, Secondary and Higher Secondary Schools

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	
Teachers and Teaching Practices	○ Higher academic qualification ○ Higher professional qualification ○ Encourage students to ask questions ○ Conduct regular written tests ○ Give regular homework and provide feedback ○ Keep parents informed about student performance

School Facilities	○ Subject specialist teachers ○ Availability of study aids in the schools ○ Access to library ○ Opportunities for students to participate in co-curricular activities ○ Access to playground ○ Adequate number of classrooms
School Leadership	○ AEO inspections and guidance of teachers ○ 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 ○ Parents staying in touch with school about child's performance ○ Supportive and healthy environment at home ○ Allocation of study time at home ○ Access to resources at home ○ Access to tuition ○ Access to books other than syllabus

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

Students District, Subject and Gender wise Mean Percentage of Scores									
District	Math		GK		Urdu		English		Overall
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
ATTOCK	74	78	54	58	56	65	56	65	63
BAHAWALNAGAR	78	79	59	60	63	65	67	66	67
BAHAWALPUR	75	81	59	62	60	65	59	65	65
BHAKKAR	71	69	50	54	49	53	55	58	56
CHAKWAL	78	75	55	54	59	53	64	59	62
CHINIOT	70	72	50	54	47	52	53	60	56
DERA GHAZI KHAN	80	82	61	68	56	61	67	71	67
FAISALABAD	75	76	57	60	53	59	62	66	63
GUJRANWALA	77	79	62	62	59	64	59	63	65
GUJRAT	73	77	57	55	54	59	56	56	60
HAFIZABAD	71	82	54	58	56	65	53	63	62
JHANG	77	77	59	56	56	59	67	70	65
JHELUM	70	74	49	55	54	60	62	67	62
KASUR	73	75	55	56	57	63	67	71	65
KHANEWAL	78	77	55	59	60	61	68	71	66
KHUSHAB	74	74	56	54	60	62	62	66	63
LAHORE	74	76	58	59	54	57	61	64	63
LAYYAH	76	77	59	64	62	68	57	62	65
LODHRAN	72	72	52	53	63	66	64	65	64
MANDI BAHU UD DIN	69	75	58	55	56	64	62	66	63
MIANWALI	66	75	53	52	54	60	58	67	60
MULTAN	77	77	61	60	63	65	67	69	67
MUZAFFARGARH	78	80	59	59	62	66	69	72	68
NANKANA SAHIB	78	76	53	60	60	63	67	65	65
NAROWAL	75	78	56	57	59	63	60	68	65
OKARA	73	75	52	55	59	63	63	64	63
PAKPATTAN	74	77	54	59	57	61	69	70	65
RAHIMYAR KHAN	74	74	59	55	58	61	62	63	63
RAJANPUR	75	74	60	55	60	62	69	67	65
RAWALPINDI	75	71	60	60	61	61	62	60	63
SAHIWAL	71	74	59	59	55	63	61	65	63
SARGODHA	71	71	55	57	54	57	61	60	61
SHEIKHUPURA	77	79	60	62	60	66	68	69	67
SIALKOT	78	77	59	63	61	65	68	69	67
TOBA TEK SINGH	73	71	52	54	54	59	59	62	60
VEHARI	72	74	58	57	54	60	60	67	63

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

Teachers District, Subject and Gender wise Mean Percentage of Scores									
District	Math		GK		Urdu		English		Overall
	Male	Female	Male	Female	Male	Female	Male	Female	
ATTOCK	87	84	74	72	82	78	75	70	77
BAHAWALNAGAR	83	85	70	69	77	74	75	73	76
BAHAWALPUR	85	89	69	73	74	75	70	70	75
BHAKKAR	84	81	68	74	69	76	68	72	72
CHAKWAL	86	85	73	70	77	74	72	67	75
CHINIOT	81	83	68	67	69	68	69	69	71
DERA GHAZI KHAN	86	84	71	74	67	68	72	74	74
FAISALABAD	87	89	72	73	69	71	72	74	75
GUJRANWALA	87	86	74	74	71	72	69	71	74
GUJRAT	84	83	67	68	73	69	67	67	71
HAFIZABAD	88	90	65	70	77	76	62	73	74
JHANG	83	81	71	69	74	73	73	75	75
JHELMUM	85	85	69	72	76	78	79	76	77
KASUR	82	82	70	69	76	76	75	74	75
KHANEWAL	85	86	69	72	75	76	77	77	77
KHUSHAB	84	89	68	68	77	75	73	71	75
LAHORE	87	87	73	72	70	70	73	74	75
LAYYAH	83	84	73	74	80	80	68	68	76
LODHRAN	80	84	70	73	74	75	68	73	74
MANDI BAHU UD DIN	83	86	72	69	72	76	73	74	75
MIANWALI	79	85	70	63	71	72	69	76	73
MULTAN	84	82	74	70	77	76	72	75	76
MUZAFFARGARH	83	87	71	68	68	73	75	78	75
NANKANA SAHIB	85	81	66	70	70	78	76	69	74
NAROWAL	82	82	69	67	70	73	63	67	71
OKARA	83	83	67	68	75	76	72	72	74
PAKPATTAN	87	83	70	67	73	74	77	79	76
RAHIMYAR KHAN	81	83	74	71	75	75	72	73	75
RAJANPUR	80	79	74	70	68	71	71	70	72
RAWALPINDI	82	84	74	75	77	77	73	74	77
SAHIWAL	79	83	74	76	70	72	72	74	75
SARGODHA	86	83	71	71	72	74	73	71	74
SHEIKHUPURA	84	84	71	67	68	72	72	77	74
SIALKOT	87	85	69	74	74	75	78	72	76
TOBA TEK SINGH	84	84	70	69	71	73	73	73	74
VEHARI	88	85	75	69	71	73	73	75	76

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	57	Security Arrangements	88
Adequate Grade 4 Employees	49	SNC Copies	88
Adequate Number of Teachers	47	Subject Specialist - English	87
Clean Drinking Water	97	Subject Specialist - Science	89
Electricity	99	Subject Specialist - Urdu	94
Furniture	84	Subject Specialist – Math	89
Language Kit	24	Teacher's Guide	93
Library	56	Washroom	93
Math Kit	51	Washroom (Teachers)	90
Playground	66	White Board	98
Complete School Boundary	90	School Main Gate	92
Science Kit	45		

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, 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	14
Drama/Meena Bazar	45
Art Competitions	29
GK Quiz	46
Plantation Drives	28
Recitation Competitions	62
Debates Competitions	57
Sports Competitions	54
Hamd o Naat Competitions	66
Literary Competitions	53

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	33
Lack of Basic Facilities	15
Teachers' Absence from School	6
Lack of Study Aids	6
Dissatisfaction with Teaching Methods Used	4

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.	44
Hard-working teachers	14
Provision of basic facilities in school	11
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.	4

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 (33%), 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	65
Crop Harvesting Season	23
Siblings Care	21
Labour	6
Lack of Resources	6
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 16% of the fathers 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	21
Literate	12
Primary	16
Middle	12
Matric	24
Intermediate	7
BA or Higher	9

Table 15: Father's Education

Father's Education	% Age of Parents
Illiterate	19
Literate	11
Primary	20
Middle	15
Matric	24
Intermediate	5
BA or Higher	6

Table 16: Mother's Education

Mother's Education	% Age of Parents
Illiterate	27
Literate	12
Primary	20
Middle	12
Matric	20
Intermediate	4
BA or Higher	5

3.10.5 Parents' Occupation

Majority of parents are farmers (33%), followed by shopkeepers and traders (23%). 18% hold private jobs while 12% work in government sector. Majority of mothers are unemployed (31%).

Table 17: Father's Occupation

Major Occupations	% Age of Parents
Farmer	33
Shopkeeper/Trader	23
Private Job	18
Government Job	12
Unemployed	5

Table 18: Mother's Occupation

Major Occupations	% Age of Parents
Government Job	5
Private Job	9
Sewing	21
Shopkeeper/Trader	8
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	10
5000-10000	23
10001-20000	39
20001-40000	20
40000+	5

Table 20: Mother's Income

Income	% Age of Parents
Less than 5000	18
5000-10000	22
10001-20000	18
20001-40000	4
40000+	3
N / A	35

3.10.7 Language Used with Child

Majority of parents talk to their children in Punjabi (42%) followed by Urdu (35%). 22% use other local languages.

Table 21: Language Used at Home with Child

Language Used at Home	% Age of Parents
Punjabi	42
Local	22
Urdu	35
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	7
Car	8
Study Table/Chair	11
Internet/Cable	13
Gas	32
Motorcycle	51
TV	38
Mobile	38
Water	70
Electricity	79

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 degree holders is negligible.

Table 23: Academic Qualification of Teachers

Academic Qualification	% Age of Teachers			
	MATHS	GK	ENGLISH	URDU
Matric	5	6	3	6
Intermediate	12	14	9	11
Bachelors	16	17	13	16
Masters	55	49	55	51
MS/MPhil	11	9	11	9
PhD	0	1	1	1

Table 24: Professional Qualification of Teachers

Professional Qualification	% Age of Teachers			
	MATHS	GK	ENGLISH	URDU
PTC	8	12	6	9
CT	3	3	3	3
Diploma	2	3	2	2
B.Ed.	43	41	40	42
M.Ed.	18	17	25	16
MA (Education)	4	5	5	4
MPhil (Education)	13	12	10	15
PhD (Education)	4	5	3	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 Experience	% Age of Teachers			
	MATHS	GK	ENGLISH	URDU
1-5	26	26	25	23
6-10	35	32	33	33
11-15	13	12	20	12
15-20	6	6	5	7
20 +	13	14	9	15

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 3 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			
	Math	GK	English	Urdu
In accordance with SLOs	92	91	91	92
According to the students' age and class	80	81	68	79
In simple language	84	86	78	84
With interesting activities	87	87	84	87
With appropriate exercises	92	91	87	91
With appropriate font size	89	90	87	90
With interesting pictures	92	91	90	92
With local examples	88	89	83	90

3.11.4 Assistant Education Officer's (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 in all of their allocated schools. Responses of teachers over the frequency of these visits are as follows:

Table 28: Frequency of AEO Inspections

Frequency of AEO Inspections	% Age of AEOs
Once in a month	29
Twice in a month	49
Once in two months	14
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	5
Humiliating	2
Kind	18

Table 30: Feedback on AEO Visit

Feedback on AEO Visit	% Age of AEOs
AEOs provide feedback after observation	81
The feedback given by AEOs helps improve teaching	90
AEOs conduct monthly community of practices session	82

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			
	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	92	88
Utilize teacher's guide to design class activities	94	95	90	91
Use of Urdu Language in Instruction	85	85	76	89
Use of Local Languages in Instruction	8	7	6	5
Use of English Language in Instruction	7	9	8	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	97	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 Learning	% Age of Teachers			
	Math	GK	English	Urdu
Oral (Question/Answers)	97	98	96	98
Written	95	95	93	96
Homework	95	94	91	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	81
Co-curricular Activities	79
Students' Performance in Studies	89
School Discipline	81
Student's Psychological Issues	73
Student's Health	79
Student's Food Issues	68
Student's Behavior	81
Student's Security	74

3.11.8 Involvement in School Administration

Teachers were asked questions about their involvement in administration activities in school. 98% 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 Students' Learning	98
Meeting with Parents to Discuss Students' Issues	94
Handle School Administration	83

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

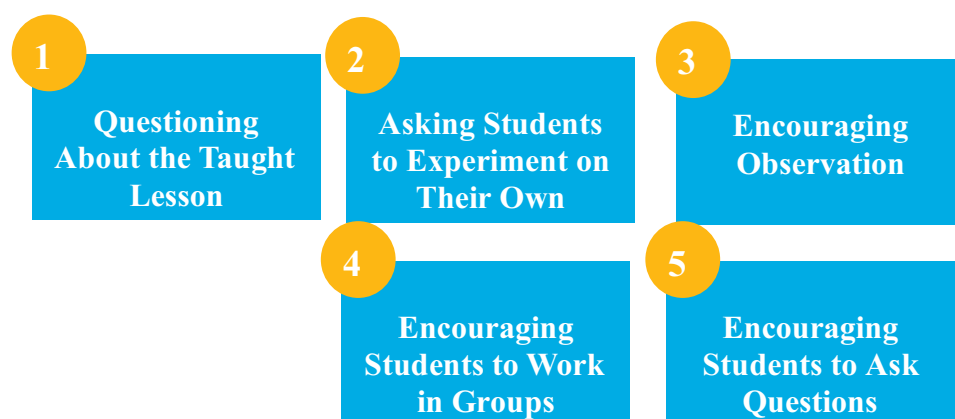
Feedback of Teachers on Head Teacher's Performance	% Age of Teachers
Head teacher always follows the rules and regulations of the school.	97
Head teacher always makes an effort to bring improvement in the school.	96
Head teacher always guides teachers in their teaching.	96

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 (more than 90%) use the following techniques for teaching GK:



Major Homework Practices Used by Teachers

More than 80% of the teachers give the following as homework for GK subject:





Teaching of Numeracy (Mathematics)

Main Techniques Used

Majority of the teachers (more than 90%) use the following technique for teaching Mathematics:

1

Demonstration
Method

2

Activity-Based
Method

3

Problem Solving
Method

4

Questioning
Method

5

Group Study
Method

Major Homework Practices Used by Teachers

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

1

Solve Exercises

3

Perform Practical
Examples About the
Topic

4

Make Charts or
Models

5

Read Material
Other than
Textbook

Teaching of Literacy (English)

Main Techniques Used

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

Translation
Method

96%

Direct Method

95%

Major Competencies Focused by Teachers

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

1

Reading

2

Writing

3

Listening

4

Speaking

5

Grammar

Major Homework Practices Used by Teachers

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

1

Word Formation

2

Enhancing
Vocabulary

3

Word Analysis

4

Creating
Homophones

5

Repeated Reading
and Writing

Teaching of Literacy (Urdu)

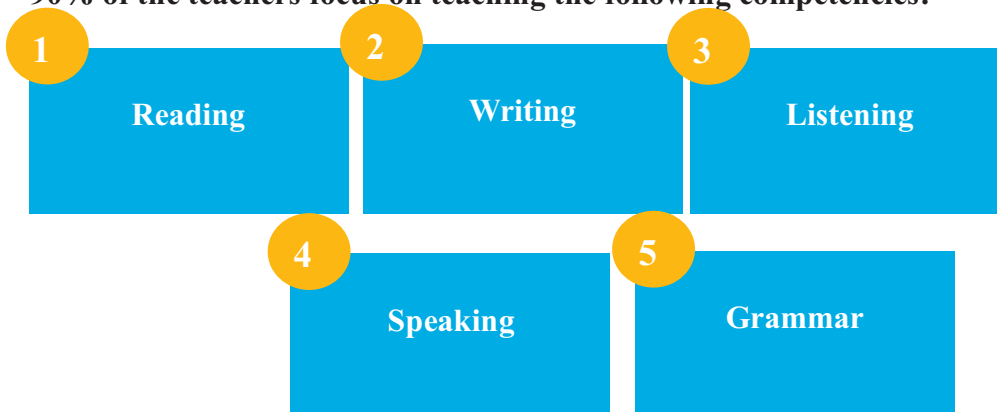
Main Techniques Used

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



Major Competencies Focused by Teachers

90% of the teachers focus on teaching the following competencies:



Major Homework Practices Used by Teachers

Majority of the teachers (above 90%) 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
Sun	91	8
Types of Resources	95	4
Protection of Natural Resources	93	6
Quaid-e-Azam Muhammad Ali Jinnah	87	12
Allama Muhammad Iqbal	91	8
Changes in Living Things	92	7
Habitat	92	7
Food	86	13
Governance and Role of Citizens	85	14
Resolving Disputes	83	16
Substance	79	20
Sources of Energy	84	15
Contemporary World	86	13
Inventions	86	13
Force and Machines	85	15
Security	88	11

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	94	5
Measurement: Length, mass and capacity	88	12
Fractions	92	7
Measurements and time	93	6
Shapes	93	6
Picture Graphs	88	11

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	11
Grammar	85	13
Sentence making	86	12
Vocabulary building	85	14
Creative writing	77	22
Oral communication	87	12
Listening and speaking skills	88	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-نثر پڑھانا	84	15
پڑھائی-نظم پڑھانا	92	7
تفہیم	90	9
قواعد	87	11
جملہ سازی	86	12
تخلیقی لکھائی	88	10
بولنے اور پڑھنے کی صلاحیت	83	15
املاء	86	14
لفظوں کا کھیل	90	9
زبان شناسی	87	12

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 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



4

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 Science, 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.



Punjab Examination Commission

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