



INCEPTION REPORT

GOAL:

**Bridging Technical Assistance
for Governments (B-TAG)**

2023

GOAL:

**Bridging Technical Assistance for Governments
(B-TAG)**

Inception Report

Table of Contents

LIST OF ABBREVIATIONS.....	3
I. PROGRAMME SUMMARY.....	6
Background.....	6
Consultations with Provincial Education Departments in Punjab and KP	7
Limitations	7
II. PROGRAMME CONTEXT	9
Punjab.....	9
Khyber Pakhtunkhwa	10
B-TAG Approach: Delivering for Impact	11
III. OUTPUTS AND ACTIVITIES.....	13
Output 1: Reducing Barriers and Schooling Costs for Marginalized Children	13
Output 2: Increased Awareness and Prioritisation of Education	16
Output 3: Improved Teacher Knowledge, Skills, and Classroom Practice.....	18
Output 4: Learning Facilitated through Quality Resources and Guided by Assessments	21
Output 5: Improved Planning and Management at the School, District, and Provincial Levels	23
IV. INNOVATIONS	27
1. SIGHT FOR SUCCESS- LEVERAGING THE PRIVATE SECTOR FOR DISABILITY INCLUSION IN LEARNING– PUNJAB & KP	27
2. TEACHERS’ READINESS PROGRAMME (TRP) – PUNJAB	28
3. IMPROVED SAFEGUARDING IN GIRLS’ EDUCATION – PUNJAB & KP	29
4. PROMOTING FOUNDATIONAL LITERACY AND NUMERACY USING ARTIFICIAL INTELLIGENCE (AI) AND MACHINE LEARNING - PUNJAB.....	30
5. CREATION OF DESIGNATED POSTS OF HEAD TEACHERS – PUNJAB & KP.....	31

List of Abbreviations

AEOs	Assistant Education Officers
AKU-IED	Aga Khan University Institute for Educational Development
APF	Assessment Policy Framework
ASDEO	Assistant Sub-Divisional Education Officers
B-TAG	Bridging Technical Assistance for Governments
CEOs	Chief Executive Officers
COT	Classroom Observation Tool
CPD	Continued Professional Development
CRO	Classroom Observation
DCTE	Directorate for Curriculum and Teacher Education
DDEO	Deputy District Education Officer
DEAs	District Education Authorities
DESE	Directorate of Elementary and Secondary Education
DEO	District Education Officer
DfID	Department for International Development
DLSG	Donor's Liaison and Synergy Group
DPD	Directorate for Professional Development
DPS	District Performance Scorecard
DRR	Disaster Risk Reduction
DSS	Double Shift Schools
E&SED	Elementary and Secondary Education Department
EMA	Education Monitoring Authority
EMIS	Education Management Information System
ESRU	Education Sector Reforms Unit
FCDO	Foreign, Commonwealth & Development Office
IGEA	Improving Girls' Education Activity
I-SAPS	Institute of Social and Policy Sciences
KESP	Khyber Pakhtunkhwa Education Sector Programme
KP	Khyber Pakhtunkhwa

KPHCIP	Khyber Pakhtunkhwa Human Capital Investment Project
LMS	Learning Management System
LND	Literacy and Numeracy Drive
LSA	Large-Scale Assessments
MGT	Multigrade Teaching
MOU	Memorandum of Understanding
NMDs	Newly Merged Districts
NSB	Non-salary Budget
PAMS	Pak Alliance for Math and Science
PCTB	Punjab Curriculum and Textbook Board
PDD	Professional Development Days
PDMA	Provincial Disaster Management Authority
PE	Physical Education
PEC	Punjab Examination Commission
PEF	Punjab Education Foundation
PEGE	Parental Engagement Groups for Education
PESP	Punjab Education Sector Programme
PITE	Provincial Institute of Teacher Education
PMIU	Program Monitoring and Implementation Unit
PPP	Public-Private Partnerships
PTC	Parent Teacher Committee
QAED	Quaid-e-Azam Academy for Educational Development
RRSD	Relief, Rehabilitation and Settlement Department
SBA	School-Based Assessment
SC	School Council
SDEO	Sub-divisional Education Officers
SDG	Sustainable Development Goals
SED	School Education Department
SIF	School Improvement Framework
SL	School Leaders

SLOs	Student Learning Outcomes
SLP	Schools Leadership Programme
SNC	Single National Curriculum
SOPs	Standard Operating Procedures
SQMI	School Quality Management Initiative
SSI	School Status Index
STEM	Science, Technology, Engineering and Mathematics
TA	Technical Assistance
TBB	Textbook Board
TCF	The Citizens Foundation
TCK	Teacher Content Knowledge
TCS	Teacher Competency Survey
TIP	Teacher Induction Programme
TORs	Terms of Reference
USAID	United States Agency for International Development
VfM	Value for Money

I. PROGRAMME SUMMARY

Background

Pakistan is undergoing significant social, political, and economic changes that have far-reaching implications, particularly for the young population. With 65.4 million individuals between the ages of 10 and 24¹, Pakistan boasts one of the largest youth populations in South Asia. This demographic profile presents an unprecedented opportunity to build human capital that can shape a prosperous future for the nation. The COVID-19 pandemic has exacerbated the existing vulnerabilities and put tremendous pressure on delivering essential services, including education. Global events such as the Russia-Ukraine war and the situation in Afghanistan have bolstered economic uncertainties and costs of living, further compounding the difficulties vulnerable communities face. As a result of inflation and loss of livelihoods, opportunity costs for access to education have increased for marginalised people.

Despite commendable progress in education over the past decade, barriers persist in ensuring every child's access to quality education. Punjab and Khyber Pakhtunkhwa have significantly improved enrolment rates and learning outcomes through various educational reforms². However, a considerable number of children, especially girls and those from marginalised backgrounds, remain out of school, pointing to the urgent need for targeted interventions to bridge the educational gaps.

The gender and equity disparities in educational attainment pose significant obstacles to achieving inclusive and sustainable development. Although progress has been made in narrowing the gender gap at the primary level, challenges persist at the secondary level, leading to losses in participation and learning achievements for girls. Additionally, geographical disparities in access to education, especially in the Newly Merged Districts (NMDs) and Southern Punjab, reflect the need for tailored solutions to address infrastructural deficiencies and teacher shortages.

Through the Foreign, Commonwealth & Development Office (FCDO), the UK Government has been a vital partner in supporting education reforms in Punjab and Khyber Pakhtunkhwa. The FCDO's financial and technical assistance has played a pivotal role in implementing high-impact interventions, contributing to the progress made in the education sector. The "*Decade of Learning*" document commissioned by the FCDO reflects valuable insights and lessons from previous initiatives, emphasising the importance of sustaining positive changes and implementing systemic improvements for long-term impact.

Girls and Out of School Children- Action for Learning (GOAL) will build on the legacy of the UK's decade-long investment in education in Punjab and Khyber Pakhtunkhwa to further improve access and learning outcomes for girls and marginalised children. Bridging Technical Assistance for Governments (B-TAG) will help consolidate previous investments and create traction with the provincial governments to ensure a smooth transition to the long-term GOAL TA. In response to the prevailing challenges and opportunities, the inception of the Bridging Technical Assistance for Governments (B-TAG) project showcases a more substantial commitment to address the root causes of educational disparities in Pakistan. B-TAG seeks to go beyond conventional approaches by harnessing various stakeholders' collective expertise

¹ Investing in Pakistan's Young People, UNICEF 2020

² See, for example, the Decade of Learning report (2023).

and knowledge. Through innovative strategies, B-TAG aims to create an enabling environment that promotes equitable, inclusive, and high-quality education for all children.

By drawing inspiration from past experiences and building upon FCDO's valuable contributions, B-TAG endeavours to empower children, especially girls and marginalised groups, to overcome educational barriers and unlock their full potential. The project's approach focuses on fostering collaboration among stakeholders, facilitating evidence-based decision-making, and catalysing transformative changes within the education system. This is a key contribution to the collective vision of a thriving, educated, and prosperous Pakistan, where every child has access to quality education and can contribute meaningfully to the nation's growth and development.

Consultations with Provincial Education Departments in Punjab and KP

This inception report relies heavily on evidence gathered through research experience and from in-depth and wide-ranging consultations in both provinces. In May 2023, the I-SAPS and B-TAG teams initiated high-level discussions with the Punjab and KP School Education departments. A joint FCDO and B-TAG mission to Lahore also met with the Secretary and other senior officials at the SED, affiliates and the attached departments in Punjab (PEF, QAED, PMIU, etc.). Post-Punjab mission, the B-TAG team continued having one-on-one meetings with the relevant officials to firm up the interventions during the bridging period.

The Punjab mission was closely followed by a two-day consultative session with E&SED, Government of Khyber Pakhtunkhwa (KPK), at the I-SAPS office in Islamabad. This allowed us to prioritise technical assistance needs in the province. It also helped us consider the difficulties in delivering reforms from the perspective of the top management, which improved our ability to see the bigger picture. B-TAG team also had in-depth sessions with officials at each of the two layers of management of the attached departments and autonomous bodies of SED Punjab and E&SED, KPK.

Limitations

The comprehensive scope of work outlined in this report reflects B-TAG's deep commitment to supporting Pakistan in achieving equitable and inclusive education for all children in Punjab and Khyber Pakhtunkhwa. By addressing the root causes of educational disparities and implementing evidence-based strategies, B-TAG endeavours to create a transformative impact, unlocking the full potential of children and contributing to a prosperous and sustainable future for the nation.

However, we would like to highlight some caveats; the timeframe available for implementing B-TAG after approval of the inception report until June 22, 2024, will be approximately ten months. This period will see interim governments at the federal and provincial levels, an election campaign, and possibly new governments. These scenarios might affect the pace, but I-SAPS will continue to mitigate these risks to the extent possible through regular conversations with senior government officials.

A fundamental principle guiding the B-TAG approach is laying a foundation for the long-term GOAL supplier to build. Given the short timeframe and the nature of TA required to lay the foundation for GOAL, it may not be possible to aim at high-level outcomes that are measurable in terms of increases in participation rates and learning outcomes. Therefore, our log frame focuses on output-level and activity-level indicators.

II. PROGRAMME CONTEXT

Punjab

As Pakistan's largest and most populous province, Punjab plays a crucial role in shaping the country's education landscape. The province has made commendable progress in recent years, witnessing significant improvements in enrolment rates and basic education achievements. However, it continues to face multifaceted challenges in providing a quality education system for the diverse needs of its population.

Despite increases in enrolment, Punjab has a staggering number of out-of-school children, estimated to be around 10.5 million. This challenge primarily affects children from marginalised communities and remote areas where access to education remains limited due to distance, lack of schools, and economic constraints. Ensuring equitable access to education for these children demands innovative strategies that address the underlying barriers and promote inclusivity.

The shortage of teachers in Punjab poses a significant hurdle to ensuring a quality learning experience for students. Many teachers lack the necessary pedagogical skills and subject expertise, impacting student learning outcomes. While efforts have been made to improve teachers' content knowledge, enhancing teaching practices and classroom engagement remains a priority for establishing an enriched learning environment that fosters critical thinking and creativity.

Effective parental and community engagement is pivotal for creating a supportive and conducive learning environment. However, several challenges hinder the meaningful participation of parents and communities in education planning and oversight processes. These challenges include limited access to information on school performance and learning outcomes, capacity gaps in utilising available data for informed decision-making, and inadequate opportunities for collaboration between educational institutions and local communities.

Punjab faces a formidable learning challenge, especially in foundational learning skills, which are critical for a strong educational foundation. Quality learning resources and guidance for teachers are limited, impacting student performance. While assessments like the Literacy and Numeracy Drive (LND) have been conducted to gauge student proficiency, a comprehensive approach to evaluating and improving learning outcomes is necessary. Integrating formative, summative, and diagnostic assessments through an Assessment Policy Framework can provide valuable insights to inform instructional strategies and support students' individual needs. Robust and effective planning is essential for translating education policies into actionable initiatives that address local challenges and foster educational excellence. Moreover, optimising budget tracking and execution is crucial to ensure that resources are effectively allocated and utilised to achieve education goals.

Gender disparity remains a pressing concern in Punjab's education landscape, with girls facing additional obstacles in accessing education and achieving positive learning outcomes. Gender-responsive policies and targeted interventions are essential to empower girls and ensure equal participation in the education system.

Considering these challenges, the commitment and support provided by the UK Government through B-TAG offer a unique opportunity for Punjab to address these issues comprehensively. By focusing on reducing barriers to schooling, improving teacher knowledge and skills, increasing awareness and prioritisation of education, facilitating quality learning resources and assessments, and enhancing planning and management at all levels, Punjab can pave the way towards a more inclusive, equitable, and high-quality education system that empowers its youth and prepares them for a prosperous future.

Khyber Pakhtunkhwa

Khyber Pakhtunkhwa, a province with rich cultural diversity and unique geographic challenges, is home to approximately 2.1 million out-of-school children. While commendable efforts have been made to improve education access, significant barriers still hinder the realisation of a robust and inclusive education system in KP.

In KP, gaps in access to education remain a pressing concern, particularly in the Newly Merged Districts (NMDs) and remote areas. The presence of limited schools and long distances to educational facilities pose challenges for children seeking formal education. These obstacles affect marginalised communities disproportionately, hindering their educational opportunities and perpetuating cycles of poverty and exclusion. Bridging these gaps to ensure equitable access to education is crucial to unlock the potential of KP's young population. The shortage of teachers in KP creates a critical gap in providing a quality learning experience for students. Many teachers lack adequate subject knowledge and pedagogical skills, impacting the quality of classroom instruction. Enhancing teacher competency and professional development is vital to raising the standard of education in KP and providing students with an enriched learning environment that fosters creativity and critical thinking.

Involving parents and local communities in education planning, implementation, and oversight processes is essential for fostering a supportive and inclusive learning environment. However, various challenges hinder effective parental and community engagement, such as limited access to information on school performance and learning outcomes, capacity gaps in utilising available data, and inadequate opportunities for collaboration with educational institutions. Addressing these challenges can strengthen the partnership between schools and communities and drive meaningful improvements in education.

KP faces significant learning challenges, with many students struggling to acquire foundational skills in reading and mathematics. The availability of quality learning resources and assessments remains limited, affecting student performance and educational outcomes. Developing a comprehensive approach to assess and improve learning outcomes, supported by formative, summative, and diagnostic assessments, can provide valuable insights for tailored interventions and support student learning needs effectively.

Robust planning and efficient management are fundamental for effectively implementing education policies and programmes. Additionally, optimising budget tracking and execution is crucial to ensure that resources are effectively utilised to achieve desired education goals.

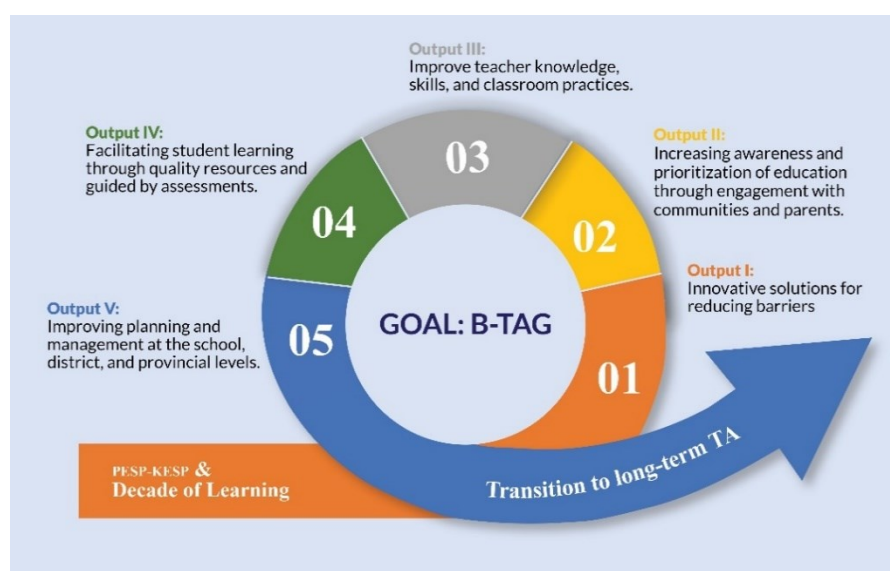
Gender disparities persist in KP's education landscape, with girls facing challenges accessing education and achieving favourable learning outcomes. To promote gender equity and inclusive education, it is imperative to develop gender-responsive policies and targeted interventions that empower girls and ensure their equal participation in educational opportunities. Additionally, fostering an inclusive environment that accommodates the needs of children from diverse backgrounds and abilities is essential for creating a conducive learning space.

By focusing on reducing barriers to education, improving teacher competency, increasing awareness and engagement, facilitating quality learning resources and assessments, enhancing planning and management, and promoting gender equity and inclusive education, KP can pave the way towards a transformative and inclusive education system that unlocks the full potential of its youth and promotes sustainable development across the province.

B-TAG Approach: Delivering for Impact

The B-TAG team is geared up to work at provincial, district, sub-district and school levels. The TA, through this programme, will provide comprehensive, flexible and high-quality technical support to the Governments of Punjab and Khyber Pakhtunkhwa for addressing the challenges in access to quality education, availability of qualified teachers, effective continuous professional development, development and readiness of teacher training materials, usage of assessment data to inform teaching practices, strengthening parental voice through provision of information on the quality of education and learning outcomes, etc.

Our deep understanding of the educational landscape informs the design and planning of the programme. The understanding is complemented by FCDO's investments in education in Punjab and KP during the previous decades.



The following factors have informed our approach to delivering the B-TAG TA:

- a.) Reducing the time it takes for provincial governments to receive GOAL assistance to increase educational access and quality;

- b.) Setting the stage for future GOAL TA so that the provider does not have to start from scratch when planning their activities and does not lose the knowledge and experience they have gained from this TA as a result of having to start over; and
- c.) Differentiating between a wider collection of TA needs that will be chosen by the new supplier and a smaller set of priority activities for one year that the new supplier might continue from where we will leave.

Guided by the approach above, the following sections map out activities, implementation and expected results under each output area.

III. OUTPUTS AND ACTIVITIES

Output 1: Reducing Barriers and Schooling Costs for Marginalized Children

1. a: Public Private Partnerships (PPPs)

1.a.1

Support the governments in Punjab and KP to broaden the base of PPPs by partnering with for-profit entities and extending the use of PPPs for education support services such as teachers' training, materials development, etc. This will also include engaging closely with other development partners working on PPPs, such as USAID, World Bank, and Malala Fund, and providing support to the governments of Punjab and KP to leverage PPPs effectively in the province.

ACTIVITIES

1.a.1.1	Examine innovations in PPPs at international and national levels, practices and the potential role of the private sector in leveraging public education for delivering education and providing education support services and develop a report.	Punjab
1.a.1.2	Develop a Strategic Plan for PEF after situation analysis and consultations with key stakeholders.	Punjab
1.a.1.3	On PPPs, Organise bi-annual consultative sessions for Donor's Liaison and Synergy Group (DLSG).	KP
1.a.1.4	Support KP node strengthening in collaboration with IGEA-USAID, Malala Fund, World Bank, etc.	KP

1. b Afternoon Schools Programme/Double Shift Schools Programme

1.b.1

Support Punjab and KP to evaluate the Afternoon Schools and Double Shift Schools Programmes to help inform policy and practice for improving the design of the Afternoon Schools Programme to ensure the transition for girls to post-primary levels.

Activities

1.b.1.1	Conduct a study on the <i>Afternoon Schools Programme</i> in Punjab to capture a) access-related impact, b) improvements in the learning outcomes and c) any other changes in policy and learning environment, such as differences in schooling norms.	Punjab
1.b.1.2	Based on activity 1.b.1.1 results, develop a strategy for afternoon school programmes, including a roadmap for implementation.	Punjab

1.b.1.3	Conduct a study on the <i>Double Shift Schools Programme</i> in KP to capture a) access-related impact, b) improvements in the learning outcomes and c) any other changes in policy and learning environment, such as differences in schooling norms.	KP
1.b.1.4	Review the Double Shift School Policy based on the 1.b.1.1 study and recommend improved design and implementation.	KP

1. c *Inclusivity in Textbooks and Teachers' Training Modules*

1. c.1

More equal and inclusive educational practices result in better access to quality education. Curricula, textbooks and teachers' training programmes should be inclusive and culturally sensitive about marginalised, minority ethnic and religious groups, girls and the poorest of the poor. B-TAG will conduct a comprehensive study on inclusivity in Textbooks and Teachers' Training content from a socio-economic inclusion perspective and use this evidence for policy influencing in Punjab and KP.

Activities

1.c.1.1	Conduct a study focusing on Punjab, identifying misalignments amongst curriculum, textbooks, and teacher training modules concerning inclusion of girls, minorities, and populations from low socio-economic backgrounds.	Punjab
1.c.1.2	Conduct a study focusing on KP using Grades 6 – 8 textbooks and teacher training materials - identifying misalignments amongst curriculum, textbooks, and teacher training modules concerning the inclusion of girls, minorities, and populations from disadvantaged socio-economic backgrounds.	KP

1. c.2

Review teachers' recruitment processes and implementation of teachers' quotas from minority groups in Punjab and KP to influence the evidence-based discourse on inclusive recruitment policy and practices.

Activities

1.c.2.1	Conduct a study to review the recruitment of minority teachers in Punjab vis-à-vis approved policy and admission of students from minorities and marginalised communities against the specified quota to improve implementation of inclusive teachers' recruitment practice and student admissions.	Punjab
1.c.2.2	Conduct a study to review the recruitment of minority teachers in KP vis-à-vis approved policy and admission of students from minorities and marginalised communities against the specified quota to improve implementation of inclusive teachers' recruitment practice and student admissions.	KP

1.d. Improving the Effectiveness of Education Subsidies

1.d.1

Given the Punjab government's appetite to assess the efficacy of conditional transfers to girl students, a VfM analysis needs to be conducted to ascertain the effectiveness of conditional transfers. In this regard, B-TAG will carry out a value for money (VfM) analysis of targeting education stipends in Punjab to improve their impact on access to educational opportunities for children, especially girls at secondary levels.

Activities

1.d.1.1	Conduct a VfM analysis to check the efficacy of education subsidies through girls' stipends.	Punjab
---------	--	--------

1.e. Climate Change and Disaster Resilience: Support for Resilient Education Systems

1.e.1

Climate change and vulnerability to natural disasters threaten already fragile school infrastructure and the continuity of the teaching and learning process. This underscores the need for better preparedness and resilient education systems to respond to such emergencies by providing learning spaces for remedial classes, distributing learning material, conducting psychosocial support programmes, restoring learning opportunities for affected communities, and mitigating learning losses. B-TAG team will support the School Education Department (SED) in Punjab and the Elementary & Secondary Education Department (E&SED) in KP to take concrete steps regarding their response to such emergencies and mitigate the disruptive effects on student learning. B-TAG will assist SED and E&SED in developing a framework and plans and provide capacity support for laying the foundations for a resilient education system in Punjab and KP.

Activities

1.e.1.1	Facilitate the Punjab government in developing feasibility for a Climate Resilience Cell in SED. Draft Mandate and SOPs.	Punjab
1.e.1.2	Facilitate the KP government in developing a feasibility for a Climate Resilience Cell in SED. Draft Mandate and SOPs.	KP
1.e.1.3	Create synergies between PDMA and SED to mitigate learning losses in emergencies through an MOU between PDMA and SED with clearly defined SOPs.	Punjab
1.e.1.4	Create synergies between PDMA and E&SED to mitigate learning losses in case of emergencies through an MOU between PDMA and E&SED with clearly defined SOPs.	KP
1.e.1.5	Review South Punjab Initiative on Climate.	Punjab

1.e.2.

Building upon the institutional alignment and policy linking activities under section 1.e.1, B-TAG will support SED and E&SED in developing model District Climate Change Resilient

Education and School Resilience Plans. School Resilience Plans will be piloted in select schools.

Activities

1.e.2.1	Develop Model District Climate Change Resilient Education Plan.	Punjab
1.e.2.2	Develop Model District Climate Change Resilient Education Plan.	KP
1.e.2.3	Develop and pilot test School Resilience plans in 25 targeted at-risk Schools.	Punjab
1.e.2.4	Develop and pilot test School Resilience plans in 25 targeted at-risk Schools.	KP
1.e.2.5	Develop training modules for teachers and headteachers of at-risk schools.	Punjab
1.e.2.6	Develop training modules for teachers and headteachers of at-risk schools.	KP
1.e.2.7	Train the trainers to cascade training to teachers and headteachers in identified schools.	Punjab
1.e.2.8	Train the trainers to cascade training to teachers and headteachers in identified schools.	KP

Output 2: Increased Awareness and Prioritisation of Education

2.a. Engaging School Councils

2.a.1

Engaging parents and communities in management, oversight and accountability of education service delivery tends to improve school performance and student learning outcomes. Efforts that have been made to improve parents' and communities' engagement include the establishment of School Councils (SCs) in Punjab and Parent Teacher Committees (PTCs) in KP. B-TAG will work with SED and E&SED to strengthen School Councils (SCs) in Punjab and Parent Teacher Committees (PTCs) in KP to increase and complement parental engagement in education.

Activities

2.a.1.1	Develop a diagnostic report on parental engagement in education in Punjab.	Punjab
2.a.1.2	Develop a diagnostic report on parental engagement in education in KP.	KP
2.a.1.3	Organise consultative sessions at the provincial level and report findings.	Punjab
2.a.1.4	Organise consultative sessions at the provincial level and report findings.	KP
2.a.1.5	Draft recommendations for revisions to the School Council Policy based on the diagnostic report and findings of the consultative sessions.	Punjab
2.a.1.6	Draft recommendations for revisions to the KP PTC Manual based on the diagnostic report and findings of the consultative sessions.	KP
2.a.1.7	Review and disseminate already existing digital content for School Councils.	Punjab

2.a.1.8	Adapt and disseminate existing digital content for School Councils – learning from Punjab’s experience.	KP
2.a.1.9	Develop training modules for PTCs and deliver training to PTC members from 500 schools in a selected district of KP.	KP

2. b. *Increasing Parental Awareness of Education*

2.b.1.

To better articulate and amplify the demand for quality education, Parental Engagement Groups for Education (PEGE) will be formed along with building the capacity of the targeted school council members. Parental engagement will be enhanced by building their capacity and ensuring their effective participation in education service delivery management, oversight, and accountability. These parental engagement groups will be integrated into district and sub-district oversight and planning processes, such as review meetings, to enhance parental ownership and participation in education processes.

Activities

2.b.1.1	Design and develop Parental Engagement Groups for Education (PEGE) model.	Punjab
2.b.1.2	Design and develop Parental Engagement Groups for Education (PEGE) model.	KP
2.b.1.3	Use data collected by the Program Monitoring and Implementation Unit (PMIU) to develop school and district knowledge products for parents and the community.	Punjab
2.b.1.4	Use data collected by the Khyber Pakhtunkhwa Education Monitoring Authority (EMA) and the Education Management Information System (EMIS) to develop school and district knowledge products for parents and the community.	KP
2.b.1.5	Create PEGEs at Tehsil and District levels to encourage parental oversight at two levels and pilot it in 1 district.	Punjab
2.b.1.6	Create PEGEs at Tehsil and District levels to encourage parental oversight at two levels and pilot it in 1 district.	KP
2.b.1.7	Build capacity of parents’ groups at tehsil and district levels, including SC members, to identify the needs of parents and amplify parental voice.	Punjab
2.b.1.8	Build capacity of parents’ groups at tehsil and district level, including PTC members, to identify the needs of parents and amplify parental voice.	KP
2.b.1.9	Integrate PEGEs into Tehsil and District review meetings.	Punjab
2.b.1.10	Integrate PEGEs into Tehsil and District review meetings.	KP
2.b.1.11	Develop videos for parents’ groups and communities.	Punjab
2.b.1.12	Develop videos for parents’ groups and communities.	KP

2. c. *Social and Political Capital Engagement*

2.c.1

B-TAG will support the government in facilitating their engagement and liaising with all political parties on education – The engagement will include signing the Citizens Agenda for Education by key political stakeholders. B-TAG will develop a list of priorities for the *Citizens' Agenda for Education* and provide technical assistance in getting it signed by key political stakeholders, demonstrating a collective commitment to prioritise education and work towards its improvement.

Activities

2.c.1.1	Develop a list of commitments/priorities on the Citizens' Agenda for Education.	Punjab
2.c.1.2	Develop a list of commitments/priorities on the Citizens' Agenda for Education.	KP
2.c.1.3	Identify relevant people and education committees in political parties, share objectives and initiate dialogue with them.	Punjab
2.c.1.4	Identify relevant people and education committees in political parties, share objectives and initiate dialogue with them.	KP
2.c.1.5	Provide technical support in getting the Citizens' Agenda for Education signed.	Punjab
2.c.1.6	Provide technical support in getting the Citizens' Agenda for Education signed.	KP

Output 3: Improved Teacher Knowledge, Skills, and Classroom Practice

3. a. Support for Newly Inducted Teachers and Teacher Training

3.a.1

Teacher induction programmes are crucial to improving teaching quality and student outcomes by providing training, mentorship, and support to new teachers. B-TAG will support improvements in the design of the Teachers Induction Programme in KP and, based upon learning from the KP experience, provide technical assistance to QAED Punjab for improving induction processes. Additionally, B-TAG will provide technical support for the institutional strengthening of DCTE and DPD in KP and QAED in Punjab.

Activities

3.a.1.1	Develop a diagnostic report and recommendations for improving the Teachers' Induction Programme, including a situation analysis and a way forward.	KP
3.a.1.2	Support DPD and DCTE in developing service rules	KP
3.a.1.3	Improve the Induction Programme's design (duration and content) based on learnings from KP's Teacher Induction Programme.	Punjab
3.a.1.4	Conduct a capacity assessment of district QAEDs, including gap analysis and a strengthening plan.	Punjab

3. b. Continuous Professional Development (CPD)

3.b.1. CPD Primary KP

Evidence suggests high-quality professional development increases teacher quality, improving student learning outcomes. DPD, KP has set up a CPD unit to implement the programme. Under KESP-II, support was provided for the CPD primary; particularly, a blended learning component was added to the CPD framework, which needs further strengthening, as discussed during our consultations with DPD. B-TAG will work with DPD to support CPD primary as required.

Activities

3.b.1.1	Review the design of the current CPD primary and suggest changes through a consultative process for its strengthening.	KP
---------	--	----

3.b.2. CPD Elementary Punjab and KP

Punjab piloted a framework for CPD Elementary for mathematics teachers in selected districts. The pilot tested some of the modalities of the framework, while others could not be tested due to time limitations. QAED desires to scale up CPD-Elementary in Punjab by building on the earlier work under PESP-II (extended) by adding more districts, schools, and teachers and covering more subjects.

In KP, there is a high demand for developing and implementing CPD for elementary teachers. B-TAG will fill the gap by supporting E&SED in designing a CPD framework at the elementary level and piloting it in selected districts.

Activities

3.b.2.1	Review and revise the framework for CPD-Elementary.	Punjab
3.b.2.2	Implement revised CPD elementary framework (Math, Science, English, for grade 6) in 2 selected districts and report the findings.	Punjab
3.b.2.3	Design and pilot CPD elementary framework (Math, Science, English, for grade 6) in 2 selected districts and report the findings.	KP

3. c. Classroom Observation

3.c.1. Support for School Leaders Programme in KP

KP launched the Schools Leadership Programme (SLP), which provides need-based, teacher-specific academic supervision and support to all primary schools through School Leaders (SLs). B-TAG will support DPD in developing coaching skills training for school leaders and provide technical support in developing implementation strategies for training delivery.

Activities

3.c.1.1	Support DPD in developing the Coaching Skills of School Leaders.	KP
---------	--	----

3.c.2. *Establish Feedback Loops between Classroom Observation Data, Teacher Training, Teaching and Learning Material Development, etc.*

Establish effective feedback loops between classroom observation data and findings and other components in the education system, such as teachers' training and teaching and learning materials development. B-TAG will assess gaps between classroom observation, assessments, curriculum and teacher training programmes. Based on the findings, to complete the feedback loop, B-TAG will develop a dashboard in Punjab and support strengthening the existing dashboard in KP through which relevant assessment and classroom data can be shared. Moreover, B-TAG will also support SED in Punjab and E&SED in KP to notify a committee comprising members from all relevant departments and, to establish routines, convene quarterly committee meetings to use the data to inform and track different reforms.

Activities

3.c.2.1	Prepare a diagnostic report on the disconnect between classroom observations, assessments, curriculum, textbooks, teacher training interventions, etc.	Punjab
3.c.2.2	Prepare a diagnostic report on the disconnect between classroom observations, assessments, curriculum, textbooks, teacher training interventions, etc.	KP
3.c.2.3	Support SED in notifying a committee with a drafted mandate, comprising members from QAED, PCTB, PEC, PMIU, and TORs to ensure a feedback loop between classroom observation, assessment results, and curriculum, textbook and teacher training material development, is not only completed but also managed at the top level.	Punjab
3.c.2.4	Develop a committee at the E&SED level to coordinate and liaise with DPD, DCTE and KP EMA with clearly drafted mandate and TORs.	KP
3.c.2.5	Convene quarterly committee meetings to identify weak teaching areas or low-performing schools for QAED to offer additional targeted support.	Punjab
3.c.2.6	Convene quarterly committee meetings to identify weak teaching areas or low-performing schools for DPD to offer additional targeted support.	KP

3.d. *Science and Mathematics Education*

3.d.1. *STEM Clubs and Mentorship–Punjab and KP*

I-SAPS and our partner, Pakistan Alliance for Math and Science (PAMS), will scale up the STEM Clubs' initiative in selected districts in South Punjab and NMDs to promote learning in maths and science.

Activities

3.d.1.1	Partner with PAMS to scale up the STEM Clubs' initiative for policy impact on (formative, summative and centralised) assessments, CPD framework, and minimum pedagogical standards.	Punjab
3.d.1.2	Partner with PAMS to scale up the STEM Clubs' initiative for policy impact on (formative, summative and centralised) assessments, CPD framework, and minimum pedagogical standards.	KP

Output 4: Learning Facilitated through Quality Resources and Guided by Assessments**4.a. Foundational Learning****4.a.1. Foundational Learning and Remediation**

Initiate a policy dialogue on foundational learning and development of a Foundational Learning Strategy to benefit children, particularly girls, in both provinces' least-developed districts. BTAG will also develop a Foundational Learning and Remedial Programme and implement it in selected districts to ensure a grade-specific level of proficiency among students of grades 1 and 2 in foundational reading and numeracy skills.

Activities

4.a.1.1	Develop a Foundational Learning Strategy to improve the foundational skills of children, particularly girls.	Punjab
4.a.1.2	Develop a Foundational Learning Strategy to improve the foundational skills of children, particularly girls.	KP
4.a.1.3	Adapt The Citizens Foundation's (TCF) remedial learning programme for public schools (3 subjects – English, Urdu and Mathematics, Grade 1-2)	Punjab
4.a.1.4	Adapt The Citizens Foundation's (TCF) remedial learning programme for public schools (3 subjects – English, Urdu and Mathematics, Grade 1-2)	KP
4.a.1.5	Pilot Remedial Learning Programme in 1 Tehsil	Punjab
4.a.1.6	Pilot Remedial Learning Programme in 1 Tehsil	KP

4.b. Assessments and Improved Learning**4.b.1**

Support PEC for piloting School-based Formative assessment, and support KP DCTE's capacity in data analysis and developing and piloting a formative assessment system in the classroom.

Activities

4.b.1.1	Support PEC in the development of a Pilot Plan for School-Based Formative Assessment.	Punjab
4.b.1.2	Develop DCTE's data analysis and management capacity to do comprehensive assessment reporting.	KP
4.b.1.3	Support DCTE in developing a Formative Assessment System to improve classroom practice.	KP
4.b.1.4	Coordinate with Punjab to acquire the SBA software, its adaptation and implementation in KP.	KP
4.b.1.5	Pilot Formative Assessment System in 1 District.	KP

4. c. Lesson Planning**4.c.1. Support DPD, KP for Improved SLP Implementation**

Support DPD KP in improved implementation of SLP for contributing toward building the skills of teachers on effective lesson planning.

Activities

4.c.1.1	Facilitate DPD in improved implementation of SLP, based on KESP TAs review.	KP
---------	---	----

4.d. Multigrade Teaching**4.d.1.**

Multi-grade teaching is prevalent in many schools across Punjab, especially in rural areas. Several factors contribute towards multigrade schools, such as inadequate resources, including the unavailability of teachers and classrooms and low student enrolment, due to which the principle of 'one teacher-one classroom' cannot be implemented. During B-TAG's consultative meeting with QAED, the multigrade pilot was highlighted as a successful programme, and QAED expressed a keen desire to expand it further. Building on PESP-II's (Extended) work, B-TAG will expand the programme and further scale it up to 5000 primary schools. Similarly, in KP, B-TAG will develop a structured programme in consultations with E&SED, DCTE and DPD to train teachers in smooth implementation of the curriculum and classroom management and achieve student learning outcomes by keeping both grades engaged in various activities simultaneously.

Activities

4.d.1.1	Conduct a situation analysis for Multi-grade Teaching	Punjab
4.d.1.2	Conduct a situation analysis for Multi-grade Teaching	KP
4.d.1.3	Scale up Punjab's multigrade pilot to 5000 schools (having 4 teachers) and provide training teachers on multi-grade teaching.	Punjab
4.d.1.4	Design a multi-grade programme pilot for 400 schools and develop teaching and learning materials.	KP

4.d.1.5	Implement multi-grade pilot in 400 schools, train 160 master trainers and approximately 1200 primary school teachers.	KP
4.d.1.6	Evaluate the pilot, report its findings, review the multi-grade programme pilot, and develop a scale-up strategy and roll-out plan.	KP

Output 5: Improved Planning and Management at the School, District, and Provincial Levels

5. a. Provide support to Delivery Managers for Better Planning, Budgeting and Leadership

5.a.1

Education service delivery is not possible without effective leadership and good governance. In Punjab, district managers oversee and manage education-related affairs at the district level. B-TAG will support QAED in designing and implementing refresher training for education managers with an added feature of on-the-job training for improved results.

In KP, B-TAG will also support DPD in designing and developing a CPD programme for district managers, including structure and components of the programme in line with the service rules of the KP Management Cadre and provide on-the-job support to education delivery managers with increased focus on NMDs through district improvement plans.

Activities

5.a.1.1	Developing refresher training for delivery managers and delivering training workshops for DEOs and AEOs.	Punjab
5.a.1.2	Provide on-the-job support to education delivery managers (CEOs and others) with an increased focus on South Punjab through district improvement plans.	Punjab
5.a.1.3	Support DPD in developing a CPD model for delivery managers in alignment with the service rules of the management cadre.	KP
5.a.1.4	Support DPD in developing and implementing courses for DEOs as part of the CPD model for the management cadre.	KP
5.a.1.5	Provide on-the-job support to education delivery managers (DEOs and others) with increased focus on NMDs through district improvement plans.	KP

5.a.2

Under this component, B-TAG will deliver Leadership Skills Training for education officials in Punjab and KP for leading and managing change and effectively delivering reforms. PESPII (Extended) designed and delivered Leadership Skills training to the education managers for effective management, conflict resolution, and better time management to ensure effective education delivery. QAED is now keen to provide refresher training to the delivery managers. E&SED has also expressed its desire for leadership training and mentoring support to the delivery managers. B-TAG will build upon the leadership training in Punjab and deliver it to the delivery managers in KP.

Activities

5.a.2.1	Develop and deliver refresher training on leadership skills for the delivery managers (CEOs, DEOs, etc.).	Punjab
5.a.2.2	Support QAED in developing training modules on leadership skills and effective management skills for effective delivery of reforms.	Punjab
5.a.2.3	Develop and deliver training on leadership skills for the delivery manager.	KP
5.a.2.4	Support DPD in developing training modules on leadership skills and effective management skills for effective delivery of reforms.	KP

5.a.3

Leveraging reforms through Inter-provincial experience sharing. B-TAG will organise two (2) inter-provincial experience-sharing conferences focused on learning from successful interventions on both sides, challenges, and success stories across all areas of reforms in education.

Activities

5.a.3.1	Organise Two (2) Inter-provincial Experience-sharing Conferences	Punjab & KP
---------	--	-------------

5. b. *Strengthening Data and Decision Support Systems*

5.b.1

To improve data-based decision-making and provide support to schools and teachers, SED, with the support of PESP-II, developed systems to generate data for decision support. This includes SIF and classroom observations besides the regular practice of the Annual School Census. Our consultations in Punjab confirmed the demand from the government to streamline and reform SIF. B-TAG will review SIF and support PMIU in resolving issues in its implementation.

E&SED, KP designed and launched a School Status Index (SSI) to collect data on school-level performance contributed by indicators on student learning, teacher quality, teacher availability, governance and management and infrastructure. However, there are gaps in the utilisation of SSI data. To address this issue, B-TAG will review SSI and support E&SED in resolving its implementation and utilisation issues.

Activities

5.b.1.1	Review the School Improvement Framework and support PMIU in resolving issues in its implementation.	Punjab
5.b.1.2	Review the School Status Index and support the E&SED in resolving issues in its implementation.	KP

5.b.2

SED and E&SED use a variety of datasets. Despite having systems like i-EMIS in place, the departments have not been able to benefit from advanced data reporting and analysis tools such as simulation / predictive modelling to optimise inputs and processes to improve education outcomes. B-TAG will carry out simulation/predictive modelling to improve inputs and operations at the school level for improved education outcomes with particular emphasis on South Punjab and Merged Areas in KP.

Activities

5.b.2.1	Support SED resource optimisation based on the evidence generated through simulation/predictive modelling to improve inputs and processes at the school level for improved education outcomes.	Punjab
5.b.2.2	Support E&SED resource optimisation based on the evidence generated through simulation/predictive modelling to improve inputs and processes at the school level for improved education outcomes.- Focus on NMDs	KP

5.b.3

Provide TA to Punjab and KP for establishing and capacitating District Budget Tracking and Execution to improve tracking of releases and expenditures.

Activities

5.b.3.1	Support SED in developing quarterly budget execution reports.	Punjab
5.b.3.2	Support E&SED in developing quarterly budget execution reports.	KP

5. c. Conducive Learning Environment and Sports to Promote Tolerance, Equity and Respect for Diversity**5. c.1**

The current education system provides fewer opportunities for students to engage in co-curricular and extra-curricular activities, especially for girls. B-TAG will support E&SED KP to develop a Sports in Schools Strategy to mainstream sports activities and inclusion at the school level, especially in the NMDs. The strategy will serve as a roadmap for developing, implementing, and managing sports programmes in schools, including exploring avenues to develop a mechanism for promoting tolerance, equity and harmony through sports. The activities will promote tolerance, respect for diversity and teamwork through student engagement and active participation in sports activities.

Activities

5. c.1.1	Conduct a situation analysis of sports in the education sector in KP.	KP
----------	---	----

5. c.1.2	Develop a Sports Strategy with particular emphasis on fostering tolerance, equity and harmony through sports for E&SED KP to mainstream sports activities and inclusion at the school level, especially in the NMDs.	KP
----------	--	----

5. c.2

Punjab Sports in Schools Strategy outlines the need for effective training of Physical Education teachers to develop the expertise and confidence to create meaningful learning experiences, support student growth, and positively impact the overall development of students. Likewise, in KP, there is also a demand for effective training of Physical Education teachers to develop the expertise and confidence to create meaningful learning experiences, support student growth, and positively impact the overall development of students.

B-TAG will support Punjab in developing a framework for training PE teachers and capacitate QAED to carry out regular training and professional development of PE teachers and build the capacity of PE teachers in KP.

Activities

5. c.2.1	Develop a framework for training Physical Education teachers on specialised knowledge and skills in instructional methods specific to physical education.	Punjab
5. c.2.2	Build QAED's capacity to carry out regular training and CPD of PE teachers.	Punjab
5. c.2.3	Conduct training needs assessment (TNA) for PE teachers in KP.	KP
5. c.2.4	Develop training modules for PE teachers focusing on using sports to promote tolerance and peace.	KP
5. c.2.5	Pilot PE training in 10 districts with 200 PE teachers.	KP

5.d. Support for Establishing a Strategic Policy Unit at SED, Punjab

5.d.1.

Support the Government of Punjab, given its keenness to establish a Strategic Policy Unit within SED. B-TAG support will include the development of a performance management framework for the proposed unit (Job Descriptions, Key Performance Indicators, and Performance Evaluation). The unit will also take over the role earlier envisaged for the Financial Management Cell (FMC) to be established in SED.

Activities

5.d.1.1	Support SED in establishing a strategic policy unit.	Punjab
5.d.1.2	Develop a Comprehensive Performance Management System for the strategic policy unit.	Punjab

IV. INNOVATIONS

1. SIGHT FOR SUCCESS- LEVERAGING THE PRIVATE SECTOR FOR DISABILITY INCLUSION IN LEARNING– PUNJAB & KP

Background

Physical disabilities play a significant role in hindering learning level improvement and negatively impacting education outcomes. Creating support systems and facilitating an environment for students with such disabilities will ensure substantial progress towards improving the provision of education in Pakistan. Both the government departments of Punjab and KP continue to face administrative and financial constraints in providing adequate educational facilities and services in this regard. These challenges can, in part, be mitigated by getting access to Corporate Social Responsibility (CSR) funds from medium and large corporations and by leveraging the private sector's role in supporting public sector education. Interestingly, ample CSR funds are available, yet the governments lack a policy or legal framework to access them, resulting in underutilisation.

Available evidence suggests that aligning the government's Corporate Social Responsibility (CSR) goals with the private sector's innovative capabilities can yield positive outcomes. This approach holds great potential for sustained societal development when various stakeholders collaborate towards a common goal³. To respond to these issues, B-TAG will work with both governments to create a policy space to leverage the private sector's role in supporting children with visual disabilities.

Innovation

B-TAG will conduct a comprehensive review of the government's existing PPP framework and CSR policy space to explore opportunities for piloting a programme in collaboration with private sector organisations. An in-depth assessment of the current PPP framework and CSR policy will be conducted to identify gaps, after which recommendations will be drafted for the CSR policy. A quasi-experimental model will be designed that utilises the PPP approach to screen and provide support for children with visual disabilities. B-TAG will also facilitate a CSR workshop involving corporate agencies, pharmaceutical industries, ophthalmology companies, and government representatives to serve as a platform to present the programme design and raise funds. The programme will be piloted in selected districts in South Punjab and NMDs, and results will be used to inform the scale-up.

Expected results

By piloting a program that leverages private sector resources and expertise, this innovation will significantly improve the support and services available to children with visual disabilities and

³ United Nations World Food Programme (<https://www.wfp.org/news/new-report-confirms-game-changing-impact-health-and-nutrition-school#:~:text=SHN%20programmes%20are%20a%20cost,%241%20invested%20over%2080%20years>)

pave the way for governments to use CSR funds and PPPs to improve education facilities and service delivery.

Sustainability and Scalability

Once a combination of CSR and PPP policy framework is developed and embedded into the government systems, multiple organisations can tap into the existing framework, leveraging PPP not just for supporting children with visual disabilities and other social causes but also for educational facilities and services.

2. TEACHERS' READINESS PROGRAMME (TRP) – PUNJAB

Background

Teacher shortage is one of the long-standing issues faced by the provincial governments in Pakistan. There are more than 80,000 vacant teaching posts. To deal with this issue, Punjab has formulated policies to engage teachers on a short-term basis through School Councils⁴ (SCs). Since these teachers are recruited at the local level⁵, the province does not have any mechanism to ensure the quality of these resources, which increases the risk of poor-quality classroom instruction. This is a considerable challenge that B-TAG will attempt to address through this innovation.

Innovation

In consultation with key officials in QAED and the government officials in SED, B-TAG will seek to test the Teacher Readiness Programme (TRP) as a plausible solution to improve the quality of contractual teachers recruited by SCs. Under the TRP, B-TAG will support QAED in developing a training module for aspiring teachers who want to join SED on a contract basis. The district field formations of QAED will deliver these modules to the aspiring teachers before they are inducted into schools. The programme will be made a condition for application to the post of teacher. Preference will be given to teachers with relatively better performance in the TRP. This will result in the creation of a pool of fresh teachers ready to join the teaching workforce. TRP will be piloted in 1 district in Punjab, and pilot results will be used to give recommendations for scale-up.

Expected results

Teachers' readiness programme is expected to play a vital role in improving the quality of education and fostering a positive learning environment. This reform will help reduce teacher recruitment delays and establish a succession planning pipeline.

Sustainability and scalability

The proposed programme has a high probability of sustainability as QAED will lead the development and implementation of the entire programme. At the same time, the programme can be scaled up at pace due to the presence of QAEDs across the province. To ensure the

⁴ These teachers are paid through NSB funds on monthly basis for a period of 10 months.

⁵ The school head along with the school council members is authorized to recruit these teachers without requiring to take approval from the senior government officials.

financial sustainability of the innovation, a financial plan in alignment with the financial rules will be developed and shared with QAED in due course.

3. IMPROVED SAFEGUARDING IN GIRLS' EDUCATION – PUNJAB & KP

Background

Evidence informs that neglect of safeguarding aspects generates socio-emotional effects such as fear, stress, despair, insecurity and lack of motivation in students. In addition, diverse reasons affect girls disproportionately, causing an interruption in learning, for example, menstrual and hygiene issues, harassment in and around schools, and gender discrimination at home and/or schools, among others. This contributes to low learning achievements and high dropout of girls during the transition from primary to secondary and beyond.

Punjab and KP have no mechanisms to support and care for students who face interruption of life and learning. There is no mechanism in government systems for life counselling or supporting students who go through behavioural changes due to diverse reasons. This necessitates the development of spaces of safety and support networks for improved safeguarding in education – especially for girls.

Innovation

B-TAG will develop mechanisms to ensure that students, especially girls in middle and high schools, are provided with guidance and support against bullying, stigmatisation, discrimination and overall support for their psychological well-being. For this purpose, Lady Health Workers and Health and Nutrition Supervisors will be engaged and facilitated to educate girls and provide the required support. This innovation will require cross-collaboration between education and health departments. The pilot will be conducted in 1 district each from Southern Punjab and NMDs.

Expected results

The communities of care developed as a result will provide the right support and facilitate girls in increasing their retention attention in classrooms and achieving learning outcomes.

Sustainability and Scalability

Lady Health Workers and Health and Nutrition Supervisors are part of the government set-up, and their roles can be built upon to provide the proper support and safeguarding system for girls. The developed communities of care can be further strengthened and built upon to appear as strong networks to support girls, families, teachers and schools.

4. PROMOTING FOUNDATIONAL LITERACY AND NUMERACY USING ARTIFICIAL INTELLIGENCE (AI) AND MACHINE LEARNING - PUNJAB

Background

Educational institutions and governments worldwide have been exploring the integration of AI and machine learning to enhance student learning experiences. These technologies can be used for personalised learning, adaptive assessment, intelligent tutoring systems, and data-driven insights into student performance. Punjab continues to face the challenge of low student achievement in foundational literacy and numeracy. Many initiatives have been taken to improve literacy and numeracy scores. All these interventions have not been able to achieve the desired results.

During B-TAG's consultative sessions, the government demanded that TA explore novel approaches to addressing the persistent problem of students' low performance in Foundational Literacy and Numeracy. Utilising AI and Machine Learning can transform student learning experiences with the potential of creating personalised learning experiences for children. One such initiative was launched during the COVID-19 pandemic through a partnership between The City School and CENTURY. It reached out to 28,000 students in 108 schools and empowered them to take ownership of their learning, resulting in improved student learning outcomes⁶. There is significant potential for testing AI and Machine Learning in improving teacher support mechanisms, student learning experiences, and outcomes in public sector schools.

Innovation

B-TAG will leverage the power of AI and data analytics to create personalised learning experiences that engage and motivate children, ultimately driving better learning outcomes. Through a quasi-experimental design in 20 schools in Punjab, the innovative learning design will be tested. While B-TAG team understands that high student-teacher ratios are one of the key challenges in the provision of quality education and that the government is unable to recruit the required number of teachers, two treatment arms (10 schools each with minimum 400 students in each group) will be tested - one with a student-teacher ratio of 1:40 and the other with a ratio of 1:60. Each teacher will be supported by caregiver which the B-TAG team will train in partnership with QAED.

The pilot design seeks to provide a tailored learning experience which is age and development-appropriate for each child based on their learning interest, preferences and past performance in the class. This will also involve supporting the teacher to track child development progress in real-time and helping them to map strengths and weaknesses to foster success.

To achieve this, B-TAG will use AI and Machine Learning to develop a mechanism to provide a tailored learning experience and support the teachers with real-time child development progress tracking. This will be done through existing school tablets using offline/preloaded material. Teachers will be provided specialised training and follow-up support on effectively

⁶ <https://academiamag.com/ai-and-education-in-pakistan-challenges-and-way-forward/>

using data and supporting students in their personalised learning journey. The innovation will be piloted in 20 selected schools in Punjab, and results will be used to inform the scale-up strategy.

Expected results

This innovation is expected to revolutionise the student learning outcomes in foundational literacy and numeracy. Students are expected to have personalised learning experiences, assessments and tutoring systems, resulting in increased learning. Teachers will be better able to support and facilitate their learning experiences, especially in large classes.

Sustainability and Scalability Challenge

Through this innovation, we will develop a mechanism using AI and Machine Learning to provide teachers with a targeted support mechanism for improved student learning outcomes and pilot test it. Once the mechanism/application has been developed and tested, based on the findings of the pilot, it can be scaled up and expanded quickly to other schools, benefitting more students and providing them with an improved learning experience. Since this will be implemented in partnership with key government departments such as QAED and PMIU, there is good potential for sustainability and scalability.

5. CREATION OF DESIGNATED POSTS OF HEAD TEACHERS – PUNJAB & KP

Background

Evidence from around the world suggests that headteachers play a significant role in enhancing teaching quality and improving student achievements. Among many functions they carry out, the most important is promoting the professional development of all the teachers and mentoring them, which can potentially improve student learning outcomes and school ethos.

Both in Punjab and KP, there are no designated posts for headteachers at the primary level. The most senior teachers are assigned additional responsibilities of the headteachers, primarily administrative tasks with a nominal extra monthly financial incentive. Not only does the incentive remains negligible, but the clarity of role and their training continues to be challenging. This poses severe limitations across multiple education outcomes, including enrolment, retention, transition rate, and learning achievement of students.

Through this innovation, B-TAG will test how designated headteachers perform their roles effectively and can bring whole-of-school improvement.

Innovation

In selected schools of 1 pilot district, each in both Punjab and KP, B-TAG will:

- i) identify a teacher based on a pre-defined criteria (qualification, experience, age) to be designated as the headteacher,
- ii) train the designated headteachers on instructional leadership as well as effective mentoring techniques, understanding and using classroom observation tools to observe classroom teaching and give feedback to teachers on their teaching practices, provide teachers with ongoing expert guidance and facilitation in their learning and share best

- practices, encourage reflection, and challenge teachers to transform existing practice, and
- iii) notify headteachers through SED/E&SED and give them an appropriate financial incentive per month

At the end of the pilot, B-TAG will evaluate with the following objectives:

1. Analyse the governance and delivery context to identify the need for designated posts of headteachers in primary schools.
2. Review the set of interventions aimed at capacity building of headteachers.
3. Review the headteacher's support and follow up with teachers through feedback. The evaluation will attempt to see how well headteachers perform their mentoring roles through classroom visits, giving one-on-one feedback to teachers, conducting teacher meetings, encouraging collaborative learning and peer learning, and giving teachers opportunities to reflect and ask for feedback and support.
4. Analyse how good leadership brings about whole-of-school improvement, including student learning outcomes, teaching quality, learning environment, etc.
5. Analyse the extent to which good leadership and mentoring increase parents and community engagement.

For the pilot's evaluation study, data will be collected through student assessments and quality indicators through classroom observations, detailed school visits, interviews with key stakeholders (CEOs/DEOs, AEOs/SLs, HTs, schoolteachers), focus group discussions with teachers, headteachers, and school council members.

The results will inform policy and practice regarding the designated posts of headteachers in primary schools of Punjab and KP.

Expected results

Provision of authority to the school head is expected to introduce improvements across several education outcomes in the short-, medium- and long run. These outcomes can be viewed from two different perspectives at a conceptual level: volume and quality. The volume of outcomes includes indicators such as enrolment, retention, transition rate, completion rate, and survival rate. Similarly, the quality of outcomes encompasses the learning achievement among students as measured through various forms of assessments, including summative and formative.

Sustainability and Scalability Challenge

This pilot intervention does not require SED/E&SED to create a separate post or amend financial rules. Headteachers will be notified through SED/E&SED along with their detailed mentoring roles and responsibilities. This makes it relatively easily acceptable and easy to scale up innovation.



Institute of Social and Policy Sciences (I-SAPS)
Box: 1379, Islamabad, Pakistan
UAN: 0092-51-111739739; Fax: 0092-51-2289425
E-mail: info@i-saps.org; Website: www.i-saps.org