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<tr>
<td>ASDEO</td>
<td>Assistant Sub Divisional Education Officer</td>
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<td>B-TAG</td>
<td>Bridging Technical Assistance for Governments</td>
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<td>COP</td>
<td>Community of Practice</td>
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<td>CPD</td>
<td>Continuous Professional Development</td>
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<td>CRO</td>
<td>Classroom Observation</td>
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<td>DCTE</td>
<td>Directorate of Curriculum and Teacher Education</td>
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<td>DEOs</td>
<td>District Education Officers</td>
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<td>DE&amp;SE</td>
<td>Directorate of Elementary and Secondary Education</td>
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<td>DPC</td>
<td>District Planning Committee</td>
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<td>DPD</td>
<td>Directorate of Professional Development</td>
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<td>DPS</td>
<td>District Performance Scorecard</td>
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<td>ECCE</td>
<td>Early Childhood Care and Education</td>
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<td>EMIS</td>
<td>Education Management Information System</td>
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<td>ESRU</td>
<td>Education Sector Reform Unit</td>
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<td>ETEA</td>
<td>Educational Testing and Evaluation Agency</td>
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<td>F2F</td>
<td>Face-to-Face</td>
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<tr>
<td>FCDO</td>
<td>Foreign, Commonwealth &amp; Development Office</td>
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<tr>
<td>FGD</td>
<td>Focus Group Discussion</td>
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<td>GOAL</td>
<td>Girls and Out of School Children-Action for Learning</td>
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<tr>
<td>GPES</td>
<td>Government Primary Elementary School</td>
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<tr>
<td>HEC</td>
<td>Higher Education Commission</td>
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<tr>
<td>HT</td>
<td>Head Teacher</td>
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<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
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<td>IDPS</td>
<td>Inter DPS</td>
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<td>ISAPS</td>
<td>Institute of Social and Policy Sciences</td>
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<td>ISU</td>
<td>Implementation Support Unit</td>
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<td>JD</td>
<td>Job Description</td>
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<tr>
<td>KESP</td>
<td>Khyber Pakhtunkhwa Education Sector Programme</td>
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<td>KfT</td>
<td>Knowledge for Teaching</td>
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<td>KII</td>
<td>Key Informant Interview</td>
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<td>KP</td>
<td>Khyber Pakhtunkhwa</td>
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<td>KPHCIP</td>
<td>Khyber Pakhtunkhwa Human Capital Investment Programme</td>
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<td>LMS</td>
<td>Learning Management System</td>
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<td>M&amp;QA</td>
<td>Monitoring and Quality Assurance</td>
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<td>NMDs</td>
<td>Newly Merged Districts</td>
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<td>PDDs</td>
<td>Professional Development Days</td>
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<td>PITE</td>
<td>Provincial Institute for Teacher Education</td>
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<td>Acronym</td>
<td>Description</td>
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<td>PM</td>
<td>Project Manager</td>
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<td>PnD</td>
<td>Planning and Development</td>
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<td>PPT</td>
<td>PowerPoint</td>
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<td>PST</td>
<td>Primary School Teacher</td>
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<td>PTC</td>
<td>Parent-Teacher Council</td>
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<td>QMM</td>
<td>Quarterly Monitoring Meeting</td>
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<td>RPDC</td>
<td>Regional Professional Development Centre</td>
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<td>SL</td>
<td>School Leader</td>
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<td>SLO</td>
<td>Student Learning Outcome</td>
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<td>SLP</td>
<td>School Leadership Programme</td>
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<td>SQMI</td>
<td>School Quality Management Initiative</td>
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<td>SRD</td>
<td>Self-Reflection Diary</td>
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<td>TCS</td>
<td>Teacher Competency Survey</td>
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<td>TCK</td>
<td>Teacher Content Knowledge</td>
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<td>TGM</td>
<td>Teacher Group Meeting</td>
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<td>TPD</td>
<td>Teacher Professional Development</td>
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The Girls and Out of School Children Action for Learning (GOAL) project, supported by the UK Government's Foreign, Commonwealth & Development Office (FCDO), aims to enhance access and learning outcomes for girls and marginalised children in Punjab and Khyber Pakhtunkhwa (KP). The project builds upon the UK’s decade-long investment in education in these regions. The Bridging Technical Assistance for Governments (B-TAG), managed by the Institute of Social and Policy Sciences (ISAPS), builds on previous investments to ensure a smooth transition to the long-term GOAL Technical Assistance (TA). As part of its project deliverables, B-TAG assessed the Continuous Professional Development (CPD) programme for Primary School Teachers (PSTs) in KP, and recommended improvements after consultations with relevant stakeholders.

The Continuous Professional Development (CPD) programme has been operational since 2018 and has reached over 105,000 PSTs. It aims to enhance student learning by improving teachers’ Knowledge for Teaching (KfT). This programme is primarily delivered through cluster-based monthly Professional Development Days (PDDs). The content of these PDD sessions is carefully curated, drawing insights from various sources such as the academic calendar, Grade 5 and Grade 2 annual student assessments, Teacher Content Knowledge (TCK) assessment, and the Teacher Competency Survey (TCS). Recent systemic changes that include the establishment of the DPD, the initiative of Schools Leadership Programme (SLP), along with the evolving teacher needs, necessitate a comprehensive review of KP’s CPD programme.

Findings:
The findings of this review have been informed by the approved CPD primary framework, recent institutional reforms, and DE&SE policies and strategies regarding in-service programmes and are as follows:

1. CPD programme needs to be tailored to teachers’ needs: Currently, the CPD programme is delivered through cluster based monthly PDDs. The content of these sessions is informed by the academic calendar, findings of student assessments, TCS and TCK. However, these sources do not fully capture the varied requirements of teachers across different clusters and districts, nor do they consider school-level needs.

2. Ongoing coaching and provision of expert support to teachers is essential: Providing teachers with coaching and expert support is a critical component of CPD. KP’s CPD programme exhibits disparities in the quality of mentoring and coaching provided by SLs. Headteachers also play a limited role in mentoring due to administrative issues hindering effective follow-up. Overall, there is a need for improved support mechanisms to enhance the effectiveness of coaching, mentoring, and follow-up in the CPD model.

3. CPD supports collaboration: The existing CPD model promotes collaboration through Teacher Group Meetings (TGMs) led by headteachers and Quarterly Monitoring Meetings (QMMs) of headteachers led by the ASDEOs. TGMs served as a Community of Practice (COP) at the school level.
and were initially held regularly with active teacher participation. However, this practice did not continue. Participants expressed a strong desire for structured networks and the development of COPs at various levels for ongoing professional development.

4. **CPD shows a positive correlation with student learning:** Improving teacher quality through professional development (PD) strongly correlates with student learning, achievements, and overall school quality.

5. **CPD needs to provide contextually developed and locally delivered solutions:** The current CPD model is centrally designed and implemented. RPDCs are not involved in the design and development of the CPD programme and have a very limited role in programme delivery. The findings underscore the RPDCs’ strong inclination to engage comprehensively in the CPD programme, encompassing design, development, monitoring, and evaluation.

6. **Clear Incentives and Recognition for CPD:** The current CPD framework lacks a connection with career progression or incentives, offering no recognition or consequences for teachers, relying solely on the intrinsic motivation of teachers. All participants unanimously expressed the need for certification and recognition to make their CPD experience more meaningful.

7. **The need for robust CPD providers:** CPD providers must possess the capability to design and deliver comprehensive, high-quality programmes that align with the latest research, best practices, and innovative approaches.

**Recommendations:**

Our findings underscore several issues that impede the effective performance of the DPD and RPDCs. The following set of recommendations aims to enhance the effectiveness of the CPD programme through a comprehensive approach.

**Development of a Dashboard for Real-Time CPD Needs Analysis:** A robust system that collects data from various sources can be used to develop a dashboard that will make it easier to visualize data and allow the DPD and RPDCs to identify key areas for targeted CPD programmes, ensuring a need-responsive professional development experience for teachers.

**CPD Content Design and Delivery based on Identified Needs:** There is an urgent need for an interactive Learning Management System (LMS) to provide teachers with the opportunity for self-study and flexible learning using digital modules developed by the DPD with RPDCs on critical SLOs every month.

**Coaching, Mentoring, and Classroom Observations by SLs, Supported by HTs:** As part of their role, SLs should offer mentoring and academic supervision to teachers, aligned with the CPD framework.

**Development of a Community of Practice (COP):** COPs should be developed at the school level with support from HTs and SLs. These communities will serve as platforms to cultivate a culture of CPD in the province.

**DPD and RPDCs Capacity Building:** To ensure that DPD and RPDCs can execute the activities outlined above, they should be staffed according to eligibility criteria and emerging needs based on merit. Physical and IT infrastructure should be upgraded, and several responsibilities should be delegated to RPDCs, particularly in CPD planning, content development, dissemination, delivery, monitoring, and research.
Introduction

There is overwhelming evidence to suggest that the better the quality of teachers, the lower the incidence of low student achievement. Teachers' access to ongoing professional development throughout their careers has been found to increase teacher retention and maintain high-quality instruction (Brighouse, 2008; Day, Sammons, Siobart, Kington, & Gu, 2007). Recognising the centrality of this evidence, the Government of KP regards transforming teacher effectiveness, including improving quality of instruction, a major component of its efforts to improve student learning outcomes. To improve quality of instruction in KP's primary schools, Khyber Pakhtunkhwa Education Sector Programme (KESP) Technical Assistance (TA) developed a CPD strategy for DPD, (at the time known as as the Provincial Institute for Teacher Education (PITE)), in 2016. The current CPD model was introduced in 2018 in collaboration with the DE&SE and DCTE.

The primary objective of the CPD programme is to improve student learning by helping teachers improve their knowledge for teaching (KfT). The programme is designed to be delivered through cluster based monthly PDDs. Contents of PDD sessions are informed by two main sources: firstly, the academic calendar, which provides information about the topics that teachers will be teaching in the period covered by the PDD, and secondly, the findings of the Grade 5 and Grade 2 annual student assessments, the TCK assessment, and the TCS. The KESP TA team supported the DPD to set up a CPD unit to implement the programme. DPD's CPD unit prepares the content for PDD sessions. The CPD unit is also responsible for selection and training of MTs and facilitators who conduct PDD sessions and monitor the conduct of CPD throughout the year. DCTE holds the mandate to identify topics and review and approve the contents of PDD sessions. Similarly, DE&SE is responsible for ensuring that teachers attend training, and that the centres for the delivery of PDDs (high/higher secondary schools in the case of CPD) have been provided with necessary facilities required to deliver training. Teacher attendance on PDDs is also tracked through the District Performance Scorecard (DPS) and Intra DPS (IDPS) and DE&SE holds District Education Officers (DEOs) and others accountable for performance on this indicator. The CPD programme currently serves 18 districts and approximately 105,000 primary school teachers in Khyber Pakhtunkhwa, having progressively expanded from 10 districts in 2018 to include all settled districts and three Newly Merged Districts.

Purpose of the Review

This review assesses and suggests improvements to the existing CPD primary framework in KP, prompted by recent systemic changes and the evolving needs of teachers. With the establishment of DPD, RPDCs, and the implementation of SLP, as well as the influx of newly recruited teachers requiring more support in pedagogy, there's a critical need to realign CPD efforts to respond to the evolving needs of teachers and ensure continuous improvement in teaching practices. Our findings explore how the existing CPD model addresses the systemic changes, and the challenge of meeting the evolving needs of teachers.

The recommendations outlined in the report are meant to serve as a guide for the Department and development partners to improve the design and implementation of the CPD primary programme. While the primary focus of this review is on assessing and improving the existing CPD primary framework in KP, our findings may also offer valuable insights for informing CPD initiatives at middle and higher levels. These insights
would need adaptation to accommodate system-level differences, particularly considering the absence of School Leaders at middle, high and higher secondary levels. The improved CDP programme in turn, is expected to enhance teaching practices and, ultimately, lead to improved student learning outcomes. The CPD primary framework has been operational since 2018, demonstrating promising results. Towards the end of the KESP, a blended learning component was incorporated into the CPD framework to respond to the demands of teachers to increase focus on the teaching of pedagogical skills. During initial discussions with the DPD, B-TAG identified a compelling need to review the existing CPD primary framework and propose recommendations for improvement. This is mostly due to recent systemic changes in the teacher education landscape as well as evolving needs of teachers.

Structure of the Report:

The report is organised into six sections. The first section introduces the project, explains the rationale for conducting the review. The second section describes the technical approach and methodology employed for this review. The third section introduces a literature survey and an overview of the review framework based on global best practices. The fourth section consolidates the analysis and findings in alignment with the established review framework. Building upon these findings, the fifth section presents recommendations for improvements in the CPD programme and outlines a way forward. Lastly, the sixth section concludes the report, summarising key insights and highlighting the significance of the findings in a broader context.
Technical Approach and Methodology
The technical approach to reviewing the CPD programme is informed by the approved CPD Primary Framework. DE&SE policies and strategies outlining the in-service teacher training practices and processes adopted by the DPD and other service providers. The approach further considers institutional roles, responsibilities, and mandates to identify capacities, existing practices, coordination, and communication challenges that may be impacting CPD programme. The approach also includes a desk review of all relevant documents, KIIIs, FGDs, consultations with key stakeholders and visit to RPDCs in selected districts that allowed for more robust conclusions via triangulation.

Desk review and literature survey was conducted to establish a review framework outlining the parameters for the review. Subsequently, findings obtained from desk review, KIIIs, FGDs, consultations and visits were utilised to assess the current CPD primary framework based on the pre-defined parameters. Based on our findings and analysis, targeted recommendations were provided for improvement in CPD framework aligned with global best practices in CPD.

Desk Review
Desk review included study of DE&SE policies regarding in-service teacher training programme(s), KP CPD Primary Framework, KESP TA project closure report – FCDO (2022), and Functional Review of DPD conducted by the KPHCIP.

Literature Review and development of CPD Review Framework
A comprehensive literature review was undertaken to identify global best practices in CPD. Subsequently, a review framework was developed, tailored to the specific context of this study, aligning with the identified best practices in the field. Detailed in section III, the review framework is based on the characteristics of an effective CPD, established through literature survey. Aligned with the review framework, our review parameters include assessing:

01. The extent to which the current CPD programme addresses the identified needs of teachers
02. Quality of coaching and expert support provided by HTs, ASDEOs and SLs
03. Opportunities for teachers to collaborate
04. Incentives and recognition within CPD programme
05. Impact of CPD on student learning outcomes
06. Role of RPDCs in providing CPD solutions in local context
07. Capacity of CPD providers including DPD and RPDCs

Data Collection Tools
The team developed data collection tools to collect data from all relevant stakeholders. Desk review as well as the literature survey was used to inform the development of data collection tools. The tools were developed in line with the CPD review framework. These tools included semi-structured interview protocols developed for focus group discussion with teachers, HTs, PDD facilitators, SLs, ASDEOs, RPDC staff and for KIIIs with DE&SE focal persons to generate insightful analysis and inform findings and recommendations. Data collection tools are attached as Annexure-A.

Data Collection
After the data collection tools were developed, the team planned their visits to KP (Peshawar and Kohat) to meet with the stakeholders and collect data against the tools. An interactive workshop with DPD focal persons was also held that focused on current design of the CPD programme, issues and challenges in its implementation and strategies for making it more effective. For FGDs, teachers were selected based on rural, urban, male, and female stratification. HTs, ASDEOs and SLs of the schools with teachers who have undergone CPD were also selected for FGDs.

Data Analysis and Reporting
Responses were populated into a database and thematic analysis was conducted. Initial insights were derived from the interview notes, consultations, FGDs and observations. Content was coded and codes were then organised into themes. These themes underwent a rigorous review to ensure they were an accurate representation of the data. Subsequently, the themes were categorised, and the findings were presented in accordance with the review framework. Detailed recommendations were provided with actionable items for the responsible departments to continue and improve effectiveness of the CPD programme.
Literature Review
Global best practices highlight the following characteristics of an effective professional development model for teachers:

1. **Grounded in the needs of the teachers with an emphasis on pedagogy and subject content**

A well-designed teacher training programme is one that aligns closely with the needs of its participants (Tapilouw, et al., 2017). To ensure that a TPD initiative is grounded in the needs of teachers, it is pertinent to ascertain specific professional development needs of teachers. These needs could be about a specific subject (content knowledge) or teaching processes that encourage student learning (pedagogy) established through collection of reliable and relevant data. At the same time, it is also critical that the data could be meaningfully translated into TPD targets and progress against these targets could be monitored.

Research by Tapilouw, et al. (2017) underscores the significance of a participant-centred approach in teacher training programmes. It emphasises that effective teacher professional development should not be a one-size-fits-all model but rather a responsive framework that considers the diverse needs, experiences, and contexts of individual teachers. By acknowledging and addressing these specific needs, a TPD programme can enhance its impact and relevance.

The process of identifying professional development needs begins with the systematic collection of data, ensuring that the information gathered is both reliable and pertinent. For this purpose, multiple sources of data are utilised, including teacher self-assessments, peer evaluations, and student performance data, to create a comprehensive and accurate picture of the professional development needs within a teaching community (Guskey, et al., 2009). Moreover, it is not only crucial to identify these needs but also to translate the collected data into tangible TPD targets (Desimone, et al., 2009). Establishing specific targets based on the identified needs ensures that the TPD programme is purposeful and directly addresses the areas where teachers can benefit the most.

Equally vital is the establishment of a robust monitoring and evaluation system to track progress against these targets. Fullan (2007) argues that effective professional development is an ongoing process that requires continuous feedback and adjustments. Regular assessments and evaluations enable facilitators to gauge the impact of the TPD programme, make necessary adaptations, and ensure sustained growth among participating teachers.

2. **Provides coaching and expert support**

A critical component of effectiveness of CPD lies in the provision of ongoing expert guidance and facilitation (Darling-Hammond, 2009; Ingersoll and Strong, 2011; Boren, et al., 2000). Mentorship and expert guidance can have a transformative impact on teacher learning and development. At the heart of this is the role of a mentor—a professional who serves as a guide, collaborator, and source of inspiration for educators seeking to improve their teaching practices. The multifaceted role of a mentor encompasses sharing expertise, modelling best practices, encouraging reflection, challenging teachers to improve, and offering constructive feedback.

Mentors play a pivotal role by sharing their expertise and offering new perspectives that extend beyond traditional classroom approaches. Darling-Hammond’s research (2009) emphasises the significance of sustained, job-embedded professional development, highlighting the role of mentors crucial for such ongoing support. As underscored by Ingersoll and Strong’s critical review (2011), mentorship is a continuous process that fosters sustained growth throughout a teacher’s career. The mentor acts as a model of best practice, demonstrating effective pedagogical techniques, classroom management strategies, and innovative approaches to teaching. This modelling not only imparts practical skills but also instills a sense of professional identity and efficacy in the mentee. The mentor’s role also extends to encouraging reflection among teachers—a practice emphasised by Boren, et al. (2000). Reflection becomes a catalyst for continuous improvement, prompting educators to critically examine their instructional methods, learning from experiences, and adapting their approaches based on ongoing feedback which fosters a culture of lifelong learning. Mentorship contributes to teachers’ sense of success, emphasising the mentor’s role in challenging educators to transform existing practices by setting higher expectations, elevating the overall quality of teaching practices (Johnson and Birkeland, 2003). Effective, timely and constructive feedback becomes a powerful tool for improvement, enabling teachers to identify strengths, address weaknesses, and refine their instructional methods (Hattie and Timperley, 2007).

Rooted in research findings, this component of CPD is not just about professional development; it is a transformative journey that empowers educators to continually evolve and excel in their teaching practices.

3. **Supports collaboration**

Effective CPD programmes are distinguished by their capacity to create dedicated time and structured opportunities for teachers to engage in collaborative learning experiences. These initiatives provide educators with platforms to share innovative ideas, engage in reflective practices, and collaboratively devise solutions to challenges encountered in their teaching roles. More than just an exchange of ideas, they represent a commitment to reciprocity, shared responsibility,
and a proactive engagement with professional learning, fostering a culture where teachers continuously learn and grow together. Cordingley, et al., (2015) characterizes it as the exchange of structured peer support through collaboration, emphasising reciprocal risk-taking and professional dialogue as foundational learning strategies. Teachers actively seek out and participate in specialist and peer support, taking responsibility for creating opportunities for their professional learning within the day-to-day school life. Such proactive engagement with professional development not only enriches individual learning but contributes to the collective growth and efficacy of the entire teaching community.

The collaborative nature of effective CPD encompasses a spectrum of interactions, ranging from one-on-one or small-group collaborations to broader exchanges extending beyond the school. As highlighted by Fullan (2016), collaborative professionalism involves educators working together to enhance teaching practices, foster continuous improvement, and collectively contribute to the school’s overall effectiveness. Globally, high-performing education systems strategically embed collaboration into the school day by planning in time for teachers to interact with each other. Successful educational systems recognize that collaboration is not an extra-curricular activity but an integral part of the professional development fabric, allowing for the continuous exchange of expertise and the collective pursuit of excellence (Hargreaves and Fullan, 2012).

Furthermore, Darling-Hammond and Richardson (2009) emphasise the importance of social capital in education, highlighting how collaborative learning communities enhance both teacher development and student outcomes. This underlines the idea that effective CPD is not only an individual pursuit but a communal endeavour that leverages the collective intelligence of the teaching community.

4. Shows a positive correlation with student learning outcomes

Improving teacher quality through professional development (PD) correlates strongly with student learning and achievement and the quality of schools (Borghouts, et al., 2021; Cordingley, et. al., 2015; Melesse & Gule, 2019). Teacher professional development plays a pivotal role in shaping the educational landscape and tailored professional development programmes maximize the potential for positive outcomes in both teaching and student achievement. Darling-Hammond (2017) provides a broader context by emphasising the role of professional development in creating a cadre of highly skilled and motivated educators. This aligns with the idea that effective PD not only enhances individual teacher quality but also contributes to the overall quality and effectiveness of schools.

5. Contextually developed locally delivered solutions

Research confirms the efficacy and cost-effectiveness of locally developed and delivered CPD programmes within close proximity to the school environment. This approach to professional development is characterized by interventions led by school staff, often with additional support provided by locally based advisory personnel. This strategy not only ensures greater effectiveness in addressing specific needs of the teachers but also contributes to a more efficient allocation of resources.

The concept of locally developed CPD is rooted in the understanding that educational practitioners within a community are uniquely positioned to identify and address the specific challenges and opportunities present in their teaching environments (Bannister, et. al., 2013; Opfer and Pedder, 2011).

The advantage of locally developed CPD is the enhanced link
to teacher needs, identified through various data sources such as classroom observations, evaluations, or the results of student assessments. Moreover, the proximity of such interventions to the school community fosters a collaborative and contextually relevant approach to professional development (Boreen, et al., 2000). The notion of cost-effectiveness is particularly crucial in education, where resource allocation is often constrained. Locally developed CPD models are more likely to leverage existing resources efficiently and sustainably. The ability to tap into local expertise and tailor initiatives to meet specific needs minimizes unnecessary expenses associated with external consultants and allows for a more targeted allocation of funds (Desimone and Garet, 2015).

6. Linked with incentives or recognition

Ensuring teacher motivation to actively engage in and effectively apply the professional development they receive is a cornerstone of successful educational systems. To achieve this, many high performing systems formally recognize teacher successful participation in CPD by offering rewards or incentives to acknowledge and appreciate teachers' participation in CPD initiatives. This approach not only recognizes the value of teachers' commitment to professional growth but also serves as a powerful catalyst for sustained improvement in instructional practices.

One form of such recognition is the explicit linkage of professional learning to advancement along a structured career ladder. In such systems, successful completion of CPD milestones is tied to tangible career progression, providing teachers with a clear pathway for professional development and growth. This linkage between learning achievements and career advancement is a key driver for teacher motivation and commitment to continuous improvement (Hargreaves and Fullan, 2012).

In situations where a structured career ladder may not be feasible, culturally appropriate forms of recognition become instrumental. This recognition often takes the shape of certification ceremonies, awards, or public acknowledgment of teachers' commitment and achievements in a way that aligns with the cultural context, fostering a sense of pride and accomplishment (Little, 2012).

Recognizing and celebrating teachers' commitment to ongoing professional development contributes to changing the perception of teaching as a dynamic and continuously evolving field. This shift in perception can attract and retain high-quality educators, further enhancing the overall quality of the teaching workforce (Darling-Hammond and Richardson, 2009). Whether through career advancement opportunities or culturally appropriate forms of acknowledgment, recognition plays a vital role in fostering a culture of continuous learning, contributing to the overall success of educational systems.

7. Robust CPD providers

Effective CPD providers play a pivotal role in shaping the professional growth of educators. To be successful in this capacity, CPD providers must possess the capability to design and deliver comprehensive, high-quality programmes that align with the latest research, best practices, and innovative approaches (Darling-Hammond, 2009). To meet the evolving needs of educators, CPD providers should demonstrate adaptability and responsiveness. This adaptability is crucial, as educational landscapes are dynamic, and effective providers must stay aware of emerging trends and challenges. Research by Desimone (2009) emphasizes the importance of professional development programmes that are responsive to the unique context and needs of teachers, highlighting the need for providers to tailor their offerings to the diverse requirements of the educational community.

Robust mechanisms for evaluating the impact of CPD programmes are equally essential. Effective evaluation is not just about assessing participant satisfaction but also involves gauging changes in teacher practice and, ultimately, improvements in student learning outcomes (Guskey, 2000). Therefore, CPD providers should employ multifaceted evaluation strategies that go beyond participant feedback to measure the tangible impact of the programmes on teaching practices and student achievements.

Ensuring the sustainability and continuity of CPD programmes is another characteristic of a responsible and effective provider. A sustained and ongoing professional development programme extends beyond one-time workshops, emphasizing the need for long-term, embedded learning experiences (Fullan, 2007). CPD providers should demonstrate a commitment to creating programmes that have lasting effects, contributing to the continuous development of educators throughout their careers.

The commitment to excellence, adaptability, and continuous improvement in their offerings, positions CPD providers as not just disseminators of knowledge but as partners in the professional growth of educators. High-quality professional development is a collaborative venture that involves ongoing support and engagement from providers. This collaborative approach ensures that CPD programmes remain relevant, impactful, and aligned with the evolving needs of educators and the educational landscape (Darling-Hammond, 2017).
Analysis and Findings
This section provides analysis and findings based on the data collected from different sources and compares them against the aforementioned review framework based on international best practices.

1. Grounded in the needs of the teachers with an emphasis on pedagogy and subject content

As established through the literature review in Section III, ideally, a CPD programme should be responsive to teachers' needs, and consider the diversity of those needs. This is typically achieved through collecting data from various sources, which is then used to inform CPD content development. In the following sub-sections, we explore how the existing CPD model addresses teachers' needs by utilising assessment data for CPD content development and delivery through PDDs. We also identify where the current model falls short in creating a comprehensive and accurate picture of teachers' professional development needs and meeting those needs effectively. Additionally, our findings are reported regarding the quality and utility of the CPD content including recently introduced digital content.

a. PDD session planning

Currently, CPD programme is delivered through cluster based monthly PDDs. Contents of PDD sessions are informed by two main sources: a) the academic calendar, which provides information about the topics that teachers will be teaching in the period covered by the PDD, and b) the findings of student and teacher assessments. DCTE computes system level averages based on the findings of the Grade 5 and Grade 2 annual student assessment as well as the Teacher Content Knowledge (TCK) assessment, and the Teacher Competency Survey (TCS). A compendium is shared with the DPD which they use for session planning. DCTE holds the mandate to identify topics and review and approve the contents of PDD sessions.

This approach, while offering a comprehensive overview of trends and training needs at macro level, introduces a potential challenge. The averages do not fully capture the varied requirements of teachers across different clusters and districts and do not take into account the school level needs. The inherent time lag from conducting the assessment to results collection, data analysis and identification of topics and contents for session planning of PDD is another challenge. For example, the student and teacher assessment data are collected in April, while the data on teaching skills of teachers is collected in November or December each year whereas the first PDD is launched in April of the following year. These limitations underscore the importance of addressing the professional development needs of teachers through a dynamic and adaptable approach. The needs of teachers in different clusters and districts can deviate from the trends suggested by the averages and are subject to change with time. Participants during FGDs also discussed that different teachers have different needs when it comes to CPD. Among the participants of FGDs, the newly recruited teachers mostly expressed a preference for pedagogy related content as they feel they have sound subject knowledge and could benefit from effective teaching methods and strategies. In contrast, teachers who have completed professional teaching qualifications and have enriched teaching experience could benefit more from subject content knowledge. This points towards the need for collecting reliable, real-time data and using that for context-specific planning and development of tailored approaches based on the unique challenges and opportunities in different regions.

b. CPD Content

DPD's CPD unit prepares the content for PDD sessions. Since the launch of CPD model, the PDD sessions were designed to focus on improving the content knowledge of teachers until April 2022 when blended learning approach was introduced. Under this approach, sessions of CPD comprised 70% pedagogy and 30% content knowledge. Our findings highlight a very positive reception of CPD content quality. Teachers and head teachers who took part in FGDs acknowledged the utility of the content, noting its practical applicability in their classrooms. Teachers found the methodologies and strategies covered in the sessions very useful when applied in classrooms. Teachers felt that their content knowledge improved. Some participants expressed the need for the inclusion of a comprehensive assessment training component in the CPD to develop skills on developing and managing effective formative assessment activities as well as using the assessment of learning concepts in more detail.

Integration of video-based content in CPD received particular acclaim. Teachers expressed a strong preference for digital mode of learning. Key insights highlighted the need of balancing video-based learning with F2F sessions. Teachers and PDD facilitators reiterated the need to use F2F sessions as a platform to supplement digital content with interactive discussions to address challenges, ask questions and engage in meaningful conversations, contributing to teacher development. While the majority of teachers appreciated the digital content, some also pointed out areas that could be improved, including concerns about quality, content, duration, the inclusion of real-life situations instead of ideal classrooms, and the need for assessments and checks-for-understanding in between and at the end of the videos.

Some of the critical areas that the participants desired CPD programme could focus on include Information and Communication Technologies (ICT), communication skills, classroom management, child psychology, lesson planning, and formative assessment.
Some other challenges as identified by the teachers include multigrading due to teacher shortage, large class sizes, low resources, overcrowding, difficulty in following curriculum and textbooks, cultural, social and language issues (Urdu being second or sometimes third language of students and teachers), additional duties of teachers (polio campaign, examination duties, election duties) among others. These challenges also contribute to disparity in motivation levels of teachers between the structured PD days and the realities of daily classroom teaching.

c. PDD Session Delivery

The CPD unit at DPD is responsible for selection and training of MTs and facilitators who conduct PDD sessions. DPD also monitors the conduct of CPD throughout the year. It does this through its field arms i.e., RPDCs, PDD facilitators who are mostly high school teachers, receive training by MTs of RPDCs and DPD. DE&SE is responsible to make sure that teachers attend training, and that the centres for the delivery of PDDs (high schools in the case of CPD) have been provided with necessary facilities required to deliver training such as furniture, drinking water etc. Teacher attendance on PDDs is also tracked through the DPS and IDPS and DE&SE holds DEOs and others accountable for performance on this indicator. A very high uptake of CPD across KP has been reported by KESP close-out report with teacher attendance on PDDs varying from 93% to 96.5% from 2016 to 2022.

Our findings underscore that most teachers perceive PDDs as highly beneficial. Beyond the content itself, teachers value the opportunity to foster collaboration and learn from their peers. Many of these sessions facilitate pairing more experienced teachers with less experienced ones. This provision has allowed teachers to learn from each other and apply these learnings in their classrooms, ultimately improving their teaching practices. However, with the evolving needs of teachers shifting from content knowledge to pedagogical skills, not all facilitators are adequately equipped to meet these changing needs and provide satisfactory responses to teachers’ training requirements. There are very limited opportunities for facilitators’ own professional development. This highlights a crucial need for the capacity development of PDD facilitators, particularly considering that they may not have been formally trained as teacher educators. Additionally, some PDD facilitators reported facing financial challenges, with delays in receiving payments extending up to three years after delivering PDD sessions. This prolonged delay significantly diminishes the motivation and willingness of PDD facilitators, posing potential challenges in securing high-quality trainers for future training sessions.

PDD centres exhibit a range of infrastructure and facilities. Some centres are well-equipped while others lack basic facilities. The centres where projectors were unavailable required facilitators to display digital content using smartphones, significantly compromising the quality of the training experience. Projectors, sound systems, stationery, and refreshments if provided can contribute to creating a conducive and well-equipped training environment for participants. Moreover, participants also emphasised the need for stronger follow-ups and a sequence or alignment with the previous PDDs to enhance the overall effectiveness of the professional development experience of teachers.

With a degree in Finance and limited knowledge of teaching skills, my participation in the PDD proved to be immensely beneficial. The sessions provided valuable insights into classroom management and equipped me with effective strategies to engage children at their level. I learnt a lot from the experiences and strategies shared by senior teachers,” says Muhammad Naeem, a PST at Government Primary School (GPS), Kohat.

When questioned about the impact of the CPD programme on teachers’ instructional practices in classrooms, HTs affirmed that the teachers who attend PDDs implement the acquired knowledge in their classrooms gradually and demonstrate improved teaching practices. However, they emphasised the need for robust follow-up mechanisms post PDD sessions.

d. Digital content and use of technology

DPD with support from KESP TA developed a total of 116 videos across English, Math, Urdu, and Science in 2022. All the videos were developed in Urdu with particular focus on the local context. These videos were integrated into a digital library for CPD. This digital repository serves as a solution to address challenges associated with the varying quality of facilitators across the province. Feedback from participants indicates that the digital content is not only highly useful but
also stands out in terms of quality, utility, and standardisation.

A notable outcome reported by the majority of participants is the adoption of innovative teaching methods in their classrooms as a direct result of exposure to digital content through CPD. Teachers now leverage smartphones to access and showcase these videos to hundreds of students, covering diverse topics such as Science concept demonstrations, rhymes, and phonics for early graders. Approximately 50% of teachers who participated in FGDs revealed that they access the internet daily, either to gain a deeper understanding of a concept or to download videos and activities for classroom use. Furthermore, 19 out of 20 PSTs in the FGD shared that they actively use the internet for both learning and personal research, with only one participant completely relying on textbooks and lesson plans. Teachers also share videos with each other over WhatsApp.

Teachers shared innovative solutions they have employed using technology including creating WhatsApp groups with parents of students for effective communication and using PTC funds to buy a projector for class to watch educational videos.

I created a WhatsApp group for parents of children in my class, successfully connecting with parents of 40 out of 64 students. This group has proven to be a valuable tool for effective communication, allowing me to share information about homework, results, and keep parents informed about classroom activities,” says Muhammad Ubaidullah Anwar, a PST at GPS no. 1 Gurzai Payan.

Recognizing the importance of technology and digital content, I successfully advocated for the purchase of a projector using PTC funds. We acquired one at a cost of Rs. 12k, and it has become an invaluable tool for showing videos and interactive content to students. This has significantly enhanced the educational experience in our school, creating a more engaging learning environment,” says Muhammad Saifullah, a PST at GPS no. 1 Ladhi Payan.

c. Printing and dissemination of PDD session plans
The CPD unit at DPD currently develops the contents of the PDD sessions at the start of the academic year, prints them, and dispatches the hard copies to CPD facilitators. Since this process is time consuming, on one hand it has resulted in delays in dissemination of session plans and other handouts and on the other hand it binds DPD to develop all the lesson plans in one go restricting any mid-session adjustments.

2. Provides coaching and expert support
A critical component of any CPD model involves providing coaching, mentoring and ongoing follow-up support to the teachers. In the current CPD model, initially, this was envisioned to be done through self-reflection diaries filled by the teachers, coaching and mentoring provided by the ASDEOs, and supported by the HTs to complete the feedback loop. The system has now introduced SLs with the core responsibility of offering school-based mentoring, support, and academic supervision to teachers. In the following sub-sections, we delve into the details of each of these components, highlighting challenges in implementation and assessing their effectiveness as perceived by different stakeholders.

a. Self-Reflection Diary (SRD)
An important component of the CPD design is the implementation of the SRD. SRD is an individual and daily activity for teachers. Teachers are asked to document their feelings and experiences about one lesson per day. SRD is an opportunity for teachers to reflect on their practices with questions such as, ‘how successful was I?’ (focusing on best practices) and ‘why was I unsuccessful?’ (identifying areas of improvement). Self-reflection diaries were printed and delivered to teachers in schools.

HTs were trained on supporting teachers to fill SRD. Trainers assessed the diaries in the subsequent PDD and offered feedback. While the quality of feedback varied, SRD, as it was predominantly envisioned to complete the feedback loop, could not meet its objectives. Teachers reported that SRD continued till 2019.

b. Classroom Observations by ASDEOs
In KP, SQMI was introduced in 2017 to improve the quality of instruction in primary classrooms. The SQMI sought to supplement the CPD programme and provide academic support to primary teachers to improve the quality of teaching and learning processes in the classroom. Under the SQMI, ASDEOs were trained to conduct classroom observations (CROs) on a set of notified teacher competencies and feedback sessions with teachers and HTs on each school visit.
Under the SQMI, a school was visited twice during the year (every six months). Given the small number of ASDEOs in the system, the frequency could not be increased. Moreover, several administrative and monitoring responsibilities of ASDEOs made it challenging for them to provide consistent academic support to teachers. This challenge contributed to an uneven quality of feedback across the province, leaving teachers dissatisfied with the mentoring provided by the ASDEOs.

Furthermore, Classroom Observation (CRO) data collected under SQMI was also underutilised. Almost no use has been made of the CRO data to inform the CPD programme.

c. Mentoring and Academic Supervision by SLs

The whole SQMI programme has now graduated into an improved SLP in which need-based, teacher-specific academic supervision and support is provided to all primary schools through SLs. SLP focuses on school-specific observations, assessments, and feedback aimed at improving teaching and learning practices addressing some of the limitations of SQMI. The main assumption driving this transition is that targeted support from SLs can accelerate improvements in teaching and learning, especially in early primary grades, complementing the existing benefits of the CPD programme. Under the SLP, 2500 SLs with Master’s or four-year Bachelor’s degrees were recruited through a rigorous recruitment test conducted by Education Testing and Evaluation Agency (ETEA). These SLs are responsible for mentoring and academic supervision with no additional responsibility beyond their core tasks. Each SL is responsible for approximately 10 schools, ensuring regular visits at least twice a month.

The KP Education Department plans to train SLs on the SLP application, equipping them to implement and record information from a range of in-school and out-of-school activities. These activities encompass conducting classroom observations, student assessments, notebook checking, and facilitating feedback sessions with headteachers and primary school teachers within schools. Additionally, SLs will be responsible for monitoring sessions conducted under the Induction programme and CPD programme, as well as engaging in meetings with school PTCs outside of school.

As SLs commenced school visits without prior training from the department, teachers and HTs reported disparities in the quality of the support provided. While some of them perceived their SLs as effective in offering mentoring and coaching, majority expressed dissatisfaction with SLs not being clear about their job description, having an authoritative attitude and very high expectations from students and teachers, completely oblivious of the real-life challenges that teachers face. SLs themselves acknowledged the need for clear job description (JDs), specifying, for example, the number of schools they are expected to visit, duration of each visit, clarity in their roles and responsibilities. They also emphasised the importance of proper training, which, they believed, would enable them to address teachers' grievances effectively and provide effective mentoring and academic support.

"Our SL is extremely supportive. She visits our school frequently, conducts quality checks, classroom observations, identifies issues and provides feedback. She is generally very helpful and has a positive attitude," says Nayab Farooq, a PST at government girls primary school (GGPS) College Abadi.

"We have not been provided with job descriptions or any training. We lack both digital and physical tools for classroom observation, and there has been no support from the department thus far. Our feedback, at times, is not given due consideration by schools. We navigate through schools, improvising our roles to the best of our abilities and understanding," says Muhammad Bilal a School Leader in Kohat.

d. Headteachers mentoring support

HTs play a vital role in the success of any teacher CPD programme by fostering a culture of continuous improvement and ensuring that professional development positively impacts teaching and learning outcomes within the school. As part of the CPD programme, DPD gave five-day training to HTs on their mentoring role, conducting classroom observation and giving feedback and providing follow-up support to the teachers. HTs were tasked to conduct 8 observations per month. Some HTs demonstrate proactive engagement by implementing innovative follow-up methods, such as maintaining a register to note PDD learnings, displaying chart papers in staff rooms, or using evaluation pro formas. They also support teachers through WhatsApp groups for CPD
discussions. However, challenges, such as administrative and logistical issues in schools hinder effective follow-up of CPD for some headteachers.

A primary role of HTs is to conduct classroom observations for every teacher in their school and provide feedback. Given their full teaching load, in addition to administrative and monitoring responsibilities, as well as issues like multi-grading, absence of school support staff (guard, sweeper), having to deal with all sorts of student issues, HTs find it challenging to conduct classroom observations and offer one-on-one feedback to teachers. Some also felt that they do not have the authority to hold teachers accountable in case they don’t improve their teaching practices. HTs are also provided with a proforma to fill on TPD, however it remains underutilised and doesn’t contribute to any specific outcome.

3. Supports Collaboration

Aligned with the practices of effective CPD programmes globally, the current CPD programme offers opportunities for teachers to collaborate, share their challenges and success stories, and learn from each other. This leads to the development of COPs at various levels. Following sub-sections explain the vision behind these platforms provided by the current CPD model, examine challenges in implementation, and identify gaps that have been recognised during our consultations.

a. Teacher Group Meetings (TGMs)

TGMs were introduced to offer teachers a platform for discussing their learnings as part of the CPD programme. Initially, these meetings occurred weekly and later once a month at the school level, where all teachers convened to discuss professional matters, primarily based on their notes from the SRDs and observations by the HTs. HTs documented meeting minutes for reference.

TGMs served as a COP at the school level. While TGMs were initially held regularly with active teacher participation, this practice was not sustained.

b. Quarterly monitoring meeting (QMMs)

QMMs, facilitated by the ASDEOs, were a vital component of CPD. However, several challenges and inefficiencies have been identified in their implementation that eventually led to their discontinuation.

ASDEOs organised these meetings with HTs at the circle level. HTs, after conducting eight observations per month, consolidated data from 24 observations in a quarter. The purpose of QMM is to discuss observations academically with HTs, identifying issues, challenges, and propose solutions. The QMM reports were compiled and shared with the DPD. While ideally, these reports should be used to inform CPD session planning, but except for some NMDs, this never happened. Moreover, a very inefficient mechanism was adopted for reporting and analysis of QMMs. A format was shared with ASDEOs for data collection. The data was collected from 600 meetings every 3 months from each circle. A small team of 4-5 individuals at DPD was responsible for analysing this extensive data to inform CPD session planning.

QMMs, originally designed to function as a circle-level COP, faced discontinuation due to factors such as a lack of follow-up by DPD, an inefficient reporting and analysis mechanism, the absence of a monitoring and evaluation system, and the prioritisation of administrative tasks by ASDEOs. They often overlooked the importance of focusing on education quality as part of their responsibilities and only prioritised monitoring of schools and other administrative tasks.

c. Need for development of Communities of Practice (COPs)

COPs play a vital role in connecting professionals, sharing challenges, and collaboratively seeking solutions. PDHs have provided teachers with a collaborative learning environment. However, because of discontinuation of other components of the CPD mentioned above, beyond PDH there is a notable gap in platforms for the ongoing development of professional networks and COPs for teachers. The lack of formal support networks and COPs is not limited to teachers but also extends to HTs, SLs and ASDEOs. Informal platforms, such as WhatsApp groups, have emerged, where some teachers, HTs, ASDEOs, and SLs engage in peer learning and collaboration. However, participants unanimously expressed a strong desire for more formal support networks and COPs at various levels operationalised through both formal meetings and informal interactions such as social media groups. For teachers, formation of these communities can be steered by the SLs and where possible HTs. Peers may interact with each other to share existing knowledge, identify solutions to common problems and collect, share, and evaluate best practices to improve their own practice. The establishment of these COPs contributes significantly to building a collaborative learning environment and strong communities that uplift and support one another. The active involvement of the education department is crucial in the development and management of these COPs.

4. Shows a positive correlation with student learning outcomes

It has been established earlier that effective CPD programme not only enhances individual teacher quality but also contributes to improving student learning outcomes and school quality. KESP TA supported a longitudinal study on grade 5 student achievement scores for the years 2018-19 and 2019-20 which suggests that CPD correlates with improvements in learning. The bar chart in the figure below indicates a statistically significant difference in performance of grade 5 students.
in CPD districts compared with non-CPD districts. The overall mean scores stand at about 45% for students in CPD districts compared with just under 39% for students in non-CPD districts.

![Figure 1: A comparison of Grade 5 student score in non-CPD and CPD districts](image)

The bar chart below shows a consistent improvement in the student achievement for grade 5 students in the same schools over a period of three years. The results show that student mean scores rose from almost 25% in 2017-18 to just under 40% in 2018-19 and then to almost 50% in 2020.

![Figure 2: Improvement in Grade 5 student score over 3 years in CPD districts](image)

5. Contextually developed locally delivered solutions

To see how RPDCs can perform an enhanced role in contextually developing CPD and delivering it locally, we need to see their current role in CPD and capacity challenges that they already face, as discussed below:

As established through the literature review in section III, locally developed and delivered solutions for CPD are cost-effective, address specific needs of teachers, contribute to a more efficient allocation of resources, and foster a collaborative and contextually relevant approach to professional development. The current CPD model is centrally designed and implemented by DPD. The DPD executes the programme through its 25 RPDCs, which serve as its outposts or district arms. RPDCs have no involvement in the design and development of the CPD programme and play a very limited role in its implementation. To explore how RPDCs can play an enhanced role in the development and delivery of localised CPD, it is crucial to understand their role in the existing CPD programme and the capacity challenges they currently face, as discussed below:

a. Role of RPDCs in CPD programme delivery

In the current CPD model, RPDCs play a very limited role that includes:

- **Selection of PDD facilitators**
  The DPD identifies the required number of PDD facilitators and develops specific criteria for their selection. For the CPD programme 2020-21, DEOs selected the PDD facilitators while for the CPD programme 2021-22, RPDCs were assigned the responsibility of their selection. RPDCs followed a selection process that involved interviews, lesson demonstrations, and assessment of candidates. However, challenges emerged during the selection process. With the need for 74 facilitators across 27 centres, the applicant pool was very limited. Consequently, even individuals who did not meet the qualifying criteria in interviews and assessments had to be selected. Furthermore, some selected candidates refused to join as PDD facilitators due to various factors including the lack of sufficient incentives, potential delay in payments and the absence of recognition at the end of the programme. Additionally, HTs were reluctant to relieve some teachers to be selected as PDD facilitators from their schools. These challenges collectively contributed to the final pool of instructors, characterized by uneven quality.

- **Training of PDD facilitators**
  The RPDCs conducted a three-day training programme for PDD facilitators based on the content designed and developed by the DPD. While PDD facilitators expressed satisfaction with the quality and delivery of the training by the RPDCs, RPDC staff believed that the three-day duration is insufficient to impart the necessary technical knowledge and training skills required for effective PDD facilitation. This has been emphasised specifically due to the primary topics addressed throughout the three-day training, which are limited to providing broad ideas for training and do not include
subject-specific instruction on good pedagogical approaches. Furthermore, following this one-time training, there are no further opportunities for the professional development of PDD facilitators. The RPDC staff expressed a strong desire to take on a more active role in the design of training materials, citing their technical skills and capacity to efficiently perform this role.

- **CPD content development**
  Currently, the RPDCs play a minimal role in the design and development of PDD content. This is primarily done by the DPD, which engages the services of subject experts from various sectors, including other departments, the Higher Education Commission (HEC), and the private sector. While there are instances where a few subject specialists from RPDCs are involved in content development, more often, they are excluded. Our findings underscore the strong desire of RPDCs to actively contribute to the development and review of PDD modules, emphasizing their belief in possessing the technical skills and capacity to fulfill this role effectively.

- **Selection of PDD venues**
  The DEOs are responsible for selecting training venues for PDDs, typically opting for high schools or higher secondary schools due to their well-equipped infrastructure and facilities. However, in cases where high schools lacked essential facilities like rooms, electricity, drinking water, and projectors, RPDCs stepped in to conduct PDDs using their own resources. This emphasizes the need for DEOs to consult with RPDCs in the venue selection process. RPDCs, with better facilities, offer an alternative space where teachers from nearby schools can convene for PDDs.

- **Monitoring of PDDs**
  PDDs are concurrently scheduled across the province at designated centres, predominantly high schools, or higher secondary schools. RPDCs monitor these PDDs after coordinating with the DEOs. This simultaneous scheduling poses challenges for efficient monitoring due to the limited staff at RPDCs. If RPDCs are assigned the responsibility of scheduling PDDs with flexibility to schedule them across different days of the month, they can optimize staff deployment for monitoring and evaluation. RPDC staff, well-equipped and trained for this purpose, can be mandated with the monitoring responsibility of PDDs. Moreover, the monitoring process needs streamlining. Although monitoring reports are submitted from each centre, they remain underutilized. There is a need for a mechanism for these reports to be actively followed through and used to inform CPD session planning.

- **Enhanced role of RPDCs and capacity challenges**
  The findings underscore the RPDCs' strong inclination to engage comprehensively in the CPD programme, encompassing design, development, monitoring, and evaluation. Subject experts at RPDCs expressed confidence, possessing the necessary skills and motivation to contribute to the CPD content development. The idea of RPDCs taking on the responsibility of training PDD facilitators and subsequently providing essential follow-ups for CPD programme, visiting schools, and conducting classroom observations aligns with their envisioned role as local hubs for CPD activities.

   During the team's visit to RPDC Kohat, the centre showcased robust infrastructure and expert personnel (7 training rooms, 1 big hall, computer lab, training infrastructure, and all subject experts, 4 instructors, IT expert, principal) but not all RPDCs share the same capabilities. Most of the centres struggle with unskilled staff, positions filled by irrelevant HR, IT-related challenges, limited infrastructure and facilities like electricity, internet, computer labs among others.

6. **Linked with incentives or recognition**
   Evidence suggests that recognizing and acknowledging teachers for their participation in the CPD programme goes a long way in sustaining improvements in their teaching practices. The current CPD framework lacks a connection with career progression, or incentives, offering no recognition or consequences for the teachers. It relies solely on intrinsic motivation of teachers. All participants unanimously expressed the need for certification and recognition to make the experience more meaningful. For teachers, positive reinforcement and acknowledgment would significantly contribute to developing intrinsic motivation for professional development. This requires a cultural shift that can empower teacher agency, allowing them to take control of their professional development.

   Not only teachers but also PDD facilitators, HTs, and SLs feel the need for acknowledgment through non-financial incentives. These could include certification, opportunities to participate in conferences, study tours, visits, and interactions with renowned officials. Introducing awards like "Best Teacher/HT of the Month" or recognizing the best-performing school leaders or PDD facilitators could create positive incentives and encourage continuous improvement.
PDD facilitators do not even receive certificates. Personally, I am not motivated by financial incentives. As a PST and curriculum expert, I'm more interested in gaining exposure through the DCTE and being part of the team involved in curriculum development”, says Adnan Irshad, PDD facilitator and PST at Government Primary School (GPS) Ahmad Nagar Kohat.

7. Robust CPD Providers
The DPD, an attached department of DE&SE was set up as KP’s premier teacher training institute with its 25 regional centres, RPDCs. To perform its functions effectively, DPD along with RPDCs must possess the capability to design and deliver comprehensive, high-quality CPD programme that aligns with the latest research, best practices, and innovative approaches and demonstrate adaptability and responsiveness to meet the evolving needs of educators, as highlighted by global best practices. The Directorate must also demonstrate capacity to develop and implement robust mechanism to evaluate the impact of CPD programmes and use results to inform continuous improvements in the CPD programme. Our findings underscore several issues and challenges within the DPD and RPDCs that impede their effective performance.

a. Human Resource Management
There are notified Job Descriptions (JDs) for key positions in the DPD developed arbitrarily which are extremely generic in nature. Hiring is done using the conventional transfers/postings mechanism of the government. Most of the academic HR engaged in DPD have neither the requisite experience or technical competencies resulting in a long onboarding period and the risk remains of the official being unable to adapt to the needs of the positions.

Retention of key staff is also an issue with the tenure length of both senior management and core staff in the DPD varying from 10 months to 3 years. Furthermore, there are no performance-based incentives and weak financial allowances. Similarly, for RPDCs, hiring is done based on the qualification level of the applicant without taking into account the suitability of the candidate’s degree to the position they are applying for. A standard DE&SE advertisement for hiring teachers advertises the degree qualification they require, and not the subject specific qualification they require, and this arrangement rolls over into the staff at DPD and RPDCs as well.

This has resulted in several RPDCs lacking subject experts for specific subjects. The IT based HR is also inadequate and insufficient in both numbers and required skills in DPD and all RPDCs. Currently, 11 out of 24 RPDCs do not have a designated IT position available in their organisation. The staff do not have the capacity to revamp, revise or improve CPD portals developed with KESPTA support.

b. Infrastructure
Both DPD and RPDCs have inadequate physical infrastructure. This includes training rooms, laboratories, libraries, principal’s room, staffrooms, and even basic amenities like toilets. In addition to that, the premises of 6 RPDCs are only partially occupied by RPDC staff and parts of the facilities are being used by other government departments, which are unrelated to the RPDC or DPD.

When it comes to IT infrastructure in both DPD and RPDCs, it is also substandard and requires urgent upgradation and improvements. With the introduction of digital material in the CPD, it is crucial to have strong IT infrastructure and related personnel. The IT-enabled human resources department lacks the required number of resources and expertise, particularly considering the increasing use of educational technology in training programmes. This issue demands immediate attention from senior management. The status of other departmental facilities, such as classrooms at DPD and RPDCs, as well as hostel rooms, toilets, labs, and other installations, are similarly dilapidated and require substantial investment for rehabilitation.
c. Programme Designing, Development and Compliance with Quality Standards
There is a lack of internal capacity in the DPD to design and implement the training programmes covering an array of different streams within the education ecosystem. Almost all the programmes have been designed, financed, and implemented with the support of donor organisations and development partners. Overall CPD programme has been received very positively by the participants with teachers satisfied by the content and skills they have learnt and implemented in classrooms, which adds value to their teaching experience.

Under the current setup, there is a Monitoring and Quality Assurance (M&QA) unit functioning under Academics Wing of the DPD. Our findings highlight that M&QA unit is not technically equipped to handle, analyse, and report on large datasets to inform decision making despite 25 RPDCs and 3,000 cluster based training centres available with the DPD. There have been no critical evaluations held of the CPD programme. There has been no research and analysis conducted by the DPD either internally using available data or in the field primarily because DPD lacks technical expertise in its M&E function. Due to this shortcoming, generally, only process level data is collected which maps the functionality of the programme, and not its efficacy.
Recommendations and Way Forward
In this section, we present a set of comprehensive recommendations aimed at enhancing the effectiveness and efficiency of the current CPD programme. These recommendations are derived from a thorough analysis of the findings appearing in this report, aligned with global best practices. The recommendations are reported under key areas such as CPD programme design and delivery, coaching and follow-up support mechanisms, collaboration opportunities for teachers, headteachers, mentors and capacity building of CPD providers. The recommendations aim to provide actionable items for the DPD and RPDCs to strengthen their CPD framework, redesign where relevant, and implement the CPD programme that builds on best practices of teacher professional development.

1. Development of a dashboard for real-time CPD needs analysis

Recognising the significance of personalised professional development, our recommendation focuses on creating tailored learning opportunities that address the diverse and evolving needs of teachers. To achieve this, we propose establishing a robust system for collecting data on teachers’ needs from various sources. A dashboard will be developed to showcase real-time data, offering insights to inform teacher training requirements. The data collection will rely on two primary sources:

- **Classroom Observation Data:** SLs will collect classroom observation data on a set of notified teacher competencies, aligned with the 42 indicators of the teacher competency survey from every school twice in a month.

- **Student Assessment Data:** The SLP application selects 6 students at random for SLs to administer the test and record the scores.

The dashboard with both datasets will allow the DPD and RPDCs to access reliable, real-time data, filter and analyse information at various levels, (such as circle-wise, district-wise, and subject-wise) and share it with relevant stakeholders. This will be instrumental in identifying key areas for targeted CPD programmes, context-specific planning and development of tailored approaches based on the unique challenges and opportunities in different regions, ensuring a more responsive and impactful professional development experience for teachers.

2. CPD content design and delivery based on identified needs

To ensure targeted and effective professional development, the following approach is recommended in designing and delivering CPD content, aligned with identified needs:

**i. Creation of a Learning Management System for Teachers**

The DPD, in collaboration with RPDCs, will design and develop an interactive LMS tailored for teachers. This platform will facilitate self-study and flexible learning, through digital modules, including purposefully developed and carefully curated video content addressing critical SLOs identified through student assessment data and weak teaching practices identified through classroom observation data. Self-assessment exercises at the end of each module will provide teachers with opportunities to gauge their understanding and progress. The LMS will also provide teachers a platform to foster a collaborative environment, allowing them to engage in discussions, share thoughts, and seek solutions to question and challenges.

**ii. Delivery of PDDs Responding to Teacher Needs**

Building on the current CPD practice of monthly PDDs, it is recommended that the PDDs focus on subject-specific pedagogy on topics identified by classroom observations, TCK test, large scale assessment (LSA) data from DCTE, and student assessment data collected by SLs every month. These
sessions will align with the annual academic calendar, allowing DPD to address specific teacher needs identified through robust data sources. PDDs will provide a platform for teachers to raise issues, discuss challenges, and learn from both the facilitator and their peers. Teachers will be able to foster collaboration, engage in meaningful conversations and apply learnings in their classrooms, ultimately improving their teaching practices.

To ensure the effectiveness of PDDs, it is recommended that RPDs take a lead in the identification and selection of the PDD facilitators, along with their subsequent training and capacity building. Introducing an incentive structure would also help in attracting quality facilitators. These could include certificates, best performing PDD facilitator award, opportunities to participate in conferences and similar initiatives. RPDs would also need to improve their coordination with DEARSE and DEOs to ensure infrastructure and facilities of PD centres are adequate.

iii. School-Based CPD by SLs

DPD and RPDs will develop and/or curate an online repository of resources over time to support SLs in delivering school based CPD tailored to the specific needs of each school. These resources will be disseminated directly to SLs through online channels or a dedicated portal. This will complement the comprehensive training they will receive, on the provision of school based CPD, among other components.

3. Coaching, Mentoring and Classroom Observations by SLs, supported by HTs

Coaching, mentoring, and school-based support are integral components of any effective CPD programme. However, the current CPD model faces serious challenges in this aspect. The introduction of SLs presents a valuable opportunity to address the gaps in coaching and mentoring.

As part of their role, SLs will offer mentoring and academic supervision to teachers, aligning with the CPD framework. They are mandated to conduct two visits to each school every month, conducting classroom observations, and providing feedback, coaching and student assessment of selected students as part of the school-based CPD approach.

The coaching and mentoring provided to teachers will be supplemented by the HTs’ support. HTs will conduct separate classroom observations of their teachers, provide feedback on their practices, and hold weekly learning sessions with their teachers. During the regular fortnightly visits, SLs will meet with HTs to discuss the classroom observations conducted by them.

To ensure the effectiveness of this support structure, DPD and RPDs must prioritise the training and capacity building of both HTs and SLs. Comprehensive professional development programmes tailored to their specific roles and responsibilities will be essential for enhancing their effectiveness in facilitating teacher development.

By reinforcing coaching and mentoring through SLs and HTs and investing in their capacity development, the CPD programme can create a robust support system that significantly contributes to the professional growth of teachers.

4. Development of a Community of Practice

When teachers and teacher educators engage in professional development activities aimed at meeting shared goals of improving practice in collaboration with other colleagues and experts, teachers are more likely to develop higher levels of expertise. In line with this perspective, initiating a culture of cultivating teacher professional communities and development of COPs within the CPD model is advisable.

These COPs will be developed at school level with support from HTs and SLs. Subject-based professional communities will be managed by the DPD which will work in close coordination directly with RPDs who will work with SLs and teachers to manage teacher COPs. DPD will organise annual conferences and quarterly meetings at various levels, including circle, tehsil, district, and provincial. These communities will serve as platforms to cultivate a culture of CPD in the province. Activities within these communities may include action research, sharing instructional materials, promoting teachers’ original work, bridging the gap between theory and practice, organizing workshops, seminars, conferences, and study tours. DPD will also establish linkages, connecting the network of teachers with other national and international associations. These COPs will provide an opportunity to recognize and acknowledge teachers for their participation in CPD programmes and make their experiences more meaningful.

In addition to teacher professional communities, DPD will extend its efforts to develop COPs for HTs and SLs. This initiative aims to provide these leaders with opportunities for collaboration, knowledge-sharing, and building professional networks.

The COPs can be organised using a hybrid modality that combines technology driven virtual platforms for remote networks and occasional F2F meetings to manage cost and time effectively and efficiently.
5. **DPD and RPDCs Capacity Building**

To execute the activities outlined above, the DPD and RPDCs must ensure that all positions within the directorate and in districts (RPDCs) are staffed according to eligibility criteria and emerging needs based on merit. Adequate onboarding and training programmes should be implemented to equip the staff with the necessary skills. Physical infrastructure should be upgraded. Strengthening the IT infrastructure is essential to provide cost-effective, technology-enabled solutions for CPD. The Directorate needs to conduct regular capacity-building activities for its staff to ensure the effective performance of the aforementioned functions.

With reinforced human resource capacity and improved infrastructure, the DPD should revise RPDCs’ mandate and delegate several CPD-related responsibilities to them. RPDCs’ subject experts should be engaged in CPD planning, CPD content development and dissemination. They should be responsible for PDD session delivery, from the selection of trainers to their capacity building and monitoring of the PDDs. In addition to that, RPDCs should analyse monitoring data, produce reports, conduct research & evaluations, and use it to inform CPD programme. This would make RPDCs local hub for CPD activities in line with global best practices.

A dedicated CPD programme for ongoing capacity building of PDD facilitators and HTs should also be designed by the DPD, which in turn will contribute to improved CPD for teachers.
The table below outlines actionable items derived from our recommendations, along with the designated departments responsible for their execution.

<table>
<thead>
<tr>
<th>Sr. no.</th>
<th>Activity</th>
<th>Responsibility</th>
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<tbody>
<tr>
<td></td>
<td><strong>Development of dashboard for real-time CPD needs analysis</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Develop a dashboard to collect data from classroom observation and student assessment conducted by the school leaders.</td>
<td>EMIS</td>
</tr>
<tr>
<td></td>
<td><strong>CPD content design and delivery</strong></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Creation of LMS for teachers to self-study CPD modules.</td>
<td>EMIS</td>
</tr>
<tr>
<td>3.</td>
<td>Design and upload CPD modules for self-study informed by real-time CPD needs analysis supported by the dashboard.</td>
<td>DPD and RPDCs</td>
</tr>
<tr>
<td>4.</td>
<td>Effective delivery of PDDs informed by monthly classroom observation and assessment data. This includes selecting, training and incentivising PDD facilitators as well as ensuring adequate infrastructure and facilities of PDD centres.</td>
<td>DPD and RPDCs</td>
</tr>
<tr>
<td></td>
<td><strong>Coaching, mentoring and Classroom Observation</strong></td>
<td></td>
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<tr>
<td>5.</td>
<td>Develop clear job descriptions and KPIs for SLs.</td>
<td>DE&amp;SE</td>
</tr>
<tr>
<td>6.</td>
<td>Train, equip and support SLs to provide School based CPD, providing coaching and mentoring to teachers, conducting classroom observation and feedback as well as supporting HTs in mentoring teachers.</td>
<td>DPD and RPDCs</td>
</tr>
<tr>
<td>7.</td>
<td>Train HTs on coaching and mentoring skills as well as conducting classroom observation and feedback.</td>
<td>DPD and RPDCs</td>
</tr>
<tr>
<td></td>
<td><strong>Development of Communities of Practice (COPs)</strong></td>
<td></td>
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<tr>
<td>8.</td>
<td>Develop Subject-based COPs at school level supported by HTs and SLs.</td>
<td>DPD and RPDCs</td>
</tr>
<tr>
<td>9.</td>
<td>Organise annual conferences and quarterly meetings at various levels including circle, tehsil, district and provincial.</td>
<td>DPD and RPDCs</td>
</tr>
<tr>
<td>10.</td>
<td>Connect teachers’ networks with other national and international associations.</td>
<td>DPD</td>
</tr>
<tr>
<td>11.</td>
<td>Organise workshops, seminars, conferences and study tours for teachers, HTs and SLs.</td>
<td>DPD and RPDCs</td>
</tr>
<tr>
<td></td>
<td><strong>DPD and RPDCs Capacity Building</strong></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Ensure that all positions are staffed in accordance with the eligibility criteria.</td>
<td>DPD and RPDCs</td>
</tr>
<tr>
<td>13.</td>
<td>Design and deliver onboarding, training and regular capacity building programmes to equip the staff with necessary skills.</td>
<td>DPD and RPDCs</td>
</tr>
<tr>
<td>14.</td>
<td>Upgrade physical and IT infrastructure.</td>
<td>DPD and RPDCs</td>
</tr>
</tbody>
</table>
Conclusion
Recognising the importance of CPD programme for teachers and its profound impact on student achievement and school quality, the Government of KP launched the CPD programme in 2017. Operational for over six years now, the programme has positively influenced over 105,000 PSTs. In light of recent systemic changes and evolving needs of educators, this report reviewed the KP CPD programme based on a review framework informed by analysis of relevant literature and global best practices related to the professional development of teachers.

Data for this report was collected through desk review, KIIIs and FGDs with key stakeholders including teachers, headteachers, SLs, ASDEOs, DPD and RPDCs staff, and DE&SE focal persons. The collected data was consolidated, analysed, and reported in accordance with the review framework. Our findings explored how the existing CPD model addresses the systemic changes, and the challenge of evolving needs of teachers and where it falls short. It highlights how the current CPD model responds to the teachers’ needs through content development and delivery, provides coaching and expert support through ASDEOs, SLs and HTs, supports collaboration, shows a positive corelation with SLOs, provides an opportunity for contextually developed and locally delivered CPD solutions through RPDCs, links with incentives or recognition and evaluates how robust and capable the CPD providers (DPD and the RPDCs) are.

Our comprehensive set of recommendations, based on analysis and findings in line with global best practices, aim at enhancing the effectiveness and efficiency of the CPD programme. The proposed initiatives address critical aspects such as real-time needs analysis, targeted content design and delivery, robust coaching and mentoring structures, and the establishment of COPs at various levels. Moreover, the emphasis on capacity building for the DPD and RPDCs, ensures the implementation of these initiatives with efficiency. By integrating technology, creating collaborative environments, and fostering a culture of CPD, the suggested approach aims to tailor teacher training to teachers’ evolving needs. The use of real-time data through dashboards, interactive LMS, and school-based CPD programmes ensures a responsive and dynamic professional development experience for teachers. The emphasis on local participation, involvement of RPDCs, and the delegation of responsibilities contribute to a decentralized and responsive CPD model in line with global best practices.

The DPD and RPDCs in coordination with the KP Education Department should consider the recommendations made in this report for possible changes to the CPD programme to inform its continuation at the primary level, and expansion of programme to middle and secondary levels. By implementing these recommendations, the CPD programme can emerge as a dynamic and adaptive system, positively impacting the professional growth of educators and, consequently, the overall quality of education in the KP. The KP Education Department may also accordingly revise its policy framework to better guide subsequent resource allocations and donor-led initiatives.
Focus Group Discussions
Guide for FGD moderators

Begin each focus group discussion with a concise overview of the ongoing CPD programme for teachers. Inform participants of the primary objectives of the review, which aims to identify areas for improvement in the design and delivery of the CPD Programme.

During the discussion, encourage participants to delve into their experiences and perspectives on the current CPD Programme, focusing on its strengths and areas that may require refinement. The aim is to gather valuable feedback to shape strategic improvements that align with international best practices and contribute to the continual enhancement of teacher training in Khyber Pakhtunkhwa.

The participants' candid reflections and input in this discussion will play a crucial role in shaping the future trajectory of the CPD Programme for teachers.

Use the following questions as prompts for the discussion with each group of respondents.

FGD with RPDC focal persons
1. How can districts be empowered to design their own CPDs? Like mandate for teacher CPD, district capacity (HR, finance), modification in roles and responsibilities of DEOs etc.
2. Is there any role of RPDCs in CPD? Can their role be expanded?
3. What is the role of RPDCs in CPD? Can it be expanded? Gather information on RPDC existing HR capacity and challenges faced by RPDCs regarding their capacity to take on further tasks.
4. How can CPD be improved? What are some recommendations to improve existing CPD model?
5. What are operational, academic, and delivery challenges in conducting CPDs?
6. How can those challenges be resolved to continue/expand CPD primary?
7. Can alternate modes, e.g. technological solutions, of CPD be employed?

FGD with headteachers
1. How do you ensure the effective implementation of CPD?
2. Are teaching practices better as a result of CPD?
3. Are students' learning outcomes improving in schools where teachers have had CPD?
4. What support mechanism does the school provide for the effective implementation of CPD?
5. Do teachers have professional networks or any formal/informal peer collaboration platforms where they can discuss their learnings from and application of CPD?
6. What are the issues and challenges in the effective implementation of CPD?
7. What are areas of improvement for CPD?
8. Are you able to provide academic supervision and mentoring support to teachers? If not, what needs to be done to enable you to provide such support?

FGD with teachers
1. Does CPD programme respond to your needs?
2. How are you implementing the CPD material?
3. Did your teaching practices improve as a result of CPD? Did you feel more confident and better prepared to teach as a result of CPD? Did your students' learning and classroom engagement improve as a result of your employing lessons from CPD? HOW? Please share specific examples.
4. Do you receive one-on-one feedback on classroom observation? Is it helpful? HOW?
5. Was the CPD content useful? HOW?
6. Was the CPD portal useful? HOW?
7. Were PDDs useful? Were you satisfied with the quality of PDD content and its delivery? HOW?
8. Were the logistics and infrastructure of PDD training venues - such as internet availability, presentations contents, availability of projector, seating space, and water - satisfactory?
9. Do you have an ongoing support mechanism?
10. Have you formed professional networks as a result of CPD? Are they effective? HOW? Are there any formal/informal peer collaboration platforms to support CPD?
11. What were the issues and challenges in the effective implementation of CPD?
12. What were areas of improvement for CPD?
13. Would you like CPD to be resumed? What changes would you suggest in the CPD when it resumes?
14. What alternate mode of delivery besides PDD do you think would be effective for CPD?

FGD with PDD facilitators
1. Were you satisfactorily trained for conducting PDDs and supporting teachers in their learning?
2. Did the CPD model help teachers?
3. Was the quality of PDD content satisfactory and useful?
4. Are PDDs an effective way of delivering CPD? What alternate modes of delivery can be employed for effective delivery of CPD?
5. Were the logistics and infrastructure of PDD training venues - such as internet availability, presentations contents, availability of projector, seating space, and water - satisfactory?
6. What are areas of improvement and recommendations for CPD?
7. Are there opportunities for your own CPD?

FGD with ASDEOs/Sl
1. Were you satisfactorily trained to support teachers' CPD? Is the training effective?
2. Do you feel equipped for conducting COTs in terms of
capacity and time?
3. Do you give one-on-one feedback to teachers. Why/why not?
4. Does your training help you to give feedback to teachers?
5. Have teacher evaluations changed since the cessation of CPD? In what ways?
6. What should be different in CPDs for better results when it resumes?
7. What are the challenges and difficulties you face in supporting teachers and conducting COTs?
8. Do you have any ongoing support mechanism for your role in CPD?

Key Informant Interviews

Respondents: DE&SE Focal Persons

Respondent Name: ________________________________________________
Organization: ____________________________________________
Designation: ________________________________________________

Guide for interviewers

Part 1: Introduction
Help the participant understand how the interview will work and why their feedback is valuable.
1. Introduce yourself/ the team.
2. Explain the purpose of this interview and why their input is valued.
3. Get to know the participant. Ask them to briefly tell you about their role at DESE and how long they have been working in this role.
4. Make them feel comfortable and ask their permission before commencing interview.

Part 2: Questions for data collection

1. How are you involved with the CPD planning, implementation, monitoring? If not, how can you be more involved?
2. What have been the achievements of CPD?
3. What are the administrative, operations, logistical challenges?
4. How does CPD affect teachers’ motivation and confidence levels and their content knowledge?
5. Are there any recommendations for improvement?
## Annexure B - Participants for consultations, FGDs, KII

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Date</th>
<th>Venue</th>
<th>Consultation type</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Oct 31, 2023</td>
<td>RPDC Peshawar</td>
<td>FGD</td>
<td>11 RPDC Subject Experts/ Instructors (4 M, 7 F)</td>
</tr>
<tr>
<td>2.</td>
<td>Nov 1, 2023</td>
<td>Institute of Social and Policy Sciences (I-SAPS) Peshawar</td>
<td>Consultation Workshop</td>
<td>8 DPD focal persons (4 M, 4 F)</td>
</tr>
</tbody>
</table>
| 3.      | Nov 3, 2023 | DE&SE Peshawar                             | KII               | Director DE&SE (M)  
Programme Manager (PM)  
Implementation Support Unit (ISU) (M)  
Additional Director Planning and Development (PnD) (M) |
| 4.      | Nov 4, 2023 | RPDC Kohat                                | FGD               | 20 Primary School Teachers (10 M, 10 F)  
(9 Rural, 11 Urban)                                      |
| 5.      | Nov 4, 2023 | RPDC Kohat                                | FGD               | 4 Head Teachers (2 M, 2 F)                           |
| 6.      | Nov 4, 2023 | RPDC Kohat                                | FGD               | 15 RPDC staff members (8 M, 7 F)                      |
| 7.      | Nov 4, 2023 | RPDC Kohat                                | FGD               | 8 School Leaders (5 M, 3 F)                          |
| 8.      | Nov 4, 2023 | RPDC Kohat                                | FGD               | 8 PDD Facilitators (5 M, 3 F)                         |