

Punjab Education Sector Plan

2019/20 – 2023/2024



Government of the Punjab



**Punjab Education Sector Plan
2019/20 – 2023/24**

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Acronyms

ADU	Academic Development Unit
CWD	Children with Disabilities
DEA	District Education Authorities
DRR	Disaster Risk Reduction
ECE	Early Childhood Education
ESA	Education Sector Analysis
GER	Gross Enrolment Ratio
GIR	Gross Intake Ratio
GoP	Government of Pakistan
GoPb	Government of the Punjab
GPE	Global Partnership for Education
HEC	Higher Education Commission
L&NFBED	Literacy and Non-Formal Basic Education Department
NER	Net Enrolment Ratio
NFE	Non-formal Education
OOSC	Out of school children
PEF	Punjab Education Foundation
PEMIS	Punjab Education Management Information System
PESP	Punjab Education Sector Plan 2019/20 - 2023/24
PLGA	Punjab Local Government Act
PLNFEP	Punjab Literacy & Non-Formal Education Policy 2018-2030
PPP	Public-Private Partnership
PSDF	Punjag Skills Development Fund
PSESP	Punjab School Education Sector Plan 2013 - 2017
QAED	Quaid-e-Azam Academy for Educational Development
QAT	Quality Assurance Test
SDG	Sustainable Development Goals
SED	School Education Department
SEN	Special Education Needs
SpED	Special Education Department
STEAM	Science Technology Engineering Arts and Mathematic
TEVTA	Technical Education and Vocational Training Authority
TLM	Teaching and Learning Materials
TVET	Technical and Vocational Education and Training
UIS	UNESCO Institute for Statistics
UNICEF	United Nations Children's Fund

Executive Summary

The goal for a well-functioning education system is quality education for all children, in an inclusive and conducive learning environment. Such a system provides children with convenient access to school so that they are able to enrol, continue their schooling, and learn well enough to gain meaningful employment and to contribute to society. Ideally, it means getting children into school at the right age, establishing a strong foundation for future learning, and building upon that foundation with age and context appropriate material, taught by competent and responsive teachers, in well-resourced classrooms. It means regularly collecting data on schooling and learning outcomes and using this data to inform continuous improvement. It also means providing targeted support to enable *all* students to stay in school, and to learn well, regardless of their personal limitations.

In Punjab, successive governments have undertaken a series of reforms to enable the public education sector to improve its performance. These reforms have enabled the Government of the Punjab (GoPb)'s School Education Department (SED) to improve school supply so that, to date, 12.4 million boys and girls are enrolled in 52,470 public schools¹ across the province. A series of successive household surveys² have reported improvements in the province's primary level (ages 5-9) participation rate from 84.8% in 2011 to 90.4% in 2017. This improvement has been driven by campaigns and incentives to increase enrolment in government schools and government funded private schools, especially in under-served parts of the province. Basic infrastructure has also improved, so that 95% of government schools have toilets, boundary walls, electricity and running water.

Student literacy and numeracy levels have also exhibited a steady increase. In a standardized, sample-based early grade literacy and numeracy assessment (English, Urdu and Math) administered to Grade 3 students in March 2015, students only responded correctly to 56% of questions on Grade 1 and 2 literacy and numeracy student learning outcomes (SLOs). In March 2017, students responded correctly to 77% of questions against the same SLOs. Punjab also outperforms other provinces in the Annual State of Education Report (ASER) assessments.

Despite these improvements, Punjab still has approximately five million out of school children (OOSC), out of which over three million are of secondary school age. Regional disparities also persist, with children in the southern part of the province having relatively limited access to schooling. The southern districts of Rahim Yar Khan, D.G. Khan and Rajanpur have the highest number of OOSC in the province. Girls are less likely to enrol into school, and more likely to drop out earlier, than boys. For every 100 students enrolled in Katchi grade, only 28 students remain until Grade 10 (31% for boys and 25% for girls)³.

Disability and economic deprivation still prevent children from accessing schooling. Even when children are in school, a large number study in classrooms that are overcrowded and multi-grade. Learning levels are still unsatisfactory even in single teacher classrooms, and formal assessments to measure learning are still not routine or standardized. Between 2015 and 2017, student performance remained stagnant in Punjab Examination Commission's (PEC) Grade 5 exams.

¹ Source: PMIU 2018/19. These do not include Punjab Education Foundation (PEF) of Punjab School Support Programme (PSSP) schools

² Nielsen Household Survey – November 2011 to November 2015; Bureau of Statistics – February 2017

³ PMIU 2018-19

Underpinning these trends are governance and management challenges: while data is collected in routine, it is not quality assured nor regularly used for decision making, the District Education Authority (DEA) model has not been fully realized, and capacity of local managers continues to be low when it comes to planning, managing or tracking reform.

The Punjab Education Sector Plan (PESP) 2019/20 – 2023/24 has been developed to address enduring education challenges in Punjab. The Education Sector Analysis (ESA) for the PESP pointed at three persistent challenges in Punjab that prevent the public-school system from achieving its vision:

- i. **Education equity and inclusion:** Access is still limited to certain groups of children in the province, including girls, children from poorer households, children with disabilities, and those living in southern districts. While the GoPb has recently started ramping up its special education and literacy and non-formal education departments, these services are grossly under-provided and are not prioritized in routine planning processes. The equity challenge has been attributed to both demand and supply side constraints.
- ii. **Quality:** The ESA quotes student performance in the 2016 ASER survey and PEC's annual Grade 5 and 8 exams to demonstrate shortcomings in student performance, even in basic literacy and numeracy. It also reinforces that children from the poorest households continue to show weak performance. Even though teacher presence in classrooms has risen substantially in recent years, the quality challenge persists because of limited supply of competent teachers, especially in math, science and English, a culture of learning for recall, and a lack of a coherent assessment regime that can help determine strengths and weaknesses in student performance.
- iii. **Governance and management:** The governance challenge results from inefficiencies arising from limited capacity of the recently introduced DEAs and of education officials. While data from schools is collected in routine, its accuracy is uncertain and its use in decision making and performance management is limited. Accountability processes are weak and financial inefficiency is common.

The interventions proposed in the PESP address these problems and challenges, and will be implemented with the following objectives:

1. Promote quality education in a safe, inclusive and conducive learning environment for children
2. Improve teaching and learning practices for better learning outcomes
3. Provide adequate and sufficient access to education for children from pre-primary to secondary (including marginalized and children with special needs) and youth/adults
4. Strengthen governance of the education sector for equitable access and high-quality education

To address these challenges, PESP proposes three overarching strategic areas:

- Quality and learning outcomes
- Access, retention and equity
- Governance and management

Within these areas, the government has introduced five priority programmes:

Table 1. PESP 2019/20-2023/24 programmes

Strategic area	Priority programmes	Focus of the programmes
1. Quality and learning outcomes	1. Improve teaching and learning practices for better learning outcomes	Teacher training, quality teaching and learning materials, learning assessments, critical thinking, elements of sustainable development, wholesome personality development, technical, vocational and technology-oriented education
2. Access, retention and equity	2. Provide adequate and sufficient access to education for children from pre-primary to secondary, including marginalized and children with special needs	Increase access and retention from ECE to post-secondary education, increase provision of functional and adequate basic school facilities including disability-friendly infrastructure in all schools, non-formal education, access for marginalized children, including children with special needs.
	3. Promote quality education in a safe, inclusive and conducive learning environment for children	Promotion of safe, clean, green, healthy and hygienic physical environment, safe and protective behavioural practices, and an enabling environment in mainstream schools and institutions for children with special needs
3. Governance and management	4. Strengthen good governance of the education sector for equitable access and high-quality education	Strengthened governance and coordination frameworks within the public education system, other line departments and with private providers, Enhance planning, monitoring and evaluation across all levels for evidence-based decision-making, improved financial planning and management
	5. Promote effective leadership and management of the education sector for better service delivery	Empowering and enabling local bodies, district officials and school communities to improve schooling inputs, outputs and outcomes

These five priority programmes have been designed to support and reinforce each other. Sound governance and management provide the scaffolding needed to introduce, sustain, and quality assure improvements to quality and learning outcomes, and to access and equity. As the quality of government schools improves, so will the motivation of parents to enrol and retain their children in school, and an inclusive, enabling learning environment will, in turn, support further improvements to student performance.

The five priority areas in the PESP also respond to, and build upon, the GoPb's national and global commitments, including those through the Sustainable Development Goals (SDGs), Article 25A of the Constitution of the Islamic Republic of Pakistan, and the Punjab School Education New Deal 2018-2023.

The figure below summarizes the theory of change for the PESP:

Figure 1: Theory of Change for PESP 2019/20-2023/24



The strategies in the PESP are supported by a costed implementation plan. The interventions the plan are defined broadly, and will be described in detail in corresponding operational plans for each organization responsible for delivery. These operational plans will provide following details:

- how the interventions will be delivered
- how vertical and horizontal linkages will be established to support delivery
- how performance will be tracked and course redressal initiated, if needed

. The PESP has proposed an inter-department coordination committee to oversee delivery of planned interventions, and one of the first tasks of this committee would be to guide the development of these plans.

1. Introduction

The PESP 2019/20 – 2023/24 embraces a transformative reform agenda for Punjab. Aligned with the New Deal 2023, the PESP 2019/20 – 2023/24 reflects on the key achievements of previous reform efforts and seeks to address remaining and emerging challenges. The PESP 2019/20-2023/24 has been developed in a participatory manner under the leadership of the GoPb, through inclusive dialogue with all key stakeholders.

The PESP 2019/20-2023/24 was informed by an Education Sector Analysis (ESA), which assessed key achievements and challenges in the education sector, and offered recommendations for the development of priority programmes. A summary of the ESA is included as an annex to this document.

The PESP 2019/20-2023/24 reflects the proposals of stakeholders of the Punjab education sector, gathered through consultative workshops and focus group discussions conducted at central and district levels between June and November 2018, as well as first quarter of 2019. The consultations included staff from School Education Department (SED) and attached departments, Special Education Department (SpED), Literacy and Non-Formal Basic Education Department (L&NFBED), other units of the GoPb, civil society and development partners. The objectives, strategies and priority programmes were proposed in these consultations. Further work was developed by the SED in early 2019 for the revision of PESP drafts, identification of indicators, setting of targets and development of an implementation plan for the PESP.

The PESP 2019/20-2023/24 also reflects the latest reform initiatives in Punjab, specifically the New Deal 2023. The Plan acknowledges the ambitious reform agenda established by the GoPb to improve the quality of teaching and learning outcomes for all children in The New Deal.

This strategic document first introduces the socio-economic situation of Punjab, followed by an overview of the global, national and provincial policy frameworks that provide the vision for the education sector in Punjab. The second chapter introduces the strategies designed to achieve the education objectives of the next five years. The subsequent chapters outline the costs projected to reach the outcomes set by the strategic plan and the estimated financing available for the implementation of the plan over the next five years. This is followed by processes for monitoring and evaluation of the plan.

1.1. Socio-economic overview

Punjab has a young population: more than one-fourth of the total provincial population is of school-going age. Punjab's population growth rates show signs of deceleration. However, with an annual population growth rate of 2.13, the number of children 5-16 years old is furthermore expected to continue growing in the medium-term. The impact on education service delivery in the near term is significant.

There are two demographic characteristics that make education planning in Punjab complex. The first: most of the 110 million people living in this province (63.3%) reside in rural areas. The second: internal migration is very significant. Employing a multidimensional measure of poverty, which takes into account not only income levels but also indicators related to health, education and standards of living, it emerges that rural areas of the province are more deprived compared to the urban areas.

While 6.3% of the population in urban areas of Punjab can be considered poor under this multidimensional index, the incidence soars to 43.7% of the population in rural areas. Southern districts of the province are more deprived than the central and northern districts. A breakdown of multi-dimensional poverty highlights that deprivation in education (43%) and living standards (30.5%) are the major contributors to multidimensional poverty index in the province.⁴

In recent years, much has been done to improve literacy levels throughout the province. As noted in the PLNFEP 2019, “literacy is an important measure of education because its improvement is likely to have an impact in the longer run on other important indicators of welfare”.⁵ Notwithstanding those efforts, female literacy rates lag behind those of their male counterparts: 54% of females are literate compared to 66% of men. The situation is more acute in rural areas – 44% of females are literate compared to 73% of females in urban areas. It is estimated that there are over 57 million illiterate persons of age 10 and above in the Punjab.

While these low literacy levels can be attributed to the limited demand and supply of schools, other factors also contribute. Children’s health and nutrition, for example, are important aspects of school preparedness. However, indicators for the overall country, and for Punjab in particular, suggest that by the time children enter school, their health and nutrition are already compromised, to the point of affecting their chances of learning or remaining in school. Firstly, child mortality rates are above other countries in the subcontinent. The infant mortality rate in the province is 75 children per 1000 live births, while the mortality rate of children under age five is 95 per 1000 live births, compared to average rates for South Asia of 40.7 and 50.8 respectively. Secondly, a high percentage of children are underweight, stunted or wasted, with great disparities between districts. Almost 30% of children in Punjab are stunted and 10% are severely so, reflecting the accumulative effect of chronic malnutrition. A total of 14% of children are underweight, and 4% severely underweight. Dera Ghazi Khan and Bahawalpur register the highest rates of children underweight and stunted, followed by Multan, Sahiwal and Sargodha.⁶

Poor literacy is also a function of the returns to education in Punjab. The labour market is characterized by a high level of informality, low participation of women in the labour force, and high levels of youth unemployment and disenfranchising. Investing in women’s education would produce the highest returns. At 54%, the proportion of the working-age population of Punjab that is employed is quite low. However, the disaggregation of this average by gender reveals that less than 30% of the women of working age actually are employed compared to 80% of men. Youth unemployment rate doubles the overall unemployment rate. Moreover, a large proportion of young people -29%- are neither in school nor working. For women the proportion rises to 47%.⁷

Studies of the rate of return to educational investment show that each year of schooling raises salary by approximately 5.4 percent in Punjab. The private rate of return in the urban labour market is much higher than the prevailing in the rural market, and overall returns are quite high in the service sector compared to agriculture or industry. Workers with tertiary technical education have witnessed the highest increases in weekly wages in the period 1991-2013. Various studies have found that

⁴ Planning Commission of Pakistan, Government of Pakistan (GOP). 2016. Multidimensional Poverty in Pakistan. UNDP, OPHI and GOP, Islamabad.

⁵ Literacy & Non-formal Basic Education Department, Government of Punjab. 2018. Punjab Literacy & Non-formal Education Policy 2018 (draft)

⁶ Pakistan Demographic and Health Survey 2017; UNICEF MICS 2014.

⁷ All labour market figures are from: ILO (2017). Decent Work Country Profile Pakistan.

investing in women's' education would contribute significantly to improve economic conditions for women and the overall economy.⁸

1.2. Structure and provision of education in Punjab

The SED is responsible for public education from pre-primary to higher secondary. School education starts with Katchi class. These are children of pre-primary age (3-4 years). The primary level includes Grades 1-5 and enrolls children ages 5-9 years. Annual examination of Grade 5 students is conducted by the Punjab Examination Commission (PEC), which is mandatory for students of public schools. After passing the PEC Grade 5 examination, students are promoted to middle school, which consists of Grades 6-8 (official age group 10-12 years). After completing middle school, students must take the mandatory PEC Grade 8 examination. After passing Grade 8 examination, students are promoted to secondary level, which caters for students between the ages 13-14 years and includes Grades 9-10. At the secondary level, students can choose between studying either science or arts. The terminal examinations at the end of both secondary grades (Grade 9 and Grade 10) are conducted externally by the concerned Boards of Intermediate and Secondary Education (BISEs). The final level in Punjab's public school system is the higher secondary level which consists of Grades 11-12; officially catering for ages 15 and 16 years. These grades are part of higher secondary schools as well as colleges with the latter falling under the jurisdiction of the Higher Education Department.

Adult⁹ literacy and Non-formal Education¹⁰ is administered by the Literacy and Non-Formal Basic Education Department (L&NFBED). It is mandated to improve adult literacy and provide non-formal basic education to out-of-school and the socially disadvantaged children of the province. Programs target out of school children as well as illiterate youth and adults. The department complements the SED in providing educational opportunities to students who have either dropped out for long periods or have never enrolled in formal schooling. The Punjab Literacy & Non-formal Education Policy 2019 has been notified and provides strategies for expanding access, improving quality and strengthening governance of L&NFBED.

The SpED currently runs special education institutes/centres/colleges and vocational institutes catering for the educational needs to children of different age groups and educational levels (primary, middle, secondary and higher secondary).

⁸ Jamal (2015). "Private returns to Education in Pakistan – A statistical Investigation", Center for Business and Economic Research Working paper: 15(2)

⁹ PLNFEP 2018-2030 defines an adult as someone 15 years and older

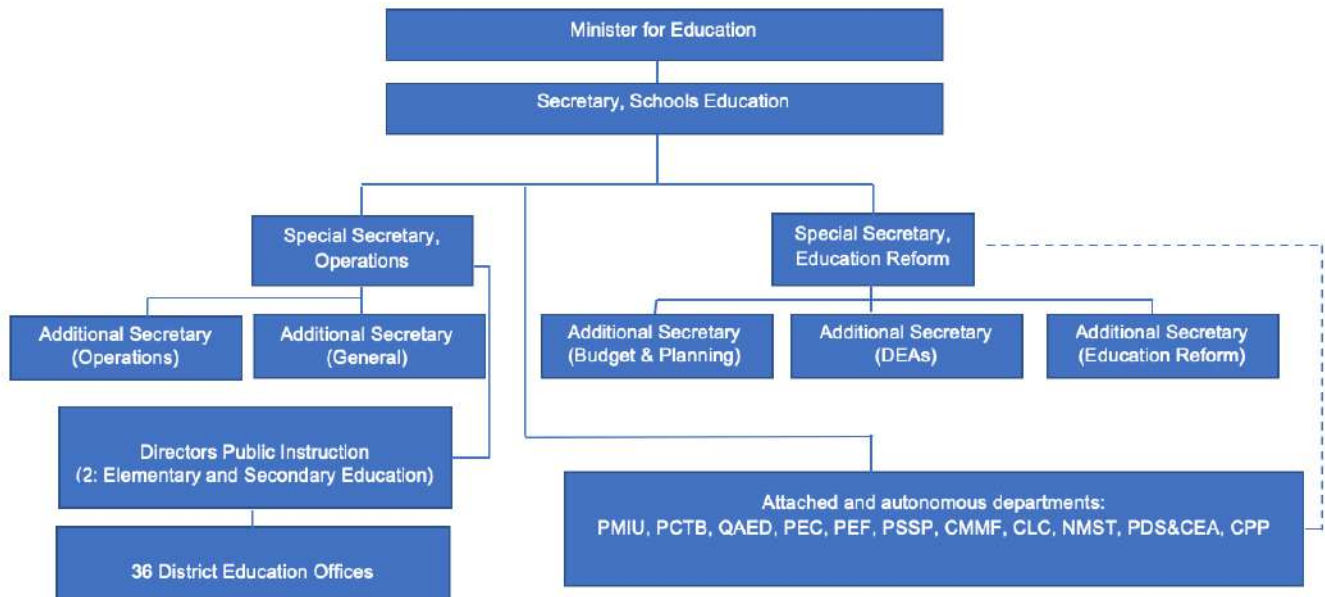
¹⁰ NFE as defined by the PLNFEP 2018-2030: "Non-formal education is one such pathway characterized by a high degree of flexibility and openness to change and innovation in its organization, pedagogy and delivery modes, non-formal education caters to diverse and context-specific learning needs of children, young people and adults worldwide." "The defining characteristic of non-formal education is that it is an addition, alternative and/or complement to formal education (FE) within the process of the lifelong learning of individuals. It is often provided to guarantee the right of access to education for all."

Figure 2: Punjab Education System

Punjab Education System					
Official age	Grade	Formal Education		Non-Formal	
		Exams			
16	12	HSSC	Higher Secondary Level		
15	11	HSSC	Two Streams: Academic or Technical		
14	10	SSC	Secondary Level		
13	9	SSC	Two Streams: Arts or Sciences	Formal TVET	
12	8	PEC	Middle Level		
11	7				
10	6				
9	5	PEC	Primary Education	PNFEP Ages 4 to 15	
8	4				
7	3				TSKL Ages 4 to 15
6	2				
5	1				
4			Katchi (pre-school)	Katchi	Katchi

The Punjab School Education Department (SED), responsible for delivering mainstream education through its public schools, has the following structure:

Figure 3: Structure of Punjab School Education Department¹¹



The Secretary's office is responsible for policy setting and oversight. A designated position has been introduced to oversee reform—the Special Secretary, Education Reform—and this position provides dedicated focus to inputs and interventions to improve enrolment, retention, quality and governance of the education sector. The Secretary's office also oversees 36 district offices (through Directors) and these offices are staffed with male and female district education officials that manage schools. District Offices are headed by District Education Authorities, which comprise of a cross section of members: education specialists, community leaders and technical experts from other fields. A critical role at the district level is that of the Area Education Officer (AEO), who has been charged with ensuring that all primary school inputs are being provided on time, as per requirement, and also providing academic supervision and mentoring to teachers.

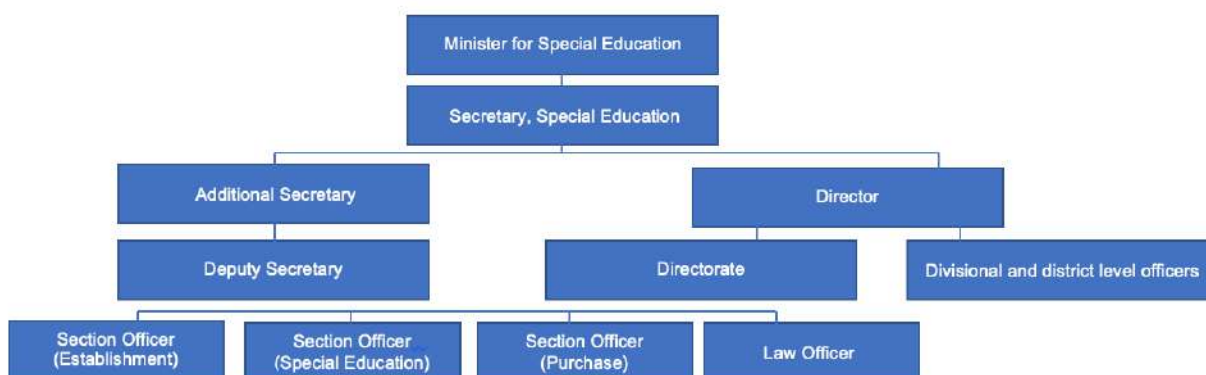
Pre-district review committee (Pre-DRC) meetings led by the Chief Executive Officer (CEO) of the DEA and District Review Committee (DRC) meetings led by the Deputy Commissioner (DC) enable routine performance management at the district level.

All schools have functional School Councils that are parent bodies responsible for supporting school performance and improvement. School Councils are allocated a Non-Salary Budget (NSB) that provides flexibility to meet critical school needs or to contribute to school improvement.

The Special Education Department (SpED) is responsible for delivering education to children with disabilities, and it has the following set up:

¹¹ PMIU: Programme Monitoring and Implementation Unit, PCTB: Punjab Curriculum and Textbook Board, QAED: Quaid-e-Azam Academy for International Development, PEC: Punjab Examination Commission, PEF: Punjab Education Foundation, PSSP: Punjab School Support Programme; CMMF: Chief Minister's Monitoring Force; CLC: Children's Library Complex; NMST: National Museum for Science and Technology; PDS&CEA: Punjab Daanish Schools and Centers of Excellence Authority; CPP: Community Participation Project

Figure 4: Structure of the Special Education Department



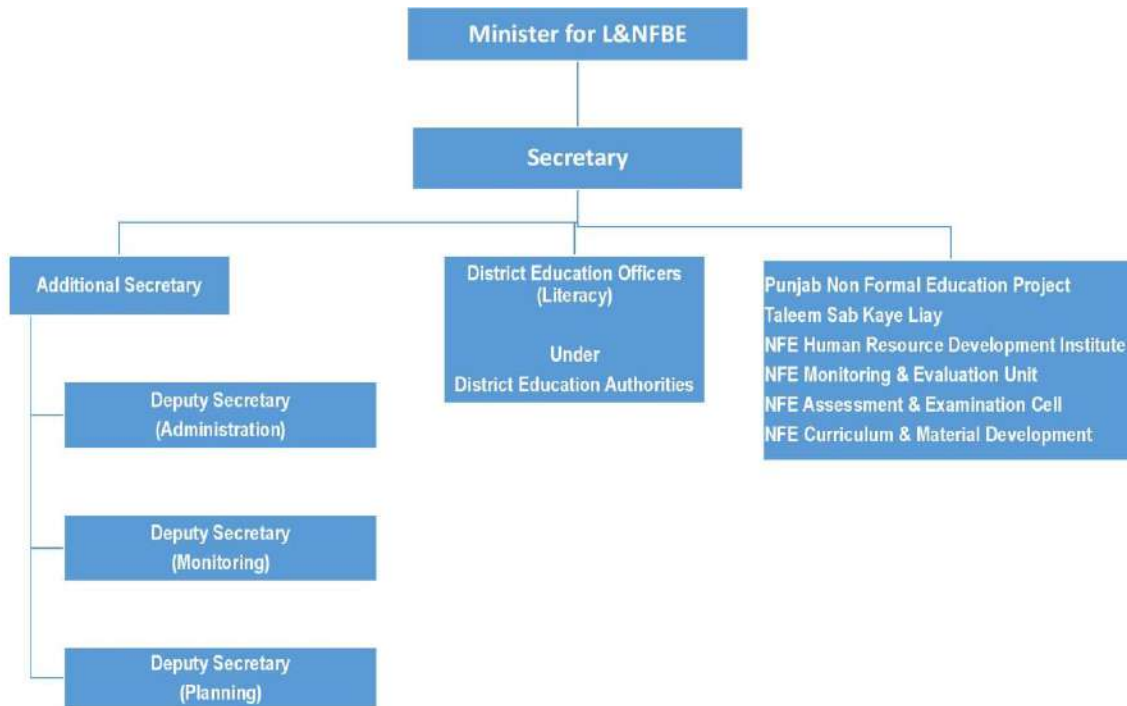
The SpED runs 259 schools for children with special needs, and provides its students with the following facilities:

- free education, textbooks and braille books
- provision of uniforms three times a year
- free pick-up and drop-off facility
- provision of hearing aids, wheelchairs, and any other required supportive device (on a needs basis)
- a stipend of PKR 800/child/month
- skills development/ training courses through partnership with Punjab Vocational and Technical Training Council and TEVTA

While both departments do not collaborate often, they co-managed the Punjab inclusive Education Programme (PIEP) through which select mainstream government schools in two southern districts and PEF schools in seven districts were supported to enrol children with mild disabilities. In participating schools, school infrastructure was enhanced to make it disability friendly, teachers were trained, and support was provided by project staff to identify, screen and enrol children. The PIEP was originally managed by the SpED, but this led to a lack of ownership among government schools and their staff of the initiative. The government has recently transferred ownership of inclusive education to the SED, which means that in the future, education officials at the provincial and district levels will be accountable for ensuring that schools are inclusive for children for children with mild disabilities: in terms of staff competencies and attitudes, student sensitization, infrastructure and accessibility and teaching and learning content.

The Literacy & Non-Formal Basic Education (L&NFBE) Department has the following structure:

Figure 5: Structure of the L&NFBE Department



The Department has three kinds of literacy interventions:

- Kachi, Grade 1 - 3
- Kachi, Grade 1 to 5
- Adult Literacy Centers

These schools are all cohort-based, run by single teachers, often in rooms and courtyards in their own houses. The schools have 55% girls and 45% boys, and 90% of their teachers are female. Once students complete Grade 5, they take the PEC Grade 5 exam, required for students in formal schools to transition from primary to middle. Upon passing the exam, these children are eligible to enrol into middle school. Last year, over 12,000 non-formal students participated in these exams, with a 96% pass rate. However, girls find it difficult to join middle and secondary schools because of distance constraints. The Department is therefore upgrading primary NFBE schools to provide continued access to girls, and providing them the option of taking the Grade 10 exam through the Allama Iqbal Open University. The Department recently carried out a needs-assessment of all its teachers to inform teacher support and trainings, which are delivered through a cluster-based training model. The Department deploys learning managers and programme managers to support and oversee the operation of the centers.

A key challenge facing the L&NFBE is the project-based financing mode through which its schools are funded. Therefore, if a certain number of schools is approved for financing, the Department does not have the flexibility to set up additional schools, even if there is a critical need.

The Technical Education and Vocational Training Authority has the following structure:

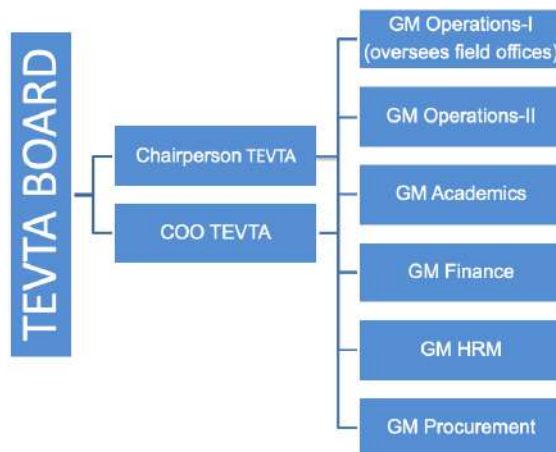


Figure 6: Structure of TEVTA

1.3 Achievements and lessons through the Punjab School Education Sector Plan (PSESP) 2013-2017

The PSESP 2013-2017 envisioned improvements to access, quality, relevance, equity, and management of education. Key achievements through that PSESP included:

Quality

- Preparation of a comprehensive curriculum implementation framework
- Standards development for textbooks and capacity development of PCTB
- Merit-based teacher recruitment
- Introduction of the Punjab Strategy for Teachers Education (PSTE) for improved quality of teacher education
- Standards for teacher education, and revision of the curriculum and training material of in-service teachers reviewed as per National Curriculum
- Improved standards for the development, conduct and marking of PEC exams

Access and equity

- ECE introduced in 5000 primary schools
- PEF schools expanded in underserved districts, offering free education through vouchers and subsidies
- Stipends distributed to middle school girls
- Improved community engagement and role of School Councils; head teachers trained in community mobilization

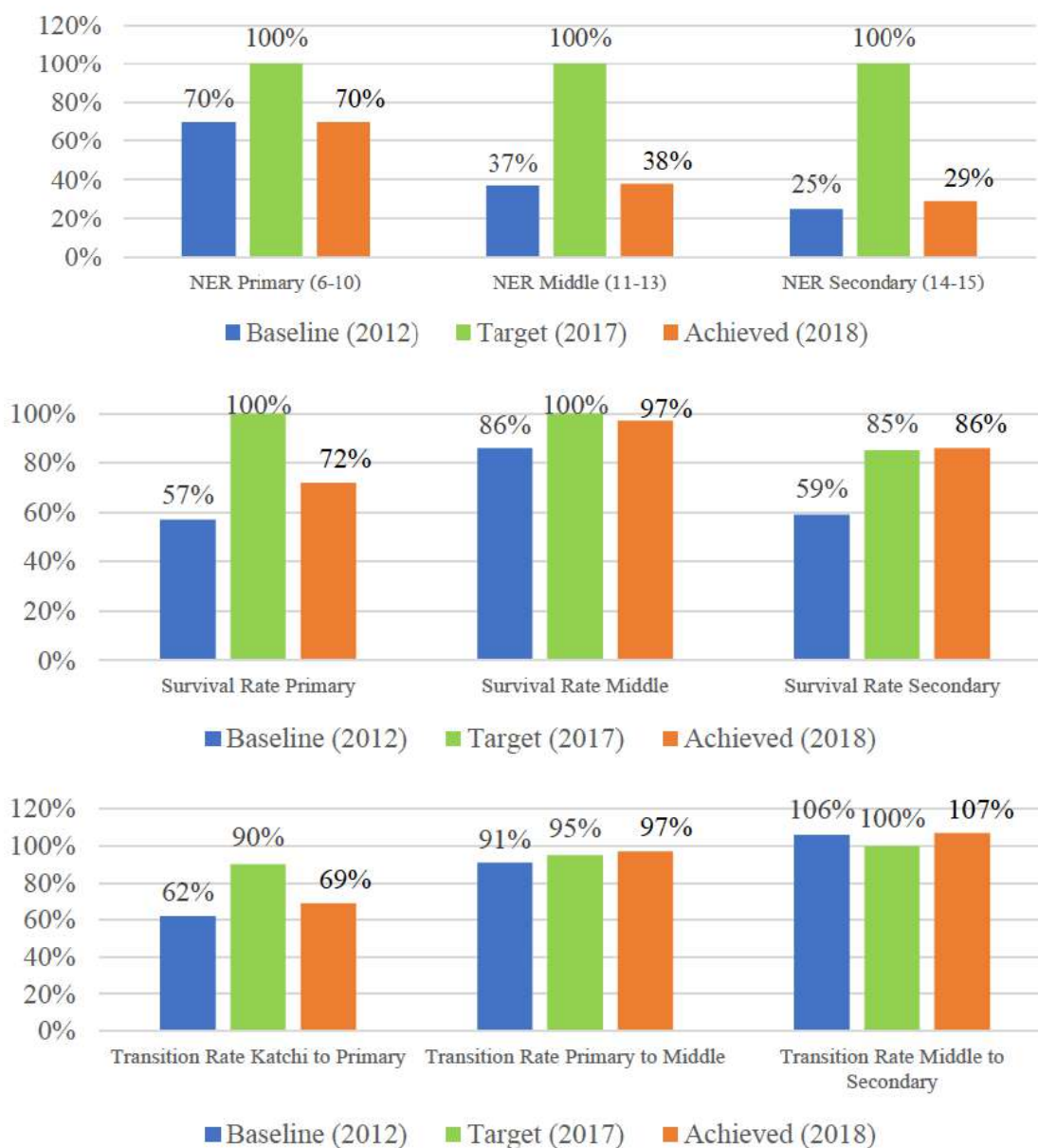
Governance and management

- Districts performance evaluation criteria reviewed and strengthened
- Use of enhanced school monitoring indicators

It was during this time that Punjab introduced innovations such as the PSSP, which facilitated partnerships with the private sector to improve the performance of low performing public schools, established monthly literacy and numeracy tests, and redirected school oversight to quality.

An analysis of the outcomes, however, reveals that while participation and survival rates increased substantially, NER at the primary level remained stagnant at 70%.

Figure 7: Improvements in NER, survival and transition rates between 2012 and 2018



1.4 International, national and provincial policy frameworks guiding the PESP 2019/20 – 2023/24

The PESP 2019/20 - 2023/24 has been developed to build upon previous reform efforts, with a view of fulfilling the mandate of Article 25A of the Constitution of the Islamic Republic of Pakistan. The PESP 2019/20 - 2023/24 also responds to various international, national and provincial commitments.

At the national level, Article 25A of the Constitution of the Islamic Republic of Pakistan requires the State to provide access to twelve years of free and compulsory education to all children between 5-16 years old. In addition, Article 37B requires the State to address illiteracy and provide free compulsory Secondary Education. The 18th Constitutional Amendment decentralized education to the provincial level. Provincial governments are responsible for providing education from pre-school to higher secondary level, formulate education policy, curriculum, planning and standards setting.

At the provincial level, there have been a series of legislation and policies, strategies and plans developed to strengthen and reform the delivery of education in the province of Punjab. The *Punjab Free and Compulsory Education Act of 2014*, while not yet ratified, is the draft legislation elaborating the provision of free education as mandated by Article 25A of the Constitution. The Special Education Department Institutional Plan laying out six core sector plan priorities and institutional capacity required to strengthen the delivery of educational services to Children with Disabilities (CWD) and special education needs (SENs). The draft Punjab Non-formal Education Policy, 2018-2030, is the first NFE policy for the province and seeks to provide structure and organization to the delivery of non-formal education, including a dedicated budget for NFE programming. In the late 2018, the New Deal 2023 was developed and charts a transformative path towards improving the quality of teaching and learning, to ensure that all children benefit from a quality education.

At the global level, Pakistan has committed to achieving the Sustainable Development Goals, particularly Goal 4. Given the size of the education system and the number of children it seeks to reach with quality education, the success of Punjab in achieving its education goals is instrumental to the overall progress of Pakistan.

Table 2. PESP 2019/20 – 2023/24 Global, National and Provincial Commitments

Global	<ul style="list-style-type: none"> UN 2030 Sustainable Development Goals Universal Declaration of Human Rights, Article 26 (1)
National	<ul style="list-style-type: none"> Article 25-A and Article 37-B of the Constitution of the Islamic Republic of Pakistan 18th Constitutional Amendment
Provincial	<ul style="list-style-type: none"> Punjab Free and Compulsory Education Act, 2014 (<i>not yet ratified</i>) The Punjab School Education New Deal 2023 Institutional Plan for Special Education Department, 2017-2020 Punjab Literacy and Non-formal Education Policy (PLNFEP), 2019 approved and notified

1.5 PESP 2019/20 - 2023/24 Goals and Objectives

The PESP 2019/20 - 2023/24 sets an ambitious agenda that seeks to deepen transformations in the education system in Punjab. As a guide for improving the quality of teaching and learning, has established the following goals and objectives for the next five years. It focuses on three key areas: improving quality, increasing access, and ensuring effective leadership and management.

Table 3. PESP 2019/20 – 2023/24 Goals and Objectives

Goals

The overarching goals that have been proposed to guide long-term priorities in education in Punjab are to:

1. Ensure free and compulsory, universal, equitable and inclusive education for all children; at all educational levels including NFE, TVET and lifelong learning; with particular attention to children with special needs, marginalized groups and out of school children; creating safe, protective and enabling learning environments.
2. Ensure quality teaching and improved learning for all.
3. Promote effective leadership, management, governance and education service delivery, and availability of enhanced resources and their efficient use at all levels.

Objectives

In order to contribute to the achievement of the overarching goals, the PESP 2019-2023 has the following general objectives:

1. Promote quality education in a safe, inclusive and conducive learning environment for children
2. Improve teaching and learning practices for better learning outcomes
3. Provide adequate and sufficient access to education for children from pre-primary to secondary (including marginalized and children with special needs) and youth/adults
4. Strengthen governance of the education sector for equitable access and high-quality education

2 Strategic Areas and Priority Programmes

The strategic areas and priority programmes for the PESP were identified through a collaborative, participatory process and extensive sector-wide consultations at different levels of service delivery (provincial, district and sub-district). A Punjab Education Development Partners Group (PEDGP) and Steering Committee, headed by the Secretary, SED, were set up to guide the process. In the light of the challenges that the education system in Punjab still faces at the basic education level and the mandate of Article 25A of the Constitution of the Islamic republic of Pakistan, the PESP focuses on the needs of children ages 5 to 16.

This chapter presents the three strategic areas of the PESP 2019/20 – 2023/24. The strategic areas respond to the challenges presented in the Education Sector Analysis, a summary of which has been included as an annex to this document.

- 1) Quality and Learning Outcomes
- 2) Access, Retention and Equity
- 3) Governance and Management

For each strategic area, the plan outlines priority programmes and the objective for these programmes. Each strategic area also responds to the vision set forth by Article 25-A and Article 37-B of the Constitution of the Islamic Republic of Pakistan, the international commitment subscribed by the country in relation to the Sustainable Development Goals (SDGs), in particular SDG 4, and strategies outlined in the New Deal 2018 - 2023.

The New Deal, 2018-2023

The New Deal embodies the following principles:

Developing skills and knowledge: Ensure every child, irrespective of gender, location or socio-economic class should learn appropriate skills and knowledge to help him or her prepare for a better future.

Promoting equity: Provide every child access to a public-school programme that meets basic standards, irrespective of gender, location or socio-economic background. This is critical to the creation of a fair and just education system that bridges existing differences between public, low-cost private, and elite private schools.

Developing Pakistanis: Embedded in our national ideology and culture, nurturing children into productive citizens who are equipped with the knowledge and understanding to engage and contribute as active citizens in all walks of life.

Clean and Green Pakistan (CGP): Every student, teacher and the school will be aware of their responsibility and the role towards environment through conservation and plantation. Every school will play its role not only in tree-plantation campaigns, but also in raising a generation of children who value and strive for protection and preservation of our environment.

It's vision for education reform prioritizes learning, access and retention, and governance. Areas of focus are:

LEARNING

1. **Transform teacher effectiveness** through quality teacher education and continuous professional development
2. **Strengthen basic competencies** at the primary level
3. **Reform post-primary education** through restructured curriculum and assessment that prepare students for further learning while nurturing a strong sense of identity and citizenship

ACCESS AND RETENTION

1. **Improve access, retention and equity** through innovative and contextualized marginalized communities for provision of education.
2. **Improve and scale high-quality pre-primary education** by setting up child-friendly classrooms, taught by trained teachers and equipped with extensive learning material

GOVERNANCE

1. **Strengthen SED** capabilities by developing technical and managerial leadership through a strong data management regime.
2. **Empower school leaders and administrators** to inculcate a sense of responsibility and ownership of systemic improvements.
3. **Streamline public private engagement** to regulate private education and align the efforts of private actors with the department for optimal results.

In addition to their contribution to government commitments, these three strategic areas also mutually reinforce and build upon each other.

There are four major reasons for low enrolment and high dropout levels in Punjab. Two are supply-side: distance from school and quality of education. Two are demand-led, but linked to supply side constraints: financial constraints and low value placed on education. For example, the quality of schooling is associated with demand for schooling. Often, low and late enrolments and high dropouts in public schools are associated with the perception of low quality of public schooling in Punjab. Even if parents are able to enrol their children into school, the low to negligible returns to schooling do not create an impetus for them to ensure that their children start at the right age, attend regularly, perform well, and stay on. They invest low effort into their children’s schooling because of the low returns to this investment. Improved schooling outcomes will prompt greater demand for schooling, which in turn will contribute to improvements enrolment, retention and equity. As greater numbers of children enrol into school, over time, the government can gradually shift gears from access and equity towards quality and learning outcomes. A larger proportion of resources can be targeted to improving teaching and learning resources and processes for continued improvement. Improvements in both these areas, in turn, cannot be possible without efficient and responsive governance and management at all levels: this ensures that requisite resources are available on time and that they are used transparently and effectively to deliver results as per expected standards.

2.1 Strategic Area 1: Quality and Learning Outcomes

By placing Quality and Learning Outcomes as the first strategic area, Punjab is making a clear statement about its focus on student performance. A decade of focus on access has enabled the government to enrol 90.4%¹² of children into school, with the participation rate in Punjab is at its highest in the history of the province. With such a large number of children in school, the government is simultaneously faced with an opportunity and a challenge: **the opportunity of an educated youth able to contribute to society and the economy, and the challenge of educating them well, so that their contribution is meaningful.**

This challenge is complex: the province’s public education sector is the size of a country, with 52,470 schools, up to 200,000 non-teaching staff and 385,000 teaching staff. To enable all its children to learn well, Punjab needs to guarantee quality schooling in all its schools, and to address the disparities caused by overcrowding and multi-grading, variations in school infrastructure and teacher capability, and delays in the provision of textbooks.

¹² Bureau of Statistics, 2017

The New Deal on Learning

Every student in Punjab should be able to read and engage with basic concepts of mathematics by the end of primary school and develop increased higher-order thinking in secondary school.

Transform teacher effectiveness

Teacher education: Pre-service teacher training; Punjab Education Professional Standards Council; Revise Continuous Professional Development; ECE teacher training

Teacher support through accessible material from primary to secondary

Formal routines for **teacher participation** into curriculum, textbook and assessment revisions and reform

Strengthen basic competencies

Revise instructional language to Urdu at the primary level, and teach English as a subject

Develop strong basic competencies in Grades 1-3 (including literacy and numeracy), and strengthen independent reading by Grades 1 – 5

Introduce **formative assessments** at key stages, starting with Grade 2

Reform post-primary education

Assessments: phase in formative assessments at all post-primary levels; reorganize assessment bodes

Quality education facilities: enable a conducive learning environment; introduce the concept of Science, Technology, Engineering, Arts and Mathematics

Quality education is a function of several, closely linked inputs: a curriculum that meets prevalent learning and development needs, textbooks that enable children to understand and apply lessons, teachers who come to school regularly and know their content well, and are able to respond to the learning needs of *all* the children in their classrooms, schools that are safe and adequately resourced, and assessments that credibly measure student performance and are used to inform improvements.

2.1.1 Priority programmes 1 – Objective: Improve teaching and learning practices for better learning outcomes

Learning achievement

The ASER survey in 2016 drew attention to literacy and numeracy levels among students in Punjab. The box below highlights key findings from the ASER survey.

Box 1: 2016 ASER survey highlights

- 35% of Class 5 children could not read a Class 2 story in Urdu and 44% of Class 3 children could not read even a simple sentence in Urdu.
- Reading levels for Class 5 children have deteriorated with respect to 2015. Basic reading skills are essential for further comprehension and are the foundation over which other competencies build.
- Arithmetic learning levels show that 40% of Class 5 children could not perform a two-digit division and 42% of Class 3 children could not do a simple subtraction.¹
- 43% of Class 5 children could not read English sentences and 49.4% of Class 3 children could not recognize words in English, at Class 2 level.
- Most of the children who are out of school are unable to read in Urdu (81%) or to recognize the first nine digits (82%).

The National Achievement Test (NAT) conducted by the National Education Assessment System (NEAS) in 2016 assessed learning achievement for Maths and Urdu language among a sample of students enrolled in Grade 4, and Science and English language among a sample of students enrolled in Grade 8, across the country. On average, girls performed better than boys, and students in urban schools scored higher than those in rural schools, in both grades 4 and 8. Assessment of English is also relevant, since it has been one of the mediums of instruction in schools in Punjab. There has been a consistent drop in students' achievement in English language since 2013. This puts into question the adequacy of the current language policy in the province. This sector plan recommends Urdu as medium of instruction at the primary level and English as the medium of instruction at higher levels, a proposal that is aligned with the current government's vision. While this may improve learning outcomes in the early grades, it will be also important that students become proficient in English to ensure successful transition as they progress through education. Currently, many students do not have access to all requisite textbooks. While the government has a mandate to provide all students with textbooks, seemingly the textbooks are either not available or they reach the children late in the school year.

Relevance of Curriculum

The situational analysis of the quality components of the school education sector argues that the current curriculum does not focus sufficiently on meaningful learning and that too much emphasis is placed on rote memorization. Moreover, there are significant reservations concerning the external relevance of the curriculum. It is posited that the curriculum needs to add a focus on life skills and ensure its relevance for developing a skilled workforce in Punjab.

Studies conducted in 2017 under the scope of the curriculum implementation framework, a broad policy guideline regarding development of learning materials, professional development of teachers/instructional delivery systems, and assessment of students' achievement, identified a number of key areas to be reflected in the revised curriculum. This included the need to produce creative, constructive, communicative and critical thinking youth, and ensure that students acquired in-depth knowledge and are prepared to participate in the highly competitive globalized knowledge-based economy. Values or citizenship education and what are sometimes referred to as the 21st century skills of communication, collaboration, critical thinking and creativity, are now deemed to form necessary components of what may be described as quality education.

Medium of Instruction

Research indicates that students taught in their mother tongue show superior overall academic achievement to those who study in monolingual second-language systems. Students who learn in their mother tongue also show superior achievement in mathematics, and their achievement in the second language is at least as high as that of students in the monolingual second-language system. Students who learn in their mother tongue acquire additional linguistic competencies in their mother tongue, which contribute to a sound foundation for further learning, participate more actively in the learning process and feel more confident about their learning¹³.

As discussed earlier, English is currently a language of instruction in Punjab. Recently however, the government carried out a survey with key stakeholders (teachers, parents and students) in 22 districts, and over 95% opinion in every category favoured Urdu instead of English as the medium of instruction. The government has therefore decided to re-introduce Urdu as the medium of instruction at the primary school level, with English being taught as a subject.

Teachers' qualifications, competencies and professional development

Compounding the concerns over low levels of student achievement is the qualifications and competencies of the teaching workforce. A major and sustained effort must be made to recruit, train and deploy teachers effectively. The education sector analysis notes that inadequate pedagogical skills, lack of proficiency in English language and low levels of teacher motivation plague the teaching workforce in Punjab, and must be urgently addressed. Additionally, training should include the teaching of multi-grade classes since this is a common practice in many public schools. The low levels of teacher motivation may have been engendered by public perception of the status of the profession, and unconducive school and classroom environments. Additionally, teachers attached to special education centres need thorough training to meet the diverse needs of the children enrolled in these centres.

There have been considerable additions to the teacher workforce over the years 2013-2017, with the number of primary school teachers rising by 47%, and overall volume of public-school teachers increasing by 25% resulting in improved Student Teacher Ratios (STR). Currently, the SED has 448,448 sanctioned positions, out of which 384,619 are filled (196,901 in girls' schools and 187,718 in boys' schools)¹⁴. The split between schools is provided in the table below:

¹³ UNESCO, Mother Tongue Matters: Local Language as a Key to Effective Learning, 2008.

¹⁴ PMIU

Table 4. Breakdown of teacher by school level

School Level	Teachers
H.Sec.	25,508
High	135,254
Middle	88,336
NULL	7
Primary	134,804
Mosque	710
Total	384,619

As some studies in Punjab have found, teachers' basic subject knowledge and their ability to transfer knowledge to students are limited. There are difficulties with the supply of competent teachers with adequate subject knowledge, particularly with respect to Science, Math and English. On assessing teachers in three districts in Punjab, the TEACH project found that teachers scored on average 82.7% and 87.5% on literacy and numeracy tests based on the curriculum they are meant to be teaching. The gap between their own scores and those of their students reveals that teachers also have difficulty transferring their own level of knowledge to the students.¹⁵

Teacher recruitment policies have evolved but require adjustment to ensure that qualified and dedicated teachers are recruited. The 2017 policy, put in place a more robust and transparent recruitment procedure, introducing merit-based recruitment through the National Testing Service (NTS). However, it is not implemented across the province consistently. The teachers would also need to have, among other things, the minimum in terms of qualifications and competence.

Successive reforms raised the professional qualifications for primary school teachers and elementary school teachers. As a result, one in four of these teachers have a primary teaching certificate or certificate of teaching, and there are many more teachers in the system with a master's degree. However, there is considerable variance in quality at the level of academic institutions—the value of a degree awarded by one institution being vastly different from the same degree awarded by another. At present, the only quality assurance mechanism is endorsement of the degree-granting institution by the Higher Education Commission (HEC) and a system of ranking presided over by the Commission. However, this still leaves a very wide gap in terms of ascertaining what a degree represents in terms of knowledge and higher order skills. The NTS can only be regarded as a partial measure in terms of addressing the issue of teachers' competence.

Teacher training and professional development have undergone reforms over the last decade, including focus on content and pedagogy, but the quality, duration and organization is insufficient. Teachers have limited pre-service training on important issues relating to classroom management and quality of teaching and learning. Information from the Teaching Effectively All Children (TEACH): project¹⁶, delivered by The Faculty of Education at University of Cambridge, reports that surveyed teachers did not receive pre-service training for: multi-lingual settings, diverse classrooms, working

¹⁵ REAL Centre and IDEAS (Mimeo), University of Cambridge and IDEAS

with poor children, or children with special needs – critical areas for teacher development in the Punjab.

The Continuous Professional Development (CPD) model, delivered by the SED, aims at monitoring teacher performance and providing support in a decentralized framework. With the establishment of the Quaid-e-Azam Academy for Educational Development (QAED), training was further decentralized by setting up Academic Development Units (ADUs) at the provincial, district, tehsil and cluster levels. QAED has established partnerships with other institutions to provide high quality training, has developed training modules for professional development, provided induction training, etc. However, the model cannot be fully implemented due to budgetary constraints.

An adequate number of teachers would only be the starting point. Teachers need to be in schools on a continuous basis. Given that 89% of schools are in rural areas, female teachers can be inducted in these schools (including boys' schools) if they can be recruited on merit. Teacher presence has already risen steadily across primary, elementary and secondary grade levels since 2012. These improvements are largely attributed to improved management and frequent administrators visits from a monitoring and performance evaluation perspective.

Learning assessment system

Reliable and routine assessment data can provide valuable insight on the performance of different student groups, and the underlying factors that influence performance. For example, geographical disparities could potentially be caused by disparities in teacher performance, and poor province-wide performance on certain topics could potentially be attributed to textbook content. Assessment data can also be triangulated with school inputs and other data to help determine correlates of student data.

The lack of a coherent learning assessment policy in Punjab has created a challenging environment to effectively collect and utilize data and then translate findings into policies, plans and activities across the three main education authorities at the provincial level and at decentralized levels. Assessments are conducted by different agencies, are administered at different intervals of time, have varying sample sizes and levels of representativeness, carry varying stakes for different stakeholders, and do not include enough information to be able to correlate of student achievement. It remains unclear how assessment data is used to inform improvements in teaching and learning and how these two aspects relate to one another. In Punjab, assessments have been used for many years to measure student learning. However, there is little evidence to suggest a heavy focus on assessments or other monitoring mechanisms have resulted in improved learning outcomes in the province. Furthermore, the results of the assessments have little bearing on student promotion as the province's automatic promotion policy generally means that even low achievers are promoted. Thus, there is a need for a more coherent students' assessment system to be effectively used to improve teaching and learning in the classroom, and for the promotion of students to be based on the attainment or mastery of learning outcomes.

Punjab is introducing an assessment policy framework, which proposes school-based formative assessments, with PCTB responsible for providing improved, enabling content and QAED responsible for training teachers. The framework also recommends that PCTB and QAED's service delivery respond to the results of PEC and other exams. A Technical Committee has been

constituted, consisting of representatives from the government and experts from development partners to oversee the development of the framework through a consultative process.

Inequality in learning outcomes

The socio-economic factors that shape inequality of opportunities in access to schooling are echoed in inequality of learning outcomes. Children from poorer households present lower levels of learning than those from wealthier households in all the basic literacy and numeracy areas assessed. Children from wealthy families, for instance, are more likely to achieve the highest order skills, whereas poorest children tend to be unable to read or to identify digits up to nine. Moreover, this gap has persisted without major change since 2012.¹⁷ Poor children are also less likely to attend school, as written earlier. The ASER report shows that most of the children who are out of school are unable to read in Urdu (81%) or to recognize the first nine digits (82%).

The NEAS NAT from 2016 provides some valuable insights on correlates of student performance:

- Content-based training, provision of teacher guides and teaching kits to all schools can improve teaching and learning processes (at fourth and eighth grades)
- Transfer of teachers during the academic year is detrimental for schools
- Parent engagement helps reduce student absenteeism, which in turn improves learning outcomes
- Lack of audio-visual aids impacts quality teaching

TVET System

Significant strides have been made within the TVET system in Punjab out of recognition of its importance to overall economic development. Technical institutes have been set up in almost all tehsils across Punjab and can provide an alternative conduit for children who drop out of school because of demand side constraints.

However, TVET pathways or links within the general education system have not been developed; students from formal schools cannot therefore seamlessly transition from the formal school system to TVET. Currently, about 30,000 students are enrolled in government TVET programmes.

Assessments of the TVET sector in Punjab emphasize that the quality and relevance of the training delivered is not according to the demands of the job market. The capacity of the TVET system in terms of developing linkages with industry is limited, there is a shortage of qualified trainers, and the curricula is not in line with the changing requirements of the markets. Some restructuring of the system is necessary. Critical challenges include accessibility, mismatch with labour market needs, weak policy support, and inadequate and underqualified instructors. The restructuring of TVET in schools in particular, could focus on refurbishing and upgrading workshops in schools, development of competency-based curricula and certification and training of instructors.

¹⁷ e-Pact (2018). First Interim Evaluation Report on the Punjab Education Sector Programme. Draft.

TVET opportunities for girls, women and minority groups

Punjab has 23 district level Technical Education and Vocational Training Authorities (TEVTAs) and runs 169 vocational and nine technical institutes for just women. The institutes are located in all districts, at the town level, and provide qualifications from middle to matric levels, with a few also providing qualifications at the primary level. Trades taught in these institutions include embroidery, cooking and food technology, hair and beauty therapy, hospitality, dress design and making, arts and craft, information technology, architecture, electricity and electronics, textiles, and communications (Chinese and English). The duration of programmes ranges from months to six years. The government is in the process of launching a Hunarmand Naujawan programme targeting 60,000 boys and girls, in collaboration with the federal government.

TEVTA does not have any ongoing collaboration with the SED or the L&NFBED, but is designing a programme for children who are visually impaired. The Punjab Skills Development Fund (PSDF) has also delivered technical education to 500,000 students

mainstream schools, and to direct them in those tracks. Demand for TVET can be encouraged through communication programmes that help improve public perception of technical and vocational education.

Priority Programmes 1

These priority programmes aim to transform the learning environment from one that focuses on transferring knowledge to students to cultivating critical thinkers. Ensuring that qualified teachers are recruited, trained and supported throughout their career is essential to realize this transformation. Teaching and learning materials will be revised and made available in all classrooms in Punjab. The system of assessments will be rationalized and focus on measuring student progress across the province, in supporting teachers in the classroom, and providing feedback for system improvement.

Programme 1.1 – Efficient supply of quality human resource

Specific objective: Introduce standardized recruitment and deployment of educational practitioners and managers at all levels

To ensure that qualified educators and managers are recruited and deployed, the PESP will improve:

- The recruitment system for selecting personnel, based on competency and standards. Deployment will also be based on needs and ensure that personnel are qualified to perform their duties. SED will introduce standardized deployment of educational practitioners and managers at all levels. Standardized recruitment and transfer policies will be introduced.
- In line with the New Deal, an authority to regulate teacher licensing and certification will be established in the first year to ensure that reforms can proceed throughout the remaining years of the PESP implementation. A teacher licensing bill has been developed, and is under review by the GoPb's Law Department. This bill, called the Punjab Education Standards Development Authority (PESDA) Bill, will notify an authority that will be responsible for the following:
 - formulating and implementing policies for teacher development
 - ensuring merit-based appointment of staff in public sector schools
 - monitoring compliance to the standards proposed by PESDA
 - prescribing regulations, procedures and making arrangements for licensing, mandatory certification and accreditation of staff;

- monitoring quality assurance of education staff;
- prescribe conditions and procedures for the withdrawal of a license, certification or recognition of the professional status, and to deal with professional misconduct of the staff

This bill is expected to be presented to the Cabinet and then the provincial Parliament for enactment. Following this enactment, PESDA will be responsible for maintaining a teacher licensing and accountability regime in the province.

- Continuous Professional Development (CPD) will be built into a Teacher Career Progression Track
- Strengthening ECE is a priority of the PESP. The SED will be responsible for recruiting qualified ECE teachers, including creating a pool of qualified teachers that can be deployed as additional ECE spaces are established. QAED will support the SED with developing the ECE teacher training plan.
- The SED will also focus on developing an education management cadre, which will be trained on core management skills (including human resource and financial management) that they can use to oversee and monitor efficient delivery of education at sub-district and district levels.
- The teacher transfer policy will also be revised so that transfers are purely needs-driven and are not disruptive to the academic calendar. The SED has already planned improvements to its online teacher transfer and posting portal and envisions all teacher transfer and posting orders to go through this portal.

Programme 1.2 – Teacher training

Specific objective: Provide quality pre-service, induction and in-service training to education professionals

Having a qualified and motivated teacher in a classroom is essential for children to learn and progress, and is a key driver for improved learning outcomes.

- Strong pre-service programmes ensure that teachers gain theoretical and practical experience, both skills and content, before entering the classroom. While pre-service teacher training is not within the mandate of the SED, the SED can support improvement of pre-service training by liaising with the HED and helping inform the curriculum, design and content for pre-service teacher education programme, so that the education that teachers receive is relevant to teaching and learning requirements in Punjab's public schools. Induction programmes will also be strengthened with the introduction of new material and techniques that focus on developing basic pedagogy and content knowledge. Action research will be explored, encouraging and supporting teachers in pre-service and induction programmes to implement their learning in real classrooms and then return to training to reflect on their experiences.
- Once in the service, teachers will continue their learning and professional development. Research suggests that teachers with experience in the classroom benefit more from professional development opportunities because they have real experiences from which to draw and share with other teachers. The New Deal places emphasis on revising CPD and linking it to teacher career progression, including developing new approaches that will focus on development pedagogical skills, content knowledge and assessment skills, including formative assessment. Teachers will benefit from school-based CPD activities that will include mentoring, classroom observation and developing communities of practice. CPD will be implemented in phases. It will focus on training needs derived from the context in which teachers and other education personnel (principals, head teachers,

- administrators) work. Localized CPD solutions and processes can prove to be an effective strategy to reduce learning disparities among student groups (by geography, gender, special needs etc). The revamped CPD program will be started in six lagging districts in year 1; twelve districts in year 2 and so on. Similarly, to improve reading habits in students and teachers, libraries are being provided in eleven priority districts.
- CPD programmes will be informed by results of routine assessments, teacher feedback of the programmes and self-identified training needs, and by routine evaluations of training programmes for relevance and effectiveness.
 - An ECE training model will be developed.
 - AEOs will be empowered to provide on-going support to schools, head teachers and teachers, including observation and mentoring. QAED has initiated a programme to train all education managers at the district level; the programme will be complete in 2020.
 - For NFBE schools' teachers, literacy centres teachers, and managers that support them, the L&NFBE Department will develop a mechanism for continuous professional development. The Department has a pool of programme and learning managers deployed in all districts, and already provides cluster-based trainings to teachers through these managers.
 - A recent training needs assessment of NFBE teachers revealed district-level disparities in teacher content knowledge. Teachers in Toba Tek Singh scored the highest while those in Nankana Sahib scored the lowest. This TNA will inform the design of a CPD that provides localized training to teachers.

Programme 1.3 – Quality teaching and learning materials

Specific objective: Make available quality textbooks, and other teaching and learning materials

Not all schools in Punjab, particularly rural and hard to reach areas, are properly equipped and can be under-resourced, lacking basic teaching and learning materials.

- The GoPb envisions the role of PCTB to be that of a regulator; to review and approve manuscripts developed by external individuals and agencies, in line with a revised curriculum from primary to higher secondary levels.
- The PESP envisions that the PCTB and the PMIU will enable all schools and classes (from pre-primary to higher secondary level) to have quality textbooks as well as other teaching and learning materials, such as student workbooks, practical notebooks, and teacher guides.
- PCTB will coordinate with relevant partners to ensure timely delivery of textbooks and relevant material for both public and private sector schools.
- Materials will be aligned with the standards and competencies planned for each grade. Special emphasis will be placed on ECE, ensuring alignment with the new ECE policy, and early grade and grade 1-3 materials to ensure that children develop mastery of foundation knowledge.
- PCTB will be reinforced to have the required capacity to develop curriculum, assessment and instructional materials. PCTB will undertake research and development to obtain feedback from relevant stakeholders into curriculum and material development and review. Capacity development can be supported by development partners in Punjab. PCTB will work with relevant academic institutions to develop content, ensuring that the classroom context is considered when developing materials. Teachers will have the opportunity to provide feedback, especially on curriculum and textbooks, and ensure that

- curriculum and textbooks are inclusive, and that there is no direct or implied bias towards girls, minority groups and religions, marginalized children and those with disabilities.
- A new accountability system will be utilized to ensure efficient procurement and delivery of textbooks.

Curriculum Reform in Punjab

PCTB has developed a new Scheme of Studies with a focus on emerging trends, modern developments and scientific learning in various subjects at appropriate levels. In this Scheme of Studies, the subject General Science has been replaced with 'Science & Technology'. For grades 9-10, two new groups, (i) Technology / Technical and Vocational Education Group and (ii) General Science / Business Administration Group, have been introduced. For grades 11 and 12, four new groups namely Pre-Medical and Allied Health Technologies Group, Pre- Engineering Technologies Group / Technical & Vocational Education Group, Pre-Agriculture / Veterinary & Animal Sciences Group and Fine Arts Group have also been included. This Scheme of Studies also discourages rote learning and promotes multiple textbooks. This will be supported with gradual changes to curriculum-based examination, rather than textbook-based exams.

PCTB has also revised the curricula of all compulsory subjects for Grades 1 to 10, keeping in view special issues like environment education (including sanitation, safe drinking water and hygiene), prevention education against fatal and infectious diseases, population and development education, human rights education, disaster risk and crisis management, peace and value education, inter-faith harmony, life skills based education, gender awareness and women empowerment, child rights, child abuse and other emerging trends etc. These revisions to the curriculum are in line with the aspirations of the PESP.

Programme 1.4 – Learning assessment

Specific objective: Develop a quality learning assessment system based on standards, with support mechanisms and feedback loops between the classroom, school and policy levels

Currently, there are several regimes of exams, including high stakes exams that determine transition and promotion as well as other lower stakes school based and formative exams.

- PEC has led the revision of the provincial Assessment Policy Framework, which recommends two kinds of assessments: system level assessments and school-based assessments. System level assessments will include literary and numeracy tests. School based assessments will consist of formative and summative assessments. These assessments will be supported by PESP.
- The Framework recommends standardized universal exams only at the Grade 8 level, and delivery of the Grade 5 exam at the school level, with PEC initially providing exam papers until schools have the ability to so.
- School-based assessments will be organized three times during the academic year.
- Formative assessment will focus on improving classroom teaching practice with a focus on student learning, informed by student performance. Formative assessment will be a continuous process that can happen on an as needed basis or upon completion of a topic.
- Previous reforms to PEC exams attempted to introduce questions anchored to student learning outcomes (SLOs), and to replace constructed response questions that tested recall with questions that tested understanding and application of knowledge. PESP will continue the emphasis on higher order thinking skills in PEC exams and will also help

- revamp the Boards of Intermediate and Secondary Education (BISEs) to improve their exam papers as well.
- In alignment with the New Deal, the PESP will introduce a strong focus on Science, Technology, Engineering, Arts and Mathematics (STEAM) in middle school by prioritizing reform efforts in curricula, teacher support, and assessments around STEAM subjects. The subject Science has already been replaced with Science and Technology.
 - Examinations and assessments generate a wealth of data that can be used to inform improvements in teaching and learning processes. The PESP therefore repeatedly emphasises feedback loops between the PEC, QAED and PCTB so for a synchronised effort to improve teaching and learning.
 - While PEC has relevant and highly qualified personnel, analysis of PEC scores is usually supported by development partners, including DFID's Punjab Education Sector Programme II and UNICEF. PEC will be supported to develop and codify exam analysis and reporting procedures so that meaningful insights can be generated to inform PCTB and QAED.
 - An institutional strengthening plan will be developed for PEC, and this will include a staff capacity building plan
 -

Teacher training, textbooks and supplementary material, will be designed keeping in mind the following government priority programmes to promote more holistic development of students.

Programme 1.5 – Critical thinking

Specific objective: Promote critical, scientific, and analytical thinking in all spheres of education

In order to improve learning outcomes of children and cultivate life-long learners, it is critical to move from rote learning to learning for understanding and application, which helps develop skills that promote critical thinking. Students learn to analyse, interpret and apply creative thinking to solve problems and form conclusions. To realize this, there is a need to transform teaching processes that currently focus on passive approaches and teaching for examinations. Over the next five years:

- teacher training and professional development will support teachers to develop the competencies needed to promote critical thinking in the classroom.
- textbooks will also be revised and introduced by 2020, as noted in the New Deal.
- the examination system will be enhanced to allow for more formative assessment moving away from multiple-choice questions that promote memorization to assessments that allow learners to express their understanding.
- students will also learn in Urdu throughout primary education, to ensure that all children are able to develop the foundation needed to continue their education beyond this level.

Programme 1.6 – Wholesome personality development

Specific objective: Promote extra- and co-curricular activities and life-skills based education to ensure wholesome personality development

Currently, rote memorization with little emphasis placed on applied learning is the standard practice in Punjab.

- The PESP focuses on transforming the learning experience from a system whereby children are provided knowledge to children developing knowledge.
- Enhancing the learning experience for children through extra- and co-curricular activities can reinforce concepts and allow children to practice and develop their knowledge,

- understanding and skills. They can also promote health and well-being and offer stimulating alternatives to traditional learning processes.
- Educators will receive training and schools will be equipped to support learning opportunities, including the provision of recreational materials. Moreover, career counsellors will be assigned to elementary and secondary schools to provide academic support and guidance to children.
 - The government has committed to developing a Punjab School Sports Strategy for its government schools.
 - The UKAid funded School Reconstruction and Rehabilitation Programme has committed to installing 1000 science and computer labs and rehabilitating 400 libraries in schools

Programme 1.7 – Elements of sustainable development

Specific objective: Promote inclusion of elements of sustainable development and sustainable lifestyles, human rights, gender equality, environment-friendly behaviour, culture of peace and non-violence, tolerance, democratic values, social cohesion, global citizenship, and appreciation of cultural diversity and of culture’s contribution to sustainable development into teaching and learning activities

The PESP envisions cultivating the student holistically: not only focusing on academic achievement and mastery of foundational and transitional skills, but also on a broader appreciation of the importance of sustainable development and cultural diversity in an increasingly globalized world.

- This includes integrating critical thinking on issues related to environmental changes, sustainability, and disaster risk reduction into the curriculum.
- Teachers will also be trained to engage students in these topics, not only theoretical, but also practically in interactive, learner-centered ways that encourage exploratory and action-oriented learning. This objective is grounded in SDG 4.7.

Programme 1.8 – Technical, vocational and technology-oriented education

Specific objective: Introduce technical, vocational and technology-oriented educational streams

Punjab has large young population that increases pressure on the education system to graduate students with employable skills. However, there is a mismatch between what children and youth learn and the skills required to find gainful employment.

- PESP will support the development and provision of demand-driven technical courses instead of traditional supply-oriented approaches. An assessment of labour market needs at the local level will inform the development of specialized courses for trades in demand.
- Courses will be gender responsive, and girls’ participation will be promoted.
- Courses will also include soft skills that promote critical thinking, problem solving as well as entrepreneurship and management. This will ensure that students have both technical and vocational as well as soft skills needed to adapt to changes in the labour market.
- If students are required to transition to PVDCs and TEVTAs, the responsibility for a smooth transition will rest with Head Teachers and AEOs. TEVTAs provide short courses and diplomas in a variety of skills, and can provide a valuable re-route for children who drop out due to demand side constraints.
- Students with special needs will be supported through inclusive policies and practice and through incentives.

Programme 1.9 – Equivalence mechanism

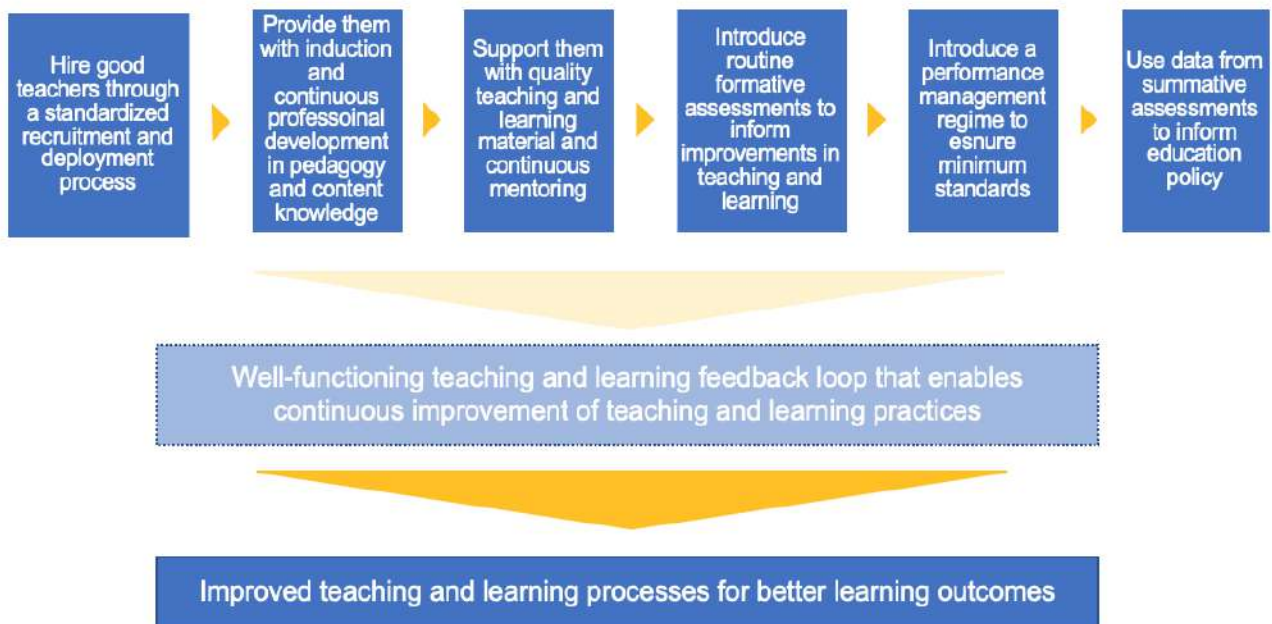
Specific objective: Introduce a qualification equivalence mechanism for students

While the education system encourages transition from NFE to formal schools, in practice the transition can be difficult, especially for the most vulnerable. Unclear pathways and lack of flexibility do not create an enabling environment for children that need additional support to engage with the education system.

- PESP envisions an education system that responds to the education and learning needs of all children in Punjab.
- For children that leave the system early and participate in Non-formal education programmes and children that require specialized learning assistance, a system of equivalences shall be developed to permit mainstreaming into the formal system.
- A comprehensive system of equivalence for various levels of literacy and NFE will be introduced in consultation with PCTB. This will allow children to test at grades 5, 8 and 10 levels and be issued a certificate that can support future learning, training or employment opportunities.

This promotes the right to education, recognizes learning that has been developed through non-formal education or informal learning experiences and provides children with a second chance.

Figure 8: Results flow chart for Strategic Area 1



Strategic Area 1 – Quality and Learning Outcomes
New Deal 2023 Strategies
Transform teacher effectiveness

Strengthen basic competencies, including in literacy and numeracy	
Reform post-primary education	
Priority Programmes 1 Objective: Improve teaching and learning practices for better learning outcomes	
Specific Objectives	Main Activities
1.1 Introduce standardized recruitment and deployment of educational practitioners and managers at all levels	<ul style="list-style-type: none"> Establish an authority to regulate teacher licensing and certification Revise current teacher transfer policy to revisit the criteria and rules Establish an education management cadre/pool
1.2 Provide quality pre-service, induction and in-service training to education professionals	<ul style="list-style-type: none"> Improve pre-service teacher education with support of Higher Education Department Revamp induction trainings to develop teacher competencies in content and pedagogy Revise roles and responsibilities of AEOs etc. to ensure mentoring support to teachers Strengthen capacity building programmes for education professionals at all levels
1.3 Make available quality textbooks, and other teaching and learning materials	<ul style="list-style-type: none"> Create capacity development programs for technical staff to develop relevant curriculum, assessment and instructional materials through collaboration with academic institutes Develop teaching and learning materials for ECE and Grades 1-3 aligned with the ECE policy
1.4 Develop a quality learning assessment system based on standards, with support mechanisms and feedback loops between the classroom, school and policy levels	<ul style="list-style-type: none"> Revamp examination system and assessment bodies (PEC and BISEs) Revise assessment tools, including SLO based assessments, with emphasis on higher order thinking skills Strengthen formative assessments at all levels Establish linkages between student learning assessment and: (a) teachers' capacity, (b) CPD, and (c) development of teaching and learning materials
1.5 Promote critical, scientific, and analytical thinking in all spheres of education	<ul style="list-style-type: none"> Establish Urdu as the medium of instruction at the primary level Review and improve teacher training modules to promote critical, scientific, and analytical thinking among students Review of student assessment system to promote critical, scientific, and analytical thinking among students
1.6 Promote extra- and co-curricular activities and life-skill based education to ensure wholesome personality development	<ul style="list-style-type: none"> Strengthen sports activities in schools School clubs Initiate career counselling for students at elementary and secondary levels

<p>1.7 Promote inclusion of elements of sustainable development and sustainable lifestyles, human rights, gender equality, environment-friendly behaviour, culture of peace and non-violence, tolerance, democratic values, social cohesion, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development into teaching and learning activities</p>	<ul style="list-style-type: none"> · Review and revise curriculum to include elements of sustainable development and healthy lifestyles · Review and revise teacher training modules and teacher training to include concepts of sustainable development and healthy lifestyles
<p>1.8 Introduce technical, vocational and technology-oriented educational streams</p>	<ul style="list-style-type: none"> · Identification and designing of specialized trades/courses at all levels · Institutional linkage of all education departments with technical and vocational institutions · Incentivize trainers and students with special needs
<p>1.9 Introduce a qualification equivalence mechanism for students</p>	<ul style="list-style-type: none"> · Develop a mechanism for granting equivalence to students of L&NFBED and SpED graduating from Grades 5, 8 and 10

2.2 Strategic Area 2 – Access, Retention and Equity

Over the last five years, Punjab has shown progress in school participation, but disparities by gender, location and socio-economic status persist, and children are less likely to continue beyond primary school. It is estimated that more than 25 percent of the population of Punjab is of school-going age. Approximately 10.5 million children of school age (5 - 16 years) are out of school children (OOSC) in Punjab despite the expansion of public and private schools. It is to be noted that 54% of the total OOSC aged 5-9 years reside in the following eight districts: Rahim Yar Khan, Dera Ghazi Khan, Rajanpur, Muzaffargarh, Multan, Bahawalnagar, Faisalabad and Lahore. Many of the OOSC are in hard to reach areas and special efforts will be required to facilitate them with learning opportunities. Overall, a higher proportion of children ages 5 to 16 years were attending school in 2017 regardless of grade compared to 2012, according to various surveys conducted during this period. However, it is those of primary school age who are more likely to be attending school, compared to older children. School access becomes increasingly limited as children grow older and have to transition to higher education cycles.

The New Deal on Access and Retention

Every child of school age in Punjab should have access to adequate educational infrastructure regardless of gender, location or economic background

Improve access, retention and equity

Use afternoon shifts to address supply side constraints at the primary, middle and secondary levels.

Create additional schooling opportunities by incentivizing the private sector to set up schools in underserved parts of the province.

Strengthen School Councils to provide school level solutions for enrolment, classroom construction and minor school repair.

Reduce OOSC by obligating parents to send school-aged children to school

Restructure subsidies by revisiting CCTs and partially redirecting funds towards localized access solutions

Priority programmes 2 – Objective: Provide adequate and sufficient access to education for children from pre-primary to secondary, including marginalized and children with special needs

Improve pre-primary education

- Develop ECE-appropriate learning materials, and teacher training model
- Provide separate learning spaces or classrooms for ECE/Katchi to accommodate an anticipated increase in pre-primary enrolment
- Develop ECE teacher recruitment and training model.

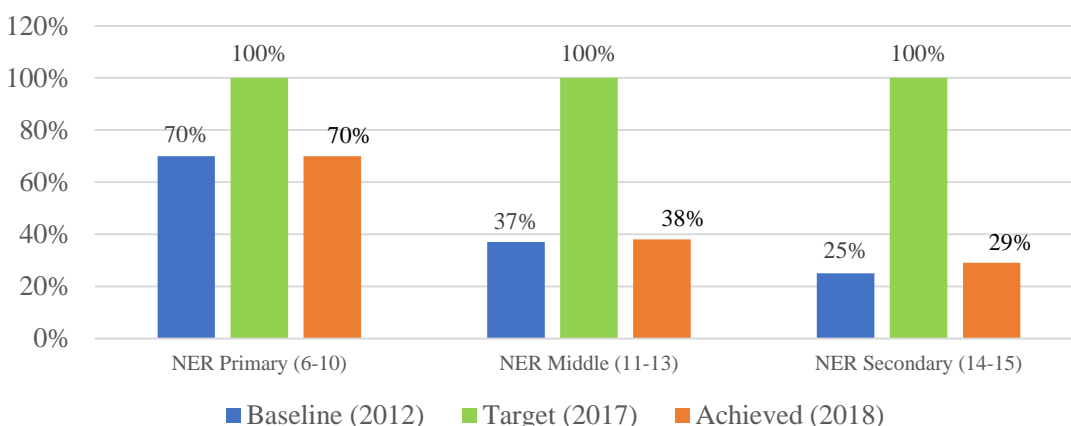
Access and retention

Punjab registers a high degree of entry to primary education. The Gross Enrolment Rate (GER) at pre-primary level has increased from 82% in 2014-15 to 87.5% in 2016-17, which is four points higher than the national average. Moreover, the Gross Intake Rate (GIR) to grade 1 has remained above 100% since 2014.¹⁸

The GER at primary level was 93.2% in 2015-16, although it had decreased since 2013-14. However, the GER drops considerably at secondary level, indicating lower transition and retention rates at post-primary levels. In 2015-16, the GER in middle education reached 56%, and that of secondary and higher secondary combined was just over 51%.

The issue of overage children is already apparent in primary school. According to the PSLM data, the NER at primary level in Punjab was 58.8% in 2015-16 compared to a GER of 93.2%. Moreover, NERs drop considerably after this level of education. Just 23.8% of children 10-12 years old are enrolled in middle education, and 27.4% of children aged 13 to 16 years are in secondary education. In all cases, the rates fell between 2013-14 and 2015-16. This shows a significant drop in student enrolment at the correct ages for their level as we move up the educational ladder.¹⁹

Figure 9: Net Enrolment Rate 2012-2018²⁰



The transition rate from primary to middle level has improved by 6% during these years. Survival rate at middle level has increased from 86% to 97%. It is important to note that one of the targets of the reform roadmap goals was to attain 100% retention rate. To achieve this, a number of

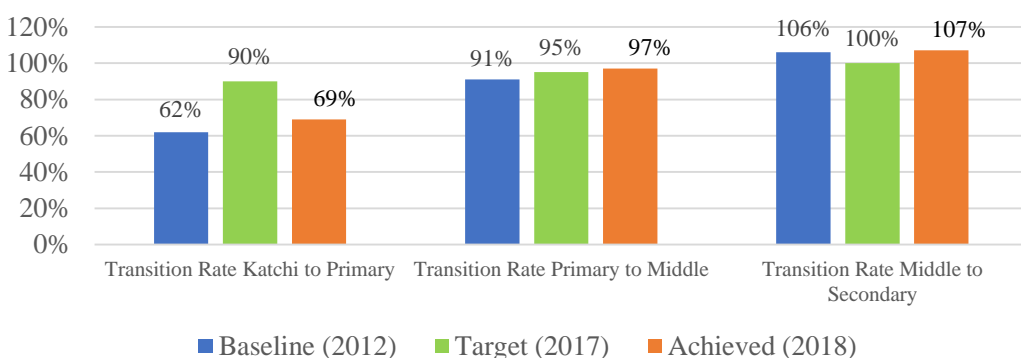
¹⁸ Pre-primary GER and GIR as recorded in Pakistan Education Statistics 2014-15, 2015-16 and 2016-17.

¹⁹ GERs and NERs as recorded in PSLM 2013-14, 2014-15 and 2015-16.

²⁰ PSLMS for NER calculations²⁰. PMIU data used for calculating survival and transition rates. For baseline figures, PSES document has been used

interventions were undertaken by the government of Punjab including provision of stipends to girl students, stipends to brick kiln children and provision of better school facilities and learning environment. The district education authorities also implemented follow-up mechanisms for drop-out students. All these measures have contributed to the improved survival rates.

Figure 10: Transition rates 2012-2018²¹



The above charts show a slight improvement in transition rates from Katchi to primary level. On average, an increase of around 1% has been noted each year. The NER at primary level has remained stagnant at 70% while the survival rate at primary level has increased from 57% to 72% between 2012 and 2018. This means that the enrolment has increased but mainly in favour of the under- or over-age children. The transition rate from middle to secondary level has not shown much improvement during these years. On the other hand, a substantial increase of 27% in survival rate at secondary level has been recorded as the survival rate has increased from 59 percent in 2011-12 to 86 percent in 2017-18. The NER at secondary level has also shown considerable improvement of 4 percentage points during these years.

However, for every 100 students enrolled in public Katchi grade, only 28 students (25% of girls and 31% of boys) remain until Grade 10 in public schools. The first loss is registered at the beginning of the education cycle, in the transition from Katchi to Grade 1 of primary education. At this point, 36% of children enrolled in public schools either drop out or transfer to private institutions. Of those who continue in public schools, just 61% will reach Grade 5.

A cohort-wise analysis of Annual School Census data for various years shows that around 72% of the students enrolled in Grade 1 reach Grade 5. Among others, the major reasons for low survival

²¹ For NER, the latest available data of PSLMS 2014-15 has been reported. PSLMS for NER calculations²¹. PMIU data used for calculating survival and transition rates. For baseline figures, PSESP document has been used.

rates at primary level include shortage of nearby schools, teacher shortage and absenteeism, poor teaching quality, poor school environment, family poverty, insecurity, and natural disasters²².

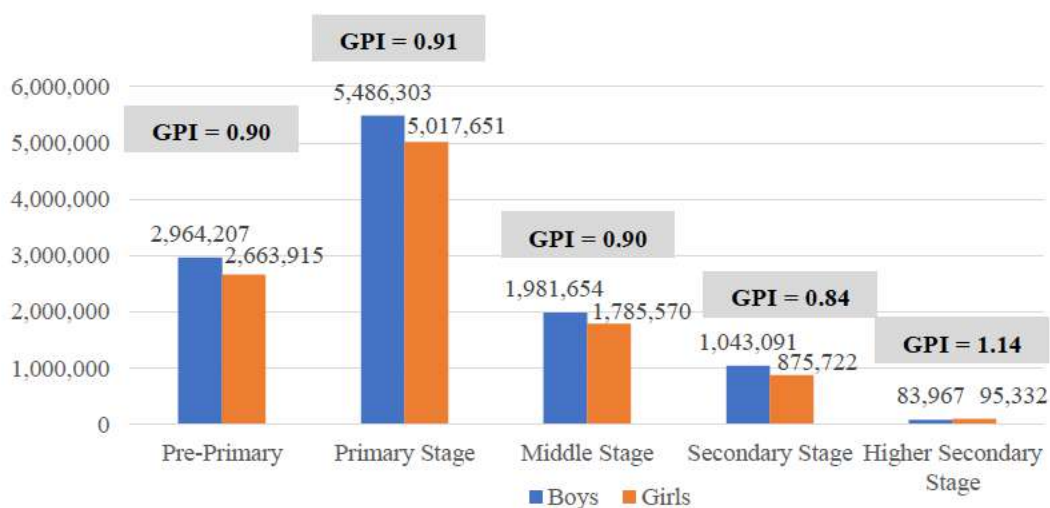
Although the transition from primary to middle education is quite high (over 96%), by the time children reach Grade 8, 15% would have left. And between Grade 6 and Grade 10, one in four children would have left public schools. Among others, the major reasons include shortage of nearby schools, teacher shortage and absenteeism, poor teaching quality, poor school environment, family poverty, insecurity, and natural disasters.²³

Disparities in access to schooling

A deeper look into the enrolment rates illustrates the various types of disparities that exist in access to school in Punjab. Punjab's Gender Parity Index currently stands at 0.94, i.e., 94 girls for every 100 boys enrolled in public sector schools. Though Punjab fares better than other provinces in terms of providing girls with opportunities to access education, gender differences in enrolment rates persist, especially after middle education. These differences increase along the education cycle.

Gender parity is highest in urban districts and lowest in Punjab's southern, rural districts, Bhakkar and Rajanpur.

Figure 11: Gender Parity in Enrolment in Punjab



While access to primary education is high overall, just 84 children in rural areas are enrolled at this level per 100 children in urban areas (considering GERs). In middle education, the proportion falls to 75, and in secondary education to just over 57 children in rural areas per 100 of their peers in urban areas.²⁴

Socio-economic status emerges as one of the clearest markers of disadvantage for access to school. A recent report has found that household wealth is largely correlated with school enrolment

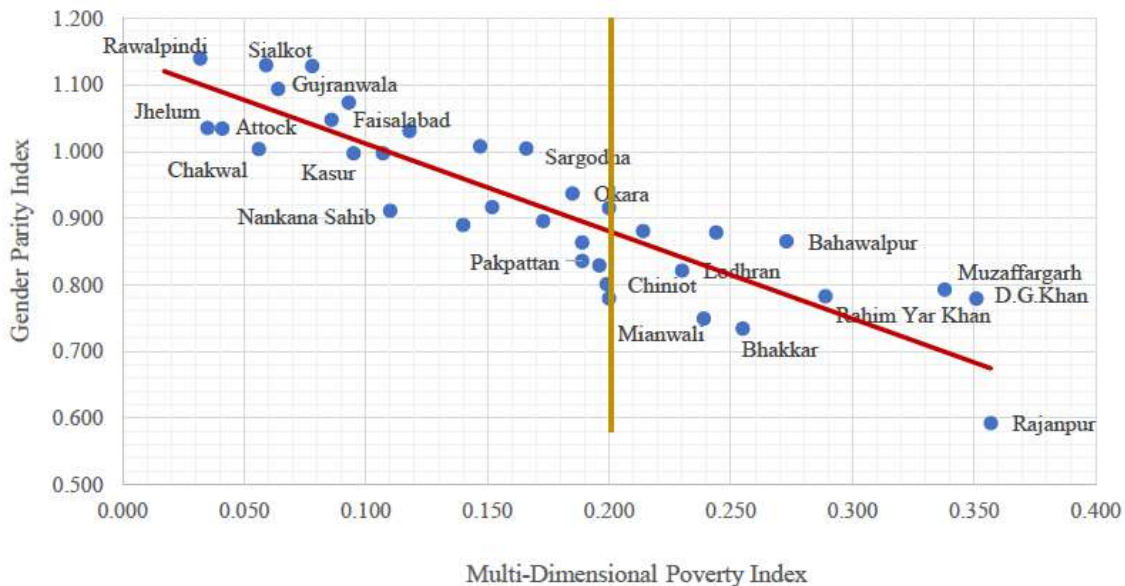
²² AEPAM (2014). Pakistan Education for All Review Report 2015.

²³ AEPAM (2014). Pakistan Education for All Review Report 2015.

²⁴ Disparities as computed from latest PSLM survey.

in Punjab.²⁵ The disparity surfaces already in primary school and becomes even more substantial in the next stages of the education cycle. The gap in enrolment between the poorest and the richest children is 22% in Primary GER and 97.5% in Secondary GER. Nevertheless, the report finds some improvements in education participation for the poorest quintile, albeit with relatively low levels of completion of the education cycles.

Figure 12: Relationship between District-wise Gender Disparity in Enrolment in Public Schools and Poverty Levels in Punjab²⁶



Children from poorer households are far less ready or equipped to gain from schooling compared to their better-off counterparts. They are, for instance, more likely to have one or both parents who are illiterate and therefore get little or no support at home in terms of their studies; and they also show higher incidence of malnourishment. The Punjab government has taken equity into consideration while designing several programmes to subsidize auxiliary expenditures on education incurred by parents. Some of these programmes include provision of student vouchers, scholarships, stipends, textbooks, lunch boxes and transportation. Government’s intervention by way of school subsidies could be expanded while improving the targeting of children most in need.

Early Childhood Education

²⁵ e-Pact (2018). First Interim Evaluation Report on the Punjab Education Sector Programme. Draft

²⁶ Punjab ASC 2017 for GPI and Planning Commission of Pakistan, UNDP and OPHI (2016) for MPI

QAED has established nearly 12,500 ECE classrooms in Punjab. ECE classrooms differ from the traditional Katchi class in three ways: (i) they have child-friendly, theme-based, decorated classrooms with different activity corners; (ii) they involve play-based learning through the use of fun and interactive teaching-learning materials provided in an ECE kit; and (iii) they are managed by an ECE teacher who has received a four-day ECE training along with a part-time caregiver who has also received ECE training and supports the teacher in ECE activities. The government intends to scale up ECE. However, the following challenges persist:

- Lack of school capacity [not possible to allocate a specific classroom and teacher]
- **Access and Enrolment:** According to the SED, almost 7.4 million children fall within the ECE age bracket (3–5 years) in the Punjab but only 34.4 percent of these children attend preschool (MICS 2018). However, actual enrollment in preschool may be higher than estimates since about 43 percent of students in preschool are above the age of 5. ECE enrollment across the various districts of Punjab is also non-homogenous, the central region depicting a much higher rate than the southern or northern regions. The central divisions of Punjab constitute about half the enrolment in pre-primary or Katchi. Urban-rural differentials also exist – the percentage of ECE-age children attending an organized ECE program in urban areas is higher than in rural areas.
- **Low Parental Engagement:** Head teachers and teachers at schools with ECE classrooms: identify lack of parental interest and engagement as a significant impediment to children's learning. For poorer households, ECE or katchi classes merely serve as a free daycare where parents pick up and drop children at their own convenience, without conforming to official school timings. As a result, teachers in ECE classes have to repeat activities and lesson plans several times before children are able to learn the expected outcomes.
- **Service delivery:** The teacher recruitment policy in public schools is not Katchi-specific, so they are likely to lack a dedicated teacher or a dedicated classroom for the Katchi class. Teachers traditionally rotate between all classes of primary on a yearly basis with little or no training for ECE, because in-service training only focuses on Grades 3-5. Teachers are also not required to comply to standards
- **Institutional challenges:** In the absence of an implementation strategy linked to the ECE policy, financial commitment to ECE cannot be guaranteed nor sustained.

Out-of-school children

Even as public and private schools expand access, the number of children out of school continues to be very significant in Punjab. Estimates of the out of school children (OOSC) vary substantially depending on the data source and the methodology used to perform the estimation.²⁷ Employing the methodology developed by UNESCO-UIS and UNICEF on the PSLM, results in a total of 8.27 million children between 5 and 16 years old out of school in 2013-14 in Punjab. The estimates in the Pakistan Education Statistics report put the number in 2016-17 at 10.5 million (55% of them girls). Despite the reforms and progress in expanding school enrolment, the province needs to intensify its efforts in increasing enrolment capacity, especially for the accommodation and retention of students beyond primary school age. It has been noted that there remain many underserved areas; especially void of post-primary or secondary schools. Additionally, focus should be placed on girls' enrolment and the accommodation of children with special needs. The expansion of school places to increase enrolment must be complemented by policies and practices to ensure retention at all levels (elementary, secondary and higher education).

²⁷ Furthermore, none of the available sources has up-to-date population estimates on the basis of the 2017 national census yet. Therefore, the estimates should be taken as indicative.

Non-formal education

It is generally agreed that the Non-Formal Education (NFE) sector in Pakistan can be the bridge to address the critical situation of a huge number of out-of-school children, yet the NFE sector is largely neglected. The Punjab Non-Formal Education Policy 2019 is the first NFE policy of the province. The Punjab Youth Policy 2012 under Education for Youth Development commits to promotion of non-formal education and emphasizes public private partnership. Policy promulgation is critical to create a level of parity between the formal and non-formal education subsectors. Such policy should also address the fragmented manner, lack of accountability and funding constraints facing Non-formal Education.

Compared to other budgets, NFE is generally underfunded. The draft NFE policy aims to commit 5 percent of the education budget to NFE, which is significant but would also require the Literacy and Non-Formal Basic Education Department (L&NFBED) to attract funds to the sector.

The public NFE offer is comprised of various programmes and projects. Teachers of NFE have lower qualification levels than those in the formal system. However, due to the need to cover the offer, the standards are further lowered. This has a direct impact on the ability of the teacher to differentiate and support students in a multi-grade environment and that need additional support. This could also be influenced by the type of contracts and low salaries.

Training and professional opportunities exist but are not adequate to prepare teachers to deliver quality Non-Formal Education. The L&NFBED has a dedicated Human Resources Development Institute, a unit in the department that is responsible for assessing training needs through classroom observations and exam results of children. A Training Needs Assessment (TNA) has been conducted for all teachers, and they participate in cluster-based peer learning and problem-solving meetings. However, there is no training plan in terms of refresher courses and induction of new teachers mostly the training is done as and when the funding is available.

Infrastructure

While investments have been made to improve the learning environment, critical inputs are still lacking. Considerable advancement has been made in recent years with regard to school infrastructure and the provision of basic facilities. More than 96% of the schools have basic facilities (drinking water, toilets, electricity and boundary wall). More than 97% of the schools have a main gate, while more than 89% of the schools have sewerage facility. However, other facilities such as playground and library are lacking in schools. Computer labs, Science labs and ECE Classrooms are significantly lacking in schools as less than 15% of the schools have each of these advanced facilities. Routine and preventive maintenance of schools are almost non-existent. A policy on minimum standards for educational facilities should be enunciated and a programme for retrofitting of schools according to the standards should be embarked upon.

Priority Programmes 2

In view of the challenges mentioned, the following specific objectives and programmes have been proposed to guide the priorities of education sector in Punjab with respect to access to schooling:

Programme 2.1 – Enablers for increased school access and retention

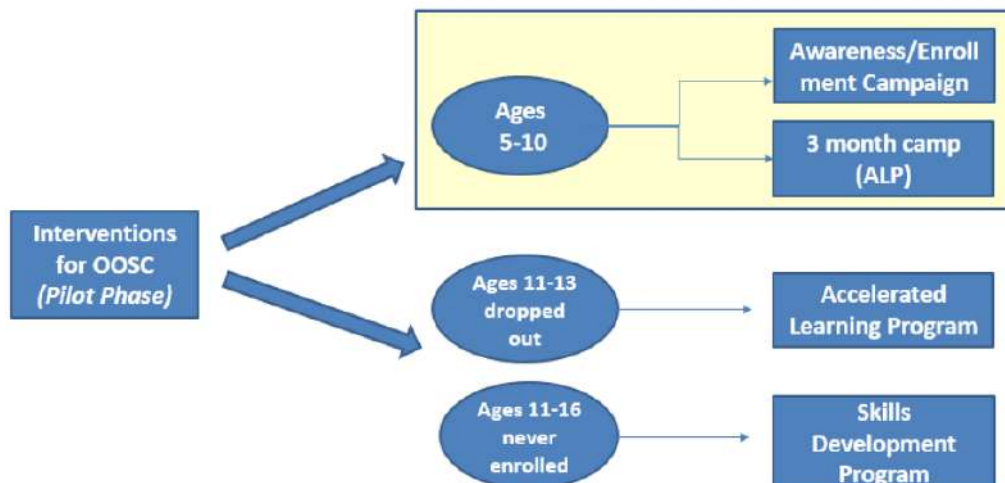
Specific objective: Increase access and retention from ECE to post-secondary education

There are over 10 million children out of school, including in rural and hard to reach locations.

The PESP seeks to increase access through expanding the school infrastructure from early childhood education to secondary levels, ensuring that new and existing infrastructure follows standards, reducing families' costs of schooling through cash transfers and other means, and strengthening PPPs.

- A six step ECE model will focus on: provision of a dedicated and trained teacher, curriculum and learning standards, scheme of study and lesson plans, classroom resources, assessments, and management and monitoring. This will require:
 - Ownership and accountability of ECE beyond QAED, so that the construction of ECE friendly classrooms, development of ECE content, introduction of ECE standards, monitoring and quality assurance of ECE, and timely enrolment (and retention) of children into ECE is the shared responsibility of the SED, PMIU, PCTB, QAED, PEF, PEIMA and district education departments
 - Prescriptive guidelines to AEOs on how to monitor and support improvements to the delivery of ECE
 - Sustained financial commitment to the expansion of ECE throughout the province
 - Emphasis on ECE in low and late enrolment districts, so that it serves the children that need it most
 - Involvement of SCs in enrolment of children into ECE and oversight of ECE delivery
 - Integration of ECE beyond katchi, up to Grade 2
 - Smooth transition from ECE to higher grades
- The number of learning spaces will increase as a result of the development of ECE infrastructure, the construction of new schools in needy areas, the upgradation of schools at elementary and secondary levels, and the establishment of afternoon shifts in schools where there is a need. By expanding the number of spaces, this strategy will also facilitate access and mainstreaming of children with mild disabilities and those having completed non-formal education. To mainstream children with mild disabilities it is critical that school infrastructure is compliant to the needs of children with disabilities.
- Public Private Partnerships will be strengthened so that they can expand reach to out of school children. This programme will also introduce measures to compensate families for the costs of schooling. For instance, transport facilities will be provided on a needs basis to students enrolled in afternoon shifts, and school meal programmes will be introduced as a pilot in some districts.
- Existing cash transfer-based interventions, such as the girls' stipends and brick-kiln programmes, will be restructured and integrated with existing social protection programmes. Conditional Cash Transfer (CCT) funds (including girls' stipends) will be revisited to improve their efficiency and sustainability. Funds from CCTs will be partially redirected to provide localized access solutions, such as classroom provision or transportation.
- The government's Campaign for Access and Retention through Enrolment (CARE) programme aims to enrol out of school children (OOSC) in schools through a combination of demand- and supply-side interventions. It targets children aged 5-10 years, who have either dropped out or never been enrolled in school and is being piloted in five districts.

Figure 13: Key components of the CARE programme



- The Insaf Afternoon School Programme will be supported to provide middle and secondary schooling and increase the supply of schools for primary school graduates. The programme has already been launched in 22 low enrolment districts, with 719 schools notified and 403 schools already participating. The programme benefits from the Department for International Development's (DFID) Sustainable Transition and Retention in Delivering Education (STRIDE) programme and its provision of bicycles for boys and transportation vouchers for girls. Primary schools are being upgraded to middle schools if one does not exist within a 3 kilometer radius, and middle schools if a high school does not exist within a 5 km radius. Students are eligible if they are dropouts or have been enrolled in distant schools. Teachers are engaged if they have five years' experience, a Masters' degree and preferably reside within 5 km of a school; they will be given a monthly honorarium to work in the afternoon shift.
- Access and equity interventions in the PESP will also have a gender dimension. While Punjab has succeeded in improving overall gender parity, girls are still less likely to survive till Grade 10 and to enrol in the province's less developed districts. The GoPb and its development partners have been running interventions to promote girls' retention (such as girls' stipends). However, a more holistic approach is required. Some of the interventions proposed in the PESP include:
 - provision of separate schools at high and higher secondary level for girls (SpED)
 - building new schools for girls (SpED)
 - promoting girls' education at middle level in existing NFE centres (L&NFBED)
 - upgradation of existing primary schools to middle level (L&NFBED)
 - starting vocational education & training at middle level (L&NFBED)
 - developing new manuscripts keeping in view gender sensitivity (SED)
 - revisiting stipends for girls (SED)
 - providing female-friendly washrooms in schools (SED)
- School Councils will be strengthened to provide school level solutions, such as classroom construction, enrolment drives and school repairs. Construction responsibility will be decentralized to School Councils, with financial and quality control support from the SED.

Programme 2.2 – Functional and adequate school facilities

Specific objective: Ensure provision of functional and adequate basic school facilities; including disability-friendly infrastructure in all schools

- All new and existing schools will be constructed or upgraded to meet SED minimum standards. This will ensure that all schools provide a minimum package of services, including potable water, electricity, and disability-friendly facilities.
- Furthermore, all schools will include female-friendly washrooms, particularly at post-primary levels.
- To encourage practical and applied learning, schools from middle to higher secondary levels will be equipped with science labs, libraries and IT infrastructure.
- Recreational space with equipment will be provided and encourage children to exercise and play.

Programme 2.3 – Non-Formal education

Specific objective: Enhance access to NFE for children and adolescents, youth and adults, and ensure mainstreaming of children in formal schools

Non-formal education and adult literacy programmes are essential to reaching out of school children and youth and ensuring that adults have the skills needed to engage with their community and seek employment opportunities.

- The PESP will expand access by establishing new NFE centres in areas where there are many out of school children.
- Existing centres will be enhanced to support additional children and provide a conducive environment for learning.
- L&NFBE will establish criteria for selecting venues for setting up non-formal education schools.
- As centres expand so will the level of NFE programme provided, from primary level to middle level.

Literacy programmes will include skills training and vocational and technical training opportunities to ensure that in addition to literacy skills, adults are able to improve their livelihood and employability perspectives.

It is envisioned that there will be four types of L&NFBE programmes²⁸:

- i. Non-formal Basic Education schools will provide primary level classes from 0-level 5 for out of school children.
- ii. Non-formal Education Feeder schools will provide classes from 0-level 3 education to out of school children
- iii. Adolescent and Adult Centers will serve adolescents and adults
- iv. Community Learning Centers will be explored to reach vulnerable populations

A pillar of the PESP is supporting the mainstreaming of students from NFE to formal education. This will be a continuous process and will apply to all grades from 0 to 10.

- For children in NFE programmes that are levelled to formal school levels 0-10, they will be considered equivalent to the formal school grade.
- Organizations that offer literacy programmes will be required to ensure that their programmes are implemented according to specific standards.
- L&NFBE Department will coordinate with other bodies, such as social welfare, labour, women development and technical and vocational education.
- Public Private Partnerships will also be used to expand reach and to raise quality.

²⁸ Literacy & Non-formal Basic Education Department, Government of Punjab. 2018. Punjab Literacy & Non-formal Education Policy 2019

- Communities will be involved in efforts to raise awareness about the importance of education, particularly of girls, to identify out of school children and to motivate their participation in NFE programmes.
- The NFBE will explore the potential of introducing an accelerated education programme (AEP). These programmes will target children who were unable to enrol into school due to demand-side constraints, and will bridge them to the relevant grade level in formal schools.

Key features to be considered for the programme:

- Target OOSC and drop outs who can access a neighbouring primary or middle school, and supporting them to enrol into a relevant AEP
- Respond to the needs of students when developing AEP schedules
- To enable smooth transition to the formal system, students should be retained in their AEP centers till the start of the formal academic year. This would help provide continuity and minimize the chances of them dropping out during transition.
- Budget allowing, consider providing stipends to AEP students so that they are encouraged to continue their courses.
- Develop a curriculum that is integrated both horizontally (across subjects) and vertically (across grade levels) to accelerate the speed of learning.

Programme 2.4 - Access for marginalized children, including children with special needs

Specific objective: Increase access for marginalized children including children with special needs, from ECE to secondary education

The PESP recognizes that there is a gap in serving all children, including the most marginalized. Through a combination of policies, plans and service provision, children will be supported to realize their right to education.

- The first steps would be to formulate a special education policy and implementation framework, with clearly identified roles and KPIs for each stakeholder.
- A thorough review process of the curriculum and textbooks, and of teaching and learning materials will be conducted to ensure that they respond to the needs of marginalized children and children with disabilities.
- Teachers will be trained on managing inclusive classrooms and supporting inclusive practices among their students.
- An assessment framework will be developed for SpEd's schools and centers, and assessments will be designed to support the learning needs of all children.
- Dearth of data on children with disabilities will be tackled through data collection efforts on the prevalence of disabilities, through partnerships with other governments, the private sector and international agencies. The PMIU census will also be expanded to capture disability data.
- An infrastructure plan will provide the guidance and minimum standards to ensure that all schools and NFE centres have in place disability-friendly infrastructure.
- Public private partnerships will be promoted to improve the supply of special education
- A communications strategy will be developed to encourage parents of children with special needs to send them to schools or special education centres.

Strategic Area 2– Access, Retention and Equity

New Deal 2023 Strategies

Improve access, retention and equity

Improve and scale high-quality pre-primary education

Priority Programmes 2 Objective: Provide adequate and sufficient access to education for children from pre-primary to secondary, including marginalized and children with special needs

Specific Objectives

Main Activities

2.1 Increase access and retention from ECE to post-secondary education

- Develop ECE infrastructure in line with the ECE Policy, and guidelines for implementation
- Upgrade existing schools and establish new ones according to SED criteria, especially at elementary and secondary levels
- Introduce afternoon shifts in schools where they are needed and provide transport facilities to students enrolled in afternoon shifts on needs basis
- Introduce skills-development programmes at secondary school levels, including workshops in selected secondary schools
- Strengthen public-private partnership modalities to expand access to education

2.2 Ensure provision of functional and adequate basic school facilities; including disability-friendly infrastructure in all schools

- Delineate minimum standards for educational infrastructure; including disability friendly infrastructure
- Implement programmes to provide adequate facilities: safe buildings, classrooms, potable water, toilets, electricity, furniture and recreational and sports areas
- Provide libraries, science labs and IT infrastructure in schools

2.3 Enhance access to NFE for children and adolescents, youth and adults and ensure mainstreaming of children in formal schools

- Establish new NFE centres to enrol out of school children
- Upgrade existing NFE schools to provide middle level education on needs-basis
- Build partnerships between L&NBED and SED to start literacy centres in formal schools in afternoon shifts
- Foster public-private partnerships to enhance supply side interventions in literacy and non-formal education
- Mainstream children from NFE programmes to formal schools

2.4 Increase access for marginalized children including children with special needs, from ECE to secondary education

- Revise curriculum, textbooks, teacher training and assessment framework to enable marginalized students to fully participate in the educational process

Priority programmes 3 – Objective: Promote quality education in a safe, inclusive and conducive learning environment for children

The geographical topography and the climatic conditions of the Punjab makes it more vulnerable to natural disasters, such as floods and droughts, particularly in the southern areas. The increasing incidence of disasters, particularly since 2010,²⁹ in the region has also increased vulnerability of disaster-prone communities, especially affecting children. The table below details the vulnerability of districts with respect to various disasters:

Table 5. Vulnerability of Punjab districts to various natural disasters

Disaster Type	Vulnerable District
Riverine Flooding	Indus
	Jhelum
	Chenab
	Ravi
	Sutlej
Flash Floods	Mianwali, D.G. Khan, Rajanpur
Urban Floods	Lahore, Rawalpindi, Gujranwala, Sialkot, Faisalabad, Narowal, Sheikhpura, Multan
Droughts	The areas of Cholistan in district Bahawalnagar and R.Y. Khan

Source: Punjab Disaster Response Plan 2017.

The PSESP 2013-2017 outlined a plan to develop and implement a policy on Disaster Risk Reduction (DRR) for mitigating the impact of possible future disasters on schools. The PSESP recommended conducting an Education System Diagnosis (ESD) to gauge the impacts of disasters and its effects on the performance of the education system. The ESD could not be initiated during the PSESP implementation period.

Priority Programmes 3

Programme 3.1 – Safe, clean, green, healthy and hygienic physical environment

Specific objective: Promote safe, clean, green, healthy and hygienic physical environment incorporating elements of disaster risk management

Punjab is prone to natural disasters, including earthquakes and floods. The SED has developed a *Provincial School Safety Plan of Action* for safe schools and educational buildings in Punjab. Additionally, the SED conducted a baseline study on Disaster Awareness and Mitigation Support to measure the level of awareness of potential natural hazards faced by the people in six high risk Union Councils of districts Dera Ghazi Khan and Rajanpur.

- The QAED has also developed teacher training modules with a focus on DRR.
- However, these modules will need to be updated and aligned with the emerging DRR priorities.³⁰

²⁹ Provincial Disaster Management Authority Punjab, 2017. *Provincial Disaster Response Plan 2017*. Available at https://reliefweb.int/sites/reliefweb.int/files/resources/Punjab%20Disaster%20Response%20Plan%202017_PartI.pdf. Accessed on May 10, 2018.

³⁰ The modules were developed in the aftermath of 2010 floods and therefore, are quite dated.

- New schools will be constructed against improved codes to ensure that buildings are earthquake and flood resistant.
- Existing structures will benefit from structural enhancements to ensure that they are safer for children and teachers.
- Importantly, teachers will be prepared in case of an emergency and children will learn and practice what to do in the event of a natural disaster.

Programme 3.2 – Safe and protective behavioural practices

Specific objective: Ensure safe and protective behavioural practices

- Schools must be safe from violence, bullying and other harmful or discriminatory practices.
- Teachers will be trained to incorporate positive discipline as part of classroom management and to recognize bullying or other forms of violence or discrimination between students as well as other teachers.
- Feedback mechanisms will be institutionalized so that incidences can be reported and followed up.

Programme 3.3 – Inclusive education

Specific objective: Establish an enabling environment for children with special needs in mainstream schools and institutions

It is generally acknowledged that the Punjab has done more for special education than any other province. However, the special education sector has many challenges to contend with. At present most special education institutes are located in urban areas and thus not readily available in rural communities. A more equitable distribution of opportunities for learning is required. There is overall a need for the enunciation of a comprehensive policy and plan on special and inclusive education. Special education institutions need to be retrofitted to ensure accessibility and student safety. The Primary GER of children for whom a disability is reported reached 12.1% in 2015, the Middle GER was 10.8% and the combined Secondary GER was 2.6%.³¹

The Special Education Department currently runs 288 institutes, centres, colleges and vocational institutes. It is also running some pilot projects on inclusive education with the Punjab Education Foundation (PEF) aimed at children with mild disabilities. However, the lack of data in respect to children with special education needs is a major obstacle for devising appropriate strategies, including a more inclusive approach to educational interventions. Some surveys provide an indication of the challenge for children with disabilities.

The TEACH project in Punjab, for instance, used a set of questions for children aged 5-17 years, based on the Washington Group on Disability Statistics, established under the United Nations Statistical Commission. As a result, the report finds that 11% of 8-12 year olds surveyed present some type of disability. This survey also highlights the intersectional evidence on disability, gender and poverty. A recent report using the Nielsen survey in Punjab, which covered a wider sample, has found that disability is indeed a significant barrier for children's access to education. Only one in ten surveyed children 5-16 years old were attending school in 2015.

An Institutional Plan for Special Education Department (SpED) 2017-2020 has been developed, laying out six core sector plan priorities and institutional capacity required to address associated

³¹ e-Pact (2018). First Interim Evaluation Report on the Punjab Education Sector Programme. Draft.

challenges. This is a positive development, but the entire paradigm of education for children with disabilities needs to be linked to the Punjab's school reform programme. Presently, education for the persons with disabilities does not find a place in with the larger debate taking place on education. A survey in 2012³² concluded that schools are currently unprepared to make inclusive education a reality due to factors such as the lack of clear admission policies for children with special needs, little knowledge among school administrators regarding how to implement inclusive education, inaccessible school infrastructure, and the absence of professional development opportunities for teachers to implement inclusive education. The professional capacities of special education teachers and educators are not sufficient to meet children's needs. Finding enough qualified teachers is a major challenge. There are 1,070 posts of teachers that are lying vacant. This gap also affects quality as the teachers must take on additional or large classes, even in subject areas they are not trained to teach. Once teachers are selected, they are often not prepared to teach appropriately. ASER reports indicate that learning outcomes for children with disabilities in Punjab (3-16 years) are lower than those for children without disabilities for both literacy and numeracy. This is because these children find it difficult to comprehend what is being taught in class due to visual and hearing impairment, among other challenges. Assistive devices are given to children, but many needy children do not get these due to limitations in budgets.

The current policies and programmes fall short in providing adequate inclusive and services for children with disabilities. New interventions are project driven, the projects could eventually provide key learning opportunities, but are too small and not likely to have an impact without a strong political commitment at the national and provincial levels on the issue of inclusive education. Due to lack of coordination amongst the relevant departments, many children are falling through the cracks. Moreover, a number of issues should be addressed with an inter-sector approach, involving health for early detection and psychological support, and social protection for families. However, the education of children with special educational needs is being looked into in isolation without forming appropriate synergies.

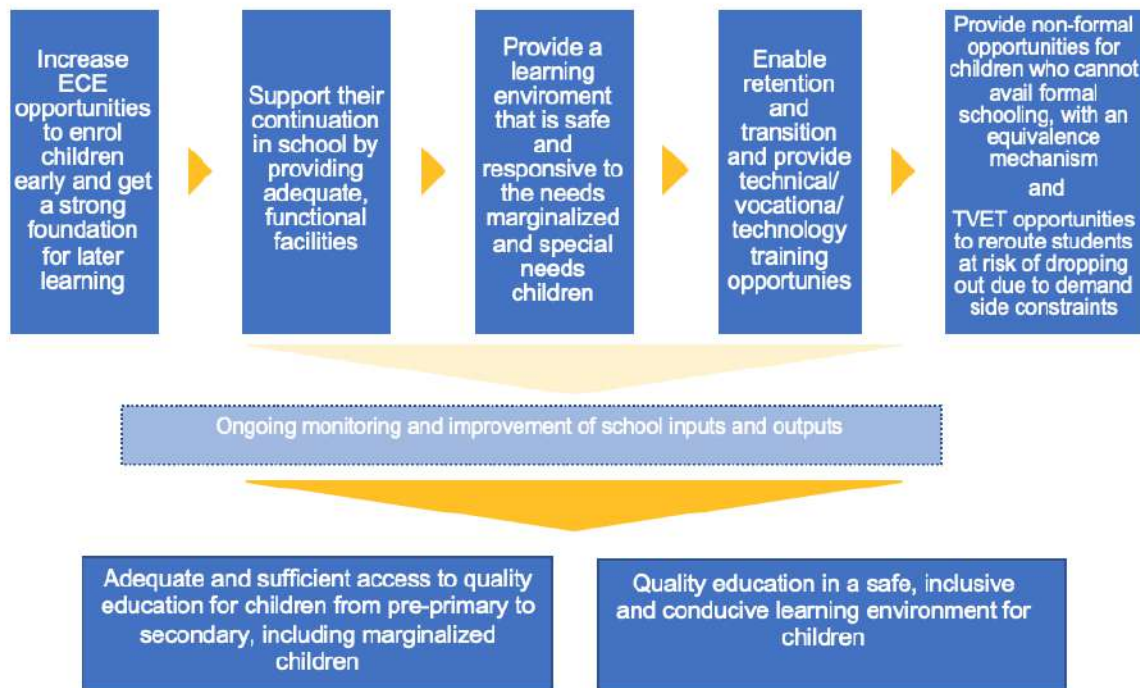
In view of the challenges mentioned, a series of strategies have been proposed to reach objectives of inclusive education, especially to ensure that welcoming and safe spaces for children with disabilities.

- Firstly, schools must be designed to facilitate access for those with various disabilities, including physical disabilities. School enhancements such as ramps, handrails and wider doors are examples of light rehabilitation that can be integrated into schools.
- Teacher training and professional development will include disability sensitization to ensure classrooms are managed inclusively and teachers have strategies to support learning for all.
- Health services will include screening and assessment to identify physical and intellectual disability and coordinate with appropriate health services to ensure that on-going referrals are available.
- Additionally, adapted learning materials will be available with teaching aids to enhance the learning experience of children with disabilities.

A recent success has been the handover of inclusive education from the SpEd to the SED, which means that accountability and responsibility of inclusive education will be with the SED and its district and school staff, engendering greater ownership.

³² Shaheen Pasha 2012. Readiness of Urban Primary Schools for Inclusive Education in Pakistan. Journal of Research and Reflections in Education. Vol.6, No.2, pp113 -128. <http://ue.edu.pk/jrre/articles/62003.pdf>.

Figure 14: Results flow diagram for Strategic Area 2



Strategic Area 2– Access, Retention and Equity	
New Deal 2023 Strategies	
Improve access, retention and equity	
Improve and scale high-quality pre-primary education	
Priority Programmes 3 Objective: Promote quality education in a safe, inclusive and conducive learning environment for children	
Specific Objectives	Main Activities
3.1. Promote safe, clean, green, healthy and hygienic physical environment incorporating elements of disaster risk management	<ul style="list-style-type: none"> Develop a programme to promote green environments in schools Provide disaster-prone infrastructure in schools Introduce earthquake and flood resistant designs in the construction of new school buildings
3.2. Ensure safe and protective behavioural practices	<ul style="list-style-type: none"> Develop and implement a strategy for safe behavioural practices among teachers, non-teaching staff and students Incorporate prevention of child abuse and other harmful practices in teacher trainings
3.3 Establish an enabling	<ul style="list-style-type: none"> Conduct screening and assessment tests to identify

environment for children with special needs in mainstream schools and institutions

physical and intellectual disability at formal schools in coordination with Health and Special Education departments

- Ensure safety of children with special needs
- Train teachers in disability sensitization and inclusive teaching methods

Provide specialized textbooks, teaching materials, suitable assistive devices and teaching aids to enhance the learning experience of children with special needs

2.3 Strategic Area 3 – Governance and Management

The 18th Constitutional Amendment decentralized education to the provincial level. Important steps have been taken to devolve power to local authorities and increase accountability in the education system in Punjab. However, the process needs to be re-evaluated, with more clearly defined roles and responsibilities, and better coordination and alignment of accountability mechanisms. In addition, there is a need to address capacity constraints in order to have a more effective educational administration and better implementation of education reforms.

Budgetary allocations over the years clearly illustrate that the government is making significant investments in education with the hope of addressing its many challenges, yet the overall contribution to the education sector has decreased in comparison to other sectors. For the financial year 2018-19, for instance, the spending on education was Rs 332.5 billion. The education budget in Punjab has increased significantly over the last seven years. In 2010-11, a budget of Rs. 155 billion was earmarked for education sector in Punjab.³³ It has more than doubled since then with the allocation of Rs. 349 billion in 2017-18. This represents an increase of 125% during these years in nominal terms and 43% in real terms. However, while education has been a priority in the agenda for the Punjab government during these years, the share of resources allocated to the education sector does not reflect this. While the provincial resource base has increased significantly, the share of education in the government budget has been declining since 2013-14. The share of education in Punjab’s budget has declined from 26% in 2013-14 to 17.7% in 2017-18.

New Deal on Governance and Management

An effective governance system must be in place to improve the quality and access to education, ensure progress and efficient utilization of resources

Empower education management

Select **competent leadership** for all schools

Empower DEAs by providing financial and administrative support and autonomy

Transform School Councils to reflect a larger role for parents and the community

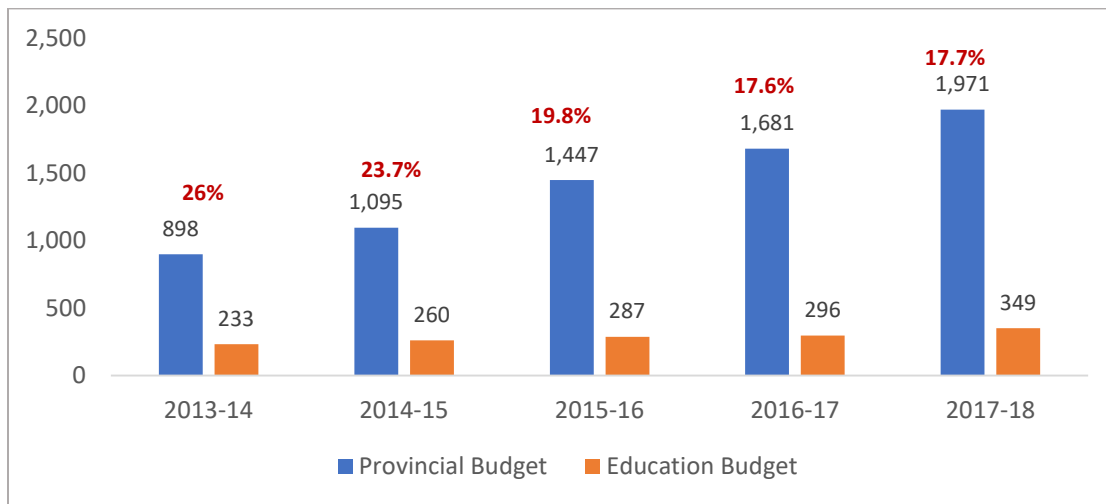
Provide customised training and support material to education managers to help them deliver their jobs well

Introduce a revised **Teacher Transfer and Posting Policy** to address the existing gaps present in the system

Drive reforms through a **department delivery team**

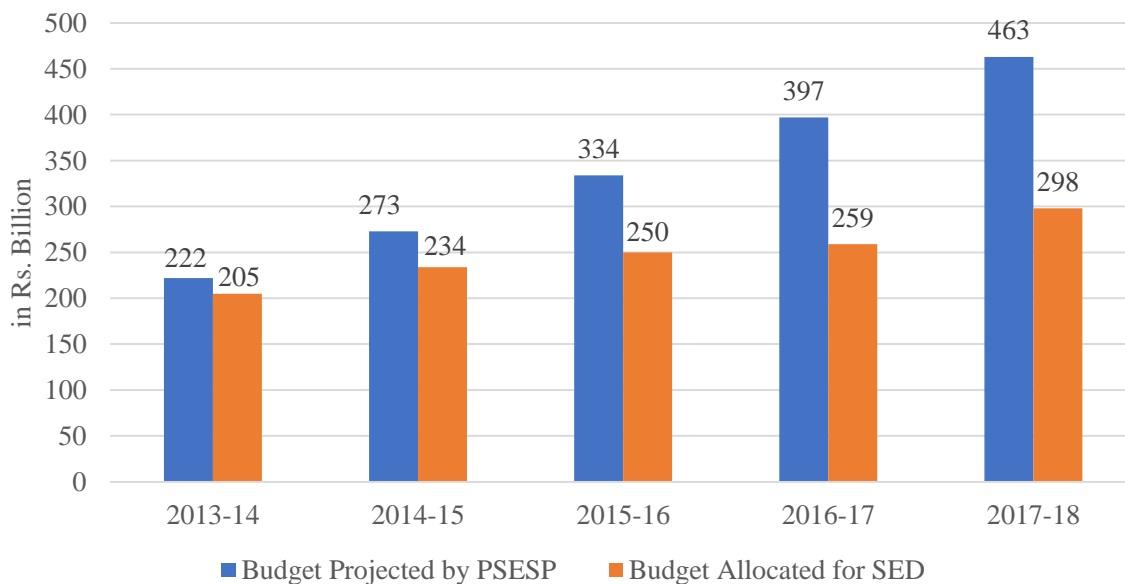
Figure 15: Share of the education budget in Punjab government’s bud

³³ Data on budget allocations as processed from Punjab Budget books of various years.



A review of the PSESP 2013-2017's budget for the five-year period does illustrate one constraint in the sector. As can be seen from the above chart, the actual allocations during these five years of PSESP implementation were significantly short of the highly ambitious projections made in the PSESP.

Figure 16: Comparison of Projected and Actual SED Budgets³⁴



To a great extent, this positive trend is due to rising transfers from the federal divisible funding pool, which constitutes the bulk of the funding for the provincial governments in Pakistan. The funds distributed to Punjab have increased on average by around 8% each year in real terms between

³⁴ Source: PSESP document and Budget Books

2011-12 and 2017-18.³⁵ In this sense, the outlook for education funding in the province in the past few years has been encouraging.

Priority programmes 4 –Objective: Strengthen good governance of the education sector for equitable access and high-quality education

Data Management and Evidence-based Decision-making

Punjab has a results-driven approach to decision-making with a strong focus on monitoring targets. However, the decision-making process is largely top-down. The target-driven approach largely revolves around the districts as key unit of analysis. The DEAs and, subsequently, other levels of education administration were assigned targets against key indicators from the School Education Department each year. There is a need for targets against various indicators to be set in consultation with the officials at respective level of governance to align these with ground realities, skills base and resources available at these levels. This will make the target setting more realistic as well as establish a broad-based ownership of these targets among the officials at the service tier. Local level planning should contribute in this respect, but the current capacity levels would not allow planning and implementation to be effectual.

Data management within the education sector is a major challenge. Currently, one can turn to a variety of sources for information on the education system, however too often there are discrepancies in information among these for the same indicator. Effective management and decision-making require a system of relevant, reliable and timely availability of data.

- The data management system must be comprehensive and built on relevant indicators that will allow for accurate and thorough monitoring and assessment of the education system.

One of the areas in which the relevant data is not available concerns children with disabilities. In fact, the biggest issue Pakistan faces in addressing the issue of education for children with disabilities is not having the right set of data on Persons with Disabilities (PWDs). There is no standardized instrument to collect data on disabilities. The discrepancies in prevalence and types of disabilities show that the purpose of surveys and survey instruments used are different and the results therefore cannot be used appropriately for developing a comprehensive strategy on education for persons with disabilities.

The lack of timely data related to out of school children and to non-formal education makes it difficult to make evidence-based decisions, particularly to ensure that NFE is accessible and inclusive. Children in NFE programmes are not counted by the Punjab Education Management Information System (PEMIS) due to weak links between the SED and L&NFBED. The L&NFBED department does not have monitoring indicators and reports available to draw conclusions on what kind of school level problems, including education quality, are being encountered and how these reports are used to rectify issues.

The L&NFBED does not have data on children who have been mainstreamed into the formal school system and at which level. The importance of consolidated, reliable and accessible data on efficiency of the NFE system, quality and learning outcomes can play a key role in informing policy. There is also a lack of qualitative analysis and documentation of lessons learned and case studies that can be beneficial in understanding and prioritizing issues for planning purposes.

³⁵ The total NFC has registered an increase of 6% per year on average during this period.

Despite improvements in data collection, there are shortcomings on information on school management, and dissemination and effective use of the data are limited, including on learning assessments. School management information would incorporate aspects of operational practices, monitoring processes and outcomes, and people management. However, data collection systems of the government departments and independent surveys do not collect any information at the school level on these aspects.³⁶ In terms of learning outcomes, several types of assessments are conducted but the resulting information is not being used to make evidence-based decisions by various stakeholders.

The capacity of education managers at various levels as regards the planning, monitoring and implementation of various interventions is very low. There is a need to design and deliver training programmes for key staff and also recruit new staff into the system that have these capacities.

Private sector engagement

The PSESP 2013-2017 envisaged integrating the private sector into the government's policy framework. The *Punjab Private Educational Institutions (Promotion and Regulation) (Amendment) Act 2016* introduced various amendments including mandatory registration of private institutions and regulation of fee structure of the private educational institutions. However, there has been little progress towards formulation of a comprehensive policy for integrating the private sector into the overarching government's objectives and standards. A considerable percentage of private schools remain unregistered across all districts. Moreover, the Act or the sub-ordinate legislation do not include standards for quality. As a result, enrolment in private schools remains unaccounted in the overall district enrolment figures. Consequently, the actual number of out of school children may appear higher than the actual number of children facing the access challenge causing the over-reporting of out of school children in a given district.

Punjab has a strategy of Public Private Partnerships to expand access to school. The Punjab Education Foundation (PEF) has played a significant role in providing access to education to the children from underserved areas. However, there is limited coordination between SED and PEF at the service delivery tier. After registration, there is little subsequent interaction between district education authorities and PEF partner schools. All monitoring is carried out by PEF's monitors against pre-determined monitoring indicators. PEF has a mechanism that locks the minimum acceptable performance from partner schools through Quality Assurance Tests (QATs) administered annually to students; however it needs to analyse trends in performance to inform improvements in school support. PEF and the SED operate as parallel streams, with limited exchange of information.

Priority Programmes 4

These priority programmes address governance and coordination needs within departments, agencies and units, and between them. They also focus on the need for improved data management and use contributing to more effective and evidence-based decision-making. Financial planning and management are also addressed through capacity development support. The priority programmes align with the third pillar of the New Deal that addresses governance of the education system.

Programme 4.1 – Coordination and regulation

Specific objective: Strengthen governance and coordination frameworks within the public education system, other line departments and with private providers

³⁶ E-pact (2018), op.cit.

The ESA notes that while decentralization will be promoted as a way to improve service delivery, there is a need to strengthen the coordination and interaction of departments, agencies, and units, both horizontally and vertically.

- The PESP places emphasis on governance structures that promote collaboration. The SED has constituted a committee called Coordinated Action for Reforms to Education (CARE); the committee consists of the heads of PCTB, QAED, PEC and the PMIU and is expected to improve coordination, harmonization and feedback loops among key SED institutions. However, this is limited to coordination among the heads of these organizations. Linkages need to be more thorough—for instance between PEC's Research Cell, QAED's Academic Development Unit (ADU), and PCTB's Curriculum and Manuscripts Wings. PESP prescribes interdepartmental coordination.
- To improve inter-district planning and management, districts will be required to develop, deliver and track progress against district and sub-district education plans. DRCs will be leveraged to drive the delivery of these plans.
- PESP also places emphasis on strengthening collaboration with the private sector. However, to ensure timely, well-coordinated and informed decisions, a robust framework is needed to guide public-private partnerships and coherent, coordinated growth of PSSP, PEF and NFBE schools.

Programme 4.2 – E-governance, evidence-based planning and management

Specific objective: Enhance planning, monitoring and evaluation across all levels for evidence-based decision-making

Evidence-based decision-making relies on the regular collection of data, its analysis and use. The private sector, though required to share data as part of the registration process, do so to a limited extent. Furthermore, there is limited access by decision-makers to reliable data on out of school children. Moreover, various departments, agencies and units maintain their own databases.

- Centralizing and mainstreaming data management will ensure that a complete picture of education supply and demand is well understood. This includes centralizing SED public school data, with various other datasets including from L&NFBED, SpED and private sector.
- While data driven decision making will be informed by routine data collection processes and assessments, a research unit will also be established to provide needs-based, in-depth reports on prevalent issues on the education sector and to carry out research to help the design and delivery of innovative practices to improve education outputs and outcomes.
- Managers will be trained on using data to support planning and management. While the SED has a culture of data-informed planning and management, the SpED and L&NFBED do not. They will invest in identifying expertise in developing plans and using data.

School Information System (SIS)

In 2017, the Punjab Information Technology Board (PITB) collaborated with the SED to introduce a SIS. This tablet-based system allows schools to self-report teacher and student-level data in real time. The SIS has registered 11.6 million students, along with their parent's identification numbers and telephone numbers, their date of birth, enrolment year and grade. To date, 48,058 of 48,283 schools, and 382,917 teachers and 73,131 support staff, have registered with SIS. SIS provides a tremendous opportunity for targeted and hence efficient data-driven decision-making and performance management. Because it tracks individual students, it can also support collaboration

between the SED, TEVTAs and the L&NFBE – for example, if the SIS identifies recent drop outs, they can be redirected to NFBE centers or to TEVTAs.

- The SIS will be integrated with the National Database and Registration Authority (NADRA) to further establish its credibility and to support with tracking dropouts.

Programme 4.3 – Financial planning and management

Specific objective: Improve financial planning and management in the education sector

In a context of increasing devolution of responsibilities from the provincial level to the district and sub-district levels, it has been noted that staff do not have sufficient financial planning and management capacity. It is important that staff are recruited with education and experience in financial management and that managers and decision-makers have knowledge of financial management principles and concepts to make informed decisions.

- To develop capacity of key personnel, training will be provided to education managers in financial planning and management.
- Within education departments, dedicated financial management cells will be established and staffed by qualified personnel.
- Newly recruited personnel will undergo an induction to become familiar with the financial management systems and structures.
- This will promote division of labour among positions at the district and sub-district levels and ensure transparent and checks and balances around financial decisions.
- The PMIU has committed to a School Improvement Framework, which will set and track targets for school improvement – this can be used by school leaders to mobilize resources and build momentum around school improvement.
- To improve financial management at the school level, the GoPb will introduce an online disbursement system for Non-Salary Budgets.

Strategic Programme Area 3 - Governance and Management	
New Deal 2023 Strategies	
Strengthen School Education Department Empower School Leaders and Administrators	
Priority Programmes 4 Objective: Strengthen good governance of the education sector for equitable access and high-quality education	
Specific Objectives	Main activities
4.1. Strengthen governance and coordination frameworks within the public education system, other line departments and with private providers	<ul style="list-style-type: none"> • Develop a regulatory mechanism for private education sector and public-private partnerships
4.2. Enhance planning, monitoring and evaluation across all levels for evidence-based decision-making	<ul style="list-style-type: none"> • Improve data collection, management and use (including on OOSC, children and youth with special education needs) • Streamline and integrate various education datasets in the education sector • Strengthen existing monitoring mechanisms for

	continuous improvement of education service delivery <ul style="list-style-type: none"> · Drive implementation of education reforms through a Secretary Delivery Unit · Measuring, monitoring and reporting of SDGs
4.3. Improve financial planning and management in the education sector	<ul style="list-style-type: none"> · Build capacity of education managers on financial planning and management

Priority programmes 5 –Objective: Promote effective leadership and management of the education sector for better service delivery

Roles and responsibilities

There are various institutions in the Punjab empowered to support quality learning, but they are often unable to implement adequately their mandates. There is duplication of roles across different institutions, which suggests that they work independent of each other. For instance, PEC, PCTB and QAED do not have regular and frequent interaction with each other in order to share relevant work, information, insights and recommendations. There are two potential reasons for this. First, the institutions lack the ability to recruit qualified and experienced professionals. Second, even if such human resources were acquired, there are factors such as working environment, service rules etc. that do not encourage retention. At the same time, qualified and competent subject specialists, assessment experts, psychometricians, data analysts and other experts related to the field are not easily available.

A better managed, monitored and administered education sector requires collaboration among all agencies involved in the management and delivery of education. For example, there is no provincial policy framework for introducing the technical stream in school education in Punjab. The Punjab School Education Sector Plan (PSESP) 2013-2017 recommended the establishment of a coordination mechanism between SED and TEVTA in order to develop linkages between technical and vocational education and general education. The Punjab Skills Development Plan also emphasizes this as a crucial need in order to build human capital in the province.

The spirit of devolution and the establishment of DEAs was to strengthen and empower the service delivery tier to plan, coordinate and execute various activities towards improving the state of education in the districts. New structures at district level have been introduced, but there is a need to review them, as there exists ambiguity as to reporting and coordination lines. The Punjab Local Government Act, 2013 vested the control of government schools in the district education authorities (DEAs). However, there was inadequate delegation of authority to the DEAs as compared to the role envisaged by PLGA 2013.

Presently, there is no specialized management cadre for the School Education Department. Subject Specialists, head teachers and other personnel from the teaching cadre are appointed at administrative posts such as AEOs, DDEOs, DEOs etc. These personnel, once posted against new designations, could again be reverted to their posts within the teaching cadre. The recruitment of AEOs is significant as it comes as an initiative of the School Education Department aimed at introducing a specialized management cadre at the service delivery tier.

The role of AEOs in school improvement

In the last two years, the role of AEOs has been redefined so that they have more thorough oversight of a small number of schools. In July 2019, the Terms of Reference for AEOs were further revised, and they were allocated two primary responsibilities: general school support and support to Head Teachers and Teachers in their leadership, management and instruction roles. Key responsibilities include developing School-Based Action Plans (SBAPs) according to School Improvement Frameworks (SIF), tracking school progress against these action plans, and maintaining the SIS. AEOs will also provide academic leadership by ensuring routine school-based assessments and their use in improving teaching and learning, carrying out classroom observations and providing feedback, ensuring CPD, accommodating the needs of students with disabilities, and managing School Councils. The AEO therefore provides a critical link between PESP priorities and their realization the school level.

Human Resource Management

Staffing gaps at the sub-provincial level remain and present capacities in some areas are weak. There is a need to complete new recruitment of positions so that intended reforms can be fully implemented. The modality for filling positions is by transfer, whereas recruitment of new staff remains delayed often, which limits the ability to bring on board staff that may have needed skills and capacities that currently do not exist among existing staff.

One of the major challenges related to management of personnel is the absence of a Performance Management Framework. Human Resource policies have been improved, yet traditional practices remain. Yearly performance appraisals are carried out in a traditional way without much regard to the performance of incumbents against various output related indicators. Performance evaluation and subsequent career progression of personnel is seldom based on their achievements against the parameters outlined by their official job descriptions and responsibilities. A Performance Management Framework would be applicable to all education managers and supervisors. It would include measures for performance evaluation for all tiers of employees. It would also outline the system of protocols for recruitment and transfer of staff.

Community engagement

The PESP 2013-2017 assigned high importance to the community involvement and its role in addressing the access challenge. For this, the PESP outlined strategic measures to achieve the objectives of effective involvement of communities in schools and facilitating the enrolment and retention of children in schools. The PESP recommended a review of the current functionality and capacity of School Councils (SCs) to identify key weaknesses/strengths and development of a strategy for SC revitalization. The development of rules and regulations for SCs, as envisaged by PESP, has been completed. The involvement of parents in the successful implementation of inclusive education is well documented. Community involvement is also an effective inclusive feature; however, the parent schools' councils in Pakistan have not been very effective. This

demands new ways of creating involvement of communities and parents to the benefit of schools, teachers and the children.

The School Councils, in addition to being responsible for improving various access, quality and infrastructure related indicators of schools, are also custodians of the Non-Salary Budget (NSB). To utilize effectively the Non-Salary Budget, School Councils are required to prepare a School Based Action Plan (SBAP). The plans and the use of the operational budget, however, have limitations, which stem from weak capacity of School Councils in planning, budgeting and executing the resources transferred under the Non-Salary Budget.

Priority Programmes 5

These priority programmes focus on realizing the objectives of decentralized implementation and accountability of the education system. Empowering school leaders and administrators is a key component of the New Deal. Communities also play an essential role to support enrolment and retention, especially for vulnerable children that are out of school and children with disabilities.

Programme 5.1 – Devolution for high quality education

Specific objective: Empower local education bodies and schools to better implement education policies and ensure high quality education

The PESP recognizes that schools play the central role in cultivating learners and therefore places emphasis on empowering schools' leaders as well as sub-provincial education managers to support decision-making closer to where decisions are implemented.

- Decision-making will be further decentralized from the provincial level to ensure that education managers, especially at the markaz and tehsil levels are empowered.
- AEOs will have more authority to support schools in their zone. Principals and teachers will be empowered to make decisions relevant to their context and needs. This will increase accountability and responsiveness while ensuring that teachers and children have the resources needed to learn in conducive environments. The following steps can be taken to empower schools:
 - Enable schools to use data on their performance to develop annual school improvement plans that are linked to district and sub-district education plans, but with targets that are decided by schools, keeping in view their needs and performance aspirations
 - Equip AEOs with the management tools required to oversee the timely delivery of school improvement plans and with the support required to overcome challenges, and enable them to stimulate dialogue with communities on school improvement
 - Revise the plans annually to ensure a culture of ongoing improvement
 - Encourage sub-district level meetings where school leaders and AEOs can compare notes and learn from each other's experience in school improvement
 - Ensure that teachers and parents contribute to, and have ownership of these plans
 - Timely receipt of NSB funds will allow school leaders to exercise more control over meeting school needs.

Programme 5.2 – Development of education system management capacities

Specific objective: Enhance education sector leadership and management capacities at provincial and local levels

Similar to teachers and trainers, education managers require regular, needs-based continuous support to enhance their leadership and managerial capacities.

- Professional development programmes will be created, and managers will be allocated time to participate in learning activities.
- Equally important is the motivation and career pathways available to managers. A performance management system will be developed to ensure that managers are participating in targeted trainings and that their investment in professional development is linked to career advancement and deployment.
- This data will also be linked to the provision of incentives, financial or non-financial, such as additional professional development opportunities, temporary appointments, or other career advancing opportunities, to encourage managers to prioritize learning.
- Effective management of services requires skills in management and administration. In Punjab however, teachers are usually promoted as education managers – with this practice, schools lose experienced teachers and gain inexperienced managers. In 2009, the National Education Policy recommended provincial education management cadres, with the premise that such a cadre, recruited and trained with the skills required for effective administration, is expected to increase the efficiency of district education departments. Punjab has since been exploring the concept. Education management cadres have successfully been introduced in Khyber Pakhtunkhwa and Sindh, and lessons from Khyber Pakhtunkhwa demonstrate that districts led by officials from the management cadre continuously outperform districts led by managers selected from the teaching cadre. PESP therefore proposes such a cadre. Such a cadre will also insulate education management from internal and external influence (such as exerted on teachers by politicians).
- The government is in the process of introducing a Human Resource Management Information System (HRMIS), which will be integrated with e-transfer and SIS data. The New Deal proposes registering of all human resource to this MIS.
- QAED introduced a School Leadership Development Programme for middle and secondary leaders in 2018; this programme has already supported 15,000 school leaders and is expected to continue till 2020. The PESP recommends routine management and academic leadership trainings for school heads.
- Improved recruitment, a specialized management cadre, professional development and career ladders will be informed by a Performance Management Framework (PMF) for the province.
- The L&NFBED's DEOs participate in leadership training at the Punjab Management Professional Development Department (MPDD). While these should be continued, the L&NFBED should ensure that these trainings respond to the spectrum of challenges faced by district officials working in different locations and different contexts in the province.

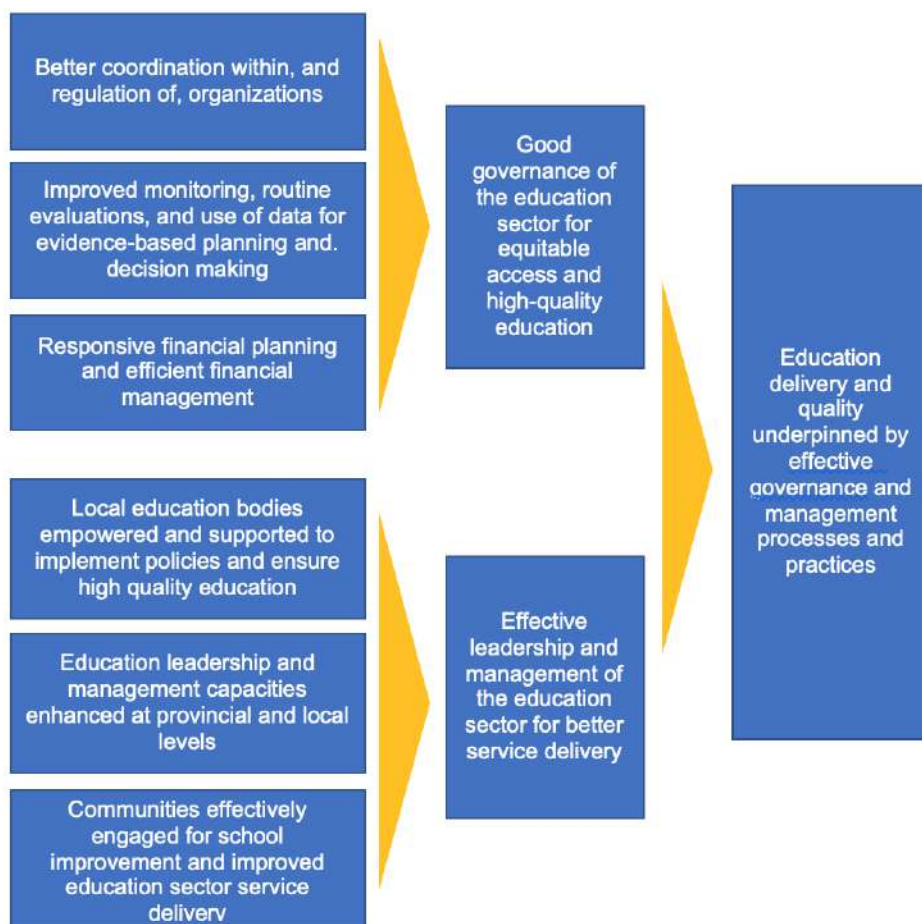
Programme 5.3 – Community engagement

Specific objective: Promote effective engagement of communities for school improvement and better education service delivery

- School Councils will play a central role in supporting the delivery of quality education in communities.
- These councils will be restructured and supported to make needs-based requests on important educational issues.
- They will work closely with education managers at sub-provincial level that will represent their needs with the SED.

- Online disbursement of the NSB will allow more timely and efficient use of school funds by School Councils to meet school needs.
- In addition, to promote the engagement of young people from the communities, the PESP will promote a culture of volunteerism.
- The L&NFBED has notified School Management Committees (SMCs) for all its centers. These SMCs consist of existing and retired teachers and government officials; they have monthly meetings. A continuous focus is enrolment, retention and attendance. The SMCs should also play a role in supporting learning processes and facilitating transition to formal schools or technical and vocational schools.
- The complaint cell for various complaints will be integrated into one system, so that they are categorized and directed towards relevant authorities for resolution and follow up.

Figure 17: Results flow diagram for Strategic Area 3



Strategic Programme Area 3 - Governance and Management	
New Deal 2023 Strategies	
Strengthen School Education Department Empower School Leaders and Administrators	
Priority Programmes 5 –Objective: Promote effective leadership and management of the education sector for better service delivery	
Specific Objectives	Main activities
5.1 Empower local education bodies and schools to better implement education policies and ensure high quality education	<ul style="list-style-type: none"> • Strengthen autonomy of local education authorities/bodies and the implementation of its structure and policies • Delegation of powers to education managers, especially at markaz and tehsil levels • Strengthen the role of AEOs to support effective service delivery at school level
5.2 Enhance education	<ul style="list-style-type: none"> • Develop professional development programmes of

sector leadership and management capacities at provincial and local levels	<p>male and female education managers and professionals in educational planning and management</p> <ul style="list-style-type: none"> · Develop an informed performance management system for educators and administrators and linked to incentives and professional development
5.3 Promote effective engagement of communities for school improvement and better education service delivery	<ul style="list-style-type: none"> · Engage local councils for improvement of school education

3 Assumptions and dependencies

Successful delivery of the PESP depends upon strong intra- and inter-departmental coordination, and leveraging the inputs of development partners. For example, to achieve aspirations for teaching and learning, the SED, PCTB, QAED and PEC need to work in sync with each other. Textbook and teacher development should be informed by assessments, and this teaching and learning process needs to be scaffolded by a curriculum that responds to learning requirements and standards for the performance of the education system. While the PESP aspires for these improvements, a coordinated and widely owned approach is critical.

Improvements to access, retention and equity also require a syndicated approach involving SED, PEF, PSSP, SpED, TEVTAs and L&NFED. A common mission, and effective communication and coordination around the mission is also necessary between the various layers of delivery: provincial, district and sub-district: on strategies, results, risks and challenges.

Collaboration to deliver results

In order to mount a collective response to the challenge posed by Article 25-A and SDGs, the coordination between School Education Department and its various allied departments is of crucial significance. For instance, Punjab Examination Commission (PEC), in addition to conduction terminal exams for primary and elementary cycle, may provide valuable insights to Quaid e Azam Academy on Educational Development (QAED) in designing the training programs for teachers in areas where students continue to exhibit low performance. Similarly, the insights can also enable Punjab Curriculum and Textbook Board in designing, approving, printing and disseminating relevant and quality textbooks and supplementary guides keeping in view the needs of teachers and students. However, these departments are largely working in isolation from each other.

Similarly, it is also imperative that there are linkages between School Education Department, Special Education Department, Non-Formal Basic Education Department, the Technical Education and Vocational Training Authority, Health Department and related departments for a holistic response to the educational needs of children at various levels and the society at large, and for ensuring health, learning and psychosocial wellbeing to ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education (SDG-4 target 4.2). Distant and remote localities, where schools based on the brick and mortar model are not feasible, can be provided access to education through Non-Formal and Basic Literacy department. These children may be mainstreamed in the formal schooling system after the completion of their basic education. Similarly, the children opting to acquire marketable skills may have opportunity to pursue

technical and vocational education alongside or after completion of their formal education. However, barring a few small-scale collaborative initiatives, an effective coordination mechanism which may create greater system efficiency and synergy among these departments is largely missing.

– PESP ESA

The SED's CARE is expected to improve coordination, harmonization and feedback loops among key SED institutions. Each institution should also consider a resource mobilization strategy to (i) assess the resources available to deliver PESP commitments, (ii) potential support from development partners, (iii) and external support and constraints.

As for human resource, their capability to deliver their roles is essential. The SED will need to:

- Assess the gaps between envisioned roles and current performance
- Determine the shortcomings that can be improved internally (eg through CPD, additional onsite support, technology etc)
- Determine the shortcomings that need to be addressed in collaboration with other departments – for instance strengthening pre-service teacher education through the Higher Education Department and through universities, training on the use of technology for planning and management through the PITB, etc

Predictability in financing is also critical. The GoPb's Medium Term Budgetary Framework (MTBF) has allocated funds to various SED institutions, based upon these institutions' recommendations and projections.

The PESP has proposed an inter-department coordination committee to oversee delivery of planned interventions. This committee is critical for timely planning and implementation, routine tracking and monitoring and effective use of resources for PESP. One of the key functions of the committee, as soon as it is constituted, should be to map dependencies with other sectors and relevant institutions on which smooth implementation is dependant. For example, liaison with the HED and with universities to inform the curriculum, design and content of pre-service teacher education, and liaison with the Department of Industries to determine employable skills that can be taught alongside the mainstream curriculum. Ideally, this committee should have representation from the Finance and Planning and Development departments, for timely approvals and release of funding. This committee should also liaise with development partners so that PESP delivery can leverage their support.

The strategies in the PESP have been broadly articulated. The organizations responsible for delivery will develop operational plans with detailed activities: how the interventions will be delivered, how vertical and horizontal linkages will be established to support delivery, and how performance will be tracked and course redressal initiated, if needed. The inter-department coordination committee will be expected guide the development of these operational plans.

4. Costing and Financing

The cost of the PESP 2019-2023 has been computed by means of a projection and simulation model, based on the targets set by School Education, Special Education and Literacy and Non-Formal Basic Education departments. As table 6 shows, the costs are expected to rise throughout the plan implementation period, reaching over 355 billion Rupees in the last year (in constant prices of 2016). The bulk of the costs, which depend on enrolment and school organization targets (scale

components) would represent, at the end of plan implementation, 0.94% of the country's GDP, or 19.14% of the Punjab's total government budget.

Table 6. Total costs of the PESP 2019/20-2023/24

	2019 2020	2020 2021	2021 2022	2022 2023	2023 2024
Cost of scale components (in million of PkRs, at current prices)	316,939	336,943	359,612	383,767	423,296
Cost of scale components (in million of PkRs, at 2016 constant prices)	269,883	274,300	279,346	283,914	298,245
as % of Pakistan GDP	0.80%	0.82%	0.84%	0.87%	0.94%
as % of Punjab global budget	16.35%	16.72%	17.25%	17.87%	19.14%
Cost for Priority Programmes 1 (in million of PkRs, at current prices)	6,133	9,051	12,517	16,111	20,341
Cost for Priority Programmes 2 (in million of PkRs, at current prices)	41,603	45,792	50,326	55,282	60,699
Cost for Priority Programmes 3 (in million of PkRs, at current prices)	1,403	1,584	1,249	1,249	1,092
Cost for Priority Programmes 4 (in million of PkRs, at current prices)	572	275	175	176	176
Cost for Priority Programmes 5 (in million of PkRs, at current prices)	764	714	410	410	310
PESP total cost (in million of PkRs, at current prices)	367,414	394,358	424,290	456,995	505,914
PESP total cost (in million of PkRs, at 2016 constant prices)	312,865	321,041	329,588	338,089	356,456

Note: Costs of priority programmes include activities in the implementation plan that are not scalable (i.e. not based on projected enrolment, etc.)

Table 7. Costs of the PESP 2019/20-2023/24 by department

	2019 2020	2020 2021	2021 2022	2022 2023	2023 2024
PESP cost for School Education (in million of PkRs, at current prices)	359,677	385,589	414,610	445,903	493,457
PESP cost for School Education (in million of PkRs, at 2016 constant prices)	306,276	313,902	322,069	329,882	347,679
PESP cost for Special Education (in million of PkRs, at current prices)	5,578	6,172	6,869	7,853	8,898
PESP cost for Special Education (in million of PkRs, at 2016 constant prices)	4,749	5,024	5,336	5,810	6,270

PESP cost for Literacy & Non-Formal Ed (in million of PkRs, at current prices)	2,776	3,307	3,628	4,184	4,649
PESP cost for Literacy & Non-Formal Ed (in million of PkRs, at 2016 constant prices)	2,364	2,692	2,818	3,095	3,276

As Table 8 shows, the costs of the plan, including scale components and priority programmes, could be absorbed by the budget forecasted for the three education departments combined, until 2020/21. The last three years of plan implementation, however, would require the mobilization of additional resources. In 2021/22 the funding gap is estimated to be 2.07% of the expected budget for the three departments; in 2022/23 it would rise to 4.97%; and in 2023/24 the funding gap would climb up to 11.25%.

Table 8. Funding gap (Primary Budget Balance) of PESP 2019/20-2023/24

	2019 2020	2020 2021	2021 2022	2022 2023	2023 2024
Total PBB (in million of PkRs, at current prices)	6,103	618	- 8,613	- 21,623	- 51,161
Total PBB (in million of PkRs, at 2016 constant prices)	5,197	503	- 6,690	- 15,997	- 36,047
PBB as % of Pakistan GDP	0.02%	0.00%	-0.02%	-0.05%	-0.11%
PBB as % of Punjab global budget	0.31%	0.03%	-0.41%	-1.01%	-2.31%
PBB as % of Punjab budget for School Ed, Special Ed and L&NFBE	1.63%	0.16%	-2.07%	-4.97%	-11.25%

Note: PBB = Budget - Costs of the Plan

The funding gap affects the education departments quite differently, a reflection of their own levels of budget allocation. While the costs of the Plan's strategies could be absorbed by the current budget allocation to the SED until 2020/21, the interventions to be implemented by Special Education Department and by Literacy and Non-Formal Basic Education Department will require substantial additional resource mobilization right from the start. The funding gap resulting from the interventions proposed for Special Education would be 44% in the first year of Plan implementation, rising to 102% in the last year of implementation. In the case of L&NFBED interventions, the funding gap is even more substantial. A careful resource mobilization strategy would be required to undertake all proposals.

Table 9. Funding gap (Primary Budget Balance) of PESP 2019/20-2023/24 by department

	2019 2020	2020 2021	2021 2022	2022 2023	2023 2024
PBB for School Education (in million of PkRs, at current prices)	8,480	3,817	- 4,697	- 16,466	- 44,819
PBB for School Education (in million of PkRs, at 2016 constant prices)	7,221	3,107	- 3,648	- 12,182	- 31,578

PBB as % of Budget for School Education	2.30%	0.98%	-1.15%	-3.83%	-9.99%
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PBB for Special Education (in million of PKRs, at current prices)	-	-	-	-	-
	1,717	2,159	2,718	3,577	4,494
PBB for Special Education (in million of PKRs, at 2016 constant prices)	-	-	-	-	-
	1,462	1,758	2,111	2,646	3,166
PBB as % of Budget for Special Education	-44.46%	-53.80%	-65.46%	-83.64%	102.02%

PBB for Literacy & NFBED (in million of PKRs, at current prices)	-	-	-	-	-
	1,277	1,749	2,016	2,524	2,939
PBB for Literacy & NFBED (in million of PKRs, at 2016 constant prices)	-	-	-	-	-
	1,087	1,424	1,566	1,867	2,071
PBB as % of Budget for Literacy & NFE d	-85.20%	112.31%	125.09%	152.04%	171.90%

5. Monitoring and Evaluation Framework

Monitoring and Evaluation (M&E) is essential to effectively and efficiently manage the overall implementation of the PESP. It is important for a robust system to be in place and guided by clear objectives and principles. Strong monitoring and evaluation practices that are transparent and objective contribute to a credible process that supports the improvement of the education system overall. It provides the evidence-base to make informed decisions that lead to greater accountability and improvements in teaching and learning, which ultimately contributes to improve student outcomes. This chapter outlines the monitoring and evaluation objectives, principles, management structures and processes. It also provides the results framework by which the plan will be monitored and evaluated throughout its implementation.

M&E Objectives

- Support improvements in the design and implementation of education activities
- Support evidence-based decision-making to inform policy and programme
- Facilitate policy dialogue between government of Punjab education stakeholder
- Generate learning to establish good practices and develop quality improvements of teaching and learning processes

M&E Principles

- **Transparency** – Processes and practices will be openly shared with relevant stakeholders. The data and findings collected during M&E practices will be made available. Regularly reporting will be shared and posted for public use to ensure that all stakeholders are informed about the progress in the education system.
- **Accountability** – Departments, agencies and partners will be responsible for implementation of the plan and its activities according to established procedures and timelines. Regular reviews will be conducted to ensure that all implementing entities have executive their responsibilities in a timely and efficient way.
- **Result-based Monitoring** – M&E practices will be demand driven and focused on achieving targets and outcomes as identified in the PESP results framework

- **Equity and gender equality** – Data will be disaggregated to ensure that actions designed based on analysis of data benefits all boys and girls, regardless of their situation. This will include, but not limited to, sex, age, location, disability, and other relevant data points.
- **Objectivity** – M&E processes will be designed based on technical requirements. Analysis of data will be based on standard practices with the aim of informing policy design and programme improvement. Interpretations will be based on evidence and procedures will be well documented.

5.1 Monitoring Structure

Monitoring and evaluation is the responsibility of all stakeholders involved in the implementation of the PESP. Its important activities and results are well coordinated between the SED, SpED and L&NFBED. To ensure coordination and collaboration and to reduce duplication of effort, a monitoring and evaluation technical working group (M&E TWG) will be established and chaired by the SED. The M&E TWG will include representatives from each of the three government agencies as well as development partner, civil society and other government agencies, such as TVET and Health Department. The M&E TWG will meet on a regular basis and will be responsible for preparing the programmes for the various monitoring and evaluation activities, ensuring alignment activities, and guidance for the sector.

5.1.1. M&E activities

During the implementation of the PESP, monitoring will be on-going, and evaluation will take place at strategic benchmarks within the timeframe of the Plan. The most important monitoring activities include: Routine, Quarterly and Annual Reviews. Additionally, mid-term and final evaluations will be conducted.

Routine:

Routine monitoring activities occur at various levels of government including at the provincial level and district level. Streamlined responsibilities of the AEOs and MEAs will ensure efficient school-level monitoring and ensure the necessary feedback loop to head teachers and teachers. At the provincial and district levels, education officers in each department will follow up on implementation of the annual work plans. District Review Meetings will be held regularly and organized by the district education office.

Quarterly:

Led by the M&E technical working group, official meetings will be held on a quarterly basis to review implementation of the annual work plans and achievement against targets in the PESP. This will be an opportunity to engage government, development partners, civil society and other stakeholders in discuss progress achieved and if necessary, agree upon corrective measures to ensure continued implementation.

Annual Reports and Reviews

Current there are many data systems collecting information across the sector. An integrated education management system is proposed to harmonize data collection. Data from the integrated management information system will be used in producing the annual sector performance report. This analysis will serve as the basic document for an annual joint education sector review (JESR), which will assess achievements and shortcomings, and agree on improvements.

The joint education sector review shall include representations of SED, SpEd, L&NFBED, Development Partners, Civil Society, Private Sector and other education stakeholders to review progress and agree on priorities for the next year.

Mid-term Evaluation

A mid-term evaluation will be conducted in 2021 at the half way point of the PESP. This will be an opportunity for all stakeholders to comprehensively review the PESP against the established targets and introduce changes to the PESP, if necessary. The mid-term evaluation will be a formative feedback into programme implementation to improve performance.

Final Evaluation:

A final evaluation will be conducted in the final year of the PESP to assess overall achievement of the plan. The final evaluation will be summative, not only to assess impacts and outcomes, relevance, cost-effectiveness, and sustainability, but also to analyze the reasons results have been achieved or not achieved, and to derive lessons for policy revision and for preparing the next plan. This will also serve as a first step in preparing for the next five-year sector plan.

Annual reporting as well as the Mid-term and Final evaluations will assess how Punjab is progressing against international targets as well, including the Sustainable Development Goals (SDGs), particularly SDG 4. Indicators will be integrated into the Management Information System and will contribute to the provincial and national reports.

5.1.2. Management Information System

SED currently relies on the Punjab Education Management Information System (PEMIS). Other databases exist such as the L&NFBED management information system as part of this Plan, an integrated plan will be developed and used to collect, manage and use data for evidence based planning and management of the education system. Data from the private sector shall also be included in the integrated management information system.

5.2 Key Performance Indicators and Programme indicators

The Results Framework provides the overall blueprint for monitoring and evaluating the implementation of the plan and demonstrating achievement of established targets. The Results Framework is organized by strategic priorities, plans and programmes objectives. Key performance indicators have been identified to demonstrate achievement for the system overall. In some cases, new indicators have been introduced and will require new tools and procedures to be developed, in other cases, collection procedures are well established.

Table 10. Key Performance Indicators

S.No.	KPIs	Gender	Baseline	Mid-Term Target	End Target
			2017-18	2021-22	2023-24
A.	Finance and Management				
A1	Percentage of provincial budget allocated for education	-	17.50%	20.00%	22.00%
A2	Joint Education Sector Reviews conducted	-	0	2	4
A3	Utilization of non-salary budgets at school level	-	90% schools with 50% utilization on current year release	100% schools with 70% utilization on current year release	100% schools with 90% utilization on current year release
B.	Access and progression				
B1	School Entry				
B1.1	Net Intake Rate to Primary School	Boys	55.50%	57.75%	60%
		Girls	56.90%	58.95%	61%
		Total	56.20%	58.35%	60.5%
B2	School Readiness				
B2.1	Percentage of children attending first grade who attended pre-school in previous year	Boys	90.60%	91.30%	92%
		Girls	90.70%	91.35%	92%
		Total	90.65%	91.33%	92%
B3	School Attendance				
B3.1	Net Attendance Ratio (NAR) Primary	Boys	65.80%	70.40%	75%
		Girls	65.10%	70.05%	75%
		Total	65.40%	70.20%	75%
B3.2	GPI NAR Primary		0.99	1	1
B3.3	Adjusted Net Attendance Ratio Lower Secondary	Boys	35.90%	40.45%	45%
		Girls	37.60%	41.55%	45.5%
		Total	36.70%	40.98%	45.25%
B3.4	GPI Adjusted NAR Lower Secondary		1.05	1.03	1.01
B3.5	Net Attendance Ratio Upper Secondary	Boys	27.80%	33.90%	40.0%
		Girls	30.00%	34.50%	39.0%
		Total	28.90%	34.20%	39.50%
B3.6	GPI NAR Upper Secondary		1.08	1.02	0.98

B4	Transition and Completion				
B4.1	Primary School Completion Rate	Boys	47.3%	55.7%	55.9%
		Girls	47.6%	57.1%	56.9%
B4.2	Transition Rate to Secondary Education	Boys	89.7%	91.6%	92.3%
		Girls	84.5%	86.6%	87.3%
B4.3	Middle Education Completion Rate	Boys	39.0%	47.3%	51.4%
		Girls	36.6%	48.3%	52.8%
C.	Quality				
C1	Grade 5 exam performance (mean score)				
C1.1	English	Total	59	61.5	64
C1.2	Science	Total	56	58.5	61
C1.3	Urdu	Total	63	65.5	68
C1.4	Mathematics	Total	61	63.5	66
C2	Grade 8 exam performance (mean score)				
C2.1	English	Total	62	64.5	67
C2.1	Science	Total	53	55.5	58
C2.3	Urdu	Total	73	75.5	78
C2.4	Mathematics	Total	52	54.5	57
C3	Teacher qualifications				
C3.1	% teachers participating in in-service training per year	Total	90,000	Not provided	Not provided
D	Special Education				
D1	Growth in number of Schools/Centres	Total	294	6.5%	13.5%
D2	Growth in enrolment - Katchi/ Primary	Boys	16,020	18.5%	37%
		Girls	9,123	21%	42.5%
		Total	25,143	19.5%	39%
D3	Growth in enrolment -Middle	Boys	2,307	15%	30%
		Girls	1,489	17%	34%
		Total	3,796	15.5%	31.5%
D4	Growth in enrolment – Secondary	Boys	1,105	22%	44.5%
		Girls	549	32%	63.5%
		Total	1,654	25.5%	51%
D5	% teachers participating in in-service training per year	Total	29%	39.50%	50%
D6	% of schools with functional	Total	74%	79.50%	85%

	local councils				
E	Literacy & Non-Formal Basic Education				
E1	Growth in number of Literacy Centres	Total	2,160	25%	50%
E2	Growth in Pass Outs of Literacy Centres	Male	3,240	25%	50%
		Female	29,160	25%	50%
		Total	32,400	25%	50%
E3	Growth in number of Non Formal Basic Education Schools (NFBES)	Total	13,279	10%	20%
E4	Enrolment of OOSC (miss outs & school drop outs)– Primary Education level	Boys	180,000	10%	20%
		Girls	220,000	10%	20%
		Total	400,000	10%	20%
E5	Number of Literates through Non Formal Basic Education/ Primary Schools	Boys	210,060	10%	20%
		Girls	256,740	10%	20%
		Total	466,800	10%	20%
E6	Mainstreaming into formal schools (Grade 1-5)	Total	60,000	5%	10%
E7	Grade 5 PEC pass outs	Boys	3,060	10%	20%
		Girls	3,740	10%	20%
		Total	6,800	10%	20%
E8	Formative Assessment for quality assurance (Urdu, English, Mathematics, GK, Science, Social Studies & Islamiyat)	Total	60%	70%	80%
E9	% NFBE/PS teachers' training (On-job)	Total	100%	100%	100%
E10	Non Formal Education Institution Management Committees at local level	Total	100%	100%	100%

Table 11. Outcome indicators for priority programmes

Strategic area/ specific objectives	Indicators	Baseline	Target 2023/24
STRATEGIC AREA 1: QUALITY AND LEARNING OUTCOMES			
Objective 1. Improve teaching and learning practices for better learning outcomes	% of girls and boys at all levels achieving a minimum proficiency level against a standardized framework	n/a	At least 40% girls and boys at all levels achieving a minimum proficiency level against the standardized framework
1.1 Introduce standardized recruitment and deployment of educational practitioners and managers at all levels	% of newly recruited and deployed teachers are based on new standards	n/a	100 %
1.2 Provide quality pre-service, induction and in-service training to education professionals	% of teachers and managers (M/F) undergoing trainings in the CPD programme as per the framework of the respective departments*	100% coverage of teachers and managers in SED	100% coverage of teachers in SED, Special ED, L&NFBED
	% of teachers appraised as defined in the CPD programme	n/a	At least 50% teachers appraised
1.3 Make available quality textbooks, and other teaching and learning materials	% of schools that receive textbooks on time	100%	100% of schools receive textbooks on time
	% of schools that receive teaching and learning materials	n/a	100% of schools have teaching and learning materials

1.4 Develop a quality learning assessment system based on standards, with support mechanisms and feedback loops between the classroom, school and policy levels	Quality learning assessment system in place	Not in place	In place	
	% of schools that implement new formative assessment process	n/a	100%	
1.5 Promote critical, scientific, analytical thinking in all spheres of education	% of students that demonstrate 21st Century skills (measured according to defined standards in corresponding curriculum)	n/a	50% (M/F)	
1.6 Promote extra- and co-curricular activities and life-skill based education to ensure wholesome personality development	% of schools that deliver extra and co-curricular activities	n/a	100% coverage in all schools	
1.7 Promote inclusion of elements of sustainable development and sustainable lifestyles, human rights, gender equality, environment-friendly behaviour, culture of peace and non-violence, tolerance, democratic values, social cohesion, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development into teaching and learning activities	Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: curriculum; teacher training and student assessment system	n/a	All elements incorporated in curriculum, teacher training and student assessment system	
1.8 Introduce technical, vocational and technology-oriented educational streams	# of schools that offer technical, vocational and technology-oriented educational streams at secondary level keeping in view the local need and in synergy with local industry	n/a	1,000 secondary schools offering technical vocation and education	
1.9 Introduce a qualification equivalence mechanism for students	% of students that are granted an equivalency	n/a	20%	
STRATEGIC AREA 2: ACCESS, RETENTION AND EQUITY				
Objective 2. Provide adequate and sufficient access to education for children from pre-primary to	Net Intake Rate to Primary School	Boys	55.5%	60%
		Girls	56.9%	61%
		Total	56.2%	60.5%

secondary, including marginalized children	Net Attendance Ratio Primary	Boys	65.8%	75%
		Girls	65.1%	75%
		Total	65.4%	75%
	Adjusted Net Attendance Ratio Lower Secondary	Boys	35.90%	45%
		Girls	37.60%	45.5%
		Total	36.70%	45.25%
	Net Attendance Ratio Upper Secondary	Boys	27.80%	40.0%
		Girls	30.00%	39.0%
		Total	28.90%	39.50%
	Growth in enrolment Special Education - Katchi/ Primary	Boys		37%
		Girls		42.5%
		Total		39%
	Growth in enrolment Special Education -Middle	Boys		30%
		Girls		34%
		Total		31.5%
	Growth in enrolment Special Education - Secondary	Boys		44.5%
		Girls		63.5%
		Total		51%
	Growth in number of Literates through Non Formal Basic Education/ Primary Schools	Boys		20%
		Girls		20%
		Total		20%
	Growth in enrolment of OOSC at Primary Education level	Boys		20%
		Girls		20%
		Total		20%
2.1 Increase access and retention from ECE to post-secondary education	% of children attending first grade who attended pre-school in previous year	Boys	90.60%	92%
		Girls	90.70%	92%
		Total	90.65%	92%
	Gross Intake Rate	Boys	81.0%	83.2%

	(Primary)	Girls	78.8%	80.2%
	Primary School Completion Rate	Boys	47.3%	55.9%
		Girls	47.6%	56.9%
	Transition Rate to Secondary Education	Boys	89.7%	92.3%
		Girls	84.5%	87.3%
	Middle Education Completion Rate	Boys	39.0%	51.4%
		Girls	36.6%	52.8%
2.2 Ensure provision of functional and adequate basic school facilities; including disability-friendly infrastructure in all schools	% of schools following the minimum for educational infrastructure; including disability friendly infrastructure (Physical infrastructure school index) ⁱⁱ		n/a	50% of all secondary schools
2.3 Enhance access to NFE for children and adolescents, youth/adults and ensure mainstreaming of children in formal schools	% of non-formal education students mainstreamed into formal education		60,000	10%
2.4 Increase access for marginalized children including minorities, transgender and others from ECE to secondary education	% schools physically adapted for children with special needs		n/a	50%
Objective 3. Promote quality education in a safe, inclusive and conducive learning environment for children	% of schools classified as safe		n/a	75%
3.1 Promote safe, clean, green, healthy and hygienic physical environment incorporating elements of disaster risk management	% of schools that are upgraded to disaster prone standards		n/a	50%
	% of schools that meet minimum standards of physical environment		n/a	50%
3.2 Ensure safe and protective behavioural practices	% of schools which have initiated safe and protective behavioural practices in the classroom		n/a	100%

	% teachers trained in prevention of child abuse and other harmful discriminatory practices	n/a	75%
3.3 Establish an enabling environment for children with special needs in mainstream schools and institutions	% of schools with sufficient number of teachers trained in special needs	n/a	50%
	% of teachers of secondary schools who have received special needs training	n/a	20%
STRATEGIC AREA 3: GOVERNANCE AND MANAGEMENT			
Objective 4. Strengthen good governance of the education sector for equitable access and high-quality education	% of private schools that are registered with SED	n/a	90%
	Utilization of non-salary budgets at school level	90% schools with 50% utilization	100% schools with 90% utilization
	Joint Education Sector Review	0	4
4.1. Strengthen governance and coordination frameworks within the public education system, other line departments and with private providers	Regulatory framework for education services private providers and PPPs in place	Not in place	In place
4.2. Enhance planning, monitoring and evaluation across all levels for evidence-based decision-making	Number of annual sector performance reports produced	0	At least 4
	Number of SDG-4 reports produced	0	At least 4
4.3. Improve financial planning and management in the education sector	% of education managers demonstrating proficiency in financial planning and management responsibilities	n/a	100%
Objective 5. Promote effective leadership and management of the education sector for better service delivery	% of schools implementing School Based Action Plans	n/a	80%
	% education managers trained in leadership and management	100%	100%

5.1 Empower local education bodies and schools to better implement education policies and ensure high quality education	% of local education bodies with approved implementation plans	n/a	50%
5.2 Enhance education sector leadership and management capacities at all levels	% of education managers that participate in one or more professional development programmes annually	100% (15,000)	80%
5.3 Promote effective engagement of communities for school improvement and better education service delivery	% of districts with mobilized school councils	100%	100%

Notes: ⁱA standardized framework will be established to reflect minimum proficiency standards. These standards will be specific to formal, NFBE and Special Education, and also vary for different levels of education. ⁱⁱ Applicable to SED and Special Education Departments. Where no baseline values are available (n/a) , a measurement will be undertaken in the first year of implementation of the Plan to produce the corresponding values.

Annexes

- I. Summary Education Sector Analysis

I. Summary Education Sector Analysis

An Education Situation Analysis (ESA) was conducted to identify the key achievements and challenges of the education sector in the Punjab. This chapter includes a summary of the findings of the situation analysis.

1.1 The context of education development in Punjab

Demographic pressures will continue to stress Punjab and its education system, despite decelerating population growth. Population growth rate in Punjab shows signs of deceleration. However, with an annual population growth rate of 2.13, the impact on education service delivery is significant. Punjab has a young population: more than one-fourth of the total provincial population is of school-going age. The number of children 5-16 years old is furthermore expected to continue growing in the medium-term. In addition to overall population levels, two other demographic characteristics make educational planning in Punjab complex: most of the 110 million people living in this province reside in the rural area (63.3%); and internal migration is very significant.

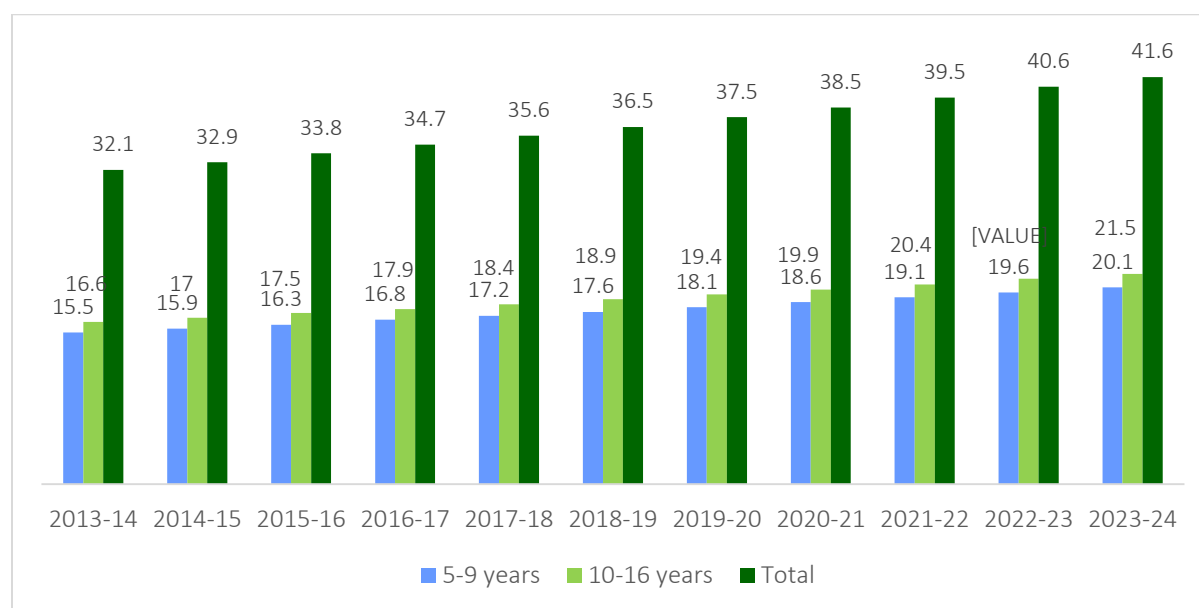


Figure 18: Projected population of 5-16 years old in Punjab, 2013-14 – 2023-24 (millions)

Note: population projections based on Pakistan Population Census 1998, and may change as a result of Census 2017

Punjab presents higher human development indicators than other provinces in Pakistan. However, there are very sharp regional disparities within the province. Employing a multi-dimensional measure of poverty, which takes into account not only income levels, but also indicators related to health, education and standards of living, it emerges that rural areas of the province are more deprived as compared to the urban areas. While 6.3% of the population in urban areas of

Punjab can be considered poor under this multidimensional index, the incidence soars to 43.7% of the population in rural areas. Southern districts of the province are more deprived than the central and northern districts. A breakdown of multi-dimensional poverty highlights that deprivation in education (43%) and living standards (30.5%) are the major contributors to multidimensional poverty index in the province.³⁷

Though Punjab has made efforts to increase literacy rates, women continue to be more disadvantaged than men, particularly in rural areas. Overall, literacy levels are low and have varied very little since 2008-09. Only 62% of the population above 10 years old in the province are literate: 72% in the case of men and just 54% in the case of women. The challenge is much bigger in rural areas, where 66% of men are literate and only 44% of women.

Children's health and nutrition are important aspects of school preparedness. **Indicators for the overall country and for Punjab in particular suggest that by the time children enter school, their health and nutrition are already compromised, to the point of affecting their chances of learning or remaining in school.** Firstly, child mortality rates are above other countries in the subcontinent. Infant mortality rate in the province is 75 children per 1000 live births, while the mortality rate of children under age five is 95 per 1000 live births, compared to average rates for South Asia of 40.7 and 50.8 respectively.

Secondly, a high percentage of children are underweight, stunted or wasted, with great disparities between districts. Almost 30% of children in Punjab are stunted and 10% are severely so, reflecting the accumulative effect of chronic malnutrition. A total of 14% of children are underweight, and 4% severely so. Dera Ghazi Khan and Bahawalpur register the highest rates of children underweight and stunted, followed by Multan, Sahiwal and Sargodha.³⁸

The labour market is characterized by a high level of informality, low participation of women in the labour force, and high levels of youth unemployment and disenfranchising. Investing in women's education would produce the highest returns. At 54%, the proportion of the working-age population of Punjab that is employed is quite low. However, the disaggregation of this average by gender reveals that less than 30% of the women of working age actually are employed compared to 80% of men.

Almost one in ten children 10 to 14 years work, a proportion that rises to nearly 13% in rural areas. Over 6% of children 10-17 years are engaged in hazardous work. Most employment is in the agriculture sector, which has the lowest productivity and growth performance. What is more, almost three in four workers in Punjab are part of the informal economy, regardless of gender and geographical area. Nearly 24% of the workers are unpaid family helpers. The distribution of unemployment by educational levels is characterized by a U-shape. The highest proportion of unemployed is concentrated among those who have less than primary education or who hold a degree. This is related to the

Youth unemployment rate doubles the overall unemployment rate. Moreover, a large proportion of young people –29%-- are neither in school nor working. For women the proportion rises to 47%³⁹.

³⁷ Planning Commission of Pakistan, Government of Pakistan (GOP). 2016. Multidimensional Poverty in Pakistan. UNDP, OPHI and GOP, Islamabad.

³⁸ Pakistan Demographic and Health Survey 2017; UNICEF MICS 2014.

³⁹ All labour market figures are from: ILO (2017). Decent Work Country Profile Pakistan.

Studies of the rate of return to educational investment show that each year of schooling raises salary by approximately 5.4 percent in Punjab. The private rate of return in the urban labour market is much higher than the prevailing in the rural market, and overall returns are quite high in the service sector compared to agriculture or industry. Workers with Tertiary Technical education have witnessed the highest increases in weekly wages in the period 1991-2013. Various studies have found that investing in women's education would contribute significantly to improve economic conditions for women and the overall economy⁴⁰

All these aspects have serious implications for the education sector, the value of the education in the labour market as perceived by households, and the likelihood of creating a skilled workforce that can contribute to the economic development of Punjab and Pakistan.

1.2. Structure of Education in Punjab

Article 25A of the Constitution requires the State to provide access to twelve years of free and compulsory education to all children between 5-16 years old. The 18th Constitutional Amendment decentralized education to the federal and provincial level. Provincial governments are responsible for providing education from pre-school to higher secondary level, as well as delegated key thematic responsibilities including education policy, curriculum, planning and standards setting to the provinces. In Punjab, School Education Department (SED) has the responsibility for ensure quality teaching and learning for formal public education across the province.

Non-formal Education is administered by the Literacy and Non-Formal Basic Education Department (L&NFBED). It is mandated to improve adult literacy and provide non-formal basic education to out-of-school and the socially disadvantaged children of the province. The department complements the SED in providing educational opportunities to students who have either dropped out for longer periods or have never enrolled in formal schooling.

The Special Education Department (SpED) currently runs special education institutes/centres/colleges and vocational institutes catering for the educational needs to children of different age groups and educational levels (primary, middle, secondary and higher secondary).

Vocational training is implemented across various formal and private sector providers. While there isn't one private sector organization response for private education the Punjab Education Foundation (PEF) has played a collaborative role with SED.

⁴⁰ Jamal (2015). "Private returns to Education in Pakistan – A statistical Investigation", Center for Business and Economic Research Working paper: 15(2)

Punjab Education System									
Official age	Grade	Formal Education			Non-Formal				
		Exams							
16	12	HSSC	Higher Secondary Level						
15	11	HSSC	Two Streams: Academic or Technical						
14	10	SSC	Secondary Level						
13	9	SSC	Two Streams: Arts or Sciences		Formal TVET				
12	8	PEC	Middle Level						
11	7								
10	6								
9	5	PEC	Primary Education			PNFEP Ages 4 to 15			
8	4								
7	3							TSKL Ages 4 to 15	
6	2								
5	1		Katchi (pre-school)			Katchi	Katchi		
4									

Figure 19: Punjab Education System

Source: Author

1.3 Equitable access to education

Over the last five years, Punjab has shown progress in school participation, but disparities by gender, location and socio-economic status persist, and children are less likely to continue beyond primary school grades. With a fertility rate that remains high and such a high proportion of young population, the education system in Punjab will continue to endure a large pressure to incorporate the increasing number of children under 16 years old and thus fulfil the mandate of the Article 25A of the Constitution. In this context, the improvements in terms of increased school participation in the past five years are commendable, although there is still much need to intensify efforts to expand school coverage, especially before and after primary education, and ensure more equitable access.

Overall, a higher proportion of children ages 5 to 16 years were attending school in 2017 regardless of grade compared to 2012, according to various surveys conducted during this period. However, it is those of primary school age who are more likely to be attending school, compared to older children. School access becomes increasingly limited as children age and have to transit to higher education cycles.

Punjab registers a high degree of entry to primary education. The Gross Enrolment Rate (GER) at pre-primary level has increased from 82% in 2014-15 to 87.5% in 2016-17, which is four points higher than the national average. Moreover, the Gross Intake Rate (GIR) to grade 1 has remained above 100% since 2014.⁴¹ The GER at primary level was 93.2% in 2015-16, although it had decreased since 2013-4.

⁴¹ Pre-primary GER and GIR as recorded in Pakistan Education Statistics 2014-15, 2015-16 and 2016-17.

However, the GER drops considerably at secondary level, indicating lower transition and retention rates at post-primary levels. In 2015-16, the GER in middle education reached 56%, and that of secondary and higher secondary combined was just over 51%.

Furthermore, GERs mask significant internal inefficiency in education, including an important proportion of children who are above the age for their grade. Considering the differences between the GER and the Net Enrolment Rates (NER), the issue of overage children is already apparent in primary school. According to the PSLM data, the NER at primary level in Punjab was 58.8% in 2015-16 compared to a GER of 93.2%. Moreover, NERs drop considerably after this level of education. Just 23.8% of children 10-12 years old are enrolled in middle education, and 27.4% of children aged 13 to 16 years are in secondary education. In all cases, the rates fell between 2013-14 and 2015-16. This shows a significant drop in student enrolment at the correct ages for their level as we move up the educational ladder.⁴²

A deeper look into the enrolment rates illustrates the various types of disparities that exist in access to school in Punjab. *Though this province fares better than others in terms of providing girls with opportunities to access education, gender differences in enrolment rates persist, especially after middle education. The gap in school coverage between urban and rural areas is even starker.* The parity index by geographical area both in terms of GER and of NER reveals a clear disadvantage of children in rural areas. In turn, these differences increase along the education cycle. While access to primary education is high overall, just 84 children in rural areas are enrolled at this level per 100 children in urban areas (considering GERs). In middle education, the proportion falls to 75, and in secondary education (lower and upper) to just over 57 children in rural areas per 100 of their peers in urban areas.⁴³

Disparities in enrolment are also significant at district level. At 40%, Bahawalpur records the lowest NER at primary level in the province. The difference with the district with highest primary NER, Layyah, is a staggering 42%. Amid overall low rates of access to post-primary education, district differences are still evident in middle education and matric. District Chakwal registers the highest NER in middle education (42%), but the gap with the district with lowest NER at this level, Muzaffargarh, is 30%. Similarly, the gap between the highest and lowest NER in matric at district level is 20% (29% for district Lahore, compared to just 9% for district Bahawalnagar).

Socio-economic status emerges as one of the clearest markers of disadvantage for access to school. A recent report has found that household wealth is largely correlated with school enrolment in Punjab.⁴⁴ The disparity surfaces already in primary school and becomes even more substantial in the next stages of the education cycle. The gap in enrolment between the poorest and the richest children is 22% in Primary GER and 97.5% in Secondary GER (see the table below). Nevertheless, the report finds some improvements in education participation for the poorest quintile, albeit with relatively low levels of completion of the education cycles.

Children from poorer households are far less ready or equipped to gain from schooling compared to their better-off counterparts. They are, for instance, more likely to have one or both parents who are

⁴² GERs and NERs as recorded in PSLM 2013-14, 2014-15 and 2015-16.

⁴³ Disparities as computed from latest PSLM survey.

⁴⁴ e-Pact (2018). First Interim Evaluation Report on the Punjab Education Sector Programme. Draft

illiterate and therefore get little or no support at home in terms of their studies; and they also show higher incidence of malnourishment.

Table 2: GER. By expenditure quintile and level of education (%), 2015-16⁴⁵

1=poorest	84.1	18.3
2	88.7	39.3
3	99.4	54.2
4	100.9	75.6
5=richest	106.2	115.8
All	93.2	51.3

Just over half of the children enrolled in schools across Punjab are in government-managed schools. Considering both government and Punjab Education Foundation (PEF) schools, the proportion of children enrolled in the public sector rises to 62%. The Punjab Education Foundation was established as a public-private partnership (PPP) with the government to expand access to children, primarily in rural and hard to reach areas. Enrolment in PPP schools swelled by 121% since 2012, an indication of the Government of Punjab's strategy to expand public-private partnerships. Enrolment in the public sector has grown by 14% over the last five years, with a significant increase of 9% just in the last year to 2017-18. However, progression within public schools is characterized by high internal inefficiency.⁴⁶

For every 100 students enrolled in Katchi grade, only 28 students remain until Grade 10 in government schools. The first loss is registered right at the beginning of the education cycle, in the transition from Katchi to Grade 1 of primary education. At this point, 36% of children enrolled in public schools either drop out or transfer to private institutions. Of those who continue in public schools, just 61% will reach Grade 5. Although the transition to middle level education is quite high (over 96%), by the time children reach Grade 8, 15% would have left in three years. And between Grade 6 and Grade 10, one in four children would have left public schools. Among others, the major reasons for low survival rates include shortage of nearby schools, teacher shortage and absenteeism, poor teaching quality, poor school environment, family poverty, insecurity, and natural disasters.⁴⁷

⁴⁵ Source: e-Pact (2018). First Interim Evaluation Report on the Punjab Education Sector Programme. Draft

⁴⁶ As flow rates are only available for government-managed schools, the related analysis is limited to these, and is based on Annual School Census data.

⁴⁷ AEPAM (2014). Pakistan Education for All Review Report 2015.

Survival Rates in Public Schools

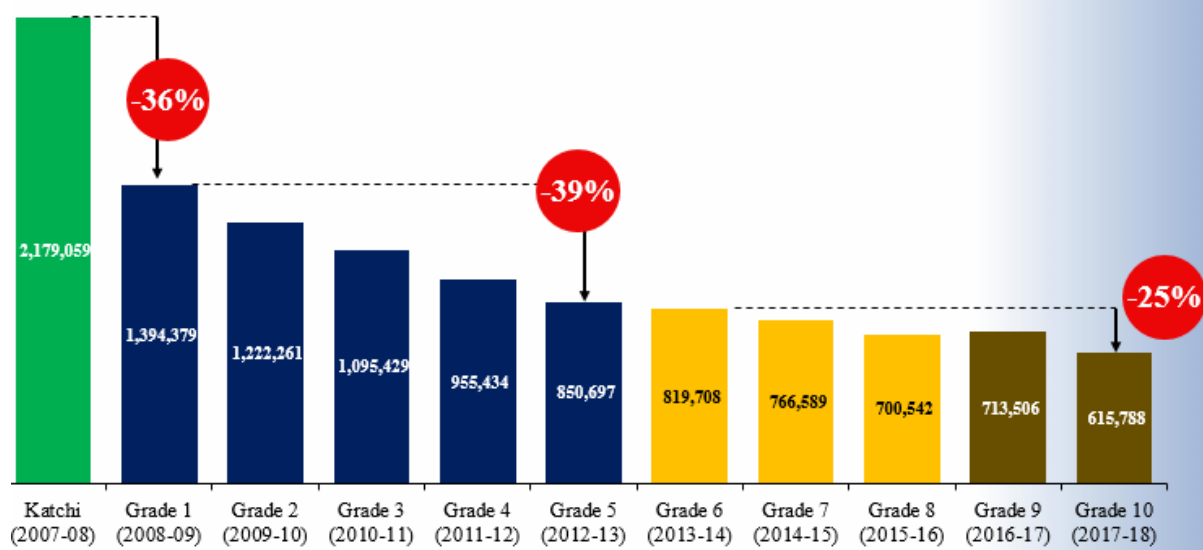


Figure 20: Survival rates in public schools

Even as public and private schools expand access, the number of children out of school continues to be very significant in Punjab. Estimates of the out of school children (OOSC) vary substantially depending on the data source and the methodology used to perform the estimation.⁴⁸ Employing the methodology developed by UNESCO-UIS and UNICEF on the PSLM, results in a total of 8.27 million children between 5 and 16 years old out of school in 2013-14 in Punjab. The estimates in the Pakistan Education Statistics report put the number in 2016-17 at 10.5 million. In both cases, the highest proportion of excluded children can be found in the age group corresponding to secondary and higher secondary education. More than one in two adolescents of 15 and 16 years are excluded from education.

Household-based surveys can shed more light on the characteristics of excluded children. According to the Punjab School Education Survey 2017 (PSES), out of the total population of 5-16 years in Punjab, 8.2% have never enrolled in schools while 6.4% have dropped out of school at a certain stage. Girls are more likely to be in the first group, while boys are more likely to drop out early. Geographical location indicates the extent of marginalization even more strikingly: three in four out of school children estimated by the PSES 2017 reside in rural areas. Poverty and lack of schooling alternatives after primary education could be among the reasons why children in rural areas are excluded in such high proportion. 54% of the total OOSC aged 5-9 years in the province reside in eight districts, namely Rahim Yar Khan, Dera Ghazi Khan, Rajanpur, Muzaffargarh, Multan, Bahawalnagar, Faisalabad and Lahore.

Households surveyed by the PSES were asked about the reasons why children were not in school. In almost one-third of the cases, the cited reason for dropping out of schools or not enrolling was related to socio-economic factors. These include 'financial issues', 'child is needed as a helping

⁴⁸ Furthermore, none of the available sources has up-to-date population estimates on the basis of the 2017 national census yet. Therefore, the estimates should be taken as indicative.

hand' and 'distance and transportation'. In 27% of the cases where the child had never enrolled and 47% of the cases where the child had dropped out of schools, lack of interest in school on the part of child and the family was the reason.

Part of the excluded are children with special educational needs that are not covered by the programmes of the Special Education Department. The Special Education Department currently runs 288 institutes, centres, colleges and vocational institutes. It is also running some pilot projects on inclusive education with the Punjab Education Foundation (PEF) aimed at children with mild disabilities that does not require structural changes in schools.

However, *the lack of data in respect to children with special education needs is a major obstacle for devising appropriate strategies*, including a more inclusive approach to educational interventions.

Some surveys provide an indication of the challenge for children with disabilities. The TEACH project in Punjab, for instance, used a set of questions for children aged 5-17 years, based on the Washington Group on Disability Statistics, established under the United Nations Statistical Commission. As a result, the report finds that 11% of 8-12 year olds surveyed present some type of disability. This survey also highlights the intersectional evidence on disability, gender and poverty. A recent report using the Nielsen survey in Punjab, which covered a wider sample, has found that disability is indeed a significant barrier for children's access to education. Only one in ten surveyed children 5-16 years old were attending school in 2015. The Primary GER of children for whom a disability is reported reached 12.1% in 2015, the Middle GER was 10.8% and the combined Secondary GER was a disheartening 2.6%.⁴⁹

1.4 Learning

Punjab is performing better than other provinces in terms of the learning outcomes of its students, and some improvements have been observed in the recent past. However, learning levels continue to be low to attain a prosperous and dynamic society. Providing access to schooling is a first and important step, but ensuring quality education is essential to develop the knowledge, skills and values to play an active part in all dimensions of life and contribute to social and economic development. Quality education requires strengthening inputs, processes and evaluation of outcomes. Standards need to be developed to determine what would be for Punjab an acceptable level of quality concerning the inputs, processes and outcomes of the education system.

In Punjab, assessments have been used for many years to measure students learning to obtain information on the knowledge and skills acquired by these. However, *there is little evidence to suggest a heavy focus on assessments or other strategies implemented have improved learning outcomes in the province.*

The National Achievement Test (NAT) conducted by NEAS in 2016 assesses learning achievement for Maths and Urdu language among a sample of students enrolled in Grade-4, and Science and English language among a sample of students enrolled in Grade-8, across the country. *Although students in Punjab perform better than their counterparts in other provinces, overall learning levels are still quite low.* On average, girls perform better than boys do, and students in urban schools score higher than those in rural schools, in both grades 4 and 8.

⁴⁹ e-Pact (2018). First Interim Evaluation Report on the Punjab Education Sector Programme. Draft.

Learning problems can be observed across the board for children of schooling-age, and not only at specific points in the schooling cycle. The ASER survey is revealing in this sense because it assesses the learning levels of all children ages 5 to 16 in sampled households in rural areas, regardless of whether they are enrolled in school or not. The assessments relate to basic literacy and numeracy abilities, designed to cover up to Class 2 level competencies in literacy, and numeracy competencies up to Class 3 level. The results for year 2016 in Punjab reveal a worrisome picture of basic levels of learning. Overall, *35% Class 5 children could not read a Class 2 story in Urdu and 44% Class 3 children could not read even a simple sentence in Urdu*. Moreover, reading levels for Class 5 children have deteriorated with respect to 2015. Basic reading skills are essential for further comprehension and are the foundation over which other competencies build. Arithmetic learning levels show that *40% Class 5 children could not perform a two-digit division and 42% Class 3 children could not do a simple subtraction*.⁵⁰

Assessment of English is also relevant, since it is one of the mediums of instruction in schools in Punjab. However, according to the ASER assessment, *43% Class 5 children could not read English sentences and 49.4% of Class 3 children could not recognize words in English, at Class 2 level*. Furthermore, there has been a consistent drop in students' achievement in English language since 2013. This puts into question the adequacy of the current language policy in the province.

The socio-economic factors that shape inequality of opportunities in access to schooling are echoed on inequality of learning outcomes. *Children from poorer house-holds present lower levels of learning than those from wealthier households in all the basic literacy and numeracy areas assessed*. Richest children, for instance, are more likely to achieve the highest order skills, whereas poorest children tend to be unable to read or to identify digits 1-9. Moreover, this gap has persisted without major change since 2012.⁵¹ Poor children are also less likely to attend school as showed earlier in this analysis. The ASER report shows that *most of the children who are out of school are unable to read in Urdu (81%) or to recognize the first nine digits (82%)*. It could be inferred, then, that being in school provides at least some beneficial effects on children's learning.

Punjab has high stakes examinations for grades 5, 8, 9, and 12. At the level of primary and elementary, the stakes are in fact higher for teachers, whose promotions and transfers are likely to be affected by students' performance. *The examinations conducted by the Punjab Education Commission (PEC) in grades 5 and 8 show low performance across all subjects assessed*. Although performance is higher in Islamiyat and Urdu, the mean score in both grades hovers around 60. In addition, *there has been no significant improvement in overall mean scores in students' performance from 2015 to 2017*. The exception is the score reached in Mathematics and Science among grade 5 students, which rose up to 20% from 2015 to 2017, and is an encouraging trend albeit still within low levels of performance. Another positive trend is the improvement showed by girls in grade 5, who in the latest exams reach very similar scores than boys in Maths and outperform them in all other subjects.

Student performance is far better on Multiple Choice Questions (MCQ) as compared to Constructed Response Questions (CRQ) in both Grade 5 and Grade 8. The difficulties in responding to CRQ are probably related to the low results in higher order skills. The results raise the question about the

⁵⁰ Figures reported in ASER (2017). ASER-Pakistan 2016.

⁵¹ e-Pact (2018). First Interim Evaluation Report on the Punjab Education Sector Programme. Draft.

useful of these examinations, what their purpose actually is and how then data from the assessments are used to improve teaching and learning.

To judge what children who are actually *in* school learn, one should observe large-scale assessments that allow to identify the impact of different factors –related to schools and related to student’s backgrounds– on students’ performance. The Learning and Numeracy Drive (LND) and the DFID Six Monthly Learning Assessment data cover samples of students in grade 3 with different levels of representativeness and assessing different types of knowledge. These assessments show marginal improvements in learning outcomes between 2014-15 and 2017, with variations according to gender, location and school type. However, the information collected does not permit a more in-depth analysis of factors that could be associated with performance and thus inform teaching practices or areas in need of improvement.⁵²

There is a *lack of a coherent learning assessment policy* in Punjab. Assessments are conducted by different agencies, are administered at different intervals of time, have varying sample sizes and levels of representativeness, carry varying stakes for different stakeholders, and do not include enough information to be able to associate schools and students’ characteristics to the results. It remains unclear how the data are used to inform improvements in teaching and learning and how these two aspects relate to the other.

The number of teachers in public schools has increased by 25% during the last four years resulting in improved Student to Teacher Ratios, but there is a need for more teachers with adequate subject knowledge, and teacher quality needs further strengthening.

There has been considerable addition to the teacher workforce over the years 2013-2017, with the corpus of primary school teachers rising by 47%, and overall volume of public-school teachers increasing by 25%.

An adequate number of teachers would only be the starting point. Teachers need to be in schools on a continuous basis. *Teacher presence has risen steadily* across primary, elementary and secondary grade levels since 2012. These improvements are largely attributed to improved management and frequent administrators visits from a monitoring and performance evaluation perspective.

The teachers would also need to have, among other things, the minimum in terms of qualifications and competence. There are *difficulties with the supply of competent teachers with adequate subject knowledge, particularly with respect to Science, Math and English*. This is the case despite recent recruitment efforts, such as focusing on science graduates in recent hiring and providing training to support English language proficiency.

Teacher recruitment policies have evolved, but require adjustment to ensure that qualified and dedicated teachers are recruited. The revision, in 2011, of the Contract Teacher Policy demonstrates a recognition that working conditions, such as pay, contract duration and qualification must be standardized. The new 2017 Policy, though putting in place a more robust and transparent recruitment procedure, is not implemented across the province consistently.

⁵² e-Pact (2018). First Interim Evaluation Report on the Punjab Education Sector Programme. Draft.

Successive reforms raised the professional qualifications for primary school teachers and elementary school teachers. As a result, one in four of these teachers have a primary teaching certificate or certificate of teaching, and there are many more teachers in the system with a Master's degree. However, there is *considerable variance in quality at the level of academic institutions*—the value of a degree awarded by one institution being vastly different from the same degree awarded by another. At present, the only quality assurance mechanism is endorsement of the degree-granting institution by the Higher Education Commission (HEC) and a system of ranking presided over by the Commission. However, this still leaves a very wide gap in terms of ascertaining what a degree represents in terms of knowledge and higher order skills.

This is not accorded any significance in recruitment procedures. The marks obtained in the NTS can only be regarded as a partial measure in terms of addressing the issue of teacher qualifications and knowledge. The interview could provide valuable insight and help in the selection process, but at present, the interview carries only 5 marks out of a maximum of 100. The salience of the interview in the process was reduced in order to minimize the effects of political patronage, but the obverse of the situation is that it makes discerning the difference between the knowledge and capability of candidates with similar academic achievement but different institutional affiliation more difficult.

A major incentive for teachers and a key factor in motivation would be a career path that gives appropriate weight to performance. Previously, promotions were largely an outcome of seniority. Post-2010 a number of requirements were added pertaining to qualifications, passing of departmental exams as well as performance in a bid to prioritize merit. In practice, however, implementation of a merit policy remains problematic.

As some in-depth studies in Punjab have found, *teachers' basic subject knowledge and their ability to transfer knowledge to students are limited*. On assessing teachers in three districts in Punjab, the TEACH project found that teachers scored on average 82.7% and 87.5% on literacy and numeracy tests based on the curriculum they are meant to be teaching. The gap between their own scores and those of their students reveals that teachers also have difficulties transferring their own level of knowledge to the students.⁵³

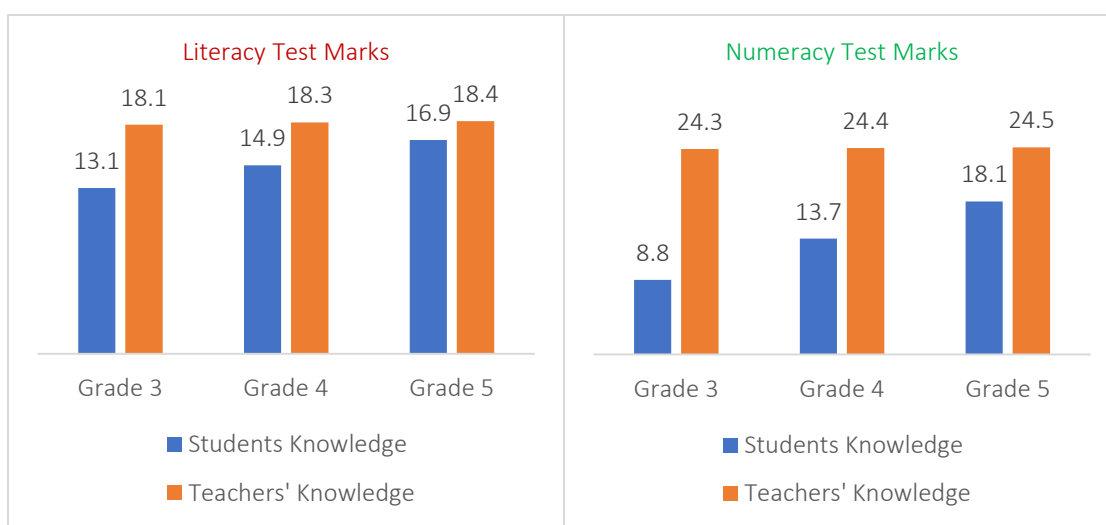


Figure 21: TEACH test results

⁵³ REAL Centre and IDEAS (Mimeo), University of Cambridge and IDEAS

Teachers have *limited pre-service training on important issues relating to classroom management and quality of teaching and learning*. The TEACH project reports that surveyed teachers did not receive pre-service training for: multi-lingual settings (47%), diverse classrooms (47%), working with poor children (44%) or children with special needs (58%).

Teacher Training and Professional development has undergone reforms over the last decade, including focus on content and pedagogy, but the quality, duration and organization is insufficient. The Continuous Professional Development (CPD) model aims at monitoring teacher performance and providing support in a decentralized framework. With the establishment of the Qaed-e-Azam Academy for Educational Development (QAED), training was further decentralized by setting up Academic Development Units (ADUs) at the provincial, district, tehsil and cluster levels. QAED has established partnerships with other institutions to provide high quality training, has developed training modules for professional development, provided induction training, etc. However, the model cannot be fully implemented due to budgetary constraints.

Another challenge exhibited by the education system in Punjab is that the various institutions empowered to support quality learning are often unable to properly implement their mandates. *There is duplication of roles across different institutions*. It appears that *much of the government work in the area of education is being done in silos*, for instance, PEC, PCTB and QAED do not have regular and frequent interaction with each other in order to share relevant work, information, insights and recommendations. A high level of input is required from all these institutions and it seems that there are barriers to such input as for instance, inadequate salaries and benefits to attract people of necessary calibre, qualification and experience. Similarly, even if such human resource is acquired, there are factors such as working environment, service rules etc that do not encourage retention. At the same time, qualified and competent subject specialists, assessment experts, psychometricians, data analysts and other related to the field are not easily available.

While investments have been made to improve the learning environment, critical inputs are still lacking. *Considerable advancement has been made in recent years with regard to school infrastructure and the provision of basic facilities*. More than 96% of the schools have basic facilities (drinking water, toilets, electricity and boundary wall). More than 97% of the schools have a main gate, while more than 89% of the schools have sewerage facility. *However, other facilities such as playground and library, 61% and 24% respectively, are lacking in schools*. Computer labs, Science labs and ECE Classrooms are significantly lacking in schools as less than 15% of the schools have each of these advanced facilities.

The unfinished agenda: consistent language policy, curriculum and learning materials.

The Punjab School Education Plan emphasised the need for improving language proficiency in English as well as Urdu and underlined the need for a comprehensive language policy that supported learning as well as a survey that would inform the formulation of such a policy. There has been no progress on either count. This situation is unsatisfactory as the related issues of the medium of Instruction and teaching English and Urdu well as subjects as well as the role of the mother tongue at the early stage of schooling has huge implications for teaching and learning.

Punjab lacks a language policy with a judicious mix of English, Urdu and the mother tongue that would support rather than hinder learning, which often happens when children have to learn new things in a given subject while being called upon at the same time to learn a new language.

The Punjab Curriculum and Textbook Board Act, 2015 has empowered the PCTB to prepare Scheme of Studies, Curricula, Textbook Manuscripts and Supplementary Reading Materials for various classes. In this regard, PCTB, in consultation with key education stakeholders, has developed and introduced a new scheme of studies in 2017, which encompasses an updated outline of subjects to be taught from Early Childhood Education to Intermediate level, indicating core and elective subjects, medium of instruction for each subject and the time/marks allocation for theoretical and practical exams. Based on this Scheme of Studies, curriculum for each subject will be developed/revised in the form of a set of courses and their contents are to be offered in a systematic order throughout the studies.

Under the new scheme of manuscripts, the textbooks now being developed are relatively well-produced. But the PCTB staff faces capacity issues. For instance, some of the subject specialists at PCTB are not recruited by following proper induction criteria. PCTB's textbook review process on seems very good on paper but there are issues related to engagement process of reviewers, background and capacity of reviewers, feedback loop and more importantly the incentive structure prepared for reviewers. Also, PCTB has weak institutional linkages with other departments such as SED, PEC, QAED and PMIU.

1.5 Literacy and Non-Formal Education

It is generally agreed that the Non-Formal Education (NFE) sector in Pakistan can be the bridge to address the critical situation of a huge number of out-of-school children and dropouts, yet the NFE sector is largely neglected

The Punjab Non-Formal Education Policy 2019 is the first NFE policy of the province. The Punjab Youth Policy 2012 under Education for Youth Development is the only other policy that commits to promotion of non-formal education and emphasizes public private partnership.

Overall, there is a *lack of coherence among scattered initiatives and the key issues pertain to lack of accountability and funding constraints*. Interrelated issues affecting quality also pertain to teachers' working conditions, including the contract and salary structure, which can be demotivating and has an indirect impact on children's learning opportunity.

The NFE sector is under-funded. It is promising to note, however, that the new NFE policy under review commits 5 percent of the education budget to NFE which is significant but would also require the Literacy and Non-Formal Basic Education Department (L&NFBED) to attract funds to the sector.

Literacy and Non-Formal Basic Education Programmes are in large supply, but not accessible to all. Even though there is an NFE policy and a Literacy and Non-Formal Basic Education Department, in effect the public offer is comprised of various programmes and projects.

The L&NFBED runs more than 13,000 non-formal basic education schools and caters to more than 450,000 NFBE learners. The 2,160 Adult Literacy Centres are targeting 36,000 adult learners. The department has 15,439 teachers and 625 project staff.

The lack of data makes it difficult to make evidence, based decisions, particularly to ensure that NFE is accessible and inclusive. Children are not counted by the Punjab Education Management Information System (PEMIS) due to weak links between the School Education Department and

LNFBED. The L&NFBED does not have data on children who have been mainstreamed into the formal school system and at which level. The importance of consolidated, reliable and accessible data on efficiency of the NFE system, quality and learning outcomes can play a key role in informing policy. There is also a lack of qualitative analysis and documentation of lessons learned and case studies that can be beneficial in understanding and prioritizing issues for planning purposes.

Teachers of NFE have lower qualification levels than those in the formal system. However, due to the need to cover the offer, the standards are further lowered. This has a direct impact on the ability of the teacher to differentiate and support students in a multi-grade environment and that need additional support. This could also be influenced by the type of contracts and low salaries.

Training and professional opportunities exist, but are not adequate to prepare teachers to deliver quality Non-Formal Education. The L&NFBED has a dedicated Human Resources Development Institute, a unit in the department that is responsible for assessing training needs through classroom observations and exam results of children. However, there is no training plan in terms of refresher courses and induction of new teachers mostly the training is done as and when the funding is available.

Short duration of training focusing on pedagogy, conventional syllabus and mode of teaching don't provide room for self-learning and peer learning and makes it very difficult for teachers to deliver high quality education.

1.6 Special Education

Punjab, more than any other province, provides services for children with disabilities, but inequity still exists.

A large number of institutes for special education are functional in Punjab, catering to thousands of children. Yet, the offer is still inadequate for the most populous province in the country, and furthermore, schools are mostly found in urban centres, thus not available to the majority of children in rural areas.

An Institutional Plan for Special Education Department (SpED) 2017-2020 has been developed, laying out six core sector plan priorities and institutional capacity required to address associated challenges. This is a positive development, but the entire *paradigm of education for children with disabilities is not linked to the Punjab's school reform programme, thus as a separate and most often a disconnected piece education for the persons with disabilities doesn't find a place in with the larger debate taking place on education.* A survey in 2012⁵⁴ concluded that schools are currently unprepared to make inclusive education a reality due to factors such as the lack of clear admission policies for children with special needs, little knowledge among school administrators regarding how to implement inclusive education, inaccessible school infrastructure, and the absence of professional development opportunities for teachers to implement inclusive education.

The biggest issue Pakistan faces in addressing the issue of education for children with disabilities is not having the right set of data on Persons with Disabilities (PWDs). There is no standardized instrument to collect data on disabilities. The discrepancies in prevalence and types of disabilities

⁵⁴ Shaheen Pasha 2012. Readiness of Urban Primary Schools for Inclusive Education in Pakistan. Journal of Research and Reflections in Education. Vol.6, No.2, pp113 -128. <http://ue.edu.pk/jrre/articles/62003.pdf>.

show that the purpose of surveys and survey instruments used are different and the results therefore cannot be used appropriately for developing a comprehensive strategy on education for persons with disabilities. Additionally, data on drop out, retention, completion and transition rates is not available.

The current policies and programmes fall short in providing adequate inclusive and services for children with disabilities. New interventions are project driven, the projects could eventually provide key learning opportunities, but are too small and not likely to have an impact without a strong political commitment at the national and provincial levels on the issue of inclusive education. Due to lack of coordination amongst the relevant departments, many children are falling through the cracks. Moreover, a number of issues should be addressed with an inter-sector approach, involving health for early detection and psychological support, and social protection for families. However, the education of children with special educational needs is being looked into in isolation without forming appropriate synergies.

The professional capacities of special education teachers and educators are not sufficient to meet children's needs. Finding enough qualified teachers is a major challenge. There are 1,070 posts of teachers that are lying vacant. This gap also affects quality as the teachers must take on additional or large classes, even in subject areas they are not trained to teach. Once teachers are selected, they are often not prepared to teach appropriately. The teacher training curriculum is theoretical with little if any teaching methodologies to engage children in artistic and cultural activity for social development. Teachers are only partially trained in specific methods for the kind of disability at hand.

ASER reports indicate that *learning outcomes for children with disabilities in Punjab (3-16 years) are lower than those for children without disabilities for both literacy and numeracy.* This is because these children find it difficult to comprehend what is being taught in class mainly due to visual and hearing impairment. Assistive devices are given to children, but many needy children do not get these due to limitations in budgets, similarly early detection and prevention, assimilating preschool children, community-based approach and student centric learning is not on the agenda.

Equality of opportunity for all children with disabilities requires higher-level debate and action at the policy level. The regular schools are not prepared to meet the physical and psychological needs of students with disabilities resulting in pushing them into specialized institutes Equity strategies should be fully developed for children with special needs. There are costs related to children with disabilities that can be unsurmountable for parents who are poor and struggle to obtain the service needed. Most are unable to afford assistive devices and transportation, for example.

1.7 Technical Education and Vocational Training

The TVET system in Punjab is filling an important gap, but requires restructuring to adequately transition people from education to work and promote life-long learning.

Although half a million graduates emerged from the TVET system in Punjab in the year 2016, the weight of TVET in Punjab remains relatively low.⁵⁵ Only 12% of the working age population in Punjab have acquired skills training. The significant trends in the province related to skills development include a limited access to TVET with mismatches, shortage in supply of skilled workers, a weak

⁵⁵ Punjab Skills Development Fund.

institutional framework, a lack of evidence-based policy making, low quality and relevance of training and low access to skills training.

A range of diverse and assorted efforts have been made in the Pakistan to include TVET subjects at secondary level of education but without any significant impact.

There is no provincial policy framework for introducing the technical stream in school education in Punjab. The Punjab School Education Sector Plan (PSESP) 2013-2017 recommends establishment of a coordination mechanism between SED and TEVTA in order to develop linkages between technical and vocational education and general education. The Punjab Skills Development Plan also emphasizes this as a crucial need in order to build human capital in the province.

The TVET pathways or links with the general education system have not been developed so most of the concepts and plans by the school education department to train secondary school students in TEVT are not grounded in reality and planning for a technical stream is pre-mature

There is a mismatch between what training is offered and what the labour market demands, often making the system very inefficient. Assessments of the TVET sector in Punjab emphasize that the quality and relevance of the training delivered is not according to the demands of the job market. The capacity of TVET in terms of developing linkages with industry is limited, there is a shortage of qualified trainers and for the most part are not exposed to the industries, and the curricula is not in line with the changing requirements of the markets. There is limited to no data available on the number of graduates who have been employed through initiatives or who have started their small businesses.

The barriers to entry into TVET programmes are high, especially for persons with disabilities, women, and the less educated. Men are more likely to complete vocational education than women are. The TVET institutes do not have special provisions for men and women who are less able or disabled. The Special Education Department runs some vocational courses with the support of TEVTA, but are very limited in the course offerings to programmes that have no proven ability to sustain or generate an income.

1.8 Governance and Management

Important steps have been taken to devolve power to local authorities and increase accountability in the education system in Punjab. However, the process needs to be streamlined, with more clearly defined roles and responsibilities, and better coordination and alignment of accountability mechanisms. Capacity constraints should be addressed in order to have a more effective educational administration and better implementation of education reforms.

New structures at district level have been introduced, but there is a need to review them, as there exists ambiguity as to reporting and coordination lines. The Punjab Local Government Act, 2013 — latest version of the Local Government Law in the province —retains the decentralized nature of education governance and vests the control of government schools in the district education authorities (DEAs). However, there is inadequate delegation of authority to the DEAs as compared

to the role envisaged by PLGA 2013. The scope of working and responsibilities assigned to DEAs in the PLGA 2013 and the rules notified subsequently under it do not seem to be fully aligned with each other. For instance, PLGA envisages the DEAs to venture into Public Private Partnerships for performance of its functions, but the Rules of Business limit DEAs to have PPP only for Special Education.

Staffing gaps at DEAs remain and the present capacities in some areas are weak. There is a need to complete new recruitment of positions so that intended reforms can be fully implemented. A few members of the newly created staff positions were posted whereas a majority remains unfilled. Those filled also seem to have been done by transfer whereas recruitment remains pending. Moreover, it was particularly highlighted during the key informant interviews and the focus group discussions that there is severe deficit of the district education officials as regards budget preparation and execution.

The spirit of devolution and the establishment of DEAs was to strengthen and empower the service delivery tier to plan, coordinate and execute various activities towards improving the state of education in the districts. However, various administration levels at the service delivery tier need to be further empowered to address administrative and financial matters in their respective jurisdiction. For instance, it was mentioned in the focus group discussions that the burden of activities for routine administrative and operational tasks is disproportionately higher for the CEOs. These tasks could be delegated by empowering the District Education Officers, Deputy District Education Officers and Assistant Education Officers, allowing greater efficiency in meeting various demands at the service delivery level, and also affording more time to the CEO for planning, coordination and effective supervision of progress in key areas.

Presently, there is no specialized education management cadre. The capacity of education managers at various levels as regards the planning, monitoring and implementation of various interventions is feeble. What is more, this absence makes officials prone to political influence. The recruitment of the AEOs on a merit basis is significant, as it comes as an initiative of the School Education Department to introduce specialized management cadre at the service delivery tier. However, the efforts do not presently extend to recruit specialized personnel at higher levels of education administration, including Deputy District Education Officers, District Education Officers and other key positions.

Human Resource polices have been improved, yet traditional practices remain. Yearly performance appraisals are carried out in a traditional way without much regard to the performance of incumbents against various output related indicators. Performance evaluation and subsequent career progression of personnel is seldom based on their achievements against the parameters outlined by their official job descriptions and responsibilities.

In addition, frequent transfers and postings are prevalent, particularly at senior levels, across various allied departments of School Education Department and at the service delivery tier. There is a need to ensure that staff appointed against various posts complete the minimum tenure, so that personnel may be allowed sufficient time to implement and consolidate progress against various reforms initiatives at their respective positions and levels.

Punjab has turned to a results-driven approach to decision-making with a strong focus on monitoring targets. However, the decision-making process is largely top-down. The target-driven approach

largely revolves around the districts as key unit of analysis. The DEAs and, subsequently, various levels of education administration are assigned targets against key indicators from the School Education Department each year. There is a need that targets against various indicators are set in consultation with the officials at respective level of governance to align these with ground realities, skills base and resources available at these levels. This will make the target setting more realistic as well as establish a broad-based ownership of these targets among the officials at the service tier. Local level planning should contribute in this respect, but the current capacity levels would not allow planning and implementation to be effectual.

There are multiple monitoring streams in the education administration in Punjab with a certain degree of overlap. Monitoring at school level is carried out by two different streams: by the education administration (Assistant Education Officers) and by the monitors assigned by PMIU (Monitoring and Evaluation Assistants). Punjab Education Foundation also has its MEAs at the service delivery tier. Monitoring for special education schools is in a nascent stage. As a result of these multiple structures and processes, there is overlap in terms of various input, process and output related indicators. The MEAs and AEOs perform slightly different functions during their visits to the school, with different follow-up mechanisms regarding the data collected by the two streams. For instance, the MEAs collect data against a prescribed set of indicators which include teachers/non-teachers presence, students' attendance, school facility, school cleanliness, and utilization of non-salary budget. The visits of AEOs revolve largely around the observation on these indicators, but not in such structured format, and there is no subsequent mechanism that consolidates the observations during the school visits into reports that are then followed up by the education administrators. Moreover, with the accumulation of responsibilities, the AEOs are unable to perform effectively the mentoring role, which has recently been included as a part of their school level activities.

Despite improvements in data collection, there are shortcomings when it comes to capture information on school management, and dissemination and effective use of the data are limited, including on learning assessments. School management information would incorporate aspects of operational practices, monitoring processes and outcomes, and people management. However, data collection systems of the government departments and independent surveys do not collect any information at the school level on these aspects.⁵⁶ In terms of learning outcomes, several types of assessments are conducted but the resulting information is not being used to make evidence-based decisions by various stakeholders.

The School Education Department has *taken important steps by involving the parents and community members in improving the state of quality education in their respective government schools, through Schools Councils.* The School Councils, in addition to being responsible for improving various access, quality and infrastructure related indicators of schools, are also custodian of the Non-Salary Budget (NSB). To utilize effectively the Non-Salary Budget, School Councils are required to prepare a School Based Action Plan (SBAP). The plans and the use of the operational budget, however, have limitations, which stem from weak capacity of School Councils in planning, budgeting and executing the resources transferred under the Non-Salary Budget.

The private sector plays a significant role in Punjab's education system, yet remains largely outside the administrative domain of the government, with important consequences on quality of education and equity.

⁵⁶ E-pact (2018), op.cit.

Although Punjab Private Education Institution (Promotion and Regulation) (Amendment) Act⁵⁷ makes it compulsory for all private schools to register with the District Registration Authority, *a considerable percentage of private schools remain unregistered across all districts. Moreover, the Act or the subordinate legislation do not include standards for quality.*

Private education providers in focus group discussions highlighted that one of the major reasons for their reluctance to register is the complexity and lengthiness of the registration process.

As a result, *enrolment in private schools remains unaccounted in the overall district enrolment figures.* Hence, the number of out of school children at district level may appear higher than the actual number of children facing the access challenge causing the over-reporting of out of school children in a given district.

Presently there is *no mechanism in place to ensure adherence to minimum standards for quality education and conducive learning environment in private schools at the district level.* DEAs have limited human resources to provide oversight to public schools in assigned areas. With the existing structure of DEAs, it is difficult to provide strategic oversight and guidance to the private education institutions across the district.

Punjab has a strategy of Public Private Partnerships to expand access to school. The Punjab Education Foundation (PEF) has played a significant role in providing access to education to the children from underserved areas. *However, there is limited coordination between SED and PEF at departmental level and, particularly, at the service delivery tier.* After registration, there is little subsequent interaction between the DEAs and PEF partner schools, in order to ensure minimum standards of education as regards access, quality or infrastructure in these schools. At present, for instance, the partner schools are required to achieve the minimum quality standard by ensuring that certain percentage of students score the minimum passing score. However, *there is no mechanism that locks the minimum acceptable performance from partner school in QATs each year and then gradually monitors the upward movement of partner schools in terms of student's performance and learning achievements.*

1.9 Cost and Financing

While funding for education has steadily increased over the last seven years, recent trends suggest that the relative weight of the education sector has dropped compared to other sectors, despite education being a priority in the provincial agenda

The education budget in Punjab has increased significantly over the last seven years. In 2010-11, a budget of Rs. 155 billion was earmarked for education sector in Punjab.⁵⁸ It has more than doubled since then with the allocation of Rs. 349 billion in 2017-18. This represents an increase of 125% during these years in nominal terms and 43% in real terms.

To a great extent, this positive trend is due to rising transfers from the Federal divisible funding pool, which constitute the bulk of the funding for the provincial governments in Pakistan. The funds distributed to Punjab have increased on average by around 8% each year in real terms between

⁵⁷ Section 3 of the Punjab Private Education Institution (Promotion and Regulation) (Amendment) Act, 2016.

⁵⁸ Data on budget allocations as processed from Punjab Budget books of various years.

2011-12 and 2017-18.⁵⁹ In this sense, the outlook for education funding in the province in the past few years has been encouraging.

However, while education has been a priority in the agenda for the Punjab government during these years, the share of resources allocated to the education sector does not reflect this. While the provincial resource base has increased significantly, the share of education in the government budget has been declining since 2013-14. The share of education in Punjab’s budget has declined from 26% in 2013-14 to 17.7% in 2017-18. Presently, Punjab allocates to education a lower portion of its resources than Sindh and Khyber Pakhtunkhwa.

Figure #: Share of the education budget in Punjab government’s budget (Rs. Billion and Percent)

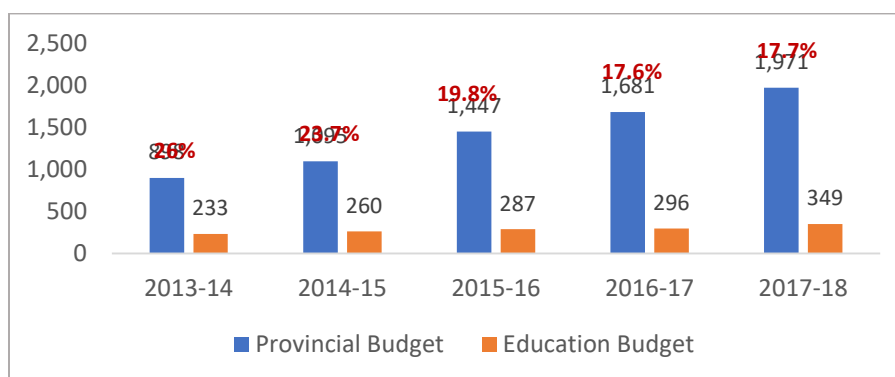


Figure 22: Share of the education budget in Punjab government’s budget (Rs. Billion and Percent)

In line with the overall trend, a higher volume of resources has been earmarked for each of the education-related departments in the past decade. In the case of the School Education Department, the allocation has significantly increased since 2008-09. At this time, a budget of Rs. 87 billion was earmarked, which has increased by 242% in nominal terms to reach Rs. 298 billion in 2017-18, and by 77% in real terms.

The budget of L&NFBED has varied over the years. In 2011-12, a budget of Rs. 821 million was earmarked. By 2017-18 the allocations had grown by 110% in nominal terms, to reach Rs. 1.7 billion, or 50% in real terms.

The budget for SpED, in turn, has increased to Rs. 1.3 billion in 2017-18, representing an increase of 59% in nominal terms since 2011-12 and 13% in real terms.

Beyond the overall levels of funding, the other major difference among the three departments lies in the composition of the budget. While the recurrent budget constitutes the bulk of SED’s resources, consistent with the size of the teacher workforce and the corresponding wage bill, L&NFBED and SpED operate largely with development budget. Practically all resources for the Literacy and Non-Formal Basic Education Department come from the development budget. In the last fiscal year this allocation represented 95.8% of the total. This situation has not changed for the past six years. In 2017-18, the development budget covered 82% of the total budget for Special Education

⁵⁹ The total NFC has registered an increase of 6% per year on average during this period.

Department. The weight of this component, in turn, has increased from 61% in 2011-12. Even for SED the weight of the development budget has risen, to the current 18%. In this case, the increase has been mostly due to the investment in missing infrastructure facilities across the province.

This reliance on development schemes introduces a high degree of uncertainty for an effective functioning of the departments concerned and makes planning very challenging. Hiring qualified teachers, who will have vulnerable working conditions, becomes close to impossible. The situation also hampers any attempt at introducing medium or long-term reforms that require sustainable funding. This seems to go against any priorities of ensuring inclusive education and providing opportunities for out of school children, as should be the case given the large numbers of children excluded from education in Punjab.

Figure #: Budgets Allocated to SED, SpED and L&NFBED in 2017-18 (Rs billion)

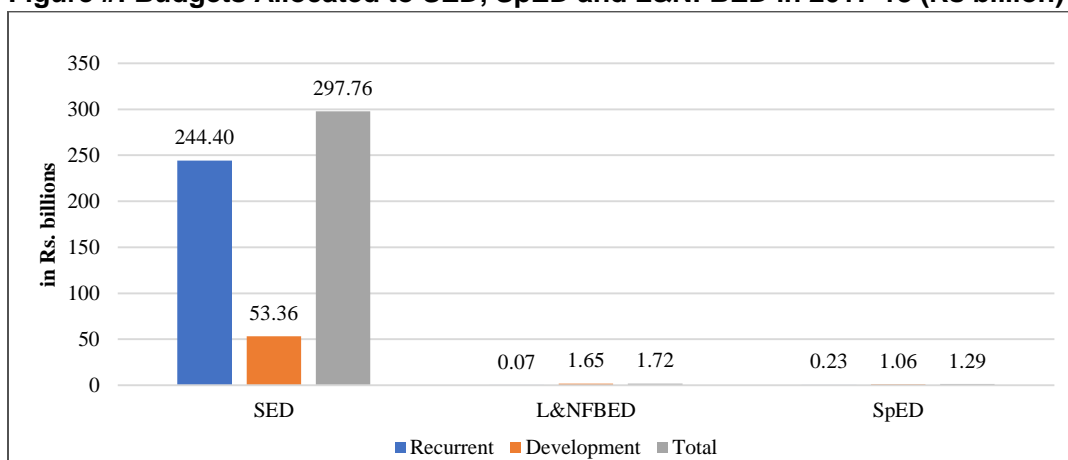


Figure 23: Budgets allocated to SED, SpED, L&NFBED in 2017-18 (PKR billion)

In 2013-14, the government of Punjab launched the Non-Salary Budget (NSB) scheme to enhance the autonomy of school management and providing better learning environments to students. By 2015-16, the scheme included all districts with a total allocation of Rs. 14 billion. Most of the NSB funds are spent on building and classroom maintenance (27%) followed by 'others' (16%) and furniture purchase (10%). The initiative still faces some challenges, such as delays in the release of funds and capacity constraints at the school level to plan the use and then effectively spend the funds.

Another important feature of the investment in human capital in Punjab, is that public spending patterns on education are regressive. Indeed, investments are skewed towards higher levels of education. Over one-third of the resources are spent on the 10% more educated.

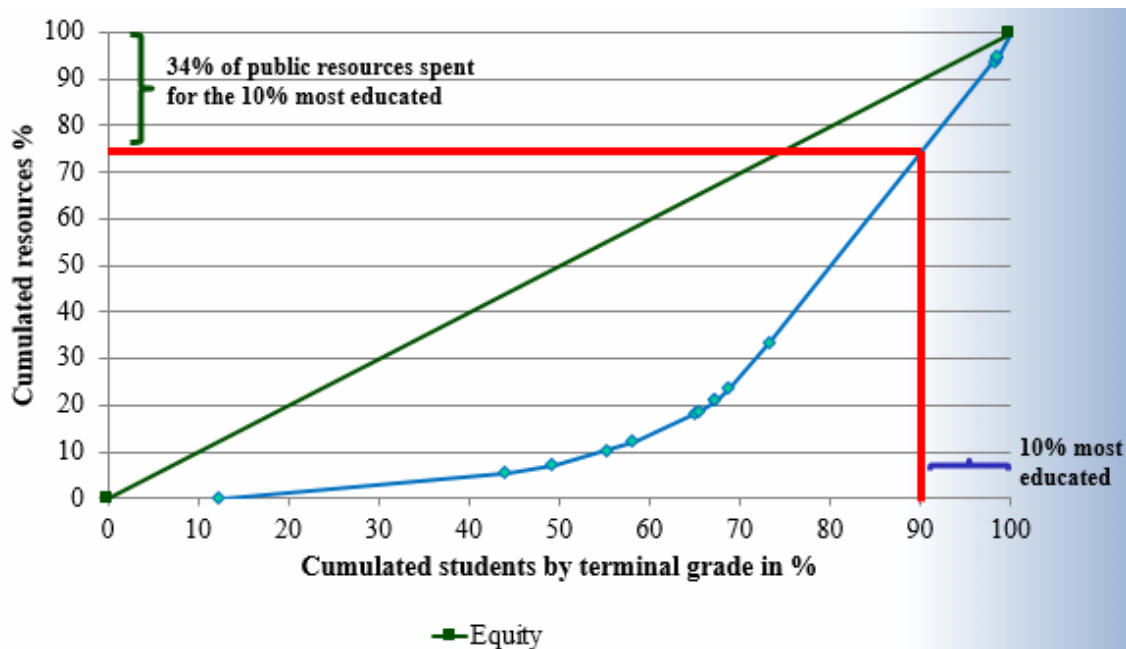


Figure 24: Distribution of education resources in public schools

As a manifestation of this unequal distribution of resources, the relative share of the budget for Secondary education (comprising grades 9 to 12) has surpassed the allocation for the other levels. A substantial increase can be noted in the relative importance of secondary education during the last eight years. The share of secondary education in total education budget has increased from 45% in 2010-11 to 53% in 2017-18.

Finally, there are district level disparities in terms of education finance, as some districts are allocated a higher share of the education budget despite having comparatively low student and school densities. This calls for better district-specific planning and budgeting.

Education comes at a cost to parents, even for children attending public schools.

There are number of expenses that parents have to bear and finance out of their pockets in order to ensure their child's education. Some of these expenses include tuition fee, stationary, uniform, transportation, after-school coaching and extra-curricular activities. Out-of-pocket expenses have an impact, especially for lower income families, on managing their household finances.⁶⁰

The Punjab government has taken equity into consideration while designing several programmes to subsidize auxiliary expenditures on education incurred by parents. Some of these programmes include provision of student vouchers, scholarships, stipends, textbooks, lunch boxes and transportation. However, certain barriers, such as poverty, disability and language often inhibit parents to comply with the conditionalities attached to such cash transfer programmes.

⁶⁰ Rizk and Abou Ali (2016). "Out of Pocket Education Expenditure and Household Budget: Evidence from Arab Countries". Working Paper 996. Economic Research Forum. Egypt: The Economic Research Forum (ERF).

II. **Projections and costing of the scalable components of the PESP 2019/20-2023/24**

Table II.1. Key indicators on enrolment

Gross intake rates		2019	2020	2021	2022	2023	2024
		2020	2021	2022	2023	2024	2024
Katchi	Boys	90.8%	91.1%	91.5%	91.8%	92.1%	
	Girls	88.8%	89.1%	89.5%	89.9%	90.2%	
Primary	Boys	82.0%	82.3%	82.6%	82.9%	83.2%	
	Girls	79.4%	79.5%	79.7%	79.9%	80.2%	
Middle education	Boys	52.1%	53.1%	56.2%	57.0%	57.1%	
	Girls	53.6%	55.1%	58.0%	58.6%	58.7%	
Secondary education	Boys	41.1%	43.9%	45.2%	47.8%	49.0%	
	Girls	40.1%	43.7%	45.5%	48.5%	50.1%	
Higher secondary education	Boys	3.7%	3.9%	4.2%	4.6%	4.9%	
	Girls	4.7%	5.1%	5.5%	6.2%	6.6%	
Total	Boys	62.6%	63.4%	64.3%	65.1%	65.5%	
	Girls	62.0%	63.0%	64.0%	64.8%	65.3%	

Gross enrolment rates		2019	2020	2021	2022	2023	2024
		2020	2021	2022	2023	2024	2024
Katchi	Boys	90.8%	91.1%	91.5%	91.8%	92.1%	
	Girls	88.8%	89.1%	89.5%	89.9%	90.2%	
Primary	Boys	71.4%	72.3%	72.5%	72.6%	72.7%	
	Girls	70.9%	71.6%	71.7%	71.7%	71.7%	
Middle education	Boys	51.6%	53.3%	55.6%	57.3%	58.7%	
	Girls	53.9%	56.2%	58.8%	60.6%	61.9%	
Secondary education	Boys	35.7%	37.4%	39.1%	41.0%	42.6%	

	Girls	36.1%	38.6%	41.0%	43.2%	45.3%
Higher secondary education	Boys	4.1%	4.2%	4.5%	4.9%	5.4%
	Girls	5.3%	5.6%	6.0%	6.7%	7.4%
Total	Boys	58.4%	59.3%	60.2%	61.0%	61.6%
	Girls	58.6%	59.8%	60.8%	61.5%	62.2%

Transition rates

		2019	2020	2021	2022	2023
		2020	2021	2022	2023	2024
Primary - Middle	Boys	90.7%	90.8%	90.9%	91.0%	91.1%
	Girls	91.4%	91.3%	91.1%	91.0%	91.1%
Middle - Secondary	Boys	90.9%	91.2%	91.6%	92.0%	92.3%
	Girls	85.7%	86.2%	86.6%	87.0%	87.3%
Secondary - Higher secondary	Boys	11.6%	12.1%	12.5%	13.0%	13.3%
	Girls	14.6%	15.0%	15.5%	16.0%	16.4%

Completion rates

		2019	2020	2021	2022	2023
		2020	2021	2022	2023	2024
Primary	Boys	51.9%	54.9%	55.7%	55.8%	55.9%
	Girls	53.7%	56.5%	57.1%	56.9%	56.9%
Middle education	Boys	43.4%	44.7%	47.3%	48.5%	51.4%
	Girls	43.6%	45.3%	48.3%	50.0%	52.8%
Secondary education	Boys	3.8%	4.0%	4.4%	4.8%	5.1%
	Girls	5.0%	5.4%	6.1%	6.5%	7.1%
Higher secondary education	Boys	3.1%	3.1%	3.3%	3.6%	4.0%
	Girls	4.1%	4.2%	4.6%	5.0%	5.7%

Table II.2. Teaching and non-teaching staff and education resources

Number of teaching staff					
	2019 2020	2020 2021	2021 2022	2022 2023	2023 2024
Katchi	60,473	60,886	61,278	61,650	62,242
Primary	84,011	83,823	82,798	81,522	82,707
Middle education	78,996	77,792	77,390	75,740	78,232
Secondary education	120,290	124,153	127,643	130,680	138,713
Higher secondary education	24,627	25,386	26,743	28,778	31,762
Special education	3,037	3,309	3,651	4,032	4,376
Literacy programmes	16,373	17,307	18,241	19,175	19,175
Total	387,807	392,655	397,744	401,577	417,207
Growth rate	0.86%	1.25%	1.30%	0.96%	3.89%

Need for construction of classrooms					
	2019 2020	2020 2021	2021 2022	2022 2023	2023 2024
Katchi	433	413	393	372	592
Primary	470	-	-	-	-
Middle education	-	-	-	-	-
Secondary education	-	-	520	650	1,720
Higher secondary education	36	73	130	195	286
Special education	84	92	116	125	119
Literacy programmes	664	664	664	664	-
Total	1,687	1,241	1,822	2,006	2,716

Table II.3. Cost of scale components by economic nature

Overall cost by economic nature, at current prices

	2019 2020	2020 2021	2021 2022	2022 2023	2023 2024
TOTAL (in million of PkRs, at current prices)	316,939	336,943	359,612	383,767	423,296
Recurrent expenditures	315,842	335,706	358,211	382,175	421,484
Development expenditures	1,096	1,237	1,401	1,592	1,811
Staff	315,842	335,706	358,211	382,175	421,484
Teaching staff	282,503	299,498	318,734	339,240	372,829
Non teaching staff	33,339	36,207	39,477	42,935	48,656
Goods and services	-	-	-	-	-
Current transfers	-	-	-	-	-
Investment	1,096	1,237	1,401	1,592	1,811

Table II.4. Unit cost by level of education

Unit costs by level of education (in PkRs, at current prices)

	2019 2020	2020 2021	2021 2022	2022 2023	2023 2024
1. Katchi	17,791	18,610	19,503	20,478	21,502
2. Primary	10,341	10,840	11,390	11,995	12,625
3. Middle education	26,794	27,330	28,027	28,785	30,396
4. Secondary education	87,494	90,574	93,884	97,549	103,802
5. Higher secondary education	312,458	326,460	341,623	358,356	378,362
6. Special education	127,066	136,618	149,391	163,921	178,662
7. Literacy programmes	3,966	4,133	4,317	4,519	4,745

