

Continuing Professional Development (CPD) Options for Primary School Teachers (PST's) at School and Local Level in Punjab

Research Report

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Acronyms

AEO	Assistant Education Officers
BoC-EW	Bureau of Curriculum and Extension Wing
CPD	Continuous Professional Development
CQE	Campaign for Quality Education
DSD	Directorate of Staff Development
DTE	District Teacher Educator
ESED	Elementary and Secondary Education Department
FGECE	Faculty of Government Elementary Colleges of Education
FTF	Face-to-Face
GOP	Government of Punjab
IDI	In depth Interview
KII	Key Informant Interview
MOU	Memorandum of Understanding
MT	Master Trainer
OOSC	Out of School Children
PD	Professional Development
PEELI	Punjab Education and English Language Initiative
PESRP	Punjab Education Sector Reform Programme
PITE	Provincial Institute of Teacher Education
PRP	Pakistan Reading Project
PST	Primary School Teacher
QAED	Quaid-e-Azam Academy for Education Development
SAHE	Society for the Advancement of Higher Education
SED	School Education Department
SLO	Students' Learning Outcomes
SPSS	Statistical Package for Social Sciences
SR	Survey Respondent
STEDA	Sindh Teacher Education Development Authority
TOT	Training of Trainers
UNICEF	United Nations International Children's Education Fund
USAID	United States Aid for International Development

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Executive summary

The exploratory study, 'Continual Professional Development (CPD) Options for Primary School Teachers (PSTs) at School and Local Level in Punjab', was commissioned by the British Council to DevTrio. The study aimed to record PSTs' opinion regarding relevance, quality and practicality of existing CPD, its modality along with their suggestions for its improvement in ways that best suit the teachers to improve teaching and learning standards and students' learning outcome (SLOs). Findings of this study will inform School Education Department (SED), Quaid-e-Azam Academy for Education Development (QAED), Punjab Education and English Language Initiative (PEELI), policy makers and other relevant stakeholders in planning future initiatives in CPD for PSTs in Punjab.

Mixed method approach was employed to uncover qualitative and quantitative data to achieve the objectives of this research study whereby a paper-based survey was used to collect quantitative data from four hundred and eight PSTs; In depth interviews were conducted with thirty-four PSTs; and Key Informant Interviews with twelve head teachers were used to collect quantitative and qualitative data. Stratified *random sampling*¹ was adopted to select PSTs in a way that it was statistically representative.

Similarly, the districts were selected on the basis of their educational performance rankings issued by the Punjab government. Four districts coupled with a major urban center per region—each from high, middle and low tier were selected respectively to ensure variability of education sector performance is taken into account. From North Punjab, districts Attock, Chakwal, Sialkot and Rawalpindi were included while from the central Punjab PSTs from Sahiwal, Faisalabad, Lahore and Sheikhpura participated in the research. Muzaffargarh, Lodhran, Multan and D.G. Khan were included from Southern Punjab (See details in research methodology section).

Findings and conclusions

The main findings of this research study is that the PSTs require learner-centered/ need-based, ongoing CPD and follow support at school level to teach the new curriculum via English language as a medium of instruction effectively.

It is important to note that there are four stages of competence that education aims to achieve: unconscious incompetence; conscious incompetence; conscious competence and unconscious competence². It is highly likely that the CPD offered by QAED and PEELI has contributed to

¹ https://www.investopedia.com/terms/stratified_random_sampling.asp

² **Unconscious incompetence:** The individual does not understand or know how to do something and does not necessarily recognize the deficit. They may deny the usefulness of the skill. The individual must recognize their own incompetence, and the value of the new skill, before moving on to the next stage.^[3] The length of time an individual spends in this stage depends on the strength of the stimulus to learn.^[4]

Conscious incompetence: Though the individual does not understand or know how to do something, they recognize the deficit, as well as the value of a new skill in addressing the deficit. The making of mistakes can be integral to the learning process at this stage.^[5]

Conscious competence: The individual understands or knows how to do something. However, demonstrating the skill or knowledge requires concentration. It may be broken down into steps, and there is heavy conscious involvement in executing the new skill.^[4]

Unconscious competence: The individual has had so much practice with a skill that it has become "second nature" and can be performed easily. As a result, the skill can be performed while executing another task. The individual may be able to teach it to others, depending upon how and when it was learned

PSTs' capacity development to the level of conscious incompetence whereby they now know and realize the deficit in their teaching practice and ask for support in specific areas. The need for further continued school based CPD and its follow up support would be required to raise their competence to unconscious competence- when new learnings become second nature to PSTs³.

However, first, CPD alone is unlikely to improve SLOs and second, the traditional and site-based CPD would improve teachers' capacity to a limited extent. It is necessary to look into other factors that support the process of teaching and learning such as providing an environment conducive to learning, for pupils and encouraging teachers take ownership of their own learning in the longer run

Evidently, the 'one size fits all' approach to CPD is less likely to achieve the desired outcomes hence there is a need for needs based CPD to be reinforced at school level- as each school is a unique entity and like its staff it is at a different development level/pace from others. Thus strategies to improve and develop schools and teaching staffs will also differ from one school to another.

Moreover, traditional CPD approaches alone will also bear limited success because the characteristics of the target audience (PSTs) vary. Using a three-pronged approach to CPD incorporating site-based, self-directed and school based CPD in existing system (traditional Cascade model of CPD) will lead to better results. Details of findings, conclusions and recommendations of the study of the research have been listed below:

³ https://en.wikipedia.org/wiki/Four_stages_of_competence (Four stages of learning)

Findings

Challenges PSTs face in teaching in primary schools: Among the challenges PSTs face in teaching in primary schools, large classes, insufficient facilities, the new curriculum and lack of parental support have been most pressing. While school infrastructure poses issues to accommodate large number of pupils, lack of teachers contributes to manage and teach them successfully.

Insufficient basic parental support leads to problems like high pupil absenteeism, inability to complete homework and nonexistent academic reinforcement at home.

Moreover, introduction of the new syllabus and change of medium of instruction to English language has increased the challenges for PSTs in two ways: first English language proficiency of PSTs is currently not at par with the desired level; second the language is difficult for pupils to understand. Therefore, understanding the concepts and teaching those using English is a challenge for the PSTs. Pupils, whose mother tongue (L1) is Punjab and second language Urdu, English is a foreign language find it difficult to follow the contents of syllabus without exposure to the language or reinforced at home.

Availability of support for PSTs at school level: Informal support is available to the PSTs to mainly by their respective head teachers though PSTs prefer to share their issues with their peers first followed by MTs and head teachers. The need for regular need based continuous professional support at the school level emerged as a key finding of this research.

Past CPD received and follow up support: PSTs have attended CPD during the induction period and later. Follow up support after a CPD intervention is provided to PSTs mainly by their head teachers The support is insufficient because sometimes the head teachers have not attended the same CPD and other times they are less qualified than they so heads cannot help answer questions raised by their staff. PSTs suggested that their head teachers and peers be trained so that the constant facilitation is available to them at the school level.

Relevance of CPD received: The PSTs find the CPD received largely relevant and practical and want to receive the same with modifications and additions of activities and new concepts.

Mode of CPD received in the past, its quality, and impact on teaching practice and the learners: FTF has been the only mode of CPD for PSTs in the past. The existing CPD, its quality and practicality were also found satisfactory and PSTs noticed a positive change in their teaching practice and confidence levels but not to the extent to help PSTs improve SLOs to the desired levels. Though PSTs were confident they could use the new knowledge and pedagogy in their classes they preferred to attend more learner centered subject-specific-English, Mathematics and Science- CPD to teach effectively.

The impact of CPD on pupils was limited to improvement of purposeful learning and active engagement in the class. Though PSTs were confident they could use the new knowledge and pedagogy in their classes they suggested their head teachers and peers receive the same CPD. They also preferred to participate in more learner centered subject specific -English, Mathematics and Science- CPD to teach effectively.

Modes of CPD received and PSTs preference for a modality of CPD: PSTs have not been exposed to any CPD modality other than FTF hence they could not comment on use of any other method and prefer to use the same.

Challenges for PSTs to participate in CPD: Travelling to the cluster center during holidays whereby PSTs have to make special transport arrangements, was one of the main barriers to

receiving CPD for PSTs. Another barrier was the absence of a mechanism whereby PSTs could demand formal CPD and wait for a decision from SED to provide the service.

Willingness to receive CPD in future, preference for modes and topics: The willingness to receive CPD was largely present and the eagerness to learn more about teaching and learning process was promising.

PSTs prefer existing frequency of FTF CPD (annual) with modifications in that the same courses should include content based sessions and new activities that are designed keeping the facilities, environment, pupils' background in mind. School based CPD with regular continued follow up support as a formal system is required to facilitate PSTs teach and manage their classrooms effectively.

The PSTs are also open to the idea of group study sessions and creating a learning community as those are informally in place to a limited extent.

Recommendations

Following recommendations are put forward based on the data received from the PSTs and other research participants.

Challenges PSTs face in teaching

Long-term solutions

Invest in training of young parents: It is recommended that CPD focused on good parenting is designed and executed via School Management Committees (SMC) and village committees to teachers and parents especially those whose children are enrolled in primary schools. This initiative could provide solutions at multiple levels: first it would address the issues of absenteeism and lack of parental support in educating young children at the school level. The issue of violence at the home, school and society level may decline and it will be a step towards creating a positive citizenry. This step could also positively affect children's physical and psychosocial wellbeing due to the potential change in their environment.

Short-term solutions

Provide a healthy meal at school for pupils: Providing a meal a day in collaboration with corporate sector through CSR and donors, in primary schools could help solve the issues of enrolment and retention immensely. The benefits of this initiative are manifold: first the time and energy PSTs and the SED use for enrolment campaigns would be saved; second the issue of malnutrition could be addressed at the school level; third the issue of absenteeism and retention would also reduce. The mechanics/processes for this initiative could be discussed with available vendors and donors to identify best suited cost-effective strategies.

Increase school timings for remedial support for pupils: Providing CPD for PSTs cannot be the only solution to improve SLOs to desired levels. Thus, remedial support at the school level by increasing one hour to school timing would be a step forward to address issues particularly for low performing pupils.

Ensure andragogy/ best practices for CPD development are in place: It is suggested that principles of andragogy are applied to design CPD for PSTs. Interesting, innovative, interactive job related and purposeful CPD is likely to motivate teachers to participate willfully and absorb/remember new concepts introduced via experiential learning.

It is important to appreciate that the process of learning for adults is different from that of children and in fact all initiatives of CPD are targeting a positive change in their teaching practice¹. Therefore, it would be helpful to practice principles of change management.

Use principles of change management: CPD targets change in existing practices of PSTs hence the principles of change management should ideally be incorporated for successful inculcation and sustainability of the desired change. Kurt Lewin (1947) defined three stages of change management model⁴: unfreeze; make changes; refreeze. The first stage involves analyzing how things are done and identify the gap along with strategies to address those. For the purpose it is essential to challenge their existing beliefs and address biases regarding teaching and learning process and help them understand and secure their buy in the new strategies to achieve sustainable change. It is also important to appreciate that CPD facilitate teachers to unlearn their existing practice and replace it with new ones. The second stage is of making the changes whereby new strategies are introduced and practically used first in an artificial setting (CPD sessions) preferably in groups and pairs and later individually in real school setting with help and support of a professional. The last stage is of re-freeze that entails re-teaching, refresher courses and follow up support service so that the changes are institutionalized. Linking use of new knowledge with Annual Performance Review report would be essential to ensure implementation of new concepts.

Provide learner-centered/needs based CPD for PSTs: Learner centered/needs based approach be used for designing CPD for PSTs. Separate CPD courses should be designed for teachers who have different competency levels (basic, intermediate and advanced levels of skills)⁵. It is considered good practice to design teaching materials, activities and introduce new knowledge firstly based on learners' profile (age, qualification, experience), schemata and keep the level of difficulty of knowledge/concepts one level higher than what they already know. Lowering or raising the level of difficulty tends to create disinterest among learners and leads to poor learning outcomes among adults and pupils alike. Therefore, it is suggested these factors are suggested to be taken into account while designing CPD.

Provide content and language specific CPD for PSTs: Provision of content based CPD is of paramount importance to support PSTs teach the new syllabus using English language as a medium of instruction. It is suggested that the focus of existing CPD is shifted towards content specific CPD PSTs whereby they are comfortable to teach the revised syllabus. Practice of lesson planning, teaching and managing large classes and multi-grade teaching be ideally included in the list of topics for CPDs in future.

Enhance the repertoire of modalities of CPD service delivery

1. School-based support/ CPD system for PSTs: It is also recommended that school based long term support⁶ is in place for PSTs to guide them when they require help the school level⁷. Two strategies, though not mutually exclusive, could be used to address this issue: **first** it is important to improve leadership at school level hence the head teachers attend the trainings PSTs participate in, so that they could provide the more informed support at school level regularly and after a CPD intervention⁸; **Second** is that a post of an academic coordinator is created and highly qualified experienced trainer is hired to be stationed in each school so that the support to PSTs is readily available regularly and especially after a CPD

⁴ <https://www.process.st/change-management-models/>

⁵ <file:///C:/Users/Rahat/Downloads/USING%20TECHNOLOGY%20TO%20TRAIN%20TEACHERS.pdf>

<http://www.ascd.org/publications/educational-leadership/may02/vol59/num08/The-Change-Leader.aspx>

⁶ [file:///C:/Users/Rahat/Documents/USING%20TECHNOLOGY%20TO%20TRAIN%20TEACHERS%20\(1\).pdf](file:///C:/Users/Rahat/Documents/USING%20TECHNOLOGY%20TO%20TRAIN%20TEACHERS%20(1).pdf)

⁷ [file:///C:/Users/Rahat/Documents/USING%20TECHNOLOGY%20TO%20TRAIN%20TEACHERS%20\(1\).pdf](file:///C:/Users/Rahat/Documents/USING%20TECHNOLOGY%20TO%20TRAIN%20TEACHERS%20(1).pdf)

⁸

intervention. The GOP could also look into the option of remote assistance whereby PSTs could contact a resource person to facilitate them when needed using new pedagogy via ICT facilities where available.

2. School development plans: In addition, the head teachers and PSTs are taught to write school development plans that include academic improvement and school as a whole with the help of a trained personnel-AEO, MT etc. Keeping in mind that each school and PST is unique and at a different level of development a custom-made solution for both is essential.⁹

Step 1: Mutually agreed upon indicators of self-assessment /school improvement are listed against each aspect of school and academic management.

Step 2: The pupils are assessed in literacy and numeracy skills to create a baseline for the school improvement and SMART targets are agreed upon by the staff, head teachers and training personnel/QAED.

Step 3: The head teachers assess teachers internally, conduct a humane teacher evaluation¹⁰ or to make is less threatening, teachers are given a list of CPD topics of which they could prioritize the ones they would want to attend first. The choices are then matched with learners' needs to finalize the option. The first two steps will help school staff know where do they stand and where do they want to go in terms of SLOs? The results will also help them think how will they get where they want to reach as a team? Answering these questions will also facilitate teachers create a common moral purpose and form a learning community to address the issues.

Step 4: A school development plan is developed based on the finding of pupil assessment and teachers' demand for CPD that encompasses targets for an academic year: CPD for teachers, pupils' academic progress in terms of literacy, numeracy, speaking, listening skills and content/syllabus base knowledge and school management (hourly allocation to different subjects and strategies to teach those-lesson plans). The plan will serve as a road map to achieving desired SLOs and will be unique to each school. The initiative would place more responsibility on the head teachers and PSTs to take responsibility and ownership of improving SLOs. It is of paramount improve that highly qualified candidates are selected for the purpose.

Step 5: The priorities for CPD per school are then shared with QAED and PEELI who could then plan the CPD accordingly whether via FTF or other modalities.

Step 6: The academic coordinator will serve as a critical friend who will handhold the head teachers and PSTs to achieve the mutually decided targets for an academic and provide ongoing follow up after a CPD received. The academic coordinator ideally would spend more time in the schools than the MTs or DTEs or else their job responsibilities and schedules could be redefined to help them serve as academic coordinators.

Step 7: Regular pupils' formative and summative assessments are conducted to record progress that will help in identifying the needs for modification in teaching strategies and CPD for PSTs¹¹.

3. Use of ICT as a CPD modality: Keeping in mind the spread of Punjab Province it is necessary to use a three-pronged approach to offer CPD to PSTs in Urban, per-urban and rural Punjab. The areas could be defined based on predetermined criteria: availability and

⁹<https://www.tandfonline.com/doi/pdf/10.1080/13632439769944?needAccess=true>

¹⁰ <https://edsources.org/2014/michael-fullan-calls-for-humane-teacher-evaluation-as-a-way-to-improve-achievement/63563>

¹¹ http://www.academia.edu/4828413/Improving_the_Quality_of_Education_for_All

quality of transport system, ICT (radio, television, cell phones, tablets etc), Cell phone service/network, electricity, digital technology, socio-economic background, digital awareness and capacity, Safety and security, parent body and pupils' socio-economic background.

Involve PSTs in the process of CPD development: The best possible means to improve existing CPD whereby it could cater the PSTs' unique learning needs is their involvement in the process.

Schools in rural settings: It is recommended that a **baseline study** is conducted to understand feasibility of digital based solutions rural areas. FTF trainings and provision of an **academic coordinator** and training of head teachers will facilitate PSTs until a mechanism is devised whereby they could be exposed to other modes of CPD.

1. Remote CPD is an option available for rural areas that could be implemented with the help of private sector corporate vendors who have been experimenting with the idea for over five years now. The trainer is available online via skype while the trainees are receiving CPD at a remote location. The details of investment/cost and resources required could be discussed with the vendor by the GOP. However, availability of network will pose issues where the basic facility or service has not yet reached.

Schools in urban and peri-urban settings: The annual FTF trainings should ideally continue until the new methods/modes are pilot tested. It is recommended that a pilot project a self-supportive option of CPD via ICT is designed. A video and audio library of lectures, model lessons, reading materials, teaching resources, online courses with progressive certification and online assessment linked to teachers' performance and career path and an interactive interface is established. The resource is made available to PSTs via Cloud computing and Application (APP) with an integrated machine intelligence system. This initiative could be pilot tested in Lahore first and modifications made on the basis of its learnings and experiences. The platform could facilitate creating an online PST community that could be linked with local and international teacher community at a later stage for experience and knowledge sharing.

Improve the process of on demand formal CPD for PSTs: Creating or improving upon the existing process of on demand formal CPD would be a cost effective source of meeting PSTs' learning needs in schools.

Literature review

Continuous Professional development (CPD) and trainings are sometimes used interchangeably whereas the difference between the two is significant. The former is a long –term process used to provide support for teacher students and includes trainings, ongoing workshops, follow up sessions, observations and evaluations to improve their practice as teachers¹².

“Professional development consists of all-natural learning experiences and those conscious and planned activities which are intended to be of direct or indirect benefit to the individual, group or school, which contribute, through these, to the quality of education in the classroom. It is the process by which, alone and with others, teachers review, renew and extend their commitment as change agents to the moral purpose of teaching; and by which they acquire and develop critically the knowledge, skills and emotional intelligence essential to good professional thinking, planning and practice with children, young people and colleagues throughout each phase of their teaching lives.” (Day, 1999, p.4)¹³

Continuous professional development (CPD) is considered an important tool to enhance the knowledge and expertise of professional teachers. CPD for primary teachers is indispensable to prepare teachers to adapt with the changing demands of the current educational systems, their school settings and locale and to their unique set of pupils. Pre-service CPD is as essential as in-service models to introduce and remind teachers of previous theories, techniques and activities as well as introduces new ones. CPD programs for primary teachers have been globally used to ensure teachers employ best possible teaching and learning approaches and practices in their classes. Different countries have adopted new learning mechanisms across the world to upgrade teachers’ knowledge and professional skills.

Approach to designing CPD has evolved over the years- from top-down training approach to transmission of skills and learning leading to transformative methods of learning that allow autonomy coupled with professional development of teachers. Among the commonly used models training, award bearing, deficit, cascade, standards based, coaching and mentoring, community of practice, action research, school-based initiatives and transformative learning are included (Kennedy, 2005).

First, the **Training** model focuses on skill transmission and expert driven approach it has been criticized for lack of practicability. Second, the **Award Bearing models** are organized in collaboration with higher education to discuss the irrelevant academic practices and how to deal with them. Third, the **Deficit** model targets overcoming the

¹²file:///C:/Users/Rahat/Documents/USING%20TECHNOLOGY%20TO%20TRAIN%20TEACHERS%20(1).pdf

¹³ <http://www.fm-kp.si/zalozba/ISBN/978-961-6573-65-8/219-240.pdf>

weaknesses of individual teachers as it is designed for individual teacher it is likely to have a negative effect on teachers' confidence and the overall learning process. The model may not be suitable for situations where large numbers of teachers are target.

Fourth the **Cascade model**, based on 'one size fits all' approach, though is a cost effective way to reaching large number of teachers when compared with other models, the collective element of learning is largely missing. In addition, cascading dilutes the crux of CPD each time it is replicated as in this model group of teachers trained in the first round then trains other teachers. Fifth, the **Standards Based model** of CPD assumes that there is a system of effective teaching, and is not relatively flexible in terms of teacher learning. It could be useful for developing a common language but may be very narrow and limiting when it comes to creating a learning and sharing culture.

Sixth, **Coaching / Mentoring** though seems to be good approach to develop relationships other than between instructor and learner albeit good communication skills would be an asset for the coaches and mentors to provide constructive, objective feedback to teachers in an acceptable manner. Another effective model is **Action Research**. This model is relevant to the classroom, and enables teachers to experiment with different practices, especially if the action research is collaborative. It also allows teachers to learn from their experiences and improve their knowledge of teaching and learning process over the years. Seventh, the **Transformative models** of CPD are different from the rest as they are designed to target solution of specific issues at hand.¹⁴

Another successful model used for CPD of primary and secondary teachers is **school based learning approach**. This approach promotes establishment of systems within each school to ensure teachers learn and grow professionally at their own pace. The model creates uniformity in teaching practice through combining the knowledge bases of members, it could inhibit active and creative innovation of practice.

In Pakistan, CPD has gained currency a few decades ago. Top-down approach to training has been used to design and execute CPD for years. The processes of selection of teachers for CPD, designing CPD models and the topics to be included are all largely centralized. The CPD trainings focus on topics common to all teachers such as teaching methodology, classroom management, interactive teaching and specific subjects and content.¹⁵ Therefore the CPD offered misses out on the opportunity of addressing unique challenges teachers face in their school setting.

Cascade model of CPD has been mainly used to train the teaching staffs over the years, whereby master trainers receive CPD as Training of Trainer (TOT) and further train teachers in different locations/schools. Though the cost-efficient model serves its purpose, it fails to ensure high quality of trainings when trickled further down during the relay process.

Approximately two hundred three (203) teacher-training institutes and three hundred (300) teacher resource centers were created along with government institutes and private teacher

¹⁴ <http://www.fm-kp.si/zalozba/ISBN/978-961-6573-65-8/219-240.pdf>

¹⁵ https://www.researchgate.net/publication/291522717_Teacher_Education_and_Professional_Development_Programs_in_Pakistan

trainings centers that are responsible for conducting trainings focused on pedagogical skills and provide teachers with professional certificates. Research shows that around 40,000 teachers have been trained annually via these short-term programs (Aly, 2007). However, the reports of National Educational Policy 1998-2010 suggest that these programs suffer quality consideration, unlikely to meet the desired standard education and have little or no impact on students' learning outcomes (SLOs).

The KP Elementary and Secondary Education Department (ESED) in collaboration with Provincial Institute of Teacher Education (PITE) started a CPD program in Peshawar and Swat in September, 2017. One hundred primary schools in Peshawar and Swat were identified for the purpose. The CPD models used were trainings, workshops and refresher courses for the capacity building and professional development of the teachers.¹⁶

The existing CPD model designed by the Sindh government are being implemented in collaboration with several Sindh government entities such as the Sindh Teacher Education Development Authority (STEDA), Provincial Institute of Teacher Education (PITE), Bureau of Curriculum and Extension Wing (BoC-EW) and Faculty of Government Elementary Colleges of Education (FGECE). In addition, the USAID Pakistan Reading Project (PRP) provided technical support to enhance reading skills of students. This model too is based on cluster approach in which different models are used to develop the skills and expertise of schools and teachers. The modes of CPD delivery include face-to-face training (FTF), on job mentoring and coaching in addition to online training sessions.¹⁷

Punjab was the first province in Pakistan to address shortcomings in its in-service teacher training system by introduction of a CPD model for its primary teachers in 2006 that was also based on cascade model and included cluster trainings. In 2017, almost after a decade, the government of Punjab (GOP) realized the need for change in its existing CPD model and revamped the system whereby monitoring the impact of CPD on SLOs was at its core. The change included hiring of assistant education officers (AEOs). The AEOs were responsible for visiting schools fortnightly to conduct student assessment and conduct teacher/class observations to identify teachers who required further support and referred them to subject specialists at the cluster center. Identified teachers would visit subject specialists once a month to receive CPD while schools were in session and a one month long training was offered at the cluster centers during summer holidays- approximately 240 hours of training annually.¹⁸

The Punjab province is working to improve the models used for CPD and needs to adopt latest, innovative and successful professional development programs at par with international standards to train its teachers. The pressing challenge of providing cost effective quality trainings to a large number of teachers in a short duration and support and re-train them regularly to upgrade their skills and content mastery is compounded by the fact that

¹⁶ <https://fp.brecorder.com/2017/12/20171206324646/>

¹⁷ <http://www.sindheducation.gov.pk/Contents/Menu/CPD%20Model.pdf>

¹⁸ <https://ideaspak.org/images/Publications/Human-Development/Teacher-Professional-Development-Reform.pdf>

most of these teachers are serving in rural areas and have to travel far to participate in existing training facilities. Therefore, it is necessary to learn from experiences of other countries in the region regarding CPD and education systems especially those performing exceptionally well and modify it to cater existing needs.

One of the successful models is the **Lesson Study Model (LSM)**. Japan is considered to be a role model in CPD service delivery system in schools due to its effective implementation. The country initiated using LSM in 1870s and has been using it since as a vital part of teachers' professional development. The Lesson study program encourages teachers to become a member of a lesson study group.

Any member could highlight an issue that requires a solution. The issue is discussed and researched collectively as a group. Resultantly the teacher study group prepares a lesson out of those materials and use those to teach while other members watch closely especially focusing on the responses, reaction and understanding of their pupils. Once modified to satisfaction the lesson is made public according to the norms in Japan.

Another successful CPD model is one implemented in Bangladesh-**school based learning CPD**. The English in Action project (2008-2018) was initiated in Bangladesh, where school-based CPD approach was used to engage teachers and make classrooms more effective in terms of learning English. The approach was based on five key stages: First an orientation was organized for making participants understand the approach; Second, teachers were provided with a twelve modular teachers' guide along with video and reading materials for self-study; Third, ¹⁹a pair support system was created whereby two teachers from each school participating in the project met and reflected upon self-study material and devised new and innovative strategies for teaching lessons; Fourth, fortnightly meetings were conducted at cluster levels for formal training on modules taken from teachers' guides; Fifth, school visits were organized for staff members of participating schools to observe and give feedback to each other to improve teaching processes.

¹⁹ https://www.britishcouncil.pk/sites/default/files/school-based_cpd_models.pdf

Background

Dismal state of Pakistan's education system received considerable attention nationally and internationally in the past two decades. Poor state of public schools' infrastructure and teaching quality has been most prominent of criticisms. Inadequate access to education, high numbers of out of school children (OOSC), low student retention, transition rates, alarmingly poor students' learning outcomes (SLOs) and teacher performance were a direct result of neglect education system in Pakistan faced over the years.

In 2010, Article 25-A of Pakistan's constitution was created that stated "The State shall provide free and compulsory education to all children of the age of five to sixteen years in such manner as may be determined by law". Soon after authority for education service delivery was devolved to the provinces.

Out of the four provinces, the Punjab successfully reduced teacher absenteeism, took measures to improve teacher quality, school infrastructure, and provided support to low-cost private schools and textbook distribution through The Punjab Education Sector Reform Programme (PESRP). Several systemic changes were also introduced to revamp the structure of Education Department and Directorate of Staff Development (DSD) now known as Quaid-e-Azam Academy for Education Development (QAED) to ensure quality of teachers is enhanced and accountability measures are in place.

Among other reforms, in 2009, the Punjab government changed the medium of instruction to English language in schools for grades 1-12. The decision was repealed and modified to use English as medium of instruction for grades 4-12. Government school teachers were however, ill prepared for the change and continued to use Urdu to communicate in classrooms to teach all subjects including the English language itself according to the Punjab Education and English Language Initiative (PEELI) and Society for the Advancement of Higher Education (SAHE) and the Campaign for Quality Education (CQE) report titled Policy and practice: teaching and learning in English in Punjab schools.

In spite of the reforms, students' learning outcomes (SLOs), though improved, remained below the desired level especially in mathematics, science and English. Teachers' inability to teach English and use the language to communicate with their students in class poses additional challenge in the way of improving SLOs.

To address the issue of teacher capacity development, the Government of Punjab Schools Education Department (SED) and QAED signed a MoU with the British Council to commence PEELI to improve quality of teaching and learning in government schools across 36 districts of the Punjab province in 2013. PEELI, using an inclusive approach, provides trainings focused on teaching methodology, English language and leadership for teachers, head teachers and district officials to foster good classroom practice. QAED has integrated PEELI trainings into its annual training plans all promotion-linked induction and professional development trainings delivered by the organization.

By 2015, PEELI trained 420 master trainers (MTs) who cascaded the trainings to almost 4000 District Teacher Educators (DTEs) who reached out to 185,000 schoolteachers across all

districts of Punjab. The project also made use of collaborating with other stakeholders such as the United Nations International Children’s Education Fund (UNICEF) to conduct a 4-day training in Southern Punjab and IT to deliver ‘online-mentoring skills in English’ course sessions for 700 DTEs using resource centers located in urban hubs of Punjab.

The project was scaled up in 2015, and aims to contribute to stronger student learning outcomes (SLOs) by helping 300,000 primary and middle school teachers reach their potential and develop knowledge base and pedagogical skills to meet the challenge of delivering world class teaching in the Punjab province by 2019. The British Council has contracted DevTrio Consulting to undertake a research study to answer the following question.

‘What are PSTs’ preferred CPD options at the school and local level in Punjab?’

In addition, the study will explore primary school teachers’ (PSTs) willingness to participate in future CPD opportunities and their preferred modalities. Thus, the purpose of this exploratory research study is to collect first-hand, field based and region-specific information related to PSTs’ preferences for CPD in Punjab. The target audiences for this study will be the QAED, PEELI and the British Council staff, SED and other stakeholders.

Target audience

The target audience of this exploratory research study included School Education Department (SED), Punjab Education and English Language Initiative (PEELI), British Council (BC) staff and other relevant stakeholders. The findings of this study will inform and facilitate future CPD designs for PSTs in future.

Objectives of the study

Firstly, the study aimed to understand existing formal and informal means and modes of on demand and practical CPD and the relevance and suitability of those for PSTs. Secondly, the study also aspired to identify PSTs’ perception of gaps and strengths in existing CPD. Thirdly, the research was designed to explore possible need-based modifications in current CPD provision system to better facilitate PSTs participate in CPD and develop pedagogical skills to enable them improve SLOs.

Research questions

The study recorded PSTs’ opinions regarding CPD opportunities available to them and their recommendations for improvement of those. More specifically, the study aimed to examine challenges PSTs’ face to participate in CPD and their willingness and preferences for CPD opportunities and their modalities. Following questions guided the study:

1. What are the key characteristics, sources and modalities of existing on demand and formal CPD for pedagogical skill development available to PSTs?
2. What is the best-suited CPD modality and why was it considered more successful than others?
3. What are the key challenges PSTs face to avail of CPD opportunities and what are the main sources and solution for those?

4. To what extent are the PSTs willing to attend CPD in future and what would they want to learn more about via CPD?

Research methodology

Qualitative and quantitative approaches were employed to obtain both data streams and answers the research question related to CPD opportunities for PSTs in Punjab province. Methodological²⁰ and data triangulation²¹ embedded in the research design strengthened validity and reliability of its data collected via comprehensive review of relevant literature and survey of PSTs' perception of existing CPD and preferences; In depth interviews (IDIs) with M/female PSTs and Head teachers; Key Informant Interviews (KIIs) with representatives of QAED and PEELI staff.

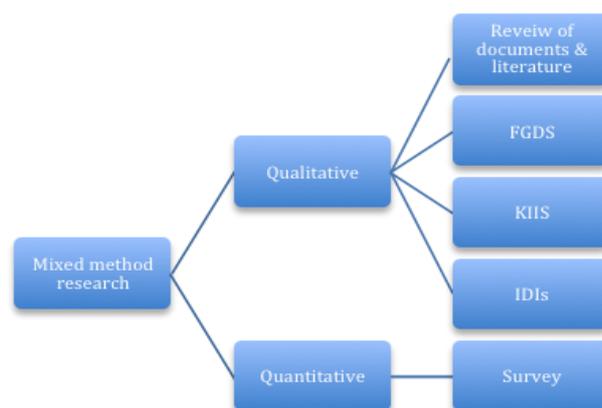


Figure 1 Research Design

The research instruments were designed and finalised after the inception meeting with British Council staff and review of literature (See Annexure 1).

Sampling Method and Sample Size

Sampling strategy was developed to access the continuing professional development (CPD) options for primary school teachers (PSTs) at school and local level in order to inform possible future CPD opportunities.

Stratified *random sampling*²² was adopted to select PSTs in a way that it was statistically representative and all variables are accounted for, that were expected to affect main variables of interest i.e. continuing professional development and its future prospects.

Basis of stratifications: Education quality, schooling and teaching quality, was expected to vary in various geographical regions that were dependent on the development index of respective areas. The geographical location of school was expected to affect the opportunities for teachers. To account for this variability province Punjab was divided into three geographical regions i.e. Northern, Central and Southern Punjab. Further each region was

²⁰ *Methodological triangulation: involves using more than one method to gather data, such as interviews, observations, questionnaires, and documents.*

²¹ *Data triangulation: involves time, space, and persons*

²² https://www.investopedia.com/terms/stratified_random_sampling.asp

stratified into districts- according to their ranking as done by School Education Department (Punjab). Within district urban-rural stratification was used whereby within each urban-rural stratum, sample primary schools were randomly selected.

Selection of Districts:

Districts were selected on the basis of their ranking issued by Punjab Government. 4 districts, including a district with major urban center, were targeted per region, each from high, middle and low tier respectively to cover the variability of education sector performance within each region. Identified districts in all three regions of Punjab have been listed in the matrix below against their ranking as done in quarter 3 of FY 2017-18.

Table 1 Selection of regions, districts and their rankings in Punjab

REGION	DISTRICT	RANKING
NORTH PUNJAB	Attock	4
	Chakwal	12
	Sialkot	18
	Rawalpindi	30
CENTRAL PUNJAB	Sahiwal	5
	Faisalabad	22
	Lahore	25
	Sheikhupura	36
SOUTHERN PUNJAB	Muzaffargarh	10
	Lodhran	23
	Multan	24
	D.G. Khan	28

Source: District ranking Third Quarter, 2017/18, extracted from <http://www.pesrp.edu.pk/datacenter>

Selection of Schools as Primary Sampling Units

In addition to district stratification, each district was further stratified based on rural and urban areas. Compared to rural schools, urban schools were expected to be more developed in terms of infrastructure and providing better opportunities to teachers for professional development. To account for this variation sample schools within each district were selected proportionate to the number of urban and rural school respectively. At the level of urban-rural strata, sample primary schools were randomly selected.

Table 2 Number of rural/urban primary schools in 12 districts

DISTRICT NAME	NULL	P. RURAL SCHOOLS	P. URBAN SCHOOLS	P. GRAND TOTAL
ATTOCK		796	54	850
CHAKWAL		694	31	725

D.G. KHAN		1299	70	1369
FAISALABAD		1125	186	1311
LAHORE		417	193	610
LODHRAN		550	25	575
MULTAN		798	207	1005
MUZAFFARGARH		1537	77	1614
RAWALPINDI	1	1081	119	1201
SAHIWAL		649	51	700
SHEIKHUPURA	1	891	83	975
SIALKOT		1361	91	1452

Source: Annual School Census, 03/04/2018, provided by Punjab Education Sector Reform Sector (PMIU-PERSP)

Sample size:

Considering that this research study is descriptive in nature (Descriptive studies include surveys to assess prevalence) and outcome will be categorical variable (it can be of three types, two categories only (binary variable), multiple categories where order does not matter (nominal variable) or multiple categories where order does matter (ordinal variable). Categorical variables are usually summarized with proportions). Yamane (1967)²³ provides a simplified formula to calculate sample sizes, where research is descriptive and outcome is categorical variables.

$$n = \frac{N}{1 + N(e)^2}$$

Where n is the sample size, N is the population size, and e is the sampling error. At 95% confidence level, 5% sampling error and population size (total primary schools in Punjab) of 36133. Sample size is

$$n = \frac{36133}{1 + 36133(0.05)^2} = 399.9889 \approx 400$$

Thus, a total of 400 teachers were surveyed. This sample of 400 teachers was equally divided among male and female teachers to get gender-balanced representation.

Intra-District distribution of sample:

With-in district 17 schools were randomly selected according to percentage of total number of primary schools present in urban areas and percentage of total number of primary schools present in rural areas. For example, in Attock, 6.35% of total primary schools were urban schools ($[54/850] * 100$). Similarly, 93.65% of total primary schools are located in rural areas ($[790/850] * 100$). So to divide sample of 17 primary schools in Attock among urban and rural areas, 1 primary school was randomly selected from urban area ($0.0635 * 17 \approx 1$) and 16 was

²³ Yamane, Taro. 1967. *Statistics, An Introductory Analysis*, 2nd Ed., New York: Harper and Row.

randomly selected from rural areas ($0.9365 \times 17 \approx 16$). Sample sizes for rest of districts are given below.

Table 3 Inter-district random selection of primary school survey sample

DISTRICT NAME	%RURAL PRIMARY SCHOOLS	%URBAN PRIMARY SCHOOLS	SAMPLE SIZE OF RURAL PRIMARY SCHOOLS	SAMPLE SIZE OF URBAN PRIMARY SCHOOLS	TOTAL PRIMARY SCHOOLS SURVEYED
ATTOCK	93.65	6.35	16	1	17
CHAKWAL	95.72	4.28	16	1	17
D.G. KHAN	94.89	5.11	16	1	17
FAISALAB AD	85.81	14.19	15	2	17
LAHORE	68.36	31.64	12	5	17
LODHRAN	95.65	4.35	16	1	17
MULTAN	79.40	20.60	13	4	17
MUZAFFA RGARH	95.23	4.77	16	1	17
RAWALPIN DI	90.01	9.91	15	2	17
SAHIWAL	92.71	7.29	16	1	17
SHEIKHUP URA	91.38	8.51	16	1	17
SIALKOT	93.73	6.27	16	1	17

This intra-district distribution was ensured so that the sample more representative at district level according to number of rural-urban schools respectively.

Inter-District distribution of sample:

Two primary school teachers per school, a total of 200 primary schools were visited in total to achieve sample size of 400 primary school teachers. 200 primary schools were equally divided among the identified/selected 12 districts, to ensure equal representation of each district with unique characteristic. This step reduced total of 200 sample primary schools to 17 sample primary schools per district.

The distribution of the survey sample from both rural and urban Primary schools in the selected twelve districts has been listed below:

Inter-district Sample Distribution
 2 PSTs per school
 200 schools/ 12 Districts = 16.67 or 17
 Schools per district
 2 x 200 schools = 400 PSTs in total

Table 4 Survey sample of PSTs from primary schools of 12 districts

SURVEY SAMPLE SELECTION OF PSTS FROM SELECTED 12 DISTRICTS

DISTRICTS	Rural Schools and Sample			Urban Schools and Sample			Total teachers surveyed in the district
	Sample rural primary schools	No of teachers per school	Total Teachers surveyed in rural schools	Sample Urban primary Schools	No of teachers per school	Teachers surveyed in rural schools	
ATTOCK	16	2	32	1	2	2	34
CHAKWAL	16	2	32	1	2	2	34
D.G. KHAN	16	2	32	1	2	2	34
FAISALABAD	15	2	30	2	2	4	34
LAHORE	12	2	24	5	2	10	34
LODHRAN	16	2	32	1	2	2	34
MULTAN	13	2	26	4	2	8	34
MUZAFFARGARH	16	2	32	1	2	2	34
RAWALPINDI	15	2	30	2	2	4	34
SAHIWAL	16	2	32	1	2	2	34
SHEIKHUPURA	16	2	32	1	2	2	34
SIALKOT	16	2	32	1	2	2	34
TOTAL			366			42	408

Qualitative Data Sample

In order to gather in depth information and triangulation, twelve in depth interviews (IDIs) and twelve key informant interviews (KIIs) were conducted of which six were conducted in rural and urban areas respectively. Equal gender representation was ensured as six each IDIs were conducted with male and female PSTs.

In addition, twenty KIIs were conducted with head teachers, representatives, QAED and PEELI representatives. Out of 20 KIIs, 12 (one per district) were conducted with head teacher/school administration representative (depending upon availability). Detailed breakup of IDIs and KIIs has been given in the following diagram. For details research instruments and methodology please see appendix 1.

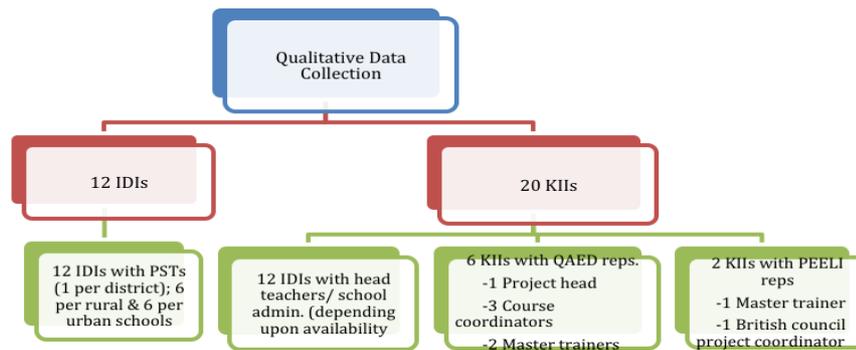


Figure 2 Detail of Sample for Qualitative Data Collection

Limitations of the Study

Listed below are the main limitations of this study:

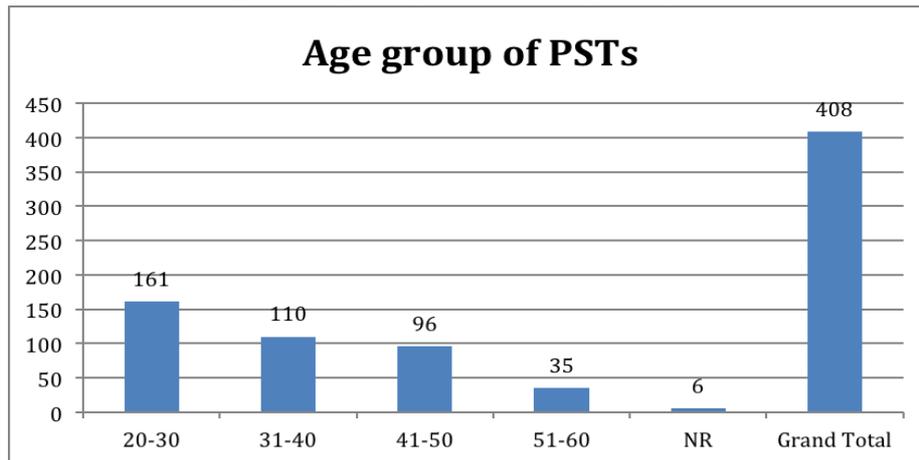
1. The newly appointed PSTs could only comment on the training attended during their induction period and not on different modes of trainings used.
2. PSTs, who have not been exposed to modes other than face-to-face trainings could not comment on other modes of trainings and express their preference and willingness to opt/try those.

Findings and Conclusions

Section1: Respondents' profile

In total, 408 PSTs participated in the survey of which 207 respondents were females. The clear gender balance has enabled the research to report opinions of both genders on equal terms. The study could voice opinions of young and middle-aged PSTs regarding CPD majority of who have one to five years of teaching experience as PSTs.

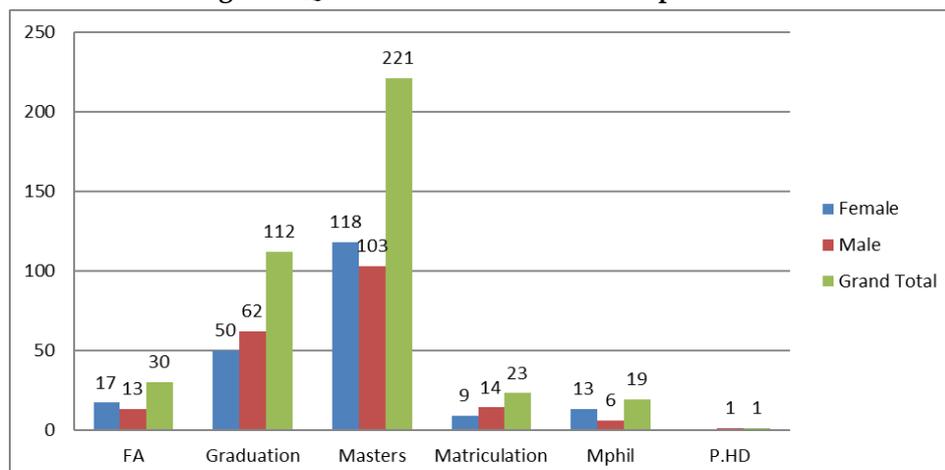
Figure 3 Age range of research participants



The findings of this study are also helpful in understanding the issues PSTs working in rural areas in Punjab face and their CPD needs as 375 (92%) out of the total respondents (408) were working in rural areas of Punjab.

Educational background of the respondents showed that qualified staff has been hired to teach in primary schools of Punjab. 221 out of 408 respondents completed their postgraduate degree and 112 were college graduates showing government of Punjab's preference for hiring qualified teachers in primary schools.

Figure 4 Qualifications of research respondents



The data also exhibited that more female PSTs have attended postgraduate programs (57%) when compared with their male counterparts (51%) whereas it was the opposite for those who graduated from college.

Though the GOP initiated posting two teachers in primary schools mainly due to increase in student enrollment the data indicated the initiative is still in process as a large number of PSTs (152 out of 408) are still teaching all subjects to their respective classes of which more are appointed in urban areas (54%). From the total respondents more female PSTs (45% of 207) reported they were teaching all the subjects when compared with their male counterparts (29% of 201). The number of sampled PSTs who were new recruits was higher than those who were close of retirement.

Section 2: Key challenges faced when teaching in primary government schools

Lack of resources, administrative problems and non-existent support from parents are some of the common challenges PSTs face on a daily basis. The qualitative data mirrors the findings.

New syllabus and English as a medium of instruction, Lack of parental support, large classes and missing facilities contribute to slows pupils' academic progress

Among the missing facilities absence of sufficient space and restrooms was most pressing. Others include absence of potable water, electricity and cleanliness of schools. Representatives of QAED and MT the endorsed the findings.

'...the major challenges in our school ...there is shortage of classrooms, most classes do not have proper ventilation, due to which students and teachers both are sitting outside the class. Environment provided to PSTs is very low.' (PST, Faisalabad)

The administrative issues included management of large classes, inappropriate teacher student ratio and lack of clerical staff. Each of these issues contributes to the make-up of primary school settings that poses challenges for PSTs to teach their classes effectively. For example, lack of resources leads to issues such as the recent influx of pupils in primary classes cannot be accommodated in a one or two room school and overburdens teachers as the teacher student ratio creates an imbalance. Teachers' energies are consumed to manage the class/pupils rather than teaching and paying individual attention to their pupils during class time. The use of class time is not maximized that clearly has a negative impact on SLOs. The head teachers also agreed that large classes and inappropriate student teacher ratio were key challenges that hamper improvement in teacher performance and SLOs because most of the teaching time is consumed in managing pupils.

'Challenges are great in number, including student teacher ratio. There are large classes so that individual attention cannot be given to every student which ultimately is the right of every student' (Head teacher, Rawalpindi)

The representative of QAED was of the view that traditional methods of teaching used by the PSTs also contribute to low SLOs.

'...children cannot fully participate in classroom activities due to traditional methods of teaching used by the PSTs.....teachers lacked pedagogical and content knowledge and their qualifications too were very basic...and large classes were hard to manage and only one post

of a teacher was allocated per primary school.... the feedback showed that improvement in PSTs teaching was not to the desired level.' (representative QAED)

Another major challenge identified was lack of parental support. Parental carelessness or irresponsibility has its own negative effects on teaching and learning primary process in schools. Pupil absenteeism, inability to manage academic responsibilities such as homework, preparing for tests and coming to school with essentials (required books, copies and stationery) also plays its part in increasing PSTs' workload and demotivation of teachers.

'Parents do not take interest in their children's which is a major challenge' (PST Chakwal)

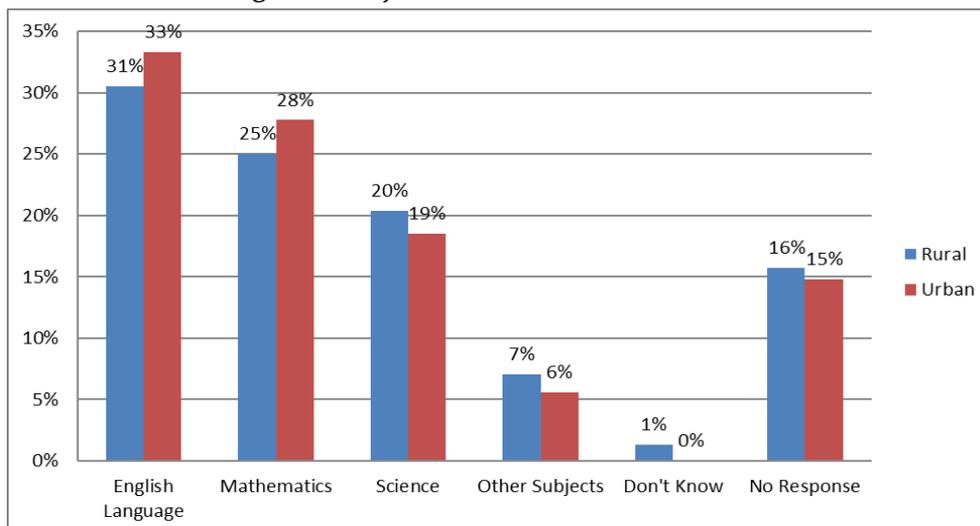
Since pupils are young the responsibility of ensuring pupils have attended the lessons, have their homework written in their diaries and making sure they have class work notes are all responsibility of a teacher. High absentees compel PSTs to reteach lessons and provide the required notes to each child who missed a class increasing their workload and hampering progress in scheme of studies. The MT shared that PSTs have to face several issues other than those of teaching responsibility.

' ..teachers are no longer motivated to learn because they are overburdened by other responsibilities and pressures such as they are given a target to enroll 90 children from 5 miles radius of their catchment areas whereas there aren't ninety children available in the area... targets are not met...he/she is out of school not teaching but following targets... they fear monitoring because their target is not met... and lack of resources also is a pressing problem- they are teaching 70-90 children.....how is that even possible?' (MT, QAED)

Workload of PSTs also increases because as a rule, primary schools in Punjab do not have an allotted post for clerical staff. Head teachers delegate their responsibility to PSTs who are already overburdened by increased enrollment and dealing with other challenges sometimes tend to ignore their own core responsibilities.

'PSTs have to be very dedicated to teach in adverse circumstances... they have to ensure increase in pupils' enrollment and retention... lack of basic resources demotivates pupils and teachers' (representative of QAED)

Figure 5 Subjects PSTs find difficult to teach



In addition, introduction of new curriculum and change in medium of instruction from Urdu to English- for which PSTs feel unprepared- has made their already difficult task of teaching young learners more cumbersome. Among the subjects, PSTs find teaching English most difficult followed by mathematics and science.

‘Our school is located in rural location and most people are illiterate and the education level of children is also very disappointing. We try our best.... but the inability of parents to teach at home and to check progress with schools on regular basis is not very much encouraging.’ (PST, Sialkot)

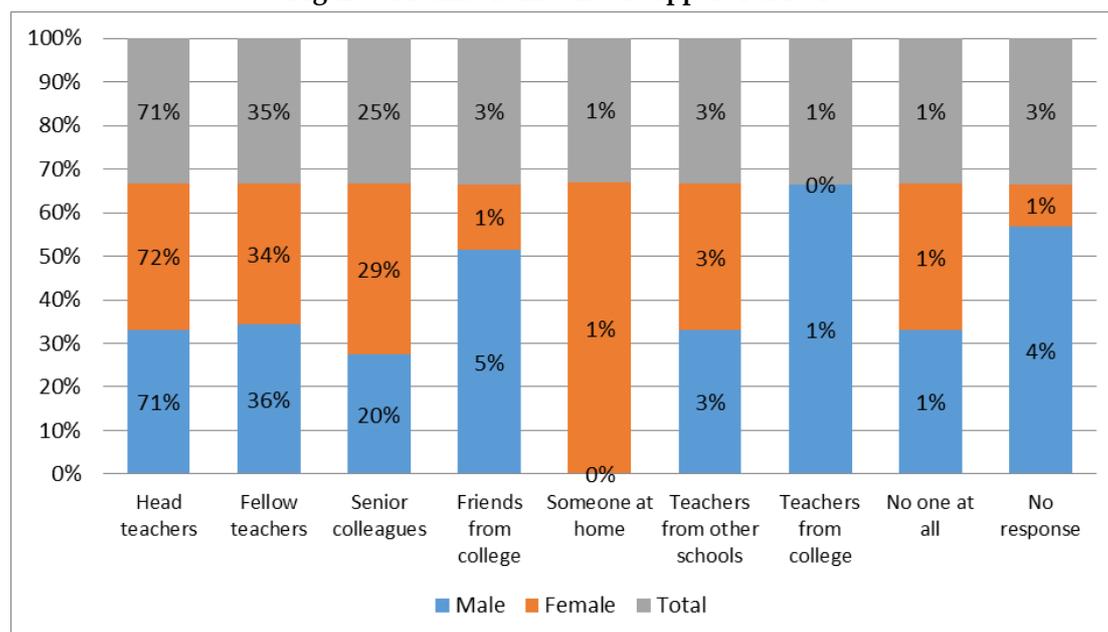
Section 3: Existing support available for PSTs at school level

Support is available to PSTs (67%) at school level, to plan their lessons, pedagogy and manage teaching in adverse circumstances. More male teachers (69% of 201 PSTs) feel supported. More than a quarter of PSTs (32%) claimed they do not have support available to them at all. Representation from QAED shared that the ‘CPD has been on a halt for a year but the new CPD program is under design phase and consideration that will address the issues’.

‘the DTEs are replaced by AEOs who provide the support PSTs require...even administrative issues and conduct classroom observations and mentors the ones who are underperforming or refer them for further CPD...’ (representative of QAED)

The key source of support for PSTs (71% of 408 PSTs) in schools is head teacher albeit many receive guidance from peers (35% PSTs) and senior colleagues (25% PSTs) mainly via informal discussions (37%) followed by coaching (29%) and class observations (21%). It is likely that the PSTs used the terms informal discussions, coaching and mentoring interchangeably without realizing the difference between them and the processes involved in each. Interestingly, a considerable number of respondents (33%) did not respond at all. Their silence could be interpreted as either support is not available to them or the quality or extent of support they receive is not sufficient enough for them to acknowledge it.

Figure 6 Available in school support for PSTs



Section 3: Past CPD received

Formal sources of support include trainings received during induction and as in-service CPD. The practice of providing training during induction period seems to be a regular practice and institutionalized in Punjab province: 92% of 408 survey participants, majority of whom were relatively new recruits (1-10 years of service), claimed to have received PD during their induction period

An overwhelming majority of PSTs (77%) claimed to have received CPD other than those conducted during their induction period. District wise analysis of data also indicated that the research participants received trainings other than induction once or more. However, PSTs (total of 34 respondents per district) from districts Sheikhpura (11), Lodhran (13), Faisalabad (17) and Muzaffargarh (19) did not get an opportunity to receive CPD more than once.

‘At least we have a guideline to prepare lesson plan, activity in class and reading material. Whenever our PSTs go for CPD, it (s/he) become our asset.’ (Head teacher, Chakwal)

Though gender divide/difference between PSTs who received CPD was minimal (25% female/23% male who attended CPD once) teachers (36%) posted in urban areas received PD more than their rural counterparts (23%). Since CPD is usually scheduled during holidays, PSTs have to make special transport arrangements to participate in the sessions and it could also possibly be due slow pace of CPD delivery in the districts mentioned above.

The one-month long CPD sessions (37% of PSTs) usually organized by QAED (69% of PSTs) and PEELI (56% of PSTs) have focused on teaching methodology (77% of PSTs), lesson planning (71% of PSTs), classroom management (57% of PSTs) and Interactive teaching (56% of PSTs) more frequently than subject or content specific initiatives, in the past. PSTs were of the view that the duration of CPD should remain as is and scheduled annually. Qualitative data showed that role of DTEs though crucial for success of CPD program weakened due to unprofessional attitude of the former.

'DTEs were the strength of the past CPD program and also its weakness... some were very professional and others were underperforming that led to its discontinuation. (representatives of QAED)

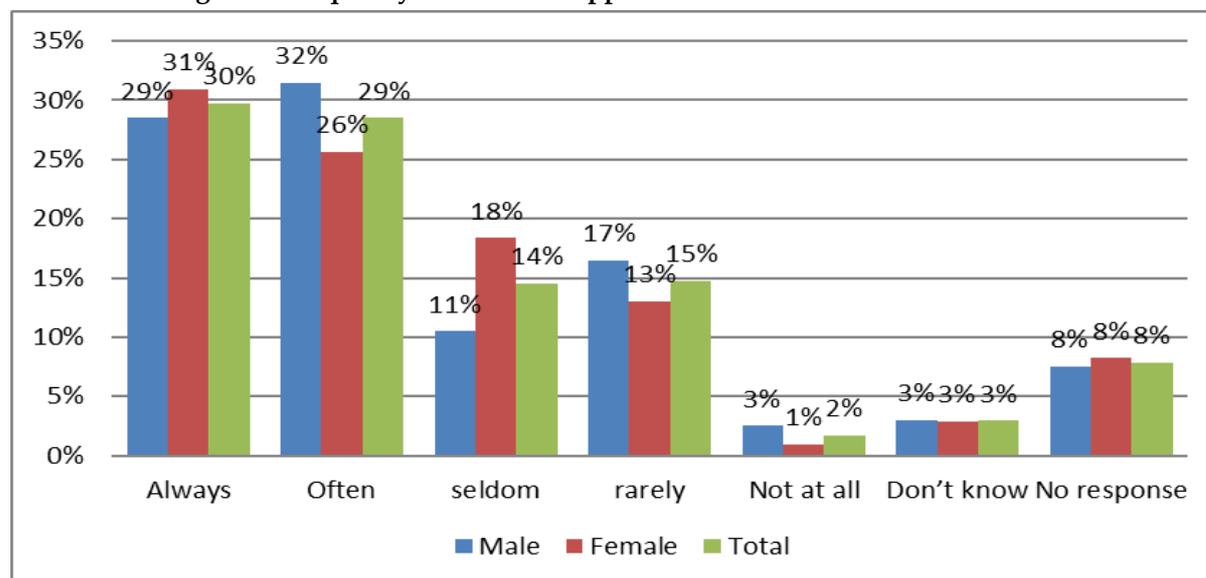
Section 5: Relevance of Existing CPD

The existing CPD received was largely considered practical (81% of PSTs). The PSTs' shared the existing CPD met their learning needs (87% of PSTs) and they (50%) could comfortably use the new ideas and activities in their classrooms though the comfort level varied. District wise data analysis showed that 60% of PSTs from Faisalabad did not agree that the CPD received in the past met their learning needs and thought the concepts, activities and ideas were not practical (32%).

'I try to use new techniques and learnings in daily matters whenever it seems suitable.' (PST, Sialkot)

Clearly the need for support is evident as more than a quarter of respondents (33%) were not sufficiently confident to use the new knowledge received via CPD.

Figure 7. Frequency of need for support after a CPD intervention



The head teachers agreed that the CPD was very useful for PSTs and encouraged them to use new methods of teaching to engage their pupils.

'I am saying collectively that we are very much satisfied with CPD trainings, it always provides new ways of thinking, ideas and way of teaching in class. CPD material is the source to keep us on track. Whenever any teacher feels difficulty the he used to consult with teacher and material is guidance to him/her'. (Head teacher, Multan)

Further analysis showed that more PSTs with higher qualifications such as MA and Bachelor's degree found implementing the newly taught teaching skills easier when compared with their less qualified peers. The head teachers too endorsed the finding and stated that using new concepts and teaching methods was difficult for less qualified teaching staff even though they are more experienced.

'Modern teaching skills and languages are difficult for some teachers especially those Matric, FA and PTC teachers. 30% of teachers are still Matric, FA pass and they can't cope up with highly qualified teachers as CPD trainings are advanced and these teachers face problems, mostly these teachers are teaching grade 1 and 2 so special CPD should be designed for these teachers.' (Head teacher, Multan)

Nevertheless, the need for further support and guidance emerged strongly as more than half of the respondents (238 out of 408) highlighted its importance and frequent demand. The representative of QAED agreed with the finding and explained that newly hired teachers are more qualified and after they are trained they will be able to teach the new syllabus effectively. Lack of infrastructure and resources emerged as a major barrier for not being able to use the newly learnt teaching techniques, concepts and activities. Challenges regarding school infrastructure included lack of sufficient space, equipment, computers and IT and other facilities. School environment or school culture also contributed as one of the key reasons for PSTs' inability to use new pedagogy in their classes followed by large classes and time constraints.

It is highly likely that managing large classes in a thirty-five-minute-long period/class per subject and making large number of young pupils learn through activities could be challenging. In addition, teaching through games or activities creates healthy noise in classes. Traditionally, school managements prefer a quiet school/classes and regard it well managed. Interactive teaching encourages interaction that could conflict with the concept of an ideal school. Representatives of QAED agreed with the finding and shared the need to ensure head teachers participate in CPD their teachers receive.

'...old school head teachers object too much noise in classes...it was only when the head teachers participated in CPD they found out this was good noise and children were enjoying the class activities...' (representative of QAED)

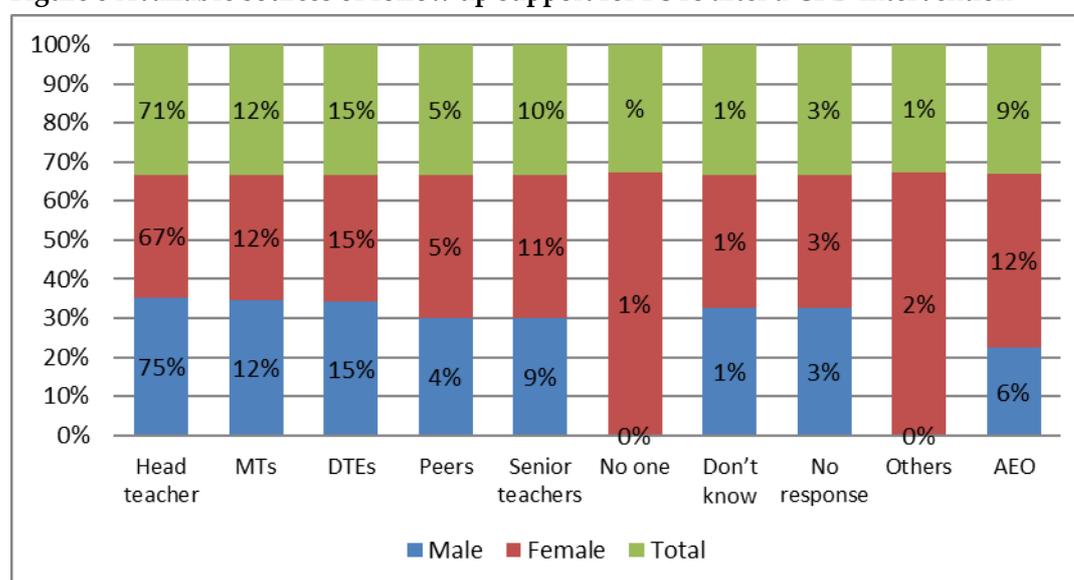
Section 6. Follow up support after CPD intervention

In case follow up support was required on urgent basis at the work place, fellow teachers (63% of PSTs) followed by Master Trainers (MT) (35%) and head teachers (24% of PSTs) were the main available resources. Clearly the PSTs seem to feel more comfortable approaching their peers and MTs when they in need of guidance. District wise data showed that PSTs from Faisalabad (76%) reported that they do not receive any support after a CPD intervention. The head teachers shared that follow up support was provided to PSTs however, in light of their head teachers' experience change in their teaching practice is directly linked with their attitude and willingness to learn and adapt.

‘The content of CPD always helps the teachers who are willing to learn but the thing they don’t follow up and teacher forget their training in few time...most of the time no change found in the teachers’ performance’. (Head teacher, D.G. Khan)

Follow up support is available to PSTs (66%) after a CPD intervention in all the sampled districts except in Faisalabad and D.G. Khan where respondents have denied availability of the aforesaid support. The head teachers have been identified as the principal source of follow up support for PSTs (71%) after a CPD intervention at school level. Strangely, MT, DTE and senior teachers’ role and involvement in follow up facilitation after a CPD intervention was minimal. The frequency of follow up support fortnightly (30% of PSTs) and daily (18% of PSTs) clearly indicating that the follow up support is sporadic.

Figure 8 Available sources of follow up support for PSTs after a CPD intervention



To receive formal CPD PSTs are dependent upon the SED that selects teachers for QAED to arrange and execute CPD sessions. Therefore, the PSTs could provide feedback to QAED while attending CPD, but a framework or process whereby PSTs could raise a demand for formal CPD is absent.

According to the data writing lesson plans is also a norm in primary schools as majority of PSTs (63%) claimed to write action plan barring a small percentage (19%). More females (66% out of 207) PSTs than males (60% out of 201) seemed to be committed to the routine though. District wise data showed that PSTs from Faisalabad (74%) and Sialkot (64%) do not write lesson plans. However, the qualitative data provided some evidence that PSTs plan lessons for each lesson once and then continue to use them for years to come. Representative of QAED agreed with the finding and shared that government has provided PSTs with lesson plans in scheme of studies that are usually followed.

‘... now the PSTs have started writing lesson plans because now they will be evaluated for it.’ (representative of QAED)

Monitoring too has emerged as a routine (81% of PSTs) that head teachers (59% of PSTs) follow regularly and feedback is given (93% of PSTs). Majority of PSTs (91% out of 408) across gender find the feedback they are provided helpful.

Section 7. Mode of CPD delivery received in the past

Face-to-Face CPD delivery model has been the primary modality in the past (91% of PSTs). However, a small percentage of PSTs (19%) shared they were exposed to coaching, group study, distance learning and mentoring (13%).

‘Cascade model of CPD has been in use...we use FTF mostly....and found out that teachers are not proficient in the content they have to teach.... the first CPD were designed to train teachers for pedagogy alone but later focus was shifted to content based CPD...clearly when we provide content based CPD the pedagogy is automatically included....’ (representative of QAED)

The data showed that overall PSTs (85%) thought FTF was highly effective and useful mode of CPD. Among other options they thought informal discussions with the head teachers (32% of PSTs) were most suited. Clearly PST prefer face to face interaction with an expert who could be present at their work place during school time to provide regular continued guidance to them as and when they needed. Group study was also viewed as an effective mode of PD that showed PSTs’ preference for learning in collaboration with their peers.

‘Yes, practical CPD are needed for PSTs time to time to use newly learnt strategies in their classrooms. The trainings of development also meet the need of the teachers.’ (Head teachers, Sheikhpura)

One of the reasons for preferring FTF could be that majority of PSTs were exposed to mainly FTF and mentoring, coaching to a limited extent while informal discussions and guidance they receive from their head teachers is a norm for them. Since the main mode of CPD delivery has been FTF, majority of research participants could give informed feedback about it. Not surprisingly highest level of satisfaction was shown with FTF as a mode of CPD albeit travelling to cluster centers, lack of time to participate in CPD sessions and its schedule and duration were some issues that repeatedly appeared in the data. The PSTs also expressed their concern regarding quality of trainers and their skill set while some found topics of trainings unsuitable according to the qualitative data. According to the head teachers it is difficult for PSTs to travel to participate in CPD and suggested it should be conducted in schools.

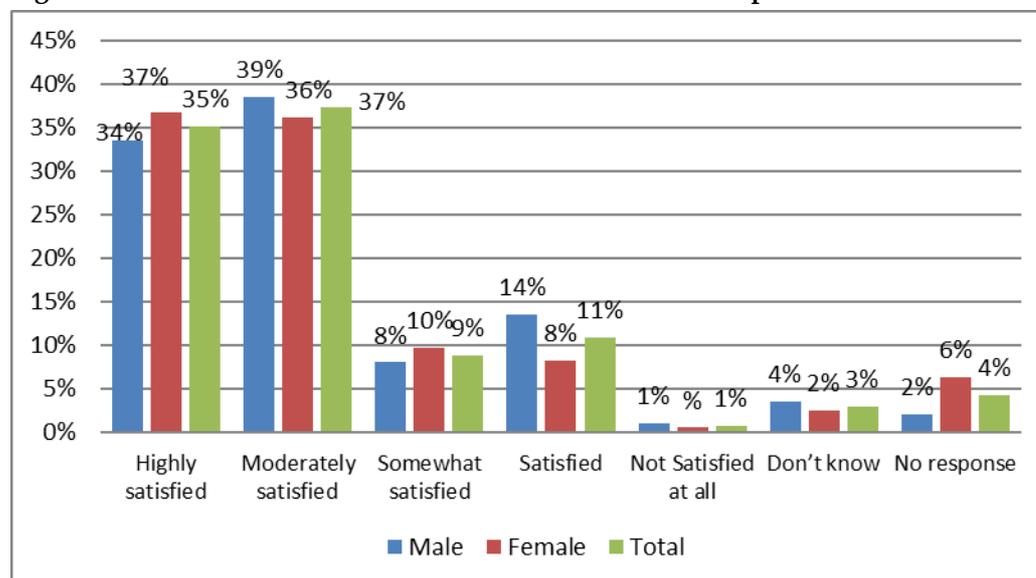
‘CPD should be provided at the school level rather than other place because it involves time constraint of teacher, travelling all participants and last but not the most important (least) it effects student learning.’ (Head teacher, Muzaffargarh)

Section 8. Quality of CPD received in the past

Overall PSTs were satisfied with the CPD received in the past though to varying extent. According to the data, the relevance of topics and content of existing CPD are potential area

for further improvement. When commenting on the quality of CPD received the PSTs (85%) agreed that the objectives of the CPD were clear, participation and interaction was encouraged (82% of PSTs) and the topics covered were relevant (63% of respondents).

Figure 9 PSTs' level of satisfaction with CPD received in the past



More than half of the respondents (65%) stated that the content used during CPD trainings was easy to follow and the trainers were knowledgeable and well prepared (70% of PSTs). PSTs also shared the objectives of CPD were met (73% of SR) and the time allotted was sufficient (62% of PSTs) and the training facility was comfortable (60% of PSTs) though the percentage of those who were highly satisfied were less than those who were moderately satisfied.

'Innovative ideas are the part of CPD which are helpful in teaching class, these ideas should be practically demonstrated in the class and classroom management should be discussed' (PST, Chakwal)

Section 9. Impact of CPD received in the past on PSTs

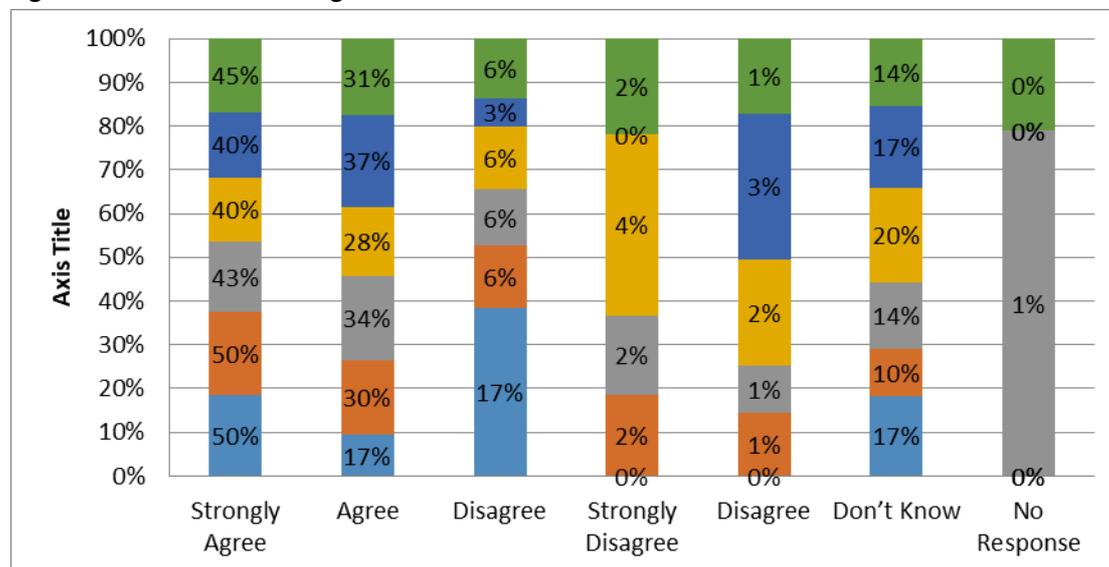
The data regarding impact of CPD received in the past showed an interesting trend. Though overall majority of survey respondents agreed that they have benefited from the CPD received, a larger percentage of respondents opted to agree rather than strongly agree with the statements enlisted to assess the impact of CPD barring the first and the last ones – 'I have increased knowledge of the content of key learning areas I teach' and 'My confidence as a teacher has increased'.

'CPD is doing great work for teachers as their teaching skills are improved and the teaching methods are slightly changed as compared to previous ones.' (PST, Lahore)

For the first and the last statement (mentioned above) more respondents (53% and 45% of SR respectively chose to strongly agree albeit the results were in the reverse order for the rest of the statements. The trend indicates three key points: first that the PSTs expected to learn more from the CPD in the past; second that they do not feel sufficiently confident to use the

materials, concepts, strategies and activities taught during CPD received independently in their classrooms; and third that they require more CPD support to be able to use the concepts, techniques and activities taught during CPD received in their classrooms.

Figure 10 PSTs claim to have gained confidence due to CPD



Further analysis showed that majority of survey respondents (94%) stated FTF as an example of CPD received in the past and claimed 85% (overall) strongly agreed to have increased their knowledge of the content though to varying extent (32% ticked the 'agreed' category).

Feedback regarding pedagogy showed that PSTs could see a positive change in their teaching practice as than half of the survey respondents agreed they increased their knowledge of teaching strategies (68%) less than a quarter strongly agreed with the statement exhibiting they expected more from the CPD received. Similarly, overall a large percentage of respondents (59%) agreed to have increased their knowledge of students' learning strategies, more PSTs chose 'agree' rather than strongly agree with the statement showing room for improvement in the area.

In line with the previous trend more PSTs (33%) agreed they could make clearer links between their teaching goals and the classroom activities. However, less than a quarter (23%) strongly agreed with the claim showing lack of confidence in practically aligning teaching goals with classroom activities.

When commenting on the ability to make a clearer link between teaching goals and methods used to assess student learning, and increased creativity in teaching, same trend was visible in the data. More survey respondents (31% and 36% respectively) agreed with the statement when compared with those who strongly agreed (25% and 26% respectively). Similarly, more survey respondents (35% and 33% respectively) agreed with the statement that they were able to use more effective teaching and learning strategies in their respective classes after receiving CPD and better able to meet the needs of my pupils but the percentage of respondents who strongly agreed was smaller (26% and 28% respectively).

The survey respondents (32%) shared that they were able to integrate information technology into their teaching more effectively rather than strongly claimed (24%). However, more PSTs

(46%) strongly agreed they gained more confidence as a result of receiving CPD than the ones (31%) who only agreed. This could be interpreted as the GOP has distributed tablets to primary school teachers that could be the reason why the PSTs claim to use digital technology in their classrooms though the term has a much larger meaning.

Section 10. Impact of CPD received in the past on pupils

The data showed that the percentage of PSTs who strongly agreed with the statements that their pupils were learning better, more actively engaged in class and had fewer difficulties to understand new concepts was lower than those who 'agreed' with the statements.

Analysis of data showed overall ('strongly agreed' and 'agreed' category of responses combined) an overwhelming majority of PSTs (86%) shared their pupils had fewer difficulties in understanding what they were taught. The overall percentage of PSTs (61% of 408 respondents) who thought their pupils were more actively engaged in classes was significant (63% of PSTs). A drastic decline in strong agreement was evident for other statements that included positive changes in pupils' purposeful learning, active engagement in classroom activities and improved learning outcomes.

even though the PSTs 'strongly agreed' that their pupils have fewer difficulties in understanding what they were being taught (43% of PSTs) and CPD has contributed to a positive change in pupils' purposeful learning (55% of PSTs) and active engagement in class activities (41% of PSTs) but SLOs have not reached the desired levels (39% of PSTs). The finding points towards the need for identifying strategies and providing further support for PSTs to achieve those. The trainer from PEELI shared that the PSTs face many challenges that include tracking pupils to meet enrollment, retention and attendance targets that often times shifts their focus from teaching to other engagements.

Section 11: Satisfaction with existing CPD

Even though the PSTs have pointed out the need for further improvement in CPD as 92% of 408 PSTs were very appreciative of the existing CPD received. Though most of the research participants were satisfied with the existing CPD some had a different point of view that representatives of QAED agreed with.

'The existing CPD is not on ground realities, training must be on ground realities and according to the environment of the school. The topic is mostly not related to the teacher syllabus. Somehow the CPD meet my class needs and I am satisfied.' (PST, Lahore)

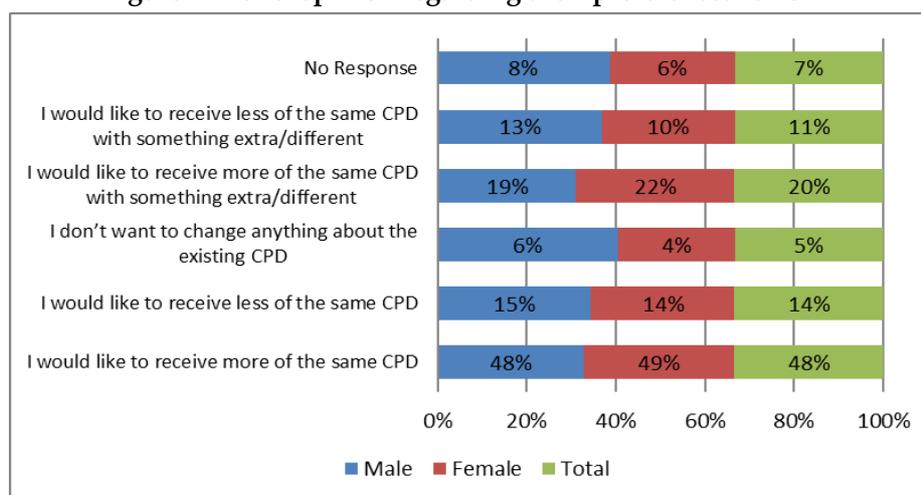
Further analysis showed that larger percentage of PSTs (37%) were moderately satisfied (11% of PSTs), a little less were highly satisfied (35% of PSTs) followed by those (11% of PSTs) who were satisfied and somewhat satisfied (9%). The trend pointed to the gaps that need to be identified and addressed to improve CPD to meet PSTs' expectations.

'.... but these activities are general, subject wise CPD should be introduced which should focus on syllabus and course because at last students have to go through exams and they do not have much know on subject'. (Head teacher, Sialkot)

When asked to identify what PSTs appreciated the most regarding CPD received in the past environment of sessions, activities and exposure to new ideas were prominent. However, majority of respondents chose not to respond when they were asked about changes they would like to make to existing CPD.

In line with PSTs' expression of satisfaction with existing CPD, they (48%) were keen to receive the same in future also. More PSTs (65%) from urban areas and females (48%) shared the former. The data indicated that drastic change in existing CPD is undesired as only some PSTs (20%) were interested in more of the existing CPD with something extra/different while others (11%) opted for less of the same CPD with something extra/different.

Figure 11 PSTs' opinion regarding their preferences for CPD



Section 12. Willingness to receive CPD in future

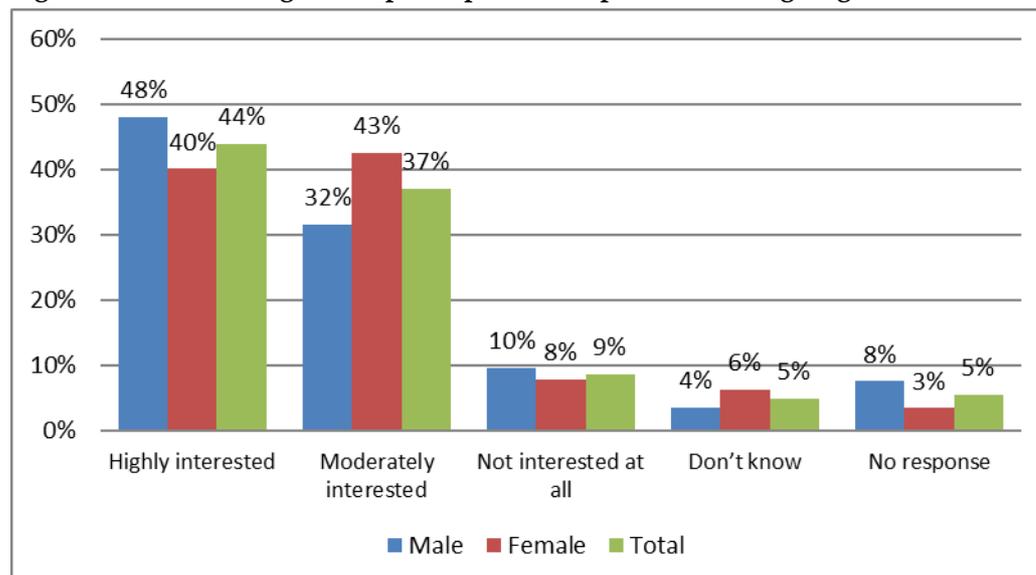
The overwhelming positive response from PSTs indicated the extent of PSTs' motivation and commitment to improve teaching and learning process in primary schools.. Overall PSTs (82%) were motivated to participate in CPD in future though more (54% of PSTs) were less eager..

PSTs from rural areas showed more eagerness to avail of the opportunity to participate in CPD. The finding is consistent with the earlier finding that PSTs stationed in rural areas tend to get less chances of receiving CPD. However qualitative data showed that a process whereby PSTs could demand formal CPD is not yet in place or not operationalised.

'There is no such mechanism to call or ask for CPD by the teachers.' (PST, D. G. Khan)

PSTs (81%) also believed they should participate in process of planning their own CPD though the interest level varied. More male PSTs (80% of male and 83% of female PSTs) posted in rural government primary schools were among those who were willing to participate in CPD planning.

Figure 12 PSTs' willingness to participate in the process of designing CPD



In addition, 79% of survey respondents felt coaching and mentoring should be included in CPD of which more PSTs (81%) were working in rural primary schools. Thus the demand for continued CPD and follow up sessions exists to a large extent.

In line with the earlier finding, overall PSTs (80% respondents) were supportive of initiation of on-site CPD and even more (88%) were convinced the initiative would gain support from head teachers. The head teachers too maintained that school based CPD will ensure need based CPD is planned and delivered.

'I think the best and the easiest way to deliver CPD is in the schools. In this way the organizations will also get to know the situation of the schools and face to face delivery in my opinion is the best.' (Head teacher, Sheikhupura)

Some head teachers were of the view that scheduling CPD during holidays would reduce PSTs' motivation to participate in the sessions. Therefore, if the CPD is scheduled during working days, practical implementation of new concepts, activities and methodology could be observed and teachers could be guided as a follow up of CPD received within their schools.

A vast majority of PSTs (70% and 69% respectively) were confident about attaining MTs' and their colleagues' support regarding school based CPD. However, the survey respondents (66%) were comparatively less hopeful regarding obtaining DTEs' buy in. Similarly, PSTs were hopeful QAED, PEELI and SED (76%, 69%, 56% of PSTs respectively) will support the initiative though to varied extent. It was noteworthy that PSTs could be more confident regarding opinion of those who they were in regular contact- head teachers, their colleagues and QAED suggesting their relationship with the DTEs and senior teachers could be rather formal or interaction was infrequent.

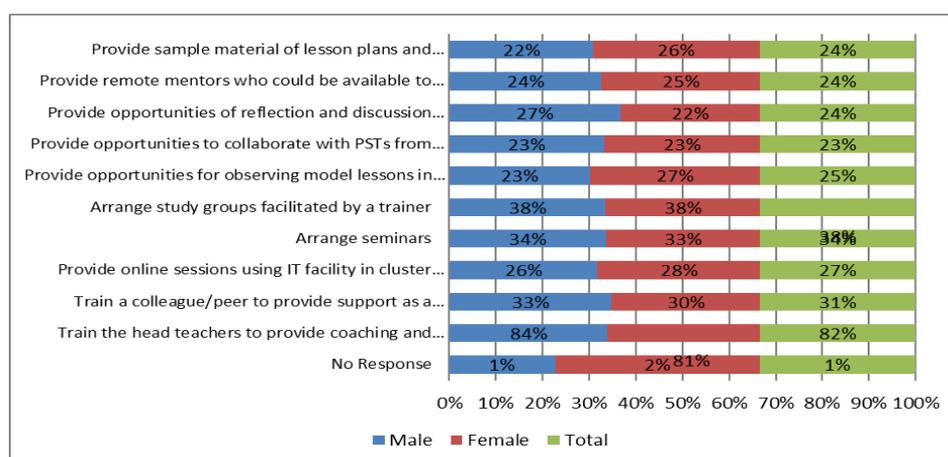
'... sometimes professional jealousy and lack of interpersonal skills are reasons PSTs do not share their challenges with colleagues and refrain from learning from each other.' (representative of QAED)

The data also indicates PSTs have a cordial relationship with their colleagues and head teachers. Accordingly, PSTs (93%) place a great deal of importance to collaborate with their peers, colleagues, head teachers and trainers and willingness to learn from each other and form a learning group. The trend was more obvious in PSTs (81%) serving rural schools albeit more or less the same across gender (94% female & 90% male PSTs).

Although more PSTs preferred to attend the sessions annually (40%) some were willing to spare time on monthly basis (39% of PSTs) to participate in a group study session, discuss teaching experiences with peers and colleagues and collaborate with colleagues for lesson planning.

Commitment for longer hours to participate in CPD declined drastically as a little less than half of PSTs (40%) were of the view that CPD should be conducted annually and less than a quarter voted for conducting CPD once a semester and monthly. Not surprisingly, more PSTs posted in urban areas and females opted for following annual CPD schedules.

Figure 13 PSTs' suggestions for QAED, PEELI, SED to facilitate them regarding CPD

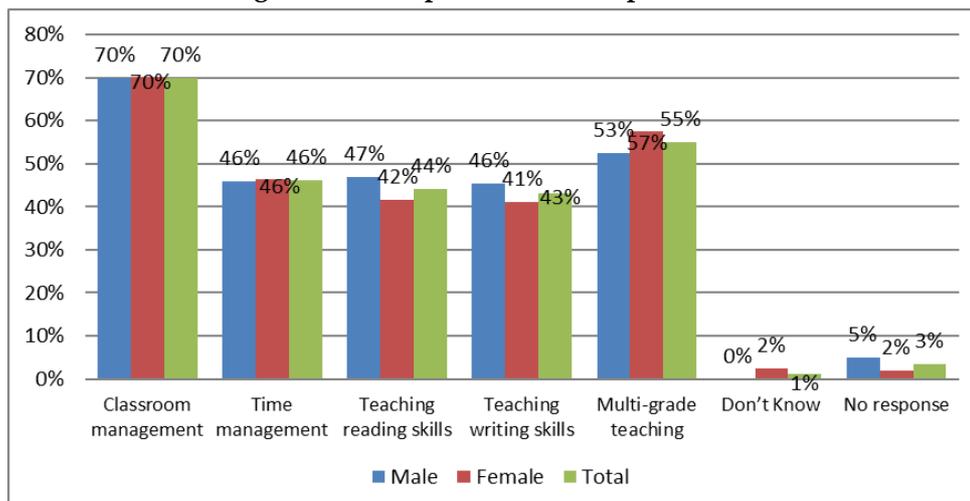


The survey respondents reported that QAED and other stakeholders could facilitate PSTs to receive ongoing support and CPD by training the head teacher (82%) followed by arranging study group sessions (38%) and arrange seminars (34%) and train a peer to provide support required (31% of PSTs).

‘the (suggested) changes can be implemented by keeping the venue same as school and not far away from the school so it is easy for PSTs to attend trainings’ (PST, Sahiwal)

Not surprisingly majority of PSTs were interested in learning more about classroom management (70% of PSTs) followed by multi-grade teaching (55% of PSTs). Among those who opted to learn more about the former served in rural areas (60% survey respondents). PSTs teach large classes sometimes with varied age group of pupils sitting in their classes. A large part of their class time is consumed in classroom management and require multi-grade teaching skills to teach effectively.

Figure 14 PSTs' preference for topics for CPD in future



Section 13. Barriers to receive CPD

More than half of the survey respondents (57%) stated they did not face any barrier to participate in CPD. The Quantitative data revealed some barriers to receiving CPD included delays in dissemination of information regarding CPD (201F & 199 M SR), required seniority to be nominated for CPD (200F & 197 M SR), lack of support from head teacher and management (189F & 198M SR), school culture (197F & 199M SR) were major impediments for male and female PSTs to participate in CPD.

PSTs were also concerned about selection criteria used to invite or nominate them for participating in CPD. The process of selection is based on top down approach whereby teachers or head teachers have little involvement or say in it. Therefore, merit based nominations too were an issue PSTs (193M and 197 F SR) faced followed by other factors such as: lack of teacher motivation (189 F and 180M SR), time constraint (176 F and 185 M SR) and schedule of CPD (171F and 192 M SR respondents) were in the lower end of the list of reasons that hampered participating in CPD for PSTs, schedule of CPD (192 respondents) and lack of motivation (189 survey respondents) were main reasons that hamper participating in CPD.

The representative of QAED shared that the new CPD program will focus on subject based training and choice will be given to PSTs to select the topic most relevant to his/her learning needs and an extensive training program will be conducted that will include certain number of PD days in their calendar and thirty days will be scheduled during summer vacation.

Head teachers agreed with the barriers mentioned by the PSTs during their interviews. They too feel travelling, time constraints due to busy schedules of PSTs and lack of resources for implementing new teaching techniques make participating in CPD challenging for primary school teachers.

'Class performance indicates its own (PSTs) performance. New strategies and activities need resources and we have less resources.' (Head teacher, Chakwal)

The representative of QAED agreed with the head teachers regarding lack of resources in primary schools that hamper effective teaching. The head teachers also pointed out that

senior teachers often feel left out because they cannot follow CPD because they do not understand English. Therefore, CPD should be designed taking into account all its participants so that each attendee could benefit from it. PSTs' key suggestions to facilitate them in their school setting included training the head teachers so that they could provide the coaching and mentoring at the school level for them. The second most commonly identified method was to arrange study groups facilitated by a trainer. The qualitative data endorsed the findings.

Conclusions

Following are the conclusions drawn from the findings of the study. The conclusions have been clubbed together for the ease of the reader therefore the numbers of conclusions could be different from those in the findings section.

1. Challenges PSTs face in teaching in primary schools

PSTs find teaching of English language coupled with the new curriculum a major challenge. Managing large classes, insufficient teaching staff and lack of parental support are among other challenges of teaching primary classes.

2 Availability of support for PSTs at school level

Support available to PSTs at school level is mainly provided by head teachers and their peers.

3. Past CPD received and follow up support

CPD has been a regular activity especially during the induction period. However, availing of the opportunities of CPD after induction period are easier for teachers serving in urban primary schools. QAED and PEELI have been principal CPD service provider for PSTs that mainly focused on teaching methodology, interactive teaching and classroom management. PSTs receive follow up support at their work place mainly from their head teachers after a CPD intervention, who also monitor their progress. The PSTs write lesson plans however institutionalizing of the practice requires further attention.

4. Relevance of CPD received

PSTs find CPD received in the past relevant however more qualified teachers could implement the teaching strategies in their classes. The need for continuous support at the school level emerged as a key finding of this study as implementation of newly learnt pedagogy, concepts and activities was a challenge for PSTs in the absence of professional support especially for PSTs whose qualification is basic

5. Mode of CPD received in the past, its quality, and impact on teaching practice and the learners

Face to face training was the key modality of CPD received in the past. PSTs were satisfied with the quality of CPD they participated in and noticed a positive change in their teaching practice. However, the desired improvement in SLOs could not be achieved. One of the main reasons for it was that there is a need for subject/content based training especially for English, Mathematics and Science among other contributing factors.

6. Follow up support after CPD received

Follow up support after a CPD intervention is available to PSTs usually through informal discussion with fellow teachers. Primary school teachers also have the option to consult their MTs and head teachers at the school level.

7. Willingness to receive CPD in future

PSTs are willing to participate in CPD activities in future. They are highly satisfied with the existing CPD and want to receive the same in future. However, they would welcome some

additions and modifications in the existing CPD and would prefer learning more about classroom management the new syllabus (English, Mathematics and Science) and multi-grade teaching.

8. Barriers to receive CPD

Management, whether at the school, QAED or SED level emerged as sources of impediments for PSTs to participate in CPD. Delays in dissemination of information, seniority based selection of candidates for CPD and travelling to cluster centers were barriers to receiving CPD. The PSTs suggested that their head teachers are trained so that they could provide the on demand practical CPD required to them at their school and that study groups are organized for sharing experiences and learnings from each other. Clearly the need for school based CPD is immense and PSTs need to be facilitated at the school level on daily basis in terms of teaching and completing the new syllabus, managing their classes, improving SLOs, receive on-going need based CPD and find follow up support within the school.

Recommendations

Taking a step back before listing recommendations, it is necessary to acknowledge that there three strategies commonly used to deliver CPD for teachers: **Traditional CPD**, that is based on the cascade model; the **Site based CPD**, that is often times received in schools, cluster and training centers; and the third is **Self-directed approach to CPD** whereby teachers take ownership of their own learning, participate in identifying their learning needs, select topics, are involved in designing courses and defining their learning goals.

The first two methods are in place for PSTs of Punjab albeit there is a need to refine the processes to allow PSTs' participation in the process of designing their CPD and use learner centered/ needs-based approach so that their specific learning needs are met.

The third approach requires professional maturity, considerable motivation to engage in self-study and higher level of competency to firstly decipher self-learning needs and effective sources for those.

When introduced extensive hand holding would be needed to help PSTs familiarize themselves with the new system but this is not to say it cannot be done. It is necessary to address the problems unique to each school therefore School based CPD could help improve schools and expedite PSTs' capacity building process. In addition, the principles of learning and retention must be kept in mind while designing activities for CPD. Learning and retention is at its highest when teacher students practice doing and teaching others. School based CPD would provide the opportunity to receive new knowledge practice it in their classrooms while they teach pupils²⁴ and reflect on it with the help of a professional MT.

Since the number of PSTs who require CPD with varied competency levels and geographical locations eclectic approach to CPD could also be beneficial whereby best suited strategies from all available models could be used to design a more comprehensive CPD program for PSTs of Punjab.

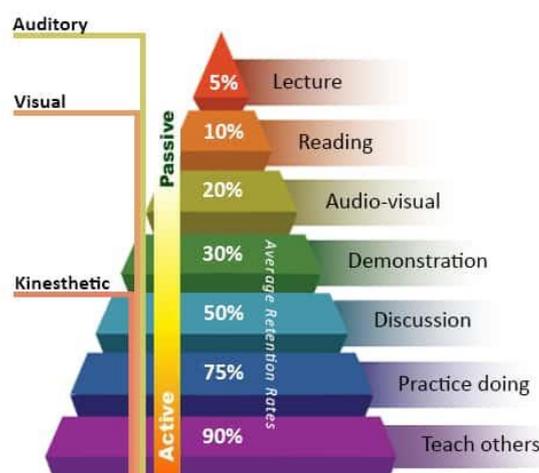
Listed below are recommendations based on the data received.

Key challenges faced by PSTs to teach primary classes

Long-term solutions

Invest in training of young parents: It is necessary to focus on training young parents on 'good parenting' to ensure young people, who are about to have children or have young children receive training on how to raise their children- reinforce good habits regarding health, food and nutrition, psychosocial skill development, environment conducive to learning and practical routines. This initiative would address many problems.

The learning pyramid



Adapted from the ITL Institute of Applied Behavioral Science Learning Pyramid

Source: <https://www.educationcorner.com/the-learning-pyramid>.

²⁴ <https://www.oercommons.org/authoring/3999-school-based-teacher-professional-development/1/view>

First it could help parents take informed decision on the number of children they would want to plan and has the potential to reduce population in future. Second, young parents would become more responsible care-takers of their children that would lead to lowering frequency of disease and child mortality among children. Therefore this initiative could possibly reduce the burden on health services of the Punjab Government.

Thirdly, the training will be a step towards reducing violence that children face at home or elsewhere on a daily basis. Reduction of violence as a step would help improve tolerance in our society as a whole. Impact of the training, if done effectively, could reach parents from all walks of life including teachers. Thus violence in schools could also reduce/diminish without imposing negative corrective steps.

Many of the issues that teachers and education delivery systems face today will decrease tremendously when young parents are informed about raising their children. The mechanism of conducting these trainings could be chalked out via collaboration with universities, hospitals and private organizations.

Short-term solutions

Provide a healthy meal at school for pupils: Providing a healthy meal in primary schools will have many benefits. Poverty coupled with illiteracy and poor parenting skills are some of the basic reasons for parents' inability to support their children in their academic progress. Serving healthy meals could have its benefits: firstly, absenteeism will decrease drastically. Secondly, enrollment will increase without investing in enrolment campaigns to meet the Sustainable Development Goals²⁵ (SDG) target. Thirdly, this step will reduce improve pupils' health and have a positive impact on their physical and cognitive skills. The Punjab Government could partner with private sector organization to provide these facilities through their CSR.

Increase school timings for remedial support for pupils: Providing additional time for remedial classes would facilitate underachievers in primary schools. Half an hour of school time could be gained by reducing the frequency of daily morning assembly in primary schools to once a week. The other half hour could be increased for regular school time so that one extra hour is available for teachers to help pupils complete their homework and focus on helping those who are lagging behind and cannot get individual attention during class time.

It is recommended that a post of a remedial teacher is created to hire those accordingly for providing extra individual attention to pupils in primary schools. Having said that, provision more teaching staff for additional hour would be essential.

Ensure principles of andragogy and best practices in CPD are incorporated: Adult learners usually learn better when they are convinced of the purpose, there is a problem that needs to be addressed, it is job related, practical and useful. Incorporating these factors in CPD for PSTs could enhance their interest to receive CPD further.

Characteristics of effective CPD

Learner-centered, need-based, practice-oriented and ongoing, sequenced, cumulative, participatory; and is often a linear process- starting from beginners' level to mastery of concepts and innovation

Source:file:///C:/Users/Rahat/Documents/USING%20TECHNOLOGY%20TO%20TRAIN%20TEACHERS%

²⁵ <http://www.un.org.pk/pakistans-challenges-sustainable-development-goals-2015-2030/>

Use principles of change management to ensure sustainable change in pedagogy: Incorporating principles of change management could expedite and achieve sustainable change in PSTs teaching practice.

Improve relevance and practicality of CPD for PSTs: Providing learner-centered, need based CPD in the school is of paramount importance. The Punjab government could use a two pronged strategy to achieve providing school based CPD: first is to make it mandatory for school head teachers and a senior teacher to attend CPD PSTs attend so that they could be a source of in house follow up support for them when required; second is to ensure the CPD is school, class and subject specific so that it can meet the specific needs of PSTs and is relevant to their school setting. For this initiative to be successful, PSTs, head teachers and MTs will ideally undertake a school assessment activity to identify school and pupil specific issues/gaps and design (chose topics for CPD), design a school development plan focused on improvement of SLOs in literacy and numeracy skills and subject/syllabus specific CPD to address those. It is also suggested that formative and summative assessments and evaluations are embedded in the school development plans for each school so that performance markers are in place and early warning signs could highlight the need for modification in any segment required.

Provide need-based content and language specific CPD for PSTs: Offering CPD for English, Mathematics and Science would enable PSTs teach their classes effectively and confidently. It is suggested that the focus of existing CPD is shifted towards content specific CPD for PSTs. Practice of lesson planning, teaching and managing large classes and multi-grade teaching be ideally included in the list of topics for CPDs in future.

Enhance the repertoire of modalities of CPD service delivery: FTF is the most suitable model for CPD to reach out to large numbers of teachers. In addition, creating learning groups at the school and cluster level will also provide an opportunity for the PSTs to share information, solution to common problems and learn from each other through sharing reading materials and lesson plans. Model lesson plans would also enhance PSTs repertoire of pedagogy, activities and concepts. However, other sources could be tried depending upon availability of resources such as the ICT facilities.

School-based ongoing CPD: Continuous learner centered, school-based support system is established for CPD along with its follow up support. Handholding is an important part of CPD that ensures absorption of new concepts and implementation of activities and pedagogy until learners comfortably use those in their own school/class setting. The benefits of this stage are manifold: first the CPD could take place in school; second, the trainees practically use the new knowledge in their classes with external support; third the trainers get direct feedback of what works in the school setting in a particular area and could modify CPD design to meets learners' specific needs. Fourth, teachers will save travel time, energy and cost. Fifth, the course could be selected and tailored to learners' specific needs and last the issues in teaching and learning process could be addressed as a team²⁶.

Create study groups: Creating study groups at school, UC and district level could be introduced whereby teachers meet and discuss new knowledge, issues and share experiences to learn from each other. Master trainers or scholars from universities. QAED and PEELI could join in remotely if it's not possible for them to be a part of a group study session physically. One of the key benefits of creating these groups will be establishing a learning

²⁶ <https://www.mdx.ac.uk/courses/short-courses-and-cpd/cpd-for-teachers-and-education-workers/school-based>

culture to improve SLOs and placing the best interest of pupils, for whom schools were established, at the center of importance.

Use of ICT for CPD interventions: CPD via ICT (radio, television, cell phones, tablets etc) could be pilot tested for urban and peri-urban areas where internet facility is available. An application (APP) could serve as the interface to a machine intelligence supported system of Cloud computing to access lectures, CPD modules, video library of lessons based on the new curriculum. In addition, the initiative provides a platform for PSTs to interact with their national and international counterparts to share experiences and form a learning community.

Involve PSTs to participate in the process of CPD development: PSTs are eager to receive CPD in future to improve their teaching practice and participate in the process of designing their CPD. They would like to learn more about managing and teaching large classes and multigame teaching in future. They also prefer coaching and mentoring that entails continuous support and follow up process and is only possible if a coach or a monitor is stationed in or pays regular visits to schools. This initiative would require to either train the head teacher or a senior teacher to take the responsibility or station MTs or DTEs in each school for a designated time period-week or month -on rotation basis. Involvement of PSTs in the process of CPD development could be done more successfully when system of providing school based CPD is in place. PSTs' involvement in CPD will ensure their learning needs are met and challenges addressed effectively.

Improve the process of on demand formal CPD for PSTs: Create or improve upon the existing process of on demand formal CPD for PSTs. The SED, QAED and PEELI could facilitate PSTs by improving dissemination of information, scheduling need based monthly CPD in schools as a part of school calendar. The cost-effective initiative will eliminate challenges such as travelling to cluster centers, duration of CPD, inclusion of generic topics and unsuitable schedules.

Annexures

Appendix 1. Detail of research methodology

Research Instrument for this study

All research instruments were shared with the British Council focal persons for their feedback. Once approved the research tools were pilot tested in Lahore. List of research instruments has been given in Annex – B.

Following research tools was designed and used for data collection for this study:

Survey questionnaire

A paper-based survey questionnaire (See Annex-C), designed to collect quantitative data, included eight sections. Numbers of questions in each section varied mainly depending upon the information required from the respondents.

The first section aimed to obtain demographic data and professional history. The second focused on details of CPDs attended by the respondents while the third sought PSTs opinion regarding quality of trainings attended in the past. The next section aimed to record PSTs perception of the impact of trainings they attended in the past on their pedagogy, knowledge and classroom practice. The fifth section aspired to understand the key challenges PSTs face in teaching their classes in primary schools whereas the following section probed into PSTs willingness to attend trainings in future. The last section of the questionnaire aimed to discover the challenges PSTs face to attend existing CPD trainings and recommendations for overcoming the issues.

In-depth Interviews (IDIs)

Each 30-40 minutes long paper-based IDI with PSTs was tape-recorded. Where consent was absent the researcher abstained from recording the interview. Each IDI questionnaire included 6-7 open-ended questions and 4-5 prompt questions that were used by the interviewer to probe further into the topic. The interviewers also took notes so that the information could be crosschecked with the recorded interviews.

In total 12 IDIs were conducted with PSTs - one per district. Questionnaire for IDIs with PSTs has been appended as Annex – D.

Key Informant Interviews (KIIs)

Each 30 minutes long KII was conducted with head teachers, representatives of QAED and PEELI. Project head, course coordinators and master trainers (MT) were interviewed from QAED. Master trainer and British council project coordinator were interviewed from PEELI. Each KII questionnaire included open and close ended questions and prompts to understand respondent point of view regarding existing CPD opportunities, their strengths and weaknesses along with other options that could be effective, cost efficient and reach out to larger number of PSTs and enhance their learning. Questionnaires for KIIs have been appended as Annex – E.

After finalizing the research tools, the following activities were undertaken:

Field Staff Training

Locally hired experienced fieldworkers/enumerators (field teams) provided a two-day rigorous training that consisted of an orientation session to familiarise them about the research study, its structure and purpose and research instruments. The field team training agenda has been presented as **Annex - F**.

The field teams pilot-tested the research instruments in Lahore that helped the research team to assess the tools and enabled fieldworkers understand the nature of study. At the end of the training sessions data collection plan and a clearly chalked out routing plan was shared with the field teams and their supervisors who monitored the process of data collection on daily basis.

Data Entry, Management and Analysis

The data was collected and analyzed using the convergent parallel data analysis approach whereby the data is collected simultaneously, compared and finally interpreted.

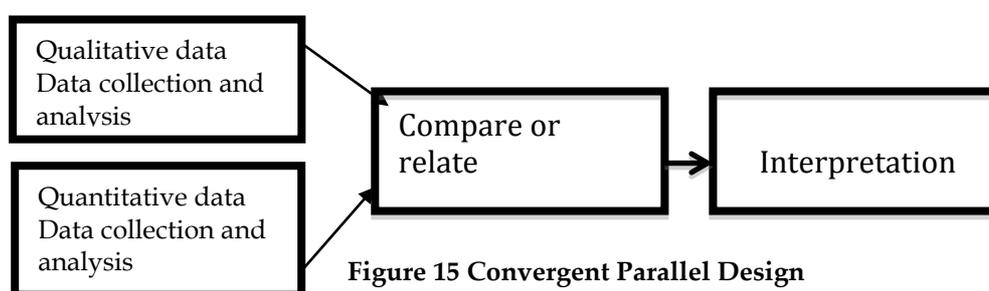


Figure 15 Convergent Parallel Design

Quantitative Data

Following steps were taken to collect, enter and analyse quantitative data:

1. Field teams used a paper-based survey for quantitative data collection and followed the field plan shared with them.
2. At the end of each working day, a debriefing meeting took place and the fieldworkers shared their experiences (findings and problems etc.) with their peers and supervisors. The supervisors checked the survey forms for quality of data collected and took suitable action where the data did not meet the prerequisite standard.
3. During fieldwork, the data-entry operators manually entered quantitative and qualitative data into a computer soon after completing fieldwork activities.
4. Upon return from the field the deployed team, matched the questionnaires with the data entered in computers to ensure data integrity and took corrective steps where needed.
5. All the quantitative data was stored in Excel-format database that was used for descriptive analysis.

Qualitative Data

Listed below are the steps followed for qualitative data collection, entry and analysis:

1. The enumerators and consultants took notes and tape-recorded all the IDIs and KIIs.
2. Qualitative findings were coded, logged, and analysed for emerging trends. The step was particularly useful when dealing with factors, which required a more significant level of explanation and subsequent discussion.
3. The findings from qualitative data were compared with the available data sources to reach to conclusions for this study.

Quality assurance during the data collection

Quality assurance was ensured throughout the data collection and data entry and analysis process via thorough monitoring of the field-teams and record work-progress on daily basis.

¹ The key characteristics of adult learning that include the following:

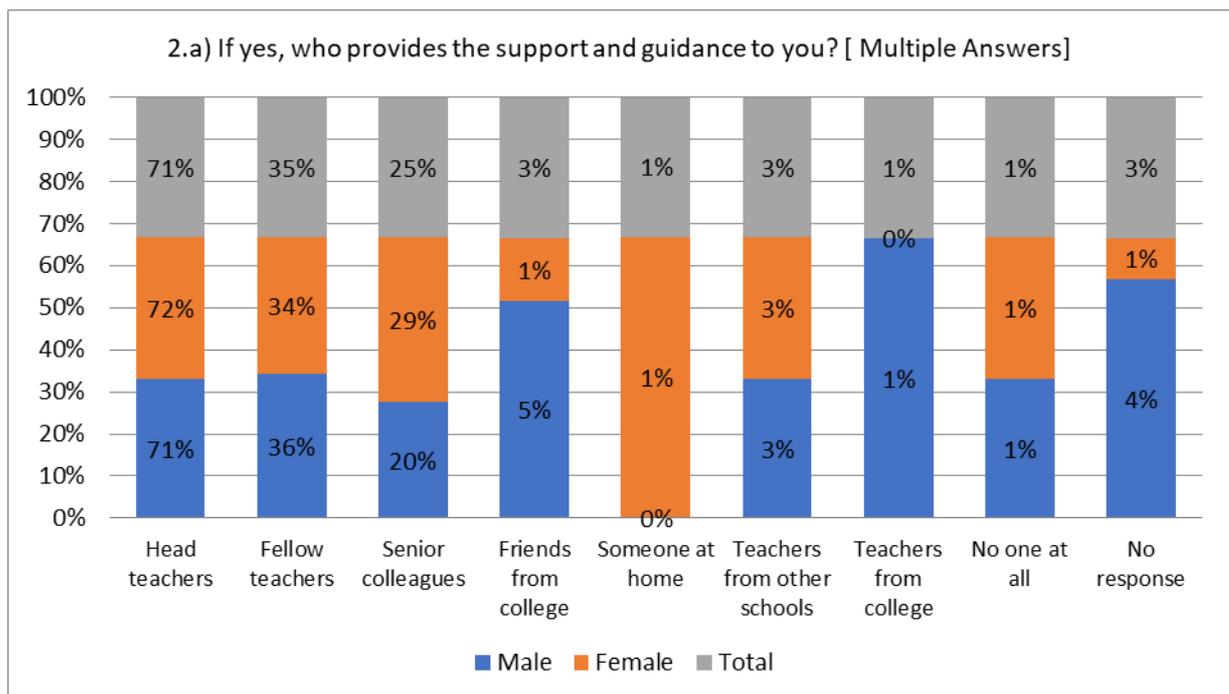
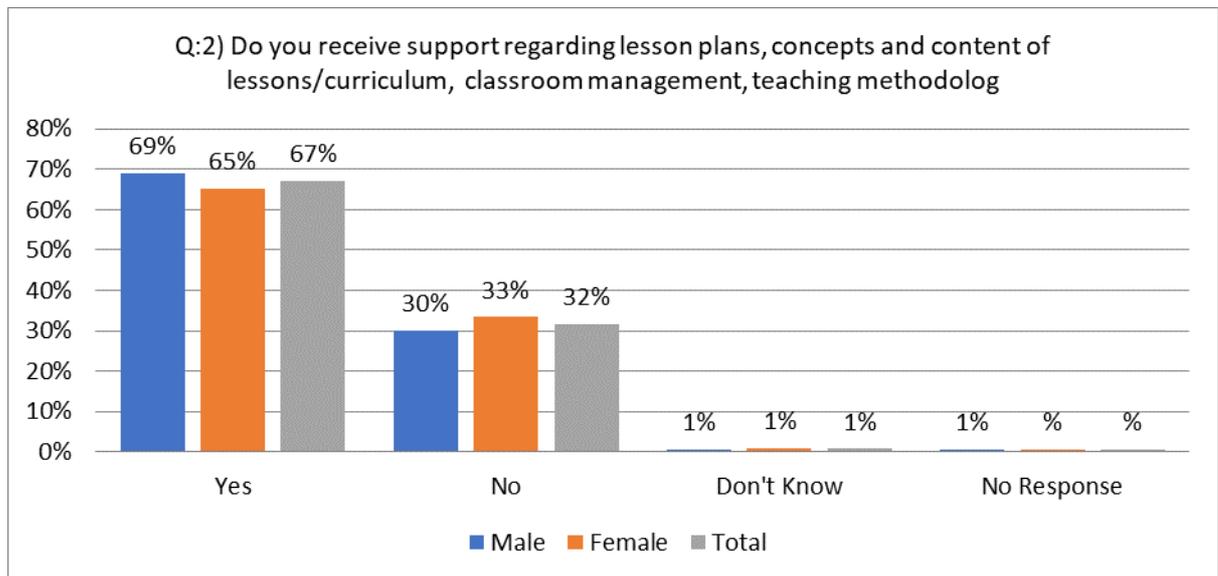
1. **Self-concept:** As an individual matures his/her self-concept moves from one of the a being a dependent personality to one of being self-directed human being
2. **Experience:** As a person matures he accumulates a growing reservoir of experience that becomes an increasing resource for learning.
3. **Readiness to learn.** As a person matures his readiness to learn becomes oriented increasingly to the developmental tasks of his social roles.
4. **Orientation to learning.** As a person matures his time perspective changes from one of postponed application of knowledge to immediacy of application, and accordingly his orientation toward learning shifts from one of subject-centeredness to one of problem centeredness.
5. **Motivation to learn:** *As a person matures the motivation to learn is internal* (Knowles 1984:12 in Smith, M., 2002)¹

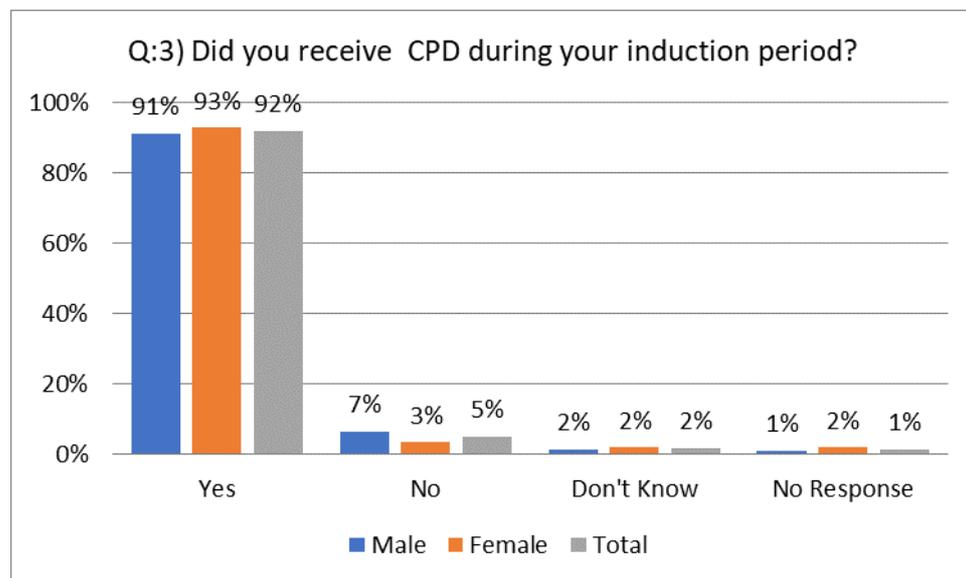
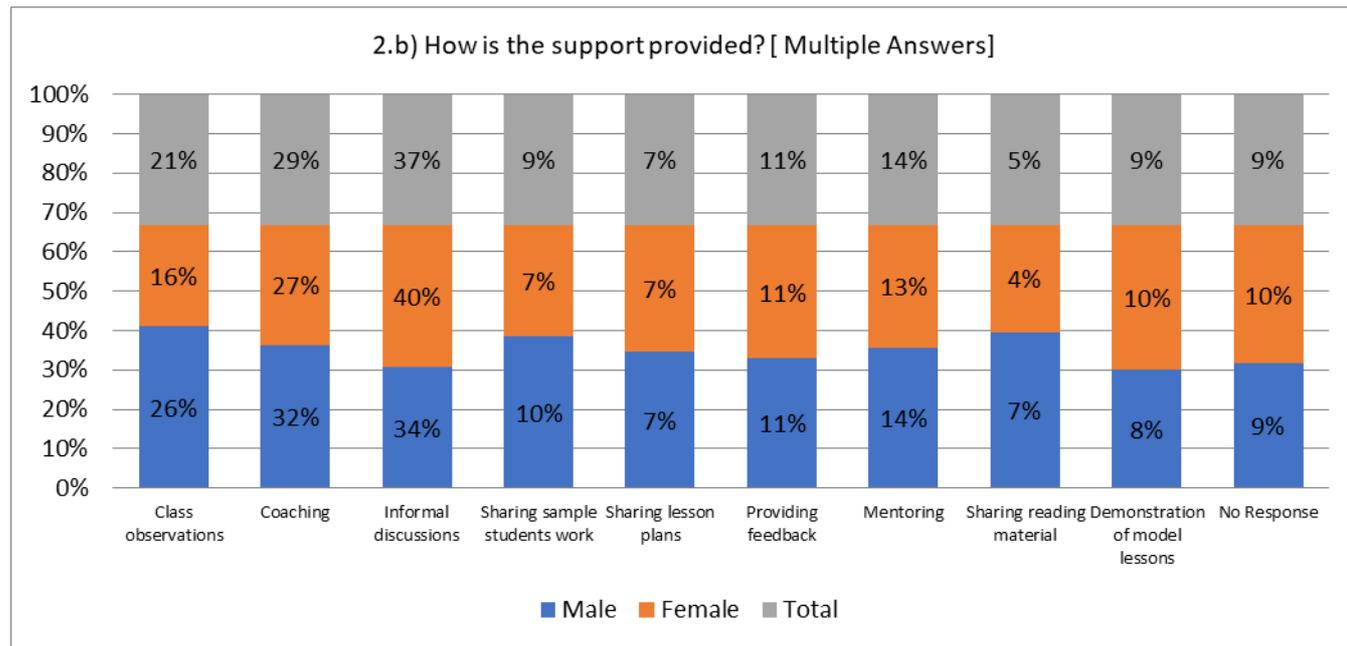
Also, according to Knowles (1984) there are four principles that are applied to adult learning:

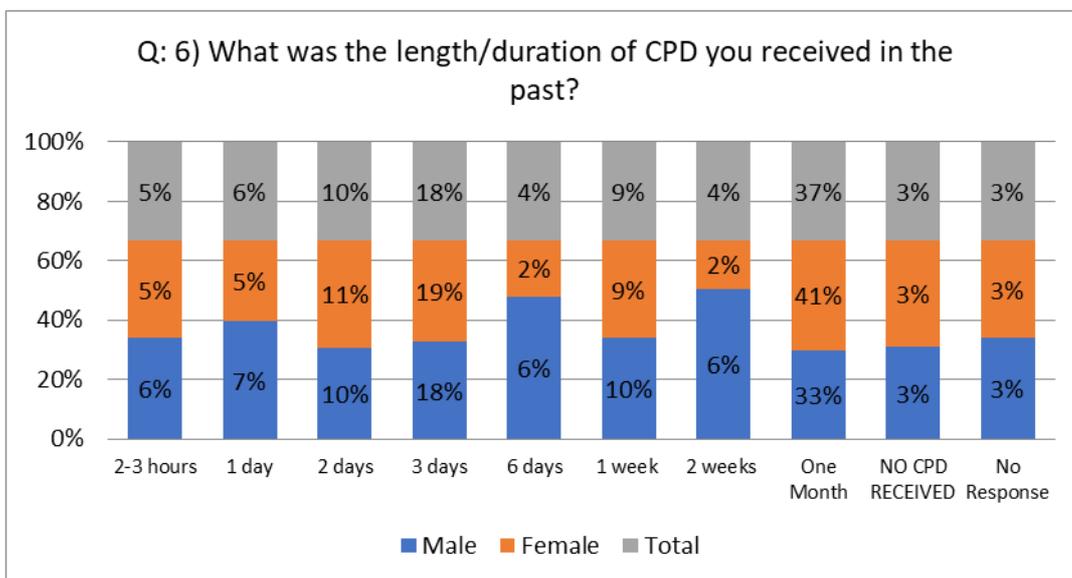
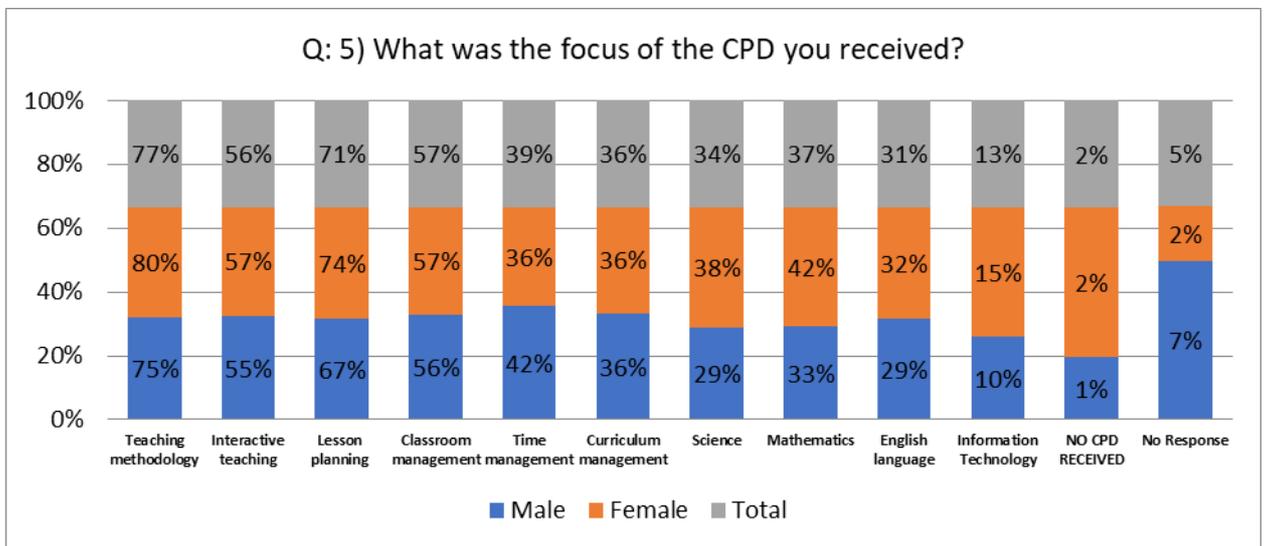
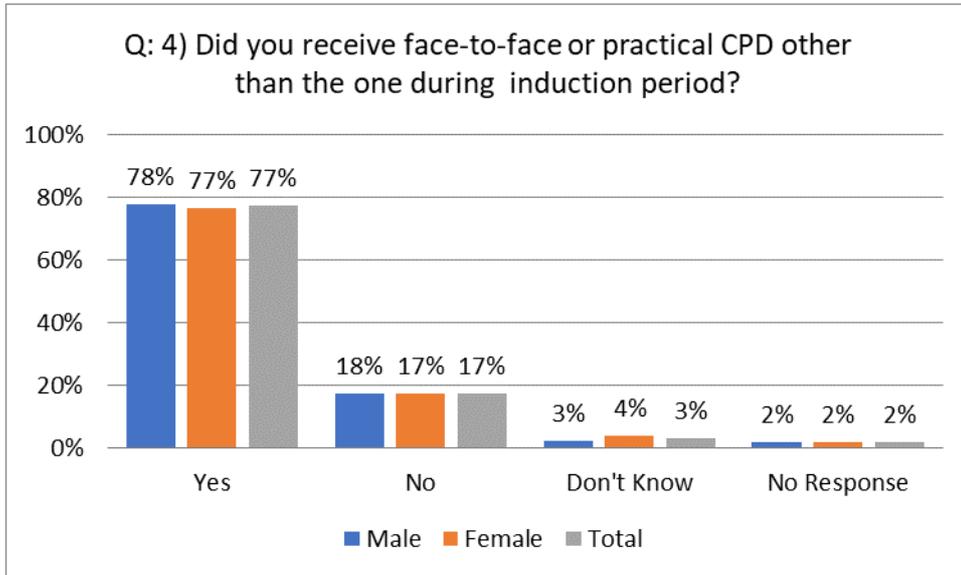
1. Adults need to be involved in the planning and evaluation of their instruction.
2. Experience (including mistakes) provides the basis for learning activities.
3. Adults are most interested in learning subjects that have immediate relevance to their job or personal life.
4. Adult learning is problem-centered rather than content-oriented (Kearsley, 2010)

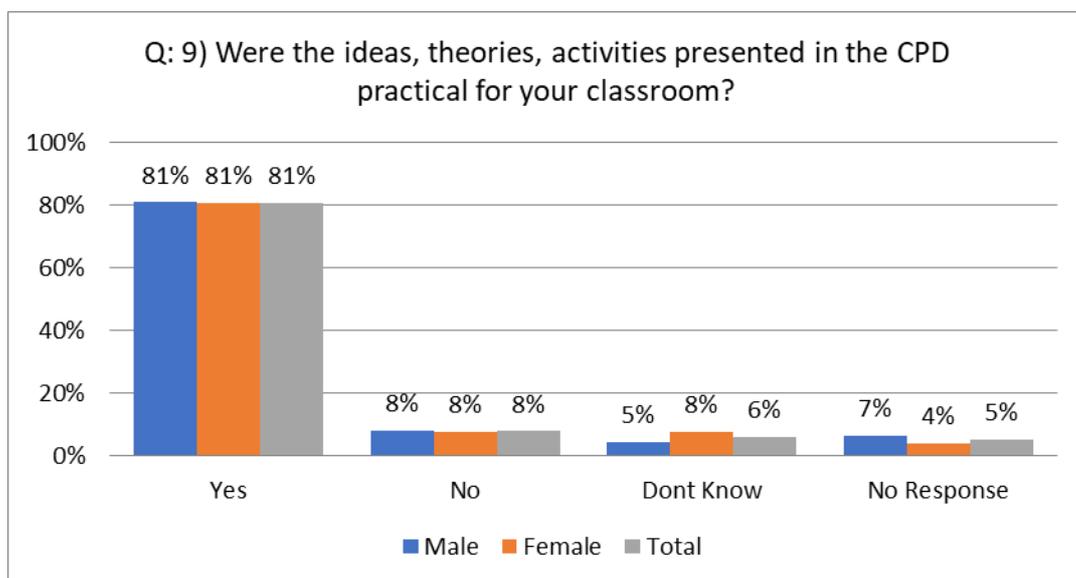
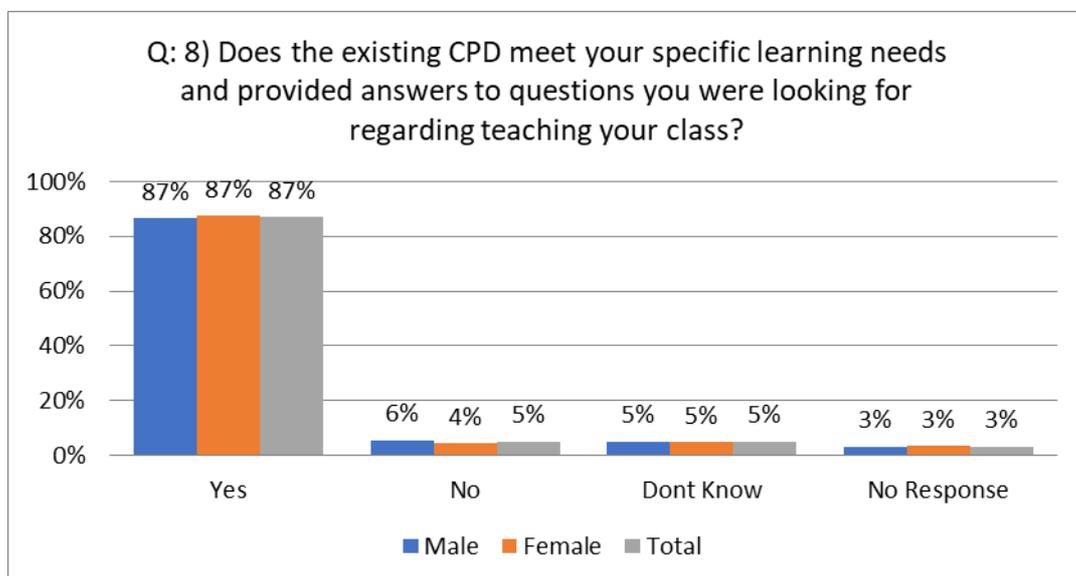
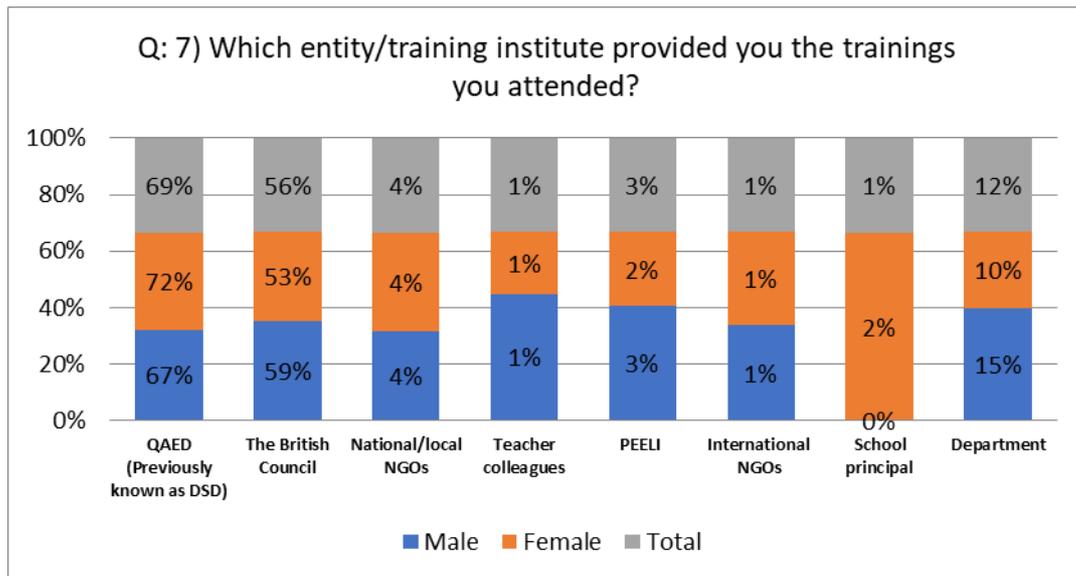
Annexure

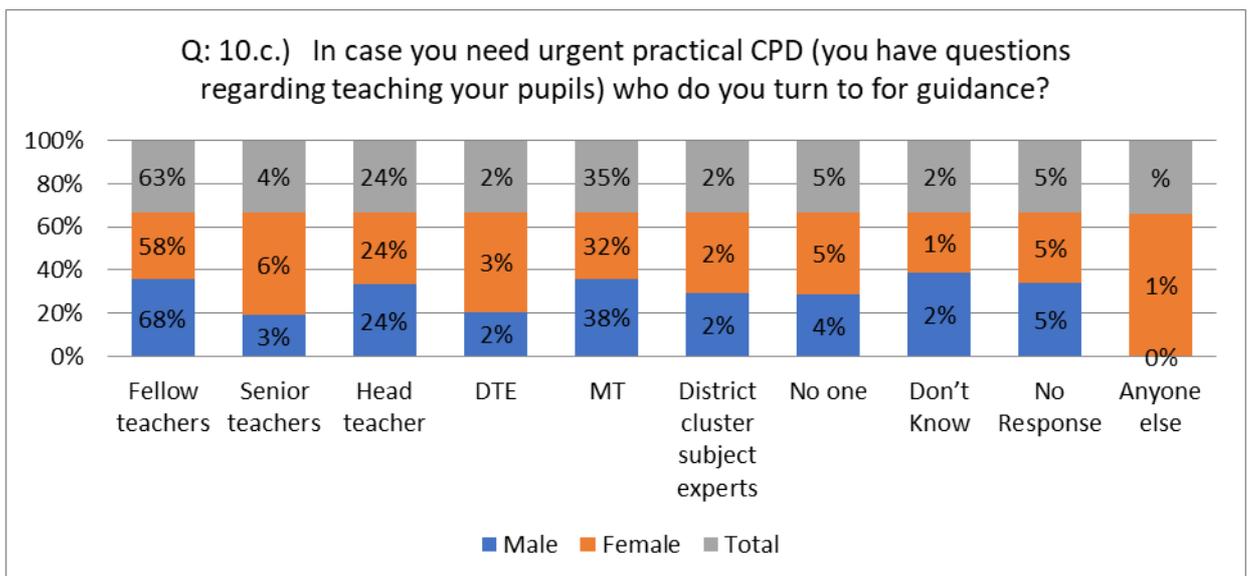
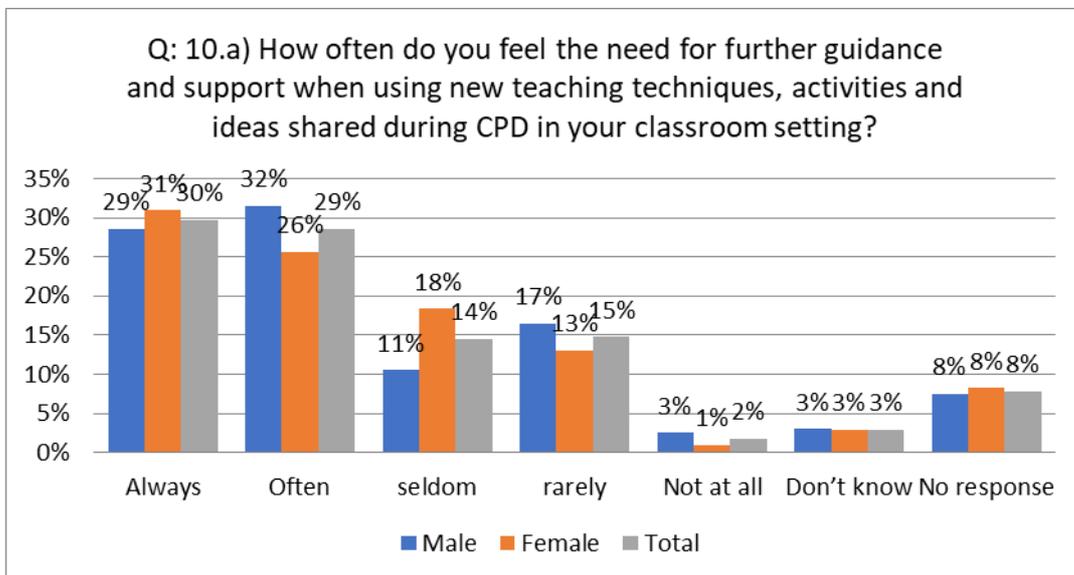
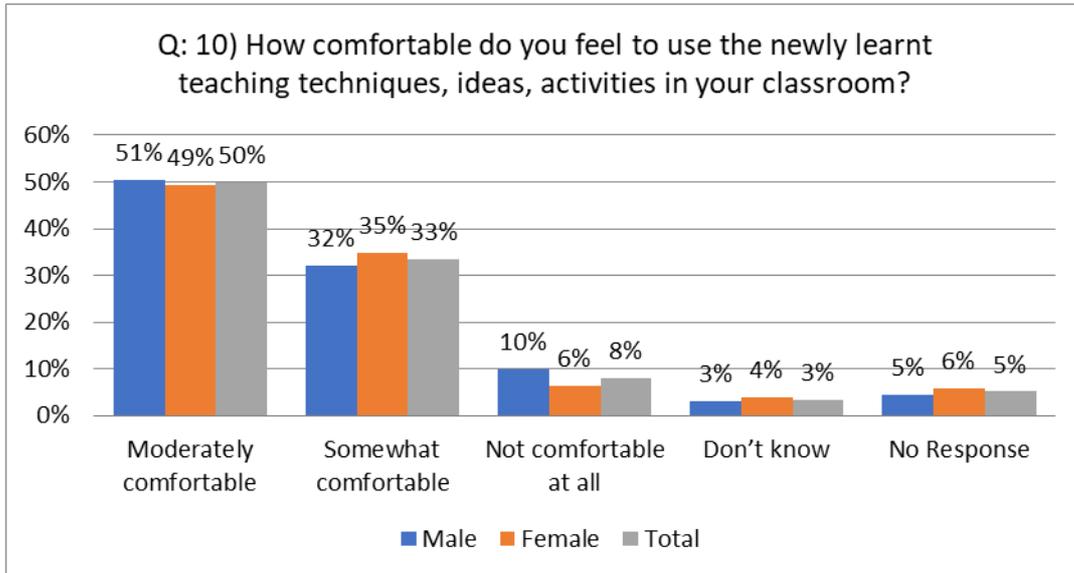
Annex – A Graphs

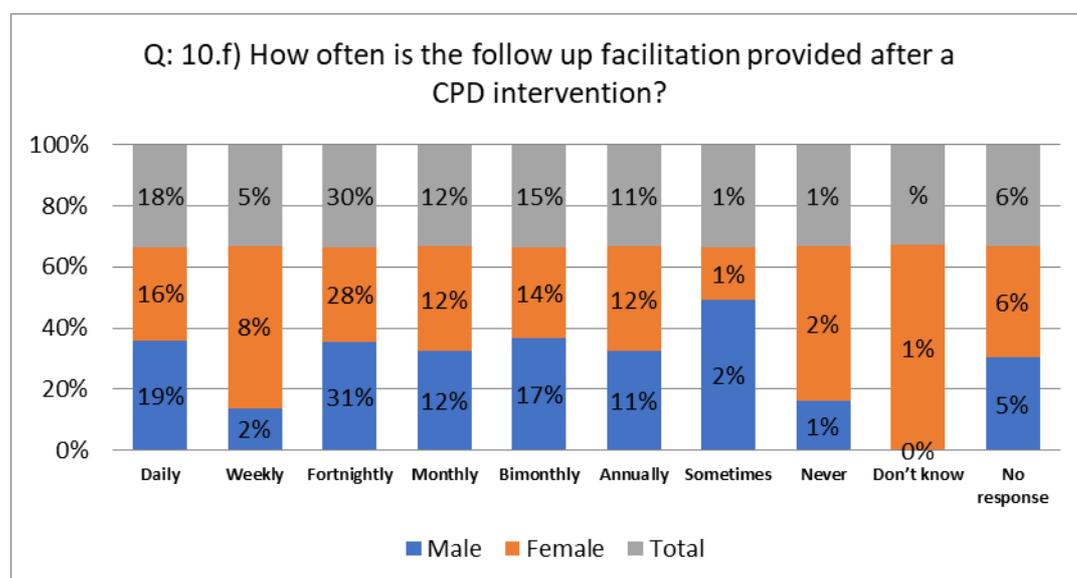
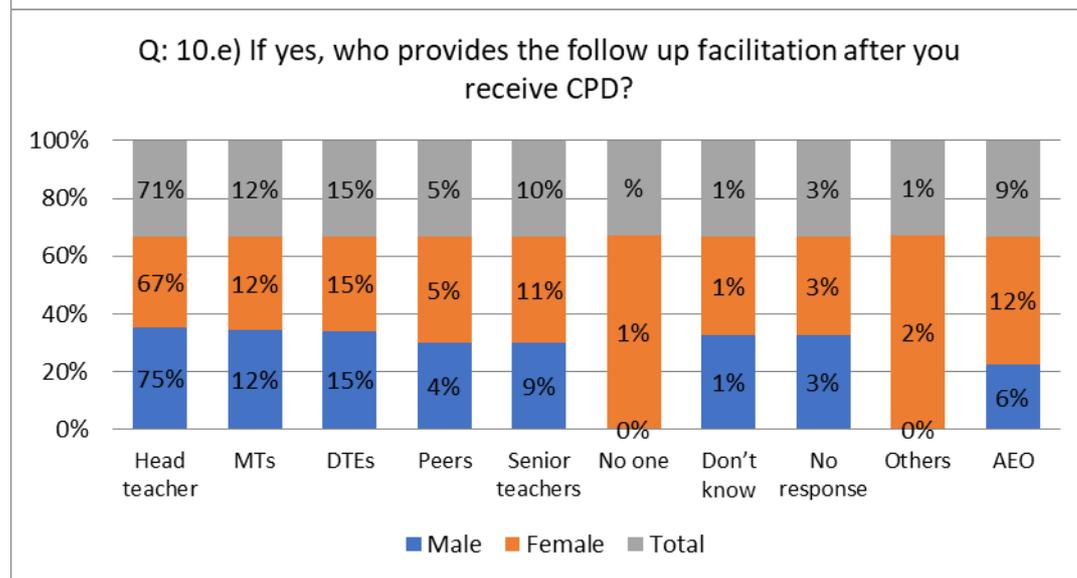
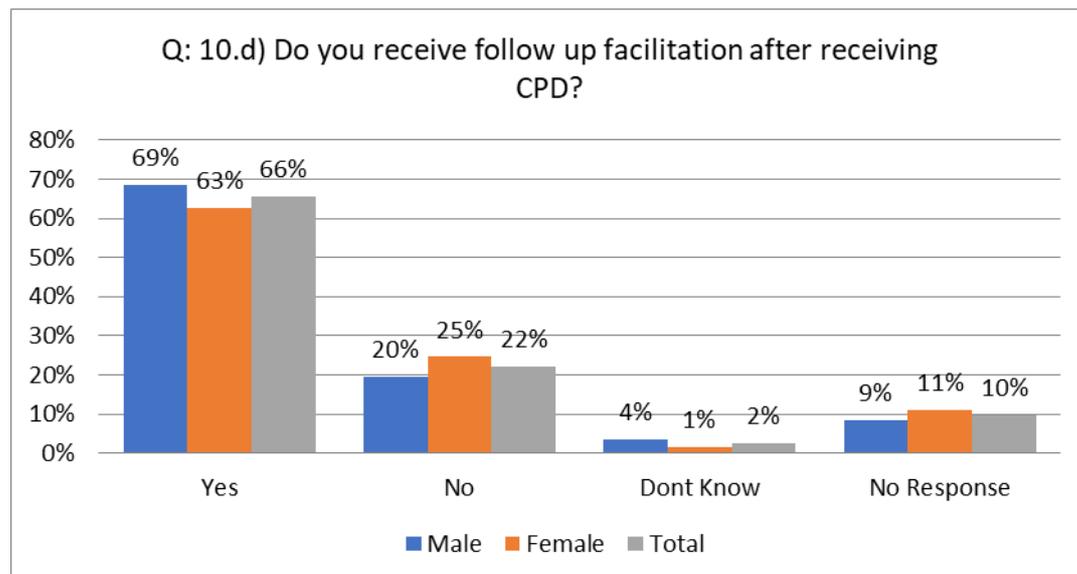


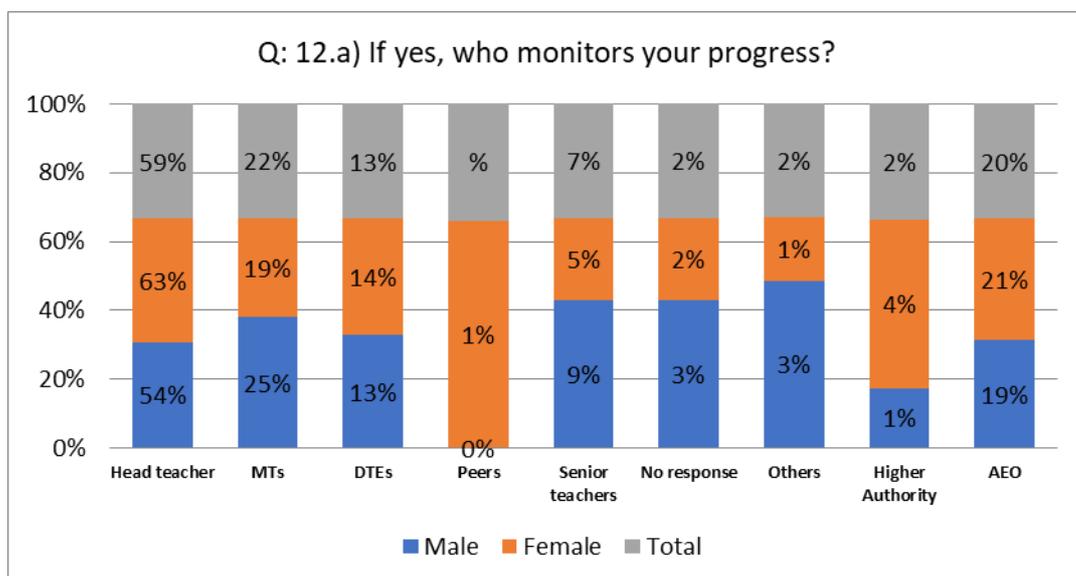
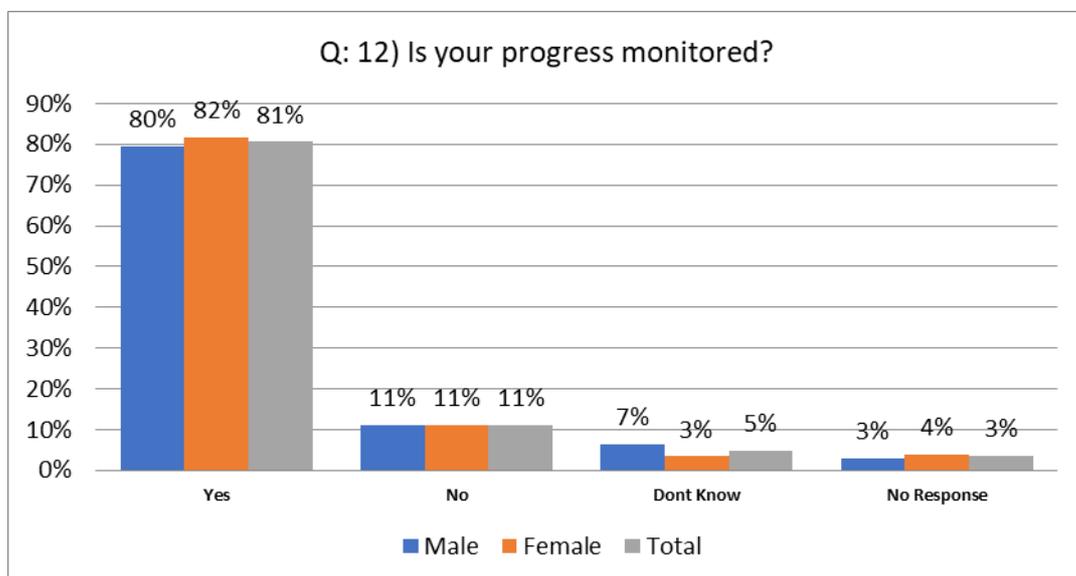
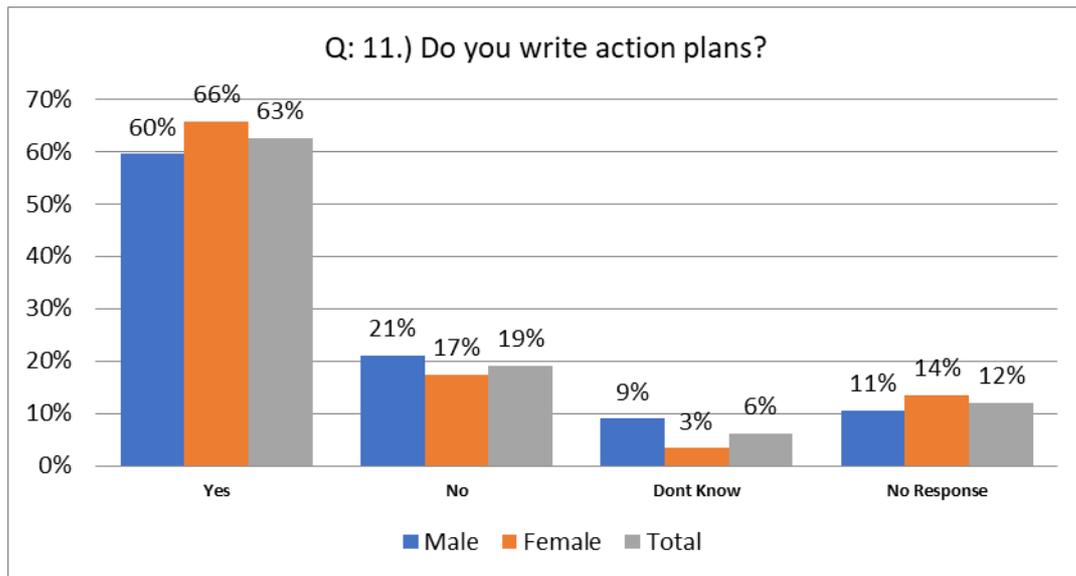


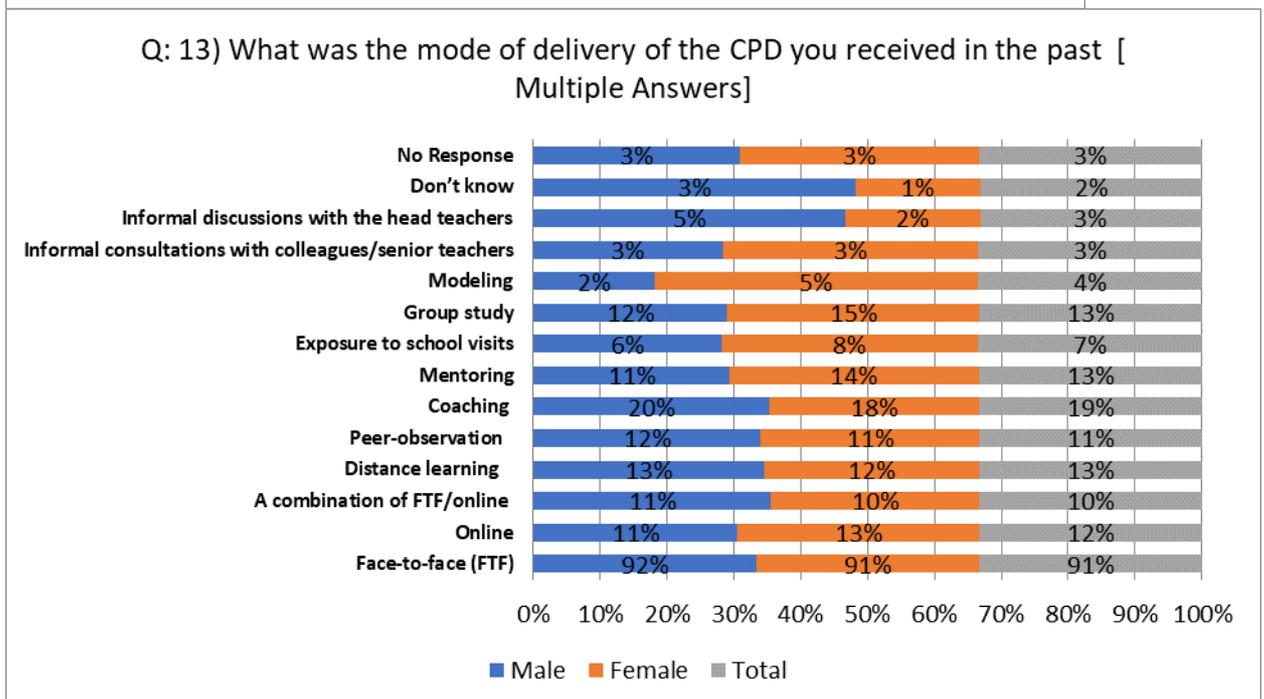
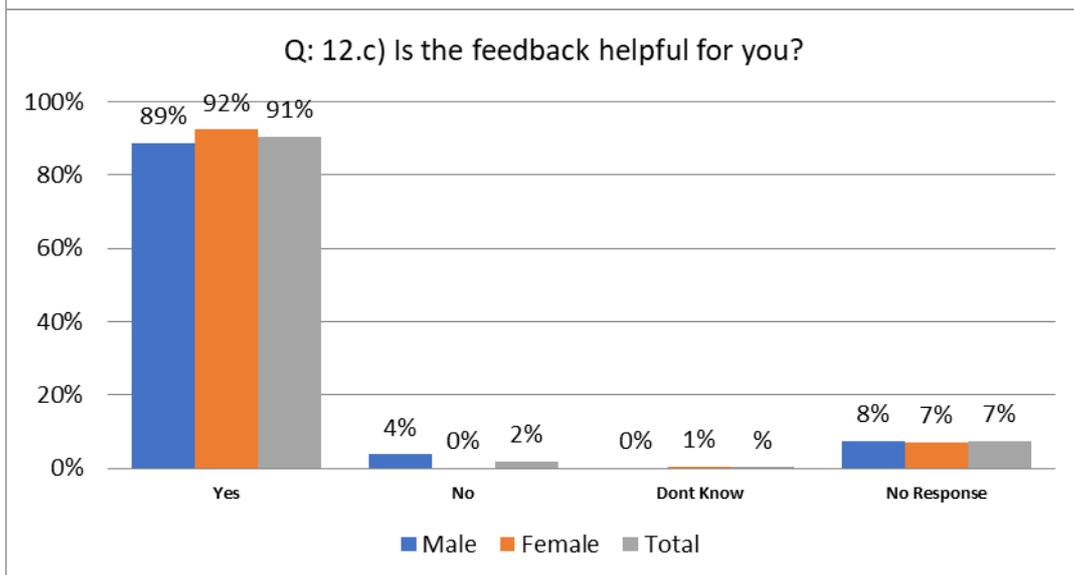
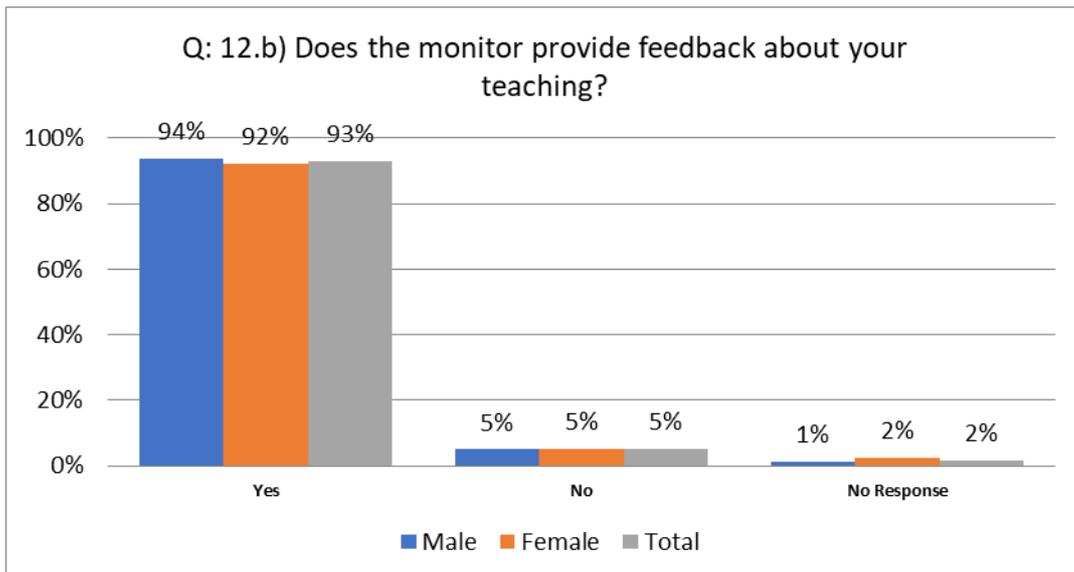


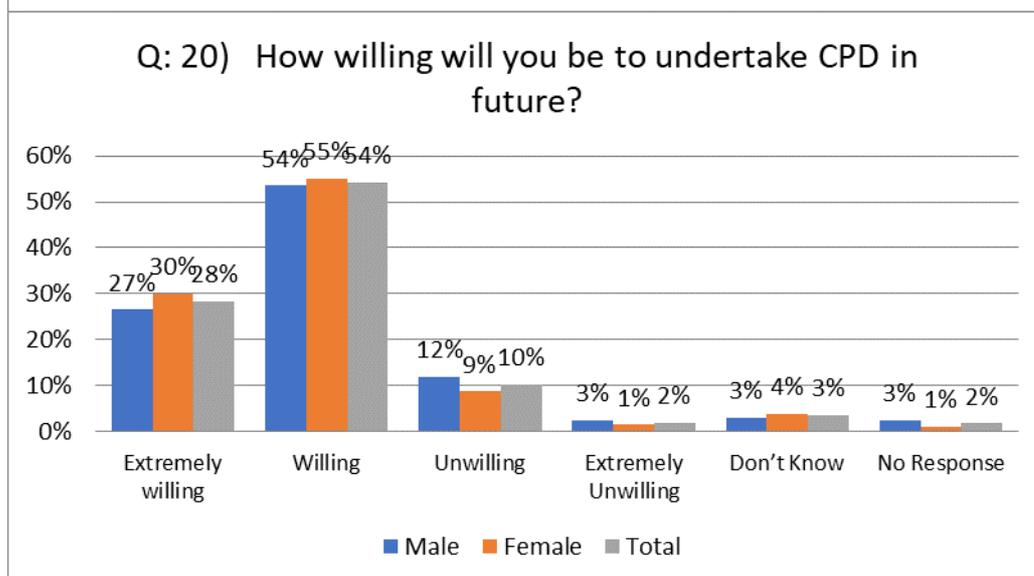
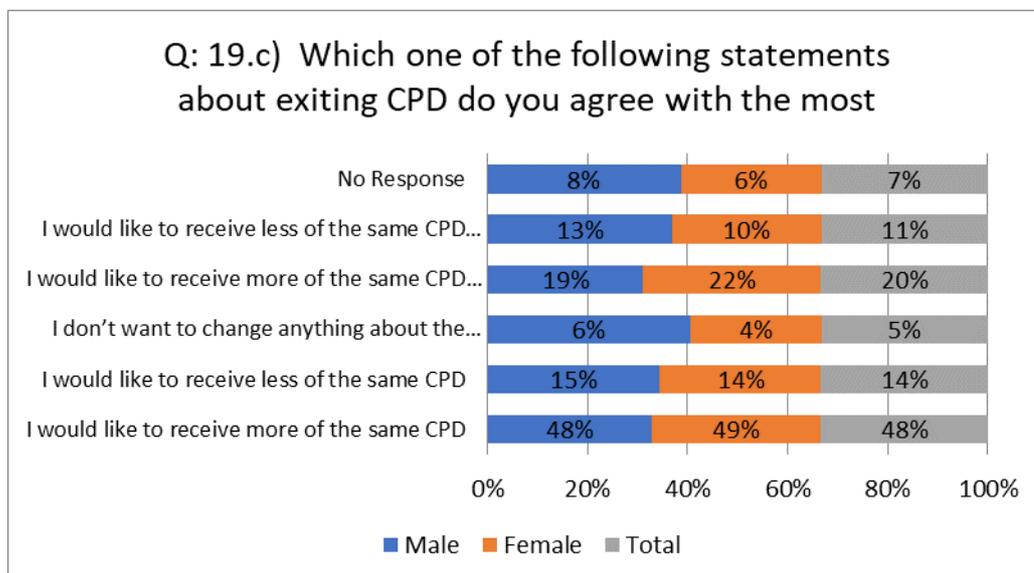
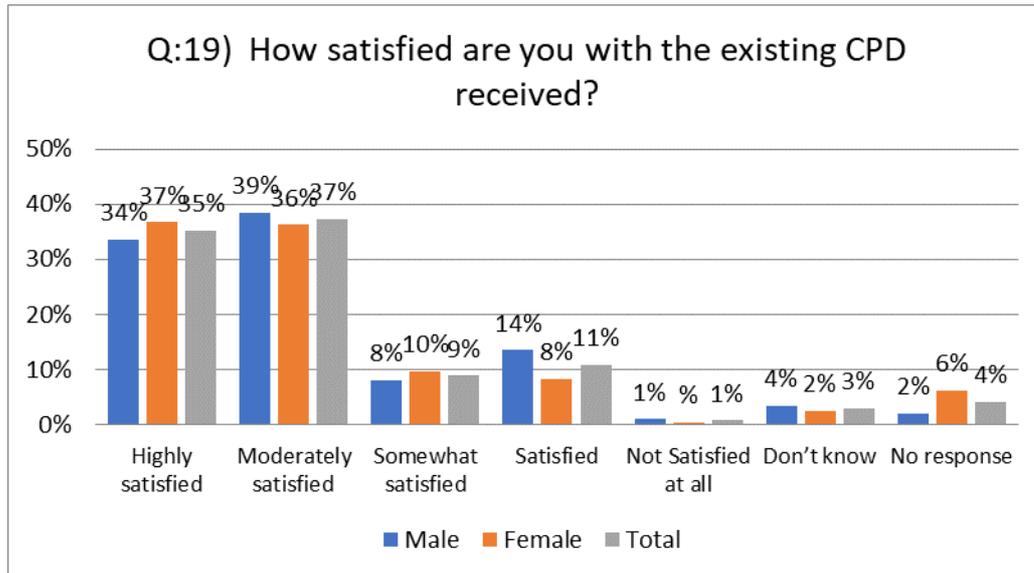


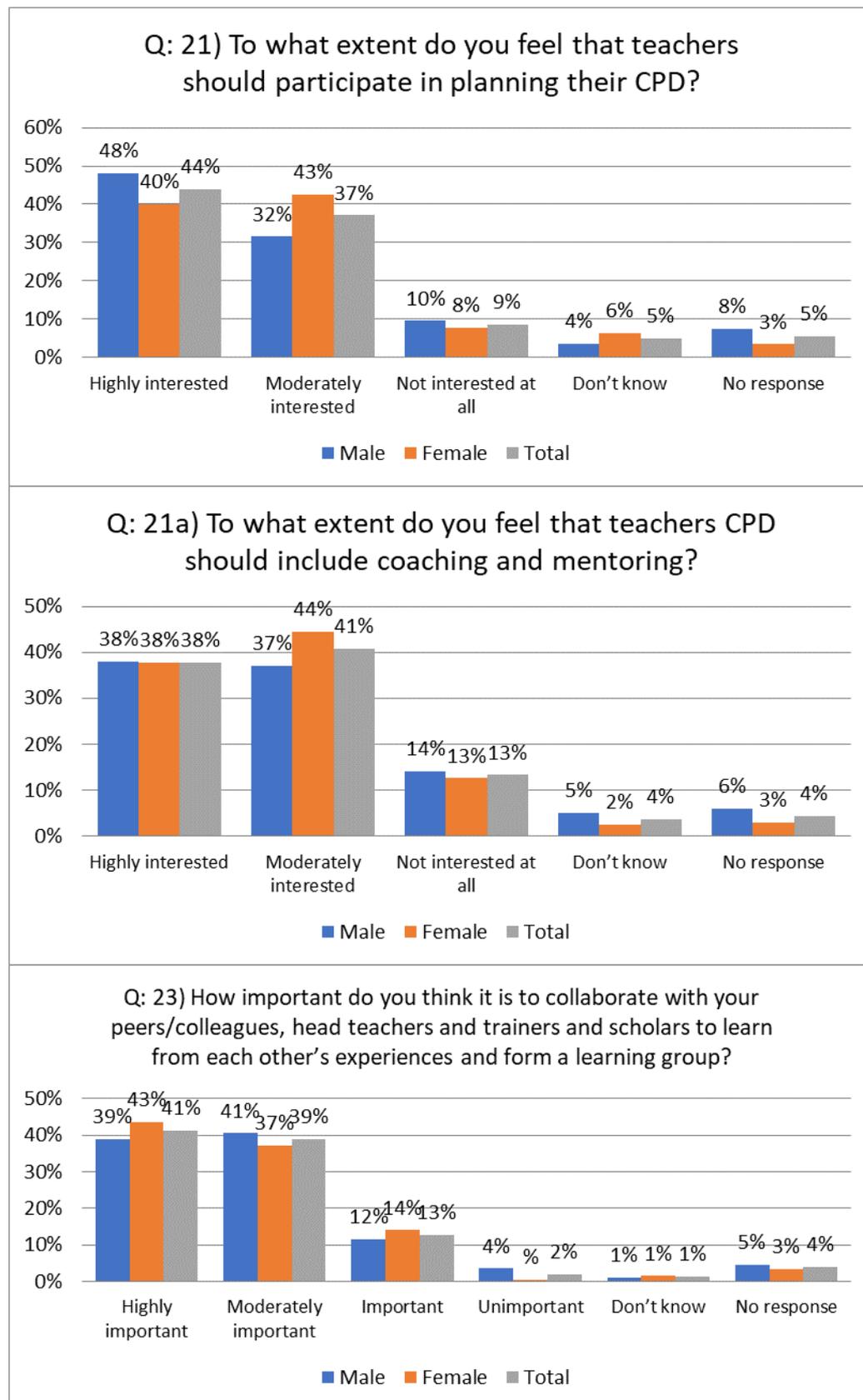


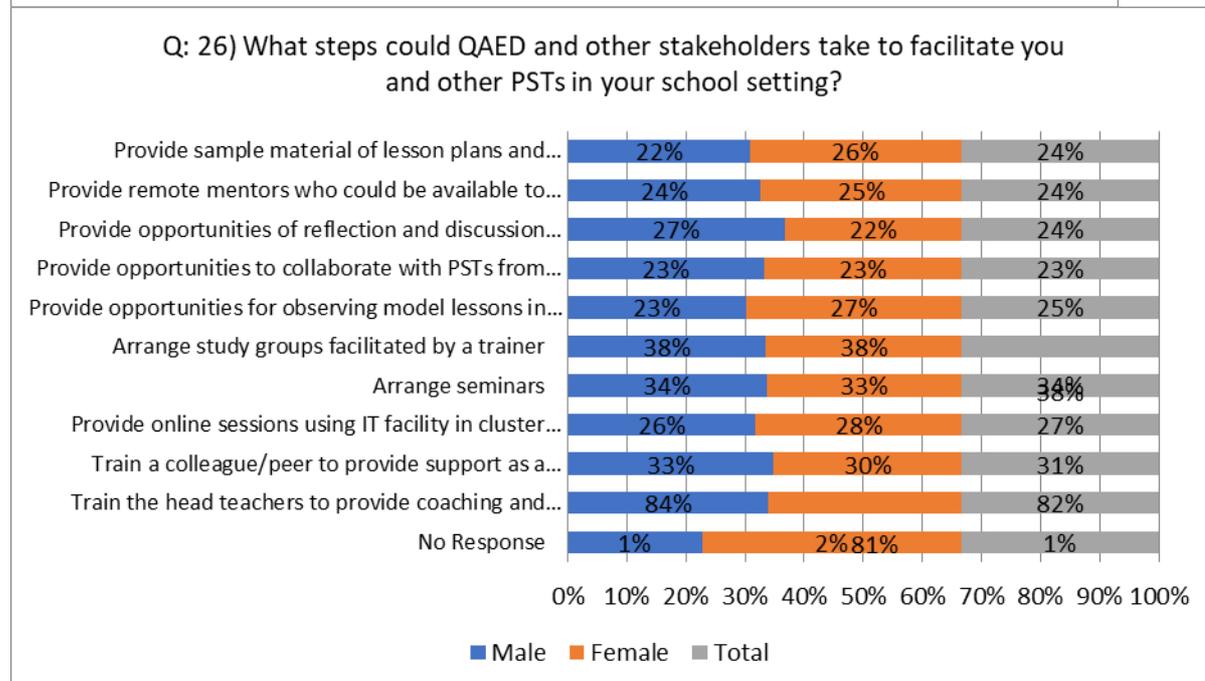
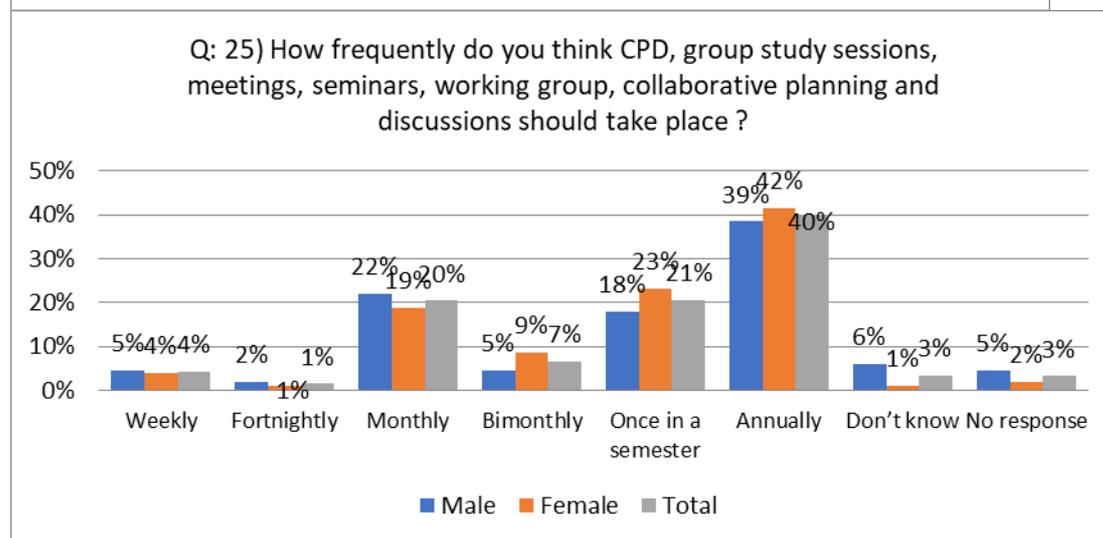
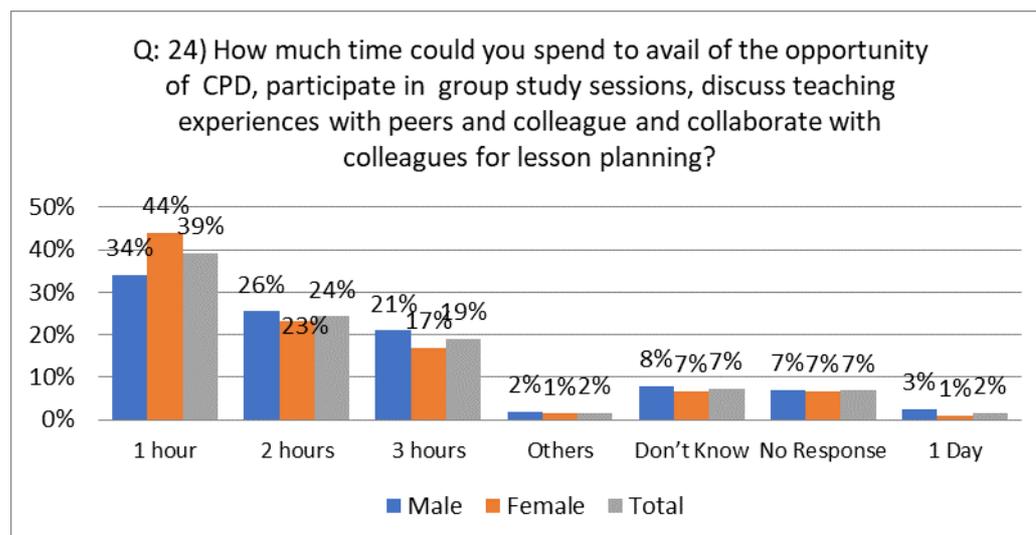


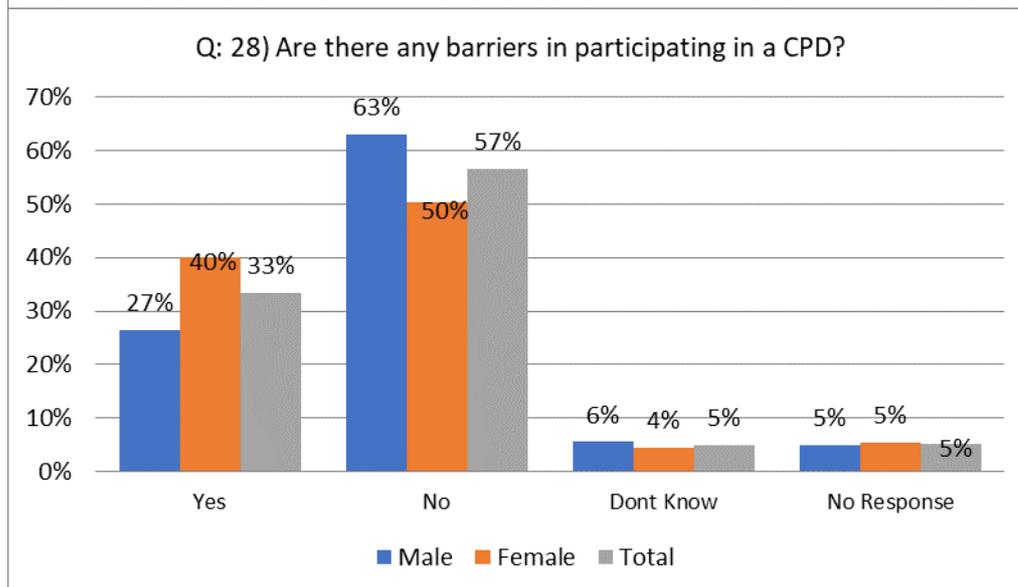
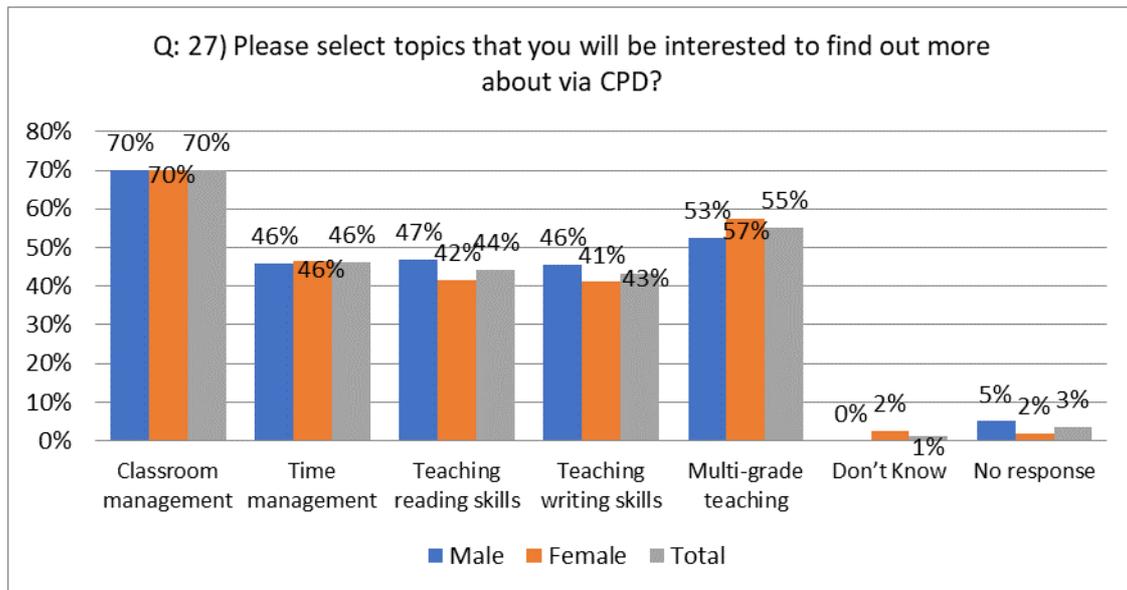












Annex – B Tables

District Wise Sample						
	Gender					
	Male		Female		Total	
	#	%	#	%	#	%
Attock	18	9%	16	8%	34	8%
Chakwal	15	8%	19	9%	34	8%
Dera Ghazi Khan	18	9%	16	8%	34	8%
Faisalabad	18	9%	16	8%	34	8%
Lahore	14	7%	20	10%	34	8%
Lodhran	18	9%	16	8%	34	8%
Multan	16	8%	18	9%	34	8%
Muzaffar Garh	16	8%	18	9%	34	8%
Rawalpindi	15	8%	18	9%	33	8%
Shaikhupura	18	9%	16	8%	34	8%
Sialkot	18	9%	16	8%	34	8%
Sahiwal	16	8%	18	9%	34	8%
Total	200	100%	207	100%	407	100%

District Wise and Age Group Wise Sample												
	Age group											
	No Response		20 - 30		31 - 40		41 - 50		51 - 60		Total	
	#	%	#	%	#	%	#	%	#	%	#	%
Attock	0	0%	21	13%	4	4%	9	9%	0	0%	34	8%
Chakwal	1	17%	17	11%	10	9%	2	2%	4	11%	34	8%
Dera Ghazi Khan	0	0%	4	2%	9	8%	15	16%	6	17%	34	8%
Faisalabad	0	0%	10	6%	6	6%	13	14%	5	14%	34	8%
Lahore	2	33%	14	9%	10	9%	7	7%	1	3%	34	8%
Lodhran	0	0%	10	6%	16	15%	5	5%	3	9%	34	8%
Multan	0	0%	11	7%	8	7%	12	13%	3	9%	34	8%
Muzaffar Garh	0	0%	13	8%	12	11%	5	5%	4	11%	34	8%
Rawalpindi	1	17%	14	9%	5	5%	8	8%	5	14%	33	8%
Shaikhupura	1	17%	15	9%	8	7%	7	7%	3	9%	34	8%
Sialkot	1	17%	12	7%	12	11%	9	9%	0	0%	34	8%
Sahiwal	0	0%	20	12%	9	8%	4	4%	1	3%	34	8%
Total	6	100%	161	100%	109	100%	96	100%	35	100%	407	100%

Q:2) Do you receive support regarding lesson plans, concepts and content of lessons/curriculum, classroom management, teaching methodolog

	Gender		
	Male	Female	Total
Yes	69%	65%	67%
No	30%	33%	32%
Don't Know	1%	1%	1%
No Response	1%	%	%
Total	200	207	407

2.a) If yes, who provides the support and guidance to you? [Multiple Answers]

	Gender		
	Male	Female	Total
Head teachers	71%	72%	71%
Fellow teachers	36%	34%	35%
Senior colleagues	20%	29%	25%
Friends from college	5%	1%	3%
Someone at home	0%	1%	1%
Teachers from other schools	3%	3%	3%
Teachers from college	1%	0%	1%
No one at all	1%	1%	1%
No response	4%	1%	3%
Total	138	135	273

2.b) How is the support provided? [Multiple Answers]

	Gender		
	Male	Female	Total
Class observations	26%	16%	21%
Coaching	32%	27%	29%
Informal discussions	34%	40%	37%
Sharing sample students work	10%	7%	9%
Sharing lesson plans	7%	7%	7%
Providing feedback	11%	11%	11%
Mentoring	14%	13%	14%
Sharing reading material	7%	4%	5%
Demonstration of model lessons	8%	10%	9%
No Response	9%	10%	9%
Total	138	135	273

Q:3) Did you receive CPD during your induction period?			
	Gender		
	Male	Female	Total
Yes	91%	93%	92%
No	7%	3%	5%
Don't Know	2%	2%	2%
No Response	1%	2%	1%
Total	200	207	407

Q:4) Did you receive CPD other than the one during induction period?			
	Gender		
	Male	Female	Total
Yes	78%	77%	77%
No	18%	17%	17%
Don't Know	3%	4%	3%
No Response	2%	2%	2%
Total	200	207	407

Q:5) What was the focus of the CPD you received? [Multiple Answers]			
	Gender		
	Male	Female	Total
Teaching methodology	75%	80%	77%
Interactive teaching	55%	57%	56%
Lesson planning	67%	74%	71%
Classroom management	56%	57%	57%
Time management	42%	36%	39%
Curriculum management	36%	36%	36%
Science	29%	38%	34%
Mathematics	33%	42%	37%
English language	29%	32%	31%
Information Technology	10%	15%	13%
NO CPD RECEIVED	1%	2%	2%
No Response	7%	2%	5%
Total	200	207	407

Q:6) What was the duration of CPD you received in the past?
--

	Gender		
	Male	Female	Total
2-3 hours	6%	5%	5%
1 day	7%	5%	6%
2 days	10%	11%	10%
3 days	18%	19%	18%
6 days	6%	2%	4%
1 week	10%	9%	9%
2 weeks	6%	2%	4%
One Month	33%	41%	37%
NO CPD RECEIVED	3%	3%	3%
No Response	3%	3%	3%
Total	200	207	407

Q:7) Which entity provided you the CPD you received? [Multiple Answers]

	Gender		
	Male	Female	Total
QAED (Previously known as DSD)	67%	72%	69%
The British Council	59%	53%	56%
National/local NGOs	4%	4%	4%
Teacher colleagues	1%	1%	1%
PEELI	3%	2%	3%
International NGOs	1%	1%	1%
School principal	0%	2%	1%
Department	15%	10%	12%
Total	195	200	395

Q:8) Does the existing CPD meet your specific learning needs and answers your questions regarding teaching your class?

	Gender		
	Male	Female	Total
Yes	87%	87%	87%
No	6%	4%	5%
Dont Know	5%	5%	5%
No Response	3%	3%	3%
Total	200	207	407

Q:9) Were the ideas, theories, activities presented in the CPD practical?

	Gender		
	Male	Female	Total
Yes	81%	81%	81%
No	8%	8%	8%
Dont Know	5%	8%	6%
No Response	7%	4%	5%
Total	200	207	407

Q:10) How comfortable do you feel to use the newly learnt teaching techniques, ideas, activities in your classroom ?

	Gender		
	Male	Female	Total
Moderately comfortable	51%	50%	50%
Somewhat comfortable	32%	35%	33%
Not comfortable at all	10%	6%	8%
Don't know	3%	4%	3%
5	2%	3%	2%
No Response	3%	2%	3%
Total	200	206	406

Q: 10.a) How often do you feel the need for further guidance and support when using new teaching techniques, activities and ideas shared during CPD in your classroom setting?

	Gender		
	Male	Female	Total
Often	29%	31%	30%
seldom	32%	26%	29%
rarely	11%	18%	14%
Not at all	17%	13%	15%
Don't know	3%	1%	2%
No response	3%	3%	3%
7	8%	8%	8%
Total	200	207	407

Q: 10.c.) In case you need help or have questions regarding teaching your pupils, who do you turn to for guidance? [Multiple Answers]

	Gender		
	Male	Female	Total
Fellow teachers	68%	58%	63%
Senior teachers	3%	6%	4%
Head teacher	24%	24%	24%
DTE	2%	3%	2%
MT	38%	32%	35%
District cluster subject experts	2%	2%	2%
No one	4%	5%	5%
Don't Know	2%	1%	2%
No Response	5%	5%	5%
Anyone else	0%	1%	%
Total	200	207	407

Q: 10.d) Do you receive follow up support after receiving CPD			
	Gender		
	Male	Female	Total
Yes	69%	63%	66%
No	20%	25%	22%
Dont Know	4%	1%	2%
No Response	9%	11%	10%
Total	200	207	407

Q: 10.e) If yes, who provides the follow up facilitation after a CPD intervention? [Multiple Answers]			
	Gender		
	Male	Female	Total
Head teacher	75%	67%	71%
MTs	12%	12%	12%
DTEs	15%	15%	15%
Peers	4%	5%	5%
Senior teachers	9%	11%	10%
No one	0%	1%	%
Don't know	1%	1%	1%
No response	3%	3%	3%
Others	0%	2%	1%
AEO	6%	12%	9%
Total	137	130	267

Q:10.f) How often is the follow up facilitation provided after a CPD intervention?			
	Gender		
	Male	Female	Total
Daily	19%	16%	18%
Weekly	2%	8%	5%
Fortnightly	31%	28%	30%
Monthly	12%	12%	12%
Bimonthly	17%	14%	15%
Annually	11%	12%	11%
Sometimes	2%	1%	1%
Never	1%	2%	1%
Don't know	0%	1%	%
No response	5%	6%	6%
Total	137	130	267

Q:11.) Do you write action plans?			
	Gender		
	Male	Female	Total
Yes	60%	66%	63%
No	21%	17%	19%
Dont Know	9%	3%	6%
No Response	11%	14%	12%
Total	200	207	407

Q:12) Is your progress monitored?			
	Gender		
	Male	Female	Total
Yes	80%	82%	81%
No	11%	11%	11%
Dont Know	7%	3%	5%
No Response	3%	4%	3%
Total	200	207	407

Q:12. a) If yes, who monitors your progress? [Multiple Answers]

	Gender		
	Male	Female	Total
Head teacher	54%	63%	59%
MTs	25%	19%	22%
DTEs	13%	14%	13%
Peers	0%	1%	%
Senior teachers	9%	5%	7%
No response	3%	2%	2%
Others	3%	1%	2%
Higher Authority	1%	4%	2%
AEO	19%	21%	20%
Total	159	169	328

Q:12. b) Does the monitor provide feedback about your teaching?

	Gender		
	Male	Female	Total
Yes	94%	92%	93%
No	5%	5%	5%
No Response	1%	2%	2%
Total	159	169	328

Q.12.c) Is the feedback helpful?

	Gender		
	Male	Female	Total
Yes	89%	92%	91%
No	4%	0%	2%
Dont Know	0%	1%	%
No Response	8%	7%	7%
Total	159	169	328

Q: 13) What was the mode of delivery of the CPD you received in the past [Multiple Answers]

	Gender		
	Male	Female	Total
Face-to-face (FTF)	92%	91%	91%
Online	11%	13%	12%
A combination of FTF/online	11%	10%	10%
Distance learning	13%	12%	13%
Peer-observation	12%	11%	11%
Coaching	20%	18%	19%

Mentoring	11%	14%	13%
Exposure to school visits	6%	8%	7%
Group study	12%	15%	13%
Modeling	2%	5%	4%
Informal consultations with colleagues/senior teachers	3%	3%	3%
Informal discussions with the head teachers	5%	2%	3%
Don't know	3%	1%	2%
No Response	3%	3%	3%
Total	200	207	407

		Q: 14) In your opinion, which modes of CPD were most useful and effective?		
		Gender		
		Male	Female	Total
Q14_Face-to-face (FTF)	Highly Effective	85%	84%	85%
	Effective	13%	13%	13%
	Ineffective	1%	0%	%
	Don't Know	1%	2%	2%
	No response	1%	1%	1%
	Total	200	207	407
Q14_Online	Highly Effective	15%	19%	17%
	Effective	23%	22%	22%
	Ineffective	17%	16%	16%
	Highly ineffective	13%	10%	11%
	Don't Know	11%	15%	13%
	No response	21%	18%	20%
	Total	200	207	407
Q14_Combination of FTF & online	Highly Effective	16%	21%	19%
	Effective	25%	26%	25%
	Ineffective	13%	11%	12%
	Highly ineffective	12%	6%	9%
	Don't Know	13%	14%	14%
	No response	23%	22%	22%
	Total	200	207	407
Q14_Distance learning	Highly Effective	11%	12%	11%
	Effective	19%	12%	15%
	Ineffective	15%	13%	14%
	Highly ineffective	14%	13%	13%
	Don't Know	13%	17%	15%
	No response	30%	33%	31%
	Total	200	207	407
Q14_Peer-observation	Highly Effective	14%	15%	14%
	Effective	20%	17%	19%
	Ineffective	14%	12%	13%
	Highly ineffective	9%	7%	8%
	Don't Know	13%	17%	15%
	No response	31%	32%	31%
	Total	200	207	407
Q14_Coaching	Highly Effective	14%	19%	16%
	Effective	31%	27%	29%
	Ineffective	10%	6%	8%
	Highly ineffective	6%	5%	6%
	Don't Know	11%	14%	13%
	No response	28%	29%	29%

	Total	200	207	407
Q14_Mentoring	Highly Effective	19%	23%	21%
	Effective	32%	24%	28%
	Ineffective	9%	7%	8%
	Highly ineffective	6%	6%	6%
	Don't Know	8%	14%	11%
	No response	28%	27%	27%
	Total	200	207	407
Q14_Exposure to school visits	Highly Effective	18%	19%	18%
	Effective	31%	30%	30%
	Ineffective	8%	4%	6%
	Highly ineffective	6%	3%	4%
	Don't Know	10%	14%	12%
	No response	29%	29%	29%
	Total	200	207	407
Q14_Group study	Highly Effective	22%	23%	23%
	Effective	32%	39%	36%
	Ineffective	10%	6%	8%
	Highly ineffective	4%	3%	3%
	Don't Know	9%	10%	10%
	No response	23%	19%	21%
	Total	200	207	407
Q14_Modeling	Highly Effective	18%	18%	18%
	Effective	20%	21%	20%
	Ineffective	14%	13%	14%
	Highly ineffective	7%	5%	6%
	Don't Know	15%	16%	15%
	No response	28%	27%	27%
	Total	200	207	407
Q14_Informal consultations with colleagues/senior teachers	Highly Effective	19%	22%	20%
	Effective	23%	23%	23%
	Ineffective	12%	11%	11%
	Highly ineffective	6%	3%	4%
	Don't Know	13%	16%	14%
	No response	28%	26%	27%
	Total	200	207	407
Q14_Informal discussions with the head teachers	Highly Effective	34%	30%	32%
	Effective	36%	39%	38%
	Ineffective	2%	2%	2%
	Highly ineffective	2%	%	1%
	Don't Know	5%	3%	4%
	No response	22%	25%	24%
	Total	200	207	407
Q14_Don't know	Highly Effective	10%	12%	11%
	Effective	10%	13%	11%
	Ineffective	4%	3%	3%
	Highly ineffective	3%	3%	3%
	Don't Know	6%	3%	5%
	No response	68%	67%	67%
	Total	200	207	407
Q14_No Response	Highly Effective	13%	11%	12%
	Effective	6%	10%	8%
	Ineffective	4%	4%	4%
	Highly ineffective	3%	4%	3%
	Don't Know	7%	3%	5%
	No response	68%	68%	68%
	Total	200	207	407

Q: 16) Think of one example of a CPD you have received. Indicate the nature of the CPD example?

	Gender		
	Male	Female	Total
Face-to-face (FTF)	92%	90%	91%
Practical advice	2%	2%	2%
No CPD	2%	1%	1%
No Response	6%	6%	6%
Total	200	207	407

Q:16) Instructions: Please indicate your level of agreement with the statements listed below				
		Gender		
		Male	Female	Total
The objectives of the trainings were clearly defined and communicated	Strongly Agree	49%	56%	52%
	Agree	34%	33%	33%
	Disagree	4%	1%	2%
	Strongly Disagree	2%	1%	1%
	Disagree	3%	%	1%
	Don't Know	10%	8%	9%
	No Response	1%	0%	%
	Total	200	207	407
Participation and interaction were encouraged	Strongly Agree	28%	28%	28%
	Agree	49%	59%	54%
	Disagree	10%	3%	6%
	Strongly Disagree	1%	0%	%
	Disagree	3%	1%	2%
	Don't Know	10%	9%	9%
	No Response	1%	0%	%
	Total	200	207	407
The topics covered were relevant to me	Strongly Agree	26%	23%	25%
	Agree	34%	43%	38%
	Disagree	24%	19%	21%
	Strongly Disagree	3%	2%	3%
	Disagree	3%	2%	2%
	Don't Know	11%	11%	11%
	No Response	1%	0%	%
	Total	200	207	407
The content was organized and easy to follow	Strongly Agree	20%	24%	22%
	Agree	40%	46%	43%
	Disagree	12%	10%	11%
	Strongly Disagree	4%	4%	4%
	Disagree	2%	3%	3%
	Don't Know	22%	13%	17%
	No Response	1%	0%	%
	Total	200	207	407
The trainer was knowledgeable about the training topics	Strongly Agree	27%	27%	27%
	Agree	42%	44%	43%
	Disagree	9%	11%	10%
	Strongly Disagree	5%	3%	4%
	Disagree	3%	3%	3%
	Don't Know	15%	12%	13%
	No Response	1%	0%	%
	Total	200	207	407
The trainer was well prepared.	Strongly Agree	42%	56%	49%
	Agree	34%	29%	31%
	Disagree	7%	2%	4%
	Strongly Disagree	1%	1%	1%
	Disagree	2%	3%	2%

	Don't Know	15%	9%	12%
	No Response	1%	0%	%
	Total	200	207	407
The training objectives were met.	Strongly Agree	22%	28%	25%
	Agree	44%	51%	48%
	Disagree	13%	6%	9%
	Strongly Disagree	3%	1%	2%
	Disagree	1%	2%	1%
	Don't Know	17%	11%	14%
	No Response	1%	0%	%
	Total	200	207	407
The time allotted for the training was sufficient	Strongly Agree	26%	27%	26%
	Agree	33%	44%	38%
	Disagree	15%	9%	12%
	Strongly Disagree	4%	%	2%
	Disagree	3%	3%	3%
	Don't Know	20%	17%	18%
	No Response	1%	0%	%
	Total	200	207	407
The meeting room and facilities were adequate and comfortable.	Strongly Agree	30%	31%	30%
	Agree	27%	34%	30%
	Disagree	16%	15%	15%
	Strongly Disagree	5%	3%	4%
	Disagree	4%	3%	4%
	Don't Know	18%	13%	15%
	No Response	1%	0%	%
	Total	200	207	407

Q: 17) Think of one example of a CPD you have received. Indicate the nature of the CPD example?			
	Gender		
	Male	Female	Total
Face-to-face (FTF)	95%	96%	95%
Practical advice	1%	1%	1%
Combination of FTF & online	0%	%	%
No CPD Received	1%	1%	1%
No Response	3%	2%	2%
Total	200	207	407

Q: 17) How much do you agree with the following statements with respect to impact of CPD received?				
		Gender		
		Male	Female	Total
a) I have increased knowledge of the content of the key learning area/s I teach.	Strongly Agree	49%	57%	53%
	Agree	33%	32%	32%
	Disagree	4%	1%	2%
	Strongly Disagree	1%	0%	%
	Disagree	2%	%	1%
	Don't Know	11%	9%	10%

	No Response	1%	0%	%
	Total	200	207	407
b) I have increased knowledge of teaching strategies appropriate to the content of the key learning area/s I teach	Strongly Agree	22%	23%	22%
	Agree	44%	46%	45%
	Disagree	10%	10%	10%
	Strongly Disagree	4%	0%	2%
	Disagree	3%	3%	3%
	Don't Know	19%	18%	18%
	No Response	1%	0%	%
	Total	200	207	407
c) I have increased knowledge about how students learn the content of the key learning area/s I teach	Strongly Agree	25%	24%	24%
	Agree	32%	38%	35%
	Disagree	14%	13%	13%
	Strongly Disagree	4%	1%	3%
	Disagree	5%	6%	5%
	Don't Know	20%	18%	19%
	No Response	1%	0%	%
	Total	200	207	407
d) I have increased understanding of individual differences among students and how to cater for them	Strongly Agree	22%	22%	22%
	Agree	35%	32%	33%
	Disagree	13%	17%	15%
	Strongly Disagree	5%	3%	4%
	Disagree	6%	6%	6%
	Don't Know	20%	20%	20%
	No Response	1%	0%	%
	Total	200	207	407
e) I now make clearer links between my teaching goals and the classroom activities I use in my classroom	Strongly Agree	26%	21%	23%
	Agree	32%	35%	33%
	Disagree	11%	15%	13%
	Strongly Disagree	4%	3%	4%
	Disagree	6%	5%	5%
	Don't Know	22%	20%	21%
	No Response	1%	0%	%
	Total	200	207	407
f) I now make clearer links between my teaching goals and the methods I use to assess student learning	Strongly Agree	28%	23%	25%
	Agree	29%	34%	31%
	Disagree	8%	12%	10%
	Strongly Disagree	5%	4%	4%
	Disagree	9%	5%	7%
	Don't Know	22%	23%	22%
	No Response	1%	0%	%
	Total	200	207	407
g) I am now more	Strongly Agree	28%	26%	27%

creative in my teaching	Agree	32%	39%	36%
	Disagree	11%	10%	10%
	Strongly Disagree	3%	1%	2%
	Disagree	8%	3%	5%
	Don't Know	19%	21%	20%
	No Response	1%	0%	%
	Total	200	207	407
h) I now use more effective teaching and learning strategies appropriate to students in my class/es	Strongly Agree	26%	28%	27%
	Agree	34%	32%	33%
	Disagree	10%	9%	10%
	Strongly Disagree	4%	4%	4%
	Disagree	6%	8%	7%
	Don't Know	22%	19%	20%
	No Response	1%	0%	%
Total	200	207	407	
i) I am better able to meet the individual learning needs of my students	Strongly Agree	31%	26%	29%
	Agree	30%	35%	33%
	Disagree	9%	9%	9%
	Strongly Disagree	3%	4%	3%
	Disagree	8%	5%	6%
	Don't Know	19%	21%	20%
	No Response	1%	0%	%
Total	200	207	407	
j) I integrate information and communication technology into my teaching more effectively	Strongly Agree	24%	24%	24%
	Agree	31%	32%	32%
	Disagree	10%	9%	9%
	Strongly Disagree	5%	5%	5%
	Disagree	4%	7%	5%
	Don't Know	26%	23%	24%
	No Response	1%	0%	%
Total	199	207	406	
k) My confidence as a teacher has increased	Strongly Agree	44%	46%	45%
	Agree	30%	33%	31%
	Disagree	6%	6%	6%
	Strongly Disagree	4%	%	2%
	Disagree	2%	1%	1%
	Don't Know	15%	13%	14%
	No Response	1%	0%	%
Total	200	207	407	

Q: 18) Think of one example of a CPD you have received. Indicate the nature of the CPD example?

	Gender		
	Male	Female	Total
Face-to-face (FTF)	94%	98%	96%
Practical advice	2%	1%	1%
Online	1%	0%	%
Combination of FTF & online	1%	0%	%
No CPD Received	2%	0%	1%
No Response	2%	1%	1%
Total	200	207	407

Q: 18) How much do you agree with the statements below in relation to the impact of CPD on students' learning outcomes?				
		Gender		
		Male	Female	Total
My students have fewer difficulties in understanding what they are being taught	Strongly Agree	39%	46%	43%
	Agree	41%	36%	38%
	Disagree	6%	5%	5%
	Strongly Disagree	2%	3%	3%
	Disagree	2%	1%	1%
	Don't Know	10%	9%	10%
	Total	200	207	407
My students are learning more purposefully	Strongly Agree	25%	25%	25%
	Agree	52%	57%	55%
	Disagree	11%	6%	8%
	Strongly Disagree	3%	1%	2%
	Disagree	2%	1%	2%
	Don't Know	9%	9%	9%
	Total	200	207	407
My students are more actively engaged in learning activities	Strongly Agree	21%	23%	22%
	Agree	40%	42%	41%
	Disagree	18%	14%	15%
	Strongly Disagree	5%	4%	5%
	Disagree	2%	3%	2%
	Don't Know	15%	14%	15%
	Total	200	207	407
My students demonstrate enhanced learning outcomes	Strongly Agree	22%	26%	24%
	Agree	38%	40%	39%
	Disagree	17%	15%	16%
	Strongly Disagree	7%	5%	6%
	Disagree	3%	1%	2%
	Don't Know	14%	13%	13%
	Total	200	207	407

Q:19) How satisfied are you with the existing CPD received?			
	Gender		
	Male	Female	Total
Highly satisfied	34%	37%	35%
Moderately satisfied	39%	36%	37%
Somewhat satisfied	8%	10%	9%
Satisfied	14%	8%	11%

Not Satisfied at all	1%	%	1%
Don't know	4%	2%	3%
No response	2%	6%	4%
Total	200	207	407

Q:19.c) Which one of the following statements about exiting CPD do you agree with: [Multiple Answers]

	Gender		
	Male	Female	Total
I would like to receive more of the same CPD	48%	49%	48%
I would like to receive less of the same CPD	15%	14%	14%
I don't want to change anything about the existing CPD	6%	4%	5%
I would like to receive more of the same CPD with something extra/different	19%	22%	20%
I would like to receive less of the same CPD with something extra/different	13%	10%	11%
No Response	8%	6%	7%
Total	200	207	407

Q: 20) How willing would you be to attend CPD in future?

	Gender		
	Male	Female	Total
Extremely willing	27%	30%	28%
Willing	54%	55%	54%
Unwilling	12%	9%	10%
Extremely Unwilling	3%	1%	2%
Don't Know	3%	4%	3%
No Response	3%	1%	2%
Total	200	207	407

Q: 21) To what extent do you feel that teachers should participate in planning their CPD?

	Gender		
	Male	Female	Total
Highly interested	48%	40%	44%
Moderately interested	32%	43%	37%
Not interested at all	10%	8%	9%
Don't know	4%	6%	5%

No response	8%	3%	5%
Total	200	207	407

Q: 21.a) To what extent do you feel that teachers CPD should include coaching and mentoring?			
	Gender		
	Male	Female	Total
Highly interested	38%	38%	38%
Moderately interested	37%	44%	41%
Not interested at all	14%	13%	13%
Don't know	5%	2%	4%
No response	6%	3%	4%
Total	200	207	407

Q: 22) How supportive do you think relevant stakeholders would be in providing on-site CPD opportunities for PSTs?				
		Gender		
		Male	Female	Total
Yourself	Highly supportive	43%	43%	43%
	Moderately Supportive	26%	27%	27%
	Somewhat Supportive	14%	9%	11%
	Not Supportive at all	2%	2%	2%
	Don't Know	4%	6%	5%
	No Response	12%	12%	12%
	Total	200	207	407
Head teachers	Highly supportive	47%	52%	49%
	Moderately Supportive	35%	29%	32%
	Somewhat Supportive	6%	9%	7%
	Don't Know	2%	1%	2%
	No Response	11%	9%	10%
	Total	200	207	407
DTEs	.00	0%	%	%
	Highly supportive	28%	26%	27%
	Moderately Supportive	19%	24%	21%
	Somewhat Supportive	18%	19%	18%
	Not Supportive at all	4%	2%	3%
	Don't Know	6%	7%	7%
	No Response	26%	22%	24%
	Total	200	207	407
MTs	Highly supportive	43%	49%	46%
	Moderately Supportive	14%	10%	12%
	Somewhat Supportive	14%	10%	12%

	Not Supportive at all	4%	5%	4%
	Don't Know	4%	7%	5%
	No Response	22%	19%	21%
	Total	200	207	407
QAED	Highly supportive	39%	44%	42%
	Moderately Supportive	24%	26%	25%
	Somewhat Supportive	11%	8%	10%
	Not Supportive at all	3%	2%	2%
	Don't Know	2%	2%	2%
	No Response	22%	17%	19%
	Total	200	207	407
SED	Highly supportive	26%	22%	24%
	Moderately Supportive	16%	18%	17%
	Somewhat Supportive	15%	15%	15%
	Not Supportive at all	5%	2%	3%
	Don't Know	10%	12%	11%
	No Response	30%	30%	30%
	Total	200	207	407
PEELI	.00	0%	%	%
	Highly supportive	33%	31%	32%
	Moderately Supportive	27%	31%	29%
	Somewhat Supportive	7%	9%	8%
	Not Supportive at all	5%	4%	5%
	Don't Know	4%	5%	4%
	No Response	25%	19%	22%
	Total	200	207	407
Peers/colleagues	Highly supportive	31%	28%	29%
	Moderately Supportive	26%	34%	30%
	Somewhat Supportive	11%	9%	10%
	Not Supportive at all	4%	2%	3%
	Don't Know	4%	5%	5%
	No Response	24%	22%	23%
	Total	200	207	407

Q: 23) How important do you think it is to collaborate with your peers/colleagues, head teachers and trainers and scholars to learn from each other's experiences and form a learning group?

	Gender		
	Male	Female	Total
Highly important	39%	43%	41%
Moderately important	41%	37%	39%
Important	12%	14%	13%
Unimportant	4%	%	2%
Don't know	1%	1%	1%
No response	5%	3%	4%

Total	200	207	407

Q: 24) How much time could you spend to avail of the opportunity of CPD, participate in group study sessions, discuss teaching experiences with peers and colleague and collaborate with colleagues for lesson planning?

	Gender		
	Male	Female	Total
1 hour	34%	44%	39%
2 hours	26%	23%	24%
3 hours	21%	17%	19%
Others	2%	1%	2%
4.00	8%	7%	7%
No Response	7%	7%	7%
1 Day	3%	1%	2%
Total	200	207	407

Q: 25) How frequently do you think CPD, group study sessions, meetings, seminars, working group, collaborative planning and discussions should take place?

	Gender		
	Male	Female	Total
Weekly	5%	4%	4%
Fortnightly	2%	1%	1%
Monthly	22%	19%	20%
Bimonthly	5%	9%	7%
Once in a semester	18%	23%	21%
Annually	39%	42%	40%
Don't know	6%	1%	3%
No response	5%	2%	3%
Total	200	207	407

Q: 26) What steps could QAED and other stakeholders take to facilitate PSTs to receive on going support and CPD?: [Multiple Answers]

	Gender		
	Male	Female	Total
0	26%	27%	26%
Train the head teachers to provide coaching and mentoring	84%	81%	82%
Train a colleague/peer to provide support as a critical friend	33%	30%	31%
Provide online sessions using IT facility in cluster center for your support	26%	28%	27%

Arrange seminars	34%	33%	34%
Arrange study groups facilitated by a trainer	38%	38%	38%
Provide opportunities for observing model lessons in your school	23%	27%	25%
Provide opportunities to collaborate with PSTs from other schools for lesson planning and sharing teaching experiences	23%	23%	23%
Provide opportunities of reflection and discussion with a peer group/s and mentors	27%	22%	24%
Provide remote mentors who could be available to PSTs to support them when needed	24%	25%	24%
Provide sample material of lesson plans and assessments for self-study	22%	26%	24%
No Response	1%	2%	1%
Total	200	207	407

Q: 27) Please select topics that you will be interested to find out more about via CPD in future? : [Multiple Answers]

	Gender		
	Male	Female	Total
Classroom management	70%	70%	70%
Time management	46%	46%	46%
Teaching reading skills	47%	42%	44%
Teaching writing skills	46%	41%	43%
Multi-grade teaching	53%	57%	55%
Don't Know	0%	2%	1%
No response	5%	2%	3%
Total	200	207	407

Q: 28) Do you face any barriers to participate in a CPD?

	Gender		
	Male	Female	Total
Yes	27%	40%	33%
No	63%	50%	57%
Dont Know	6%	4%	5%
No Response	5%	5%	5%
Total	200	207	407

Q:28. a) If yes, what are some of the barriers to receive CPD?				
		Gender		
		Male	Female	Total
Time constraint	Yes	12%	17%	15%
	No	71%	66%	68%
	No Response	18%	16%	17%
	Total	200	207	407
Schedule of CPD	Yes	8%	7%	7%
	No	93%	93%	93%
	Total	200	207	407
Leadership	Yes	2%	4%	3%
	No	98%	96%	97%
	Total	200	207	407
Lack of encouragement to initiate collaborative CPD at school level	Yes	5%	6%	6%
	No	95%	94%	94%
	Total	200	207	407
Lack of teacher motivation to participate in CPD	Yes	11%	9%	10%
	No	90%	91%	90%
	Total	200	207	407
Lack of support from head teachers/school management	Yes	2%	5%	3%
	No	99%	95%	97%
	Total	200	207	407
Merit-based nominations	Yes	4%	5%	4%
	No	96%	95%	96%
	Total	200	207	407
School culture	Yes	1%	5%	3%
	No	99%	95%	97%
	Total	200	207	407
Required seniority	Yes	2%	3%	3%
	No	98%	97%	97%
	Total	200	207	407
Delay in dissemination of information about CPD opportunities	Yes	1%	3%	2%
	No	99%	97%	98%
	Total	200	207	407
Don't know	Yes	4%	5%	5%
	No	96%	95%	95%
	Total	200	207	407
No response	Yes	1%	%	%
	No	100%	100%	100%
	Total	200	207	407

Annex – C District wise analysis

Q:2) Do you receive support regarding lesson plans, concepts and content of lessons/curriculum, classroom management, teaching methodology													
	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Yes	18%	94%	50%	21%	94%	32%	100%	88%	55%	68%	100%	85%	67%
No	82%	6%	50%	74%	6%	68%	0%	9%	45%	26%	0%	15%	32%
Don't Know	0%	0%	0%	6%	0%	0%	0%	3%	0%	0%	0%	0%	1%
No Response	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%	0%	0%	%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
2.a) If yes, who provides the support and guidance to you? [Multiple Answers]													
	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Head teachers	50%	63%	41%	57%	91%	73%	88%	90%	67%	65%	59%	69%	71%
Fellow teachers	17%	31%	47%	57%	38%	27%	24%	23%	22%	30%	65%	34%	35%
Senior colleagues	33%	19%	24%	14%	13%	18%	6%	47%	0%	22%	62%	21%	25%
Friends from college	17%	3%	6%	0%	0%	0%	0%	0%	0%	0%	18%	0%	3%
Someone at home	0%	3%	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	1%
Teachers from other schools	0%	0%	0%	0%	9%	0%	0%	7%	0%	4%	3%	3%	3%
Teachers from college	17%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	1%
No one at all	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	3%	1%

No response	0%	0%	0%	0%	3%	18%	0%	0%	11%	4%	0%	3%	3%
Total	6	32	17	7	32	11	34	30	18	23	34	29	273

2.b) How is the support provided? [Multiple Answers]

	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Class observations	33%	9%	47%	71%	16%	18%	3%	23%	22%	30%	26%	17%	21%
Coaching	17%	22%	35%	0%	16%	45%	3%	67%	11%	35%	71%	3%	29%
Informal discussions	17%	28%	29%	14%	44%	36%	97%	40%	0%	17%	9%	52%	37%
Sharing sample students work	17%	9%	0%	14%	3%	18%	3%	10%	28%	17%	6%	3%	9%
Sharing lesson plans	0%	16%	0%	14%	0%	0%	12%	7%	0%	13%	9%	3%	7%
Providing feedback	33%	6%	0%	0%	19%	18%	3%	20%	0%	4%	9%	24%	11%
Mentoring	0%	6%	0%	0%	9%	27%	3%	20%	11%	26%	35%	7%	14%
Sharing reading material	0%	0%	0%	0%	0%	9%	0%	3%	0%	26%	21%	0%	5%
Demonstration of model lessons	17%	31%	0%	14%	0%	0%	0%	13%	11%	17%	6%	0%	9%
No Response	0%	3%	6%	14%	25%	18%	0%	7%	17%	13%	3%	10%	9%
Total	6	32	17	7	32	11	34	30	18	23	34	29	273

Q:3) Did you receive CPD during your induction period?

	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Yes	100%	100%	100%	53%	100%	97%	100%	91%	100%	68%	100%	94%	92%

No	0%	0%	0%	26%	0%	0%	0%	6%	0%	21%	0%	6%	5%
Don't Know	0%	0%	0%	15%	0%	3%	0%	3%	0%	0%	0%	0%	2%
No Response	0%	0%	0%	6%	0%	0%	0%	0%	0%	12%	0%	0%	1%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407

Q:4) Did you receive CPD other than the one during induction period?

	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Yes	100%	91%	94%	50%	94%	44%	100%	56%	94%	41%	76%	88%	77%
No	0%	9%	6%	29%	6%	50%	0%	29%	6%	38%	24%	12%	17%
Don't Know	0%	0%	0%	15%	0%	6%	0%	12%	0%	6%	0%	0%	3%
No Response	0%	0%	0%	6%	0%	0%	0%	3%	0%	15%	0%	0%	2%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407

Q:5) What was the focus of the CPD you received? [Multiple Answers]

	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Teaching methodology	74%	59%	97%	62%	85%	76%	100%	62%	91%	76%	50%	97%	77%
Interactive teaching	71%	41%	100%	12%	74%	62%	100%	18%	55%	50%	18%	76%	56%
Lesson planning	71%	59%	100%	6%	74%	76%	100%	71%	82%	71%	53%	85%	71%
Classroom management	56%	59%	88%	12%	59%	24%	100%	47%	48%	50%	41%	97%	57%
Time management	44%	62%	85%	0%	9%	35%	100%	6%	39%	29%	21%	35%	39%
Curriculum	9%	21%	3%	35%	62%	9%	100%	47%	24%	29%	24%	68%	36%

management													
Science	15%	6%	0%	6%	76%	41%	100%	12%	9%	26%	21%	91%	34%
Mathematics	24%	9%	0%	6%	74%	41%	100%	12%	9%	44%	35%	94%	37%
English language	3%	12%	0%	12%	71%	3%	100%	15%	21%	44%	18%	71%	31%
Information Technology	0%	0%	0%	0%	21%	0%	91%	0%	6%	9%	15%	12%	13%
NO CPD RECEIVED	0%	0%	0%	21%	0%	0%	0%	0%	0%	0%	0%	0%	2%
No Response	3%	9%	0%	9%	0%	12%	0%	6%	3%	9%	6%	0%	5%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Q:6) What was the duration of CPD you received in the past?													
	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
2-3 hours	3%	0%	18%	0%	3%	35%	0%	0%	3%	0%	0%	3%	5%
1 day	0%	3%	6%	3%	21%	0%	0%	0%	6%	0%	15%	18%	6%
2 days	32%	3%	3%	0%	38%	0%	0%	0%	6%	0%	29%	12%	10%
3 days	65%	29%	12%	0%	0%	0%	9%	6%	24%	44%	26%	6%	18%
6 days	0%	15%	18%	0%	0%	3%	3%	3%	6%	3%	0%	0%	4%
1 week	0%	0%	32%	47%	3%	0%	6%	3%	3%	9%	9%	0%	9%
2 weeks	0%	0%	12%	3%	9%	0%	0%	0%	9%	15%	0%	0%	4%
One Month	0%	50%	0%	12%	24%	53%	82%	85%	36%	18%	21%	62%	37%
NO CPD RECEIVED	0%	0%	0%	32%	0%	0%	0%	0%	0%	0%	0%	0%	3%
No Response	0%	0%	0%	3%	3%	9%	0%	3%	6%	12%	0%	0%	3%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407

Q:7) Which entity provided you the CPD you received? [Multiple Answers]													
	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
QAED (Previously known as DSD)	62%	71%	0%	13%	94%	85%	100%	85%	79%	94%	29%	100%	69%
The British Council	97%	79%	59%	70%	68%	32%	91%	52%	61%	32%	38%	0%	56%
National/local NGOs	0%	12%	9%	13%	0%	3%	0%	0%	6%	6%	0%	0%	4%
Teacher colleagues	0%	0%	0%	0%	0%	3%	0%	0%	3%	0%	3%	0%	1%
PEELI	0%	3%	6%	0%	0%	0%	9%	12%	0%	0%	0%	0%	3%
International NGOs	0%	0%	6%	4%	3%	0%	0%	0%	0%	0%	0%	0%	1%
School principal	0%	0%	6%	0%	0%	0%	0%	3%	0%	0%	0%	0%	1%
Department	0%	0%	76%	9%	0%	0%	0%	0%	0%	0%	62%	0%	12%
Total	34	34	34	23	34	34	34	33	33	34	34	34	395
Q:8) Does the existing CPD meet your specific learning needs and answers your questions regarding teaching your class?													
	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Yes	97%	94%	97%	41%	85%	91%	100%	97%	88%	79%	91%	82%	87%
No	0%	0%	0%	18%	12%	3%	0%	0%	9%	0%	9%	9%	5%
Don't Know	0%	6%	0%	32%	3%	3%	0%	3%	0%	9%	0%	3%	5%
No Response	3%	0%	3%	9%	0%	3%	0%	0%	3%	12%	0%	6%	3%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Q:9) Were the ideas, theories, activities presented in the CPD practical?													

	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Yes	97%	91%	97%	32%	79%	88%	100%	74%	88%	74%	76%	74%	81%
No	0%	0%	0%	32%	18%	6%	0%	0%	12%	0%	12%	15%	8%
Don't Know	0%	0%	0%	29%	0%	0%	0%	21%	0%	9%	12%	3%	6%
No Response	3%	9%	3%	6%	3%	6%	0%	6%	0%	18%	0%	9%	5%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Q:10) How comfortable do you feel to use the newly learnt teaching techniques, ideas, activities in your classroom ?													
	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Moderately comfortable	97%	88%	62%	26%	12%	62%	74%	6%	76%	41%	21%	35%	50%
Somewhat comfortable	0%	12%	38%	32%	53%	26%	18%	79%	9%	44%	50%	38%	33%
Not comfortable at all	0%	0%	0%	18%	9%	6%	9%	9%	6%	3%	29%	9%	8%
Don't know	0%	0%	0%	6%	15%	0%	0%	0%	6%	0%	0%	15%	3%
No Response	3%	0%	0%	18%	12%	6%	0%	6%	3%	12%	0%	3%	5%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Q: 10.a) How often do you feel the need for further guidance and support when using new teaching techniques, activities and ideas shared during CPD in your classroom setting?													
	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total

Always	91%	74%	21%	6%	6%	47%	6%	0%	58%	12%	24%	15%	30%
Often	0%	15%	68%	50%	18%	6%	3%	18%	15%	47%	53%	50%	29%
seldom	0%	6%	9%	9%	15%	24%	18%	47%	3%	0%	21%	24%	14%
rarely	0%	0%	0%	0%	29%	21%	68%	24%	6%	24%	3%	3%	15%
Not at all	0%	3%	0%	3%	6%	0%	6%	0%	0%	0%	0%	3%	2%
Don't know	0%	0%	0%	24%	0%	0%	0%	6%	0%	3%	0%	3%	3%
No response	9%	3%	3%	9%	26%	3%	0%	6%	18%	15%	0%	3%	8%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407

Q: 10.c.) In case you need help or have questions regarding teaching your pupils, who do you turn to for guidance? [Multiple Answers]

	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Fellow teachers	91%	65%	85%	53%	74%	32%	15%	65%	70%	53%	85%	68%	63%
Senior teachers	21%	3%	0%	12%	0%	6%	0%	0%	9%	0%	0%	3%	4%
Head teacher	35%	32%	32%	29%	0%	15%	6%	12%	21%	21%	76%	3%	24%
DTE	3%	0%	0%	3%	6%	0%	0%	0%	6%	0%	6%	6%	2%
MT	18%	0%	6%	18%	56%	26%	47%	85%	21%	24%	44%	71%	35%
District cluster subject experts	3%	0%	0%	9%	0%	0%	0%	0%	0%	9%	0%	0%	2%
No one	0%	12%	0%	0%	0%	0%	35%	0%	0%	9%	0%	0%	5%
Don't Know	0%	0%	0%	15%	0%	0%	0%	3%	0%	3%	0%	0%	2%
No Response	0%	3%	0%	0%	6%	44%	0%	0%	0%	6%	0%	0%	5%
Anyone else	0%	0%	0%	0%	0%	6%	0%	0%	0%	0%	0%	0%	%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407

Q: 10.d) Do you receive follow up support after receiving CPD													
	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Yes	82%	85%	62%	3%	71%	74%	74%	91%	61%	50%	56%	79%	66%
No	15%	9%	35%	76%	15%	9%	0%	3%	24%	24%	38%	18%	22%
Don't Know	0%	0%	0%	12%	0%	6%	0%	0%	0%	12%	0%	0%	2%
No Response	3%	6%	3%	9%	15%	12%	26%	6%	15%	15%	6%	3%	10%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Q: 10.e) If yes, who provides the follow up facilitation after a CPD intervention? [Multiple Answers]													
	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Head teacher	100%	66%	43%	100%	100%	52%	20%	87%	85%	71%	58%	89%	71%
MTs	4%	28%	10%	0%	13%	48%	0%	3%	10%	0%	16%	0%	12%
DTEs	0%	3%	38%	0%	4%	0%	56%	6%	0%	18%	53%	4%	15%
Peers	0%	3%	14%	0%	4%	0%	0%	0%	0%	0%	26%	11%	5%
Senior teachers	46%	7%	5%	0%	4%	0%	0%	3%	0%	12%	32%	0%	10%
No one	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	%
Don't know	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	0%	1%
No response	0%	3%	19%	0%	0%	0%	0%	3%	5%	6%	0%	0%	3%
Others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	4%	1%
AEO	0%	0%	0%	0%	0%	0%	88%	3%	0%	0%	0%	0%	9%
Total	28	29	21	1	24	25	25	31	20	17	19	27	267

Q:10.f) How often is the follow up facilitation provided after a CPD intervention?													
	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Daily	89%	17%	0%	0%	21%	0%	0%	0%	20%	0%	0%	30%	18%
Weekly	0%	14%	0%	0%	17%	0%	0%	0%	0%	0%	0%	22%	5%
Fortnightly	0%	3%	10%	0%	21%	72%	68%	84%	10%	41%	5%	0%	30%
Monthly	0%	24%	43%	0%	0%	24%	4%	0%	0%	0%	26%	15%	12%
Bimonthly	0%	10%	33%	0%	17%	4%	12%	3%	60%	12%	32%	7%	15%
Annually	0%	21%	10%	0%	13%	0%	16%	3%	5%	18%	32%	15%	11%
Sometimes	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%	1%
Never	0%	0%	0%	100%	4%	0%	0%	0%	0%	0%	0%	7%	1%
Don't know	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	%
No response	11%	0%	5%	0%	8%	0%	0%	6%	5%	29%	0%	4%	6%
Total	28	29	21	1	24	25	25	31	20	17	19	27	267
Q:11.) Do you write action plans?													
	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Yes	97%	94%	88%	9%	91%	47%	6%	82%	91%	47%	3%	97%	63%
No	0%	6%	12%	74%	3%	53%	0%	9%	6%	3%	62%	3%	19%
Don't Know	0%	0%	0%	15%	0%	0%	0%	6%	3%	15%	35%	0%	6%
No Response	3%	0%	0%	3%	6%	0%	94%	3%	0%	35%	0%	0%	12%

Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Q:12) Is your progress monitored?													
	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Yes	97%	97%	94%	0%	97%	100%	100%	100%	97%	65%	21%	100%	81%
No	0%	3%	0%	85%	0%	0%	0%	0%	3%	12%	29%	0%	11%
Don't Know	0%	0%	0%	9%	0%	0%	0%	0%	0%	0%	50%	0%	5%
No Response	3%	0%	6%	6%	3%	0%	0%	0%	0%	24%	0%	0%	3%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Q:12.a) If yes, who monitors your progress? [Multiple Answers]													
	District												
	Attock	Chakwal	Dera Ghazi Khan	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total	
Head teacher	91%	85%	13%	79%	50%	3%	79%	84%	77%	71%	32%	59%	
MTs	3%	6%	69%	24%	3%	100%	3%	3%	0%	29%	0%	22%	
DTEs	0%	3%	44%	6%	44%	0%	15%	3%	23%	14%	0%	13%	
Peers	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	%	
Senior teachers	36%	9%	3%	0%	0%	0%	6%	3%	5%	57%	0%	7%	
No response	3%	0%	3%	3%	3%	0%	0%	9%	5%	0%	0%	2%	
Others	0%	0%	9%	0%	0%	0%	0%	0%	0%	14%	9%	2%	
Higher Authority	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	24%	2%	
AEO	0%	9%	72%	45%	0%	15%	9%	0%	9%	0%	44%	20%	

Total	33	33	32	33	34	34	34	32	22	7	34	328	
Q:12.b) Does the monitor provide feedback about your teaching ?													
	District												
	Attock	Chakwal	Dera Ghazi Khan	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total	
Yes	97%	97%	100%	100%	47%	100%	100%	100%	91%	100%	97%	93%	
No	3%	0%	0%	0%	44%	0%	0%	0%	0%	0%	3%	5%	
No Response	0%	3%	0%	0%	9%	0%	0%	0%	9%	0%	0%	2%	
Total	33	33	32	33	34	34	34	32	22	7	34	328	
Q.12.c) Is the feedback helpful?													
	District												
	Attock	Chakwal	Dera Ghazi Khan	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total	
Yes	97%	94%	100%	97%	53%	100%	97%	88%	77%	100%	97%	91%	
No	0%	0%	0%	0%	0%	0%	0%	6%	18%	0%	0%	2%	
Don't Know	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	%	
No Response	3%	6%	0%	3%	47%	0%	0%	6%	5%	0%	3%	7%	
Total	33	33	32	33	34	34	34	32	22	7	34	328	
Q: 13) What was the mode of delivery of the CPD you received in the past [Multiple Answers]													
	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total

Face-to-face (FTF)	100%	94%	94%	68%	94%	100%	100%	85%	100%	65%	94%	100%	91%
Online	47%	24%	3%	6%	15%	0%	0%	9%	39%	0%	3%	0%	12%
A combination of FTF/online	44%	35%	3%	0%	3%	0%	3%	3%	30%	0%	0%	3%	10%
Distance learning	50%	53%	0%	0%	3%	0%	0%	0%	42%	0%	3%	0%	13%
Peer-observation	38%	41%	0%	3%	0%	3%	0%	6%	36%	0%	9%	0%	11%
Coaching	26%	24%	0%	3%	0%	62%	3%	26%	33%	15%	35%	0%	19%
Mentoring	0%	24%	0%	0%	0%	29%	3%	21%	21%	29%	24%	0%	13%
Exposure to school visits	12%	9%	0%	12%	0%	6%	6%	0%	33%	3%	6%	0%	7%
Group study	12%	18%	6%	21%	0%	21%	15%	15%	21%	15%	18%	0%	13%
Modeling	9%	6%	3%	0%	0%	3%	0%	0%	15%	6%	3%	0%	4%
Informal consultations with colleagues/senior teachers	6%	0%	0%	0%	0%	0%	0%	3%	3%	15%	9%	0%	3%
Informal discussions with the head teachers	3%	3%	0%	0%	0%	0%	9%	0%	9%	9%	6%	0%	3%
Don't know	0%	0%	0%	12%	0%	0%	0%	0%	0%	9%	0%	0%	2%
No Response	0%	0%	3%	12%	3%	0%	0%	3%	0%	12%	0%	0%	3%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407

Q: 14) In your opinion, which modes of CPD were most useful and effective?

	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Highly Effective	100%	91%	47%	91%	97%	44%	100%	71%	97%	88%	88%	100%	85%
Effective	0%	6%	50%	0%	0%	53%	0%	21%	3%	9%	12%	0%	13%
Ineffective	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	%

Don't Know	0%	3%	0%	6%	0%	3%	0%	9%	0%	0%	0%	0%	2%
No response	0%	0%	3%	3%	3%	0%	0%	0%	0%	0%	0%	0%	1%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Highly Effective	53%	32%	3%	3%	32%	0%	0%	6%	24%	9%	0%	44%	17%
Effective	44%	53%	6%	0%	9%	0%	12%	18%	61%	26%	9%	32%	22%
Ineffective	0%	9%	0%	35%	35%	44%	15%	3%	9%	18%	21%	9%	16%
Highly ineffective	0%	0%	0%	38%	12%	3%	24%	12%	0%	15%	32%	0%	11%
Don't Know	0%	0%	0%	12%	0%	29%	32%	47%	0%	0%	24%	12%	13%
No response	3%	6%	91%	12%	12%	24%	18%	15%	6%	32%	15%	3%	20%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Highly Effective	50%	44%	12%	3%	9%	0%	3%	15%	39%	9%	0%	41%	19%
Effective	26%	29%	6%	35%	32%	3%	50%	6%	18%	26%	32%	38%	25%
Ineffective	18%	9%	0%	15%	3%	44%	0%	0%	18%	3%	24%	6%	12%
Highly ineffective	0%	3%	0%	18%	0%	3%	21%	12%	3%	15%	29%	0%	9%
Don't Know	0%	3%	0%	24%	0%	32%	21%	53%	0%	15%	6%	9%	14%
No response	6%	12%	82%	6%	56%	18%	6%	15%	21%	32%	9%	6%	22%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Highly Effective	50%	44%	3%	0%	0%	0%	0%	3%	33%	0%	0%	0%	11%
Effective	41%	26%	0%	9%	0%	9%	6%	6%	24%	29%	32%	3%	15%
Ineffective	0%	15%	0%	21%	3%	44%	18%	3%	12%	15%	26%	9%	14%
Highly ineffective	6%	6%	0%	35%	0%	6%	47%	15%	3%	15%	26%	0%	13%
Don't Know	0%	0%	0%	29%	0%	26%	26%	53%	0%	3%	6%	38%	15%
No response	3%	9%	97%	6%	97%	15%	3%	21%	27%	38%	9%	50%	31%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Highly Effective	50%	44%	3%	6%	0%	0%	3%	6%	42%	9%	12%	0%	14%
Effective	35%	35%	0%	18%	0%	3%	15%	18%	24%	32%	44%	0%	19%

Ineffective	6%	9%	0%	9%	3%	56%	18%	0%	6%	6%	29%	9%	13%
Highly ineffective	3%	0%	0%	29%	0%	3%	35%	6%	12%	3%	3%	0%	8%
Don't Know	0%	3%	0%	35%	0%	24%	24%	53%	0%	3%	0%	38%	15%
No response	6%	9%	97%	3%	97%	15%	6%	18%	15%	47%	12%	53%	31%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Highly Effective	59%	50%	0%	0%	0%	0%	3%	18%	27%	18%	24%	0%	16%
Effective	32%	21%	6%	9%	0%	65%	50%	24%	39%	41%	53%	6%	29%
Ineffective	6%	18%	0%	24%	3%	9%	6%	0%	3%	0%	18%	9%	8%
Highly ineffective	0%	3%	0%	29%	0%	3%	15%	6%	9%	3%	0%	0%	6%
Don't Know	0%	3%	0%	32%	0%	18%	24%	32%	0%	6%	0%	38%	13%
No response	3%	6%	94%	6%	97%	6%	3%	21%	21%	32%	6%	47%	29%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Highly Effective	65%	38%	12%	3%	0%	6%	6%	24%	58%	24%	18%	0%	21%
Effective	24%	35%	9%	0%	0%	71%	47%	35%	24%	26%	53%	6%	28%
Ineffective	6%	12%	0%	18%	6%	0%	0%	0%	9%	15%	18%	9%	8%
Highly ineffective	0%	0%	0%	35%	0%	0%	18%	6%	3%	3%	3%	0%	6%
Don't Know	0%	6%	0%	35%	0%	15%	26%	12%	0%	3%	0%	35%	11%
No response	6%	9%	79%	9%	94%	9%	3%	24%	6%	29%	9%	50%	27%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Highly Effective	68%	50%	3%	6%	0%	3%	12%	3%	30%	21%	26%	0%	18%
Effective	18%	26%	6%	32%	0%	71%	71%	29%	45%	24%	38%	6%	30%
Ineffective	6%	18%	0%	0%	6%	0%	0%	0%	12%	0%	24%	9%	6%
Highly ineffective	0%	0%	0%	21%	0%	0%	6%	12%	3%	0%	6%	6%	4%
Don't Know	0%	3%	0%	29%	0%	12%	12%	38%	0%	6%	0%	41%	12%
No response	9%	3%	91%	12%	94%	15%	0%	18%	9%	50%	6%	38%	29%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407

Highly Effective	74%	44%	6%	15%	3%	3%	24%	12%	61%	21%	12%	0%	23%
Effective	21%	32%	9%	21%	41%	59%	59%	35%	27%	26%	29%	68%	36%
Ineffective	3%	21%	0%	0%	9%	3%	6%	0%	3%	0%	44%	6%	8%
Highly ineffective	0%	0%	0%	18%	0%	3%	0%	9%	0%	3%	9%	0%	3%
Don't Know	0%	0%	0%	38%	3%	18%	12%	26%	0%	9%	0%	9%	10%
No response	3%	3%	85%	9%	44%	15%	0%	18%	9%	41%	6%	18%	21%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Highly Effective	74%	53%	3%	3%	0%	3%	9%	3%	36%	18%	15%	0%	18%
Effective	18%	24%	3%	0%	6%	15%	35%	26%	45%	32%	32%	9%	20%
Ineffective	6%	18%	0%	26%	3%	44%	12%	0%	3%	6%	35%	9%	14%
Highly ineffective	0%	3%	0%	24%	0%	6%	15%	12%	3%	0%	6%	0%	6%
Don't Know	0%	0%	0%	32%	3%	21%	29%	38%	0%	15%	0%	44%	15%
No response	3%	3%	94%	15%	88%	12%	0%	21%	12%	29%	12%	38%	27%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Highly Effective	79%	50%	15%	3%	3%	0%	3%	9%	52%	32%	0%	0%	20%
Effective	12%	29%	0%	0%	0%	59%	56%	18%	27%	18%	53%	6%	23%
Ineffective	6%	18%	0%	29%	3%	3%	15%	3%	12%	6%	29%	9%	11%
Highly ineffective	0%	0%	0%	15%	0%	3%	9%	12%	6%	3%	3%	0%	4%
Don't Know	0%	3%	0%	38%	0%	21%	18%	41%	0%	6%	3%	44%	14%
No response	3%	0%	85%	15%	94%	15%	0%	18%	3%	35%	12%	41%	27%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Highly Effective	94%	68%	0%	53%	0%	0%	26%	15%	76%	35%	12%	6%	32%
Effective	3%	24%	0%	38%	0%	62%	65%	41%	18%	35%	74%	91%	38%
Ineffective	3%	6%	0%	3%	3%	3%	3%	0%	0%	0%	6%	0%	2%
Highly ineffective	0%	0%	0%	0%	0%	0%	0%	6%	3%	0%	3%	0%	1%
Don't Know	0%	0%	0%	3%	3%	15%	6%	18%	0%	0%	0%	0%	4%

No response	0%	3%	100%	3%	94%	21%	0%	21%	3%	29%	6%	3%	24%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Highly Effective	62%	26%	0%	0%	0%	0%	0%	0%	33%	6%	0%	0%	11%
Effective	38%	47%	0%	0%	0%	0%	0%	0%	42%	0%	6%	0%	11%
Ineffective	0%	0%	0%	26%	3%	0%	0%	0%	0%	0%	9%	0%	3%
Highly ineffective	0%	6%	0%	26%	0%	3%	0%	0%	0%	0%	0%	0%	3%
Don't Know	0%	12%	0%	26%	0%	3%	3%	0%	3%	0%	0%	9%	5%
No response	0%	6%	100%	21%	97%	94%	97%	100%	21%	94%	85%	91%	67%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Highly Effective	68%	41%	0%	0%	0%	0%	0%	0%	36%	0%	0%	0%	12%
Effective	26%	26%	0%	0%	0%	0%	0%	0%	30%	0%	9%	0%	8%
Ineffective	6%	9%	0%	21%	3%	0%	0%	0%	6%	0%	6%	0%	4%
Highly ineffective	0%	3%	0%	32%	0%	0%	0%	0%	3%	0%	0%	0%	3%
Don't Know	0%	12%	0%	26%	0%	6%	3%	0%	3%	0%	0%	9%	5%
No response	0%	9%	100%	21%	97%	94%	97%	100%	21%	100%	85%	91%	68%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407

Q: 16) Think of one example of a CPD you have received. Indicate the nature of the CPD example?

	District												Total
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	
Face-to-face (FTF)	100%	97%	100%	82%	100%	53%	100%	97%	91%	74%	97%	100%	91%
Practical advice	0%	3%	0%	0%	0%	0%	0%	0%	6%	12%	3%	0%	2%
No CPD	0%	0%	0%	18%	0%	0%	0%	0%	0%	0%	0%	0%	1%
No Response	0%	0%	0%	0%	0%	47%	0%	3%	3%	15%	0%	0%	6%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407

Q:16) Instructions: Please indicate your level of agreement with the statements listed below													
	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Strongly Agree	100%	79%	38%	50%	65%	6%	65%	9%	88%	26%	15%	88%	52%
Agree	0%	15%	18%	12%	26%	91%	24%	85%	6%	35%	76%	12%	33%
Disagree	0%	3%	0%	6%	3%	0%	6%	0%	0%	0%	9%	0%	2%
Strongly Disagree	0%	3%	0%	3%	0%	0%	3%	0%	3%	6%	0%	0%	1%
Disagree	0%	0%	0%	6%	3%	3%	0%	0%	0%	6%	0%	0%	1%
Don't Know	0%	0%	44%	24%	3%	0%	3%	3%	3%	26%	0%	0%	9%
No Response	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Strongly Agree	56%	38%	41%	24%	12%	6%	62%	3%	18%	24%	18%	29%	28%
Agree	44%	47%	18%	35%	71%	91%	29%	85%	70%	38%	50%	71%	54%
Disagree	0%	9%	3%	6%	9%	0%	6%	0%	9%	6%	29%	0%	6%
Strongly Disagree	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	%
Disagree	0%	3%	0%	9%	0%	3%	0%	3%	0%	9%	0%	0%	2%
Don't Know	0%	3%	38%	24%	9%	0%	3%	6%	3%	24%	3%	0%	9%
No Response	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Strongly Agree	44%	41%	29%	38%	6%	9%	65%	6%	21%	21%	6%	9%	25%
Agree	18%	9%	15%	18%	50%	29%	29%	82%	55%	44%	65%	47%	38%
Disagree	38%	35%	0%	9%	32%	53%	3%	0%	15%	12%	21%	35%	21%
Strongly Disagree	0%	3%	0%	6%	0%	0%	0%	0%	6%	6%	3%	9%	3%
Disagree	0%	3%	0%	6%	3%	9%	0%	3%	0%	3%	0%	0%	2%

Don't Know	0%	9%	56%	24%	9%	0%	3%	6%	3%	15%	6%	0%	11%
No Response	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Strongly Agree	44%	44%	12%	32%	6%	6%	62%	0%	27%	15%	9%	3%	22%
Agree	29%	18%	12%	21%	68%	41%	18%	82%	45%	44%	50%	88%	43%
Disagree	9%	26%	0%	9%	12%	0%	18%	3%	6%	12%	29%	9%	11%
Strongly Disagree	18%	9%	0%	3%	0%	0%	0%	0%	12%	0%	6%	0%	4%
Disagree	0%	3%	0%	9%	0%	6%	0%	3%	9%	3%	0%	0%	3%
Don't Know	0%	0%	76%	26%	15%	47%	3%	9%	0%	26%	6%	0%	17%
No Response	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Strongly Agree	65%	38%	12%	35%	38%	6%	62%	0%	21%	24%	9%	12%	27%
Agree	12%	15%	15%	21%	47%	82%	32%	85%	52%	38%	47%	71%	43%
Disagree	12%	26%	0%	3%	6%	3%	3%	0%	6%	6%	38%	18%	10%
Strongly Disagree	9%	15%	0%	9%	0%	0%	0%	0%	6%	6%	3%	0%	4%
Disagree	3%	0%	0%	6%	0%	9%	0%	6%	6%	3%	0%	0%	3%
Don't Know	0%	6%	74%	26%	9%	0%	3%	6%	9%	24%	3%	0%	13%
No Response	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Strongly Agree	100%	82%	29%	53%	74%	6%	62%	3%	91%	24%	9%	53%	49%
Agree	0%	12%	0%	9%	24%	85%	32%	76%	0%	29%	71%	35%	31%
Disagree	0%	0%	0%	0%	3%	6%	0%	3%	0%	12%	18%	12%	4%
Strongly Disagree	0%	3%	0%	3%	0%	0%	3%	0%	3%	3%	0%	0%	1%
Disagree	0%	3%	0%	3%	0%	3%	0%	6%	6%	9%	0%	0%	2%
Don't Know	0%	0%	71%	32%	0%	0%	3%	9%	0%	24%	3%	0%	12%
No Response	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	%

Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Strongly Agree	59%	38%	18%	29%	12%	9%	59%	3%	39%	21%	6%	9%	25%
Agree	41%	53%	12%	32%	65%	38%	29%	82%	52%	29%	56%	82%	48%
Disagree	0%	6%	0%	0%	12%	50%	3%	0%	0%	6%	26%	9%	9%
Strongly Disagree	0%	0%	0%	3%	0%	0%	6%	0%	3%	9%	6%	0%	2%
Disagree	0%	3%	0%	3%	0%	3%	0%	0%	3%	6%	0%	0%	1%
Don't Know	0%	0%	71%	32%	12%	0%	3%	12%	3%	29%	6%	0%	14%
No Response	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Strongly Agree	59%	41%	9%	24%	6%	12%	62%	3%	52%	21%	21%	9%	26%
Agree	21%	18%	0%	35%	68%	26%	32%	82%	27%	29%	47%	74%	38%
Disagree	18%	38%	0%	3%	15%	9%	0%	0%	18%	3%	24%	12%	12%
Strongly Disagree	3%	0%	0%	0%	0%	3%	3%	0%	3%	6%	6%	3%	2%
Disagree	0%	3%	0%	3%	0%	6%	0%	3%	0%	21%	0%	0%	3%
Don't Know	0%	0%	91%	35%	12%	44%	3%	9%	0%	21%	3%	3%	18%
No Response	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Strongly Agree	65%	38%	15%	21%	21%	9%	62%	0%	39%	9%	6%	82%	30%
Agree	12%	12%	3%	26%	53%	29%	26%	76%	33%	24%	71%	0%	30%
Disagree	15%	41%	0%	6%	15%	47%	6%	3%	6%	21%	12%	15%	15%
Strongly Disagree	9%	6%	0%	9%	0%	3%	3%	0%	9%	3%	9%	0%	4%
Disagree	0%	0%	0%	0%	0%	12%	0%	9%	3%	21%	0%	0%	4%
Don't Know	0%	3%	82%	38%	12%	0%	3%	9%	9%	24%	3%	3%	15%
No Response	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407

Q: 17) Think of one example of a CPD you have received. Indicate the nature of the CPD example?													
	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Face-to-face (FTF)	94%	94%	100%	88%	100%	94%	100%	94%	94%	88%	97%	100%	95%
Practical advice	0%	3%	0%	0%	0%	0%	0%	0%	6%	3%	0%	0%	1%
Combination of FTF & online	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	%
No CPD Received	0%	0%	0%	12%	0%	0%	0%	0%	0%	0%	0%	0%	1%
No Response	6%	3%	0%	0%	0%	6%	0%	3%	0%	9%	3%	0%	2%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Q: 17) How much do you agree with the following statements with respect to impact of CPD received?													
	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Strongly Agree	100%	91%	50%	44%	74%	3%	71%	21%	79%	18%	9%	82%	53%
Agree	0%	9%	9%	15%	3%	91%	29%	71%	21%	50%	76%	15%	32%
Disagree	0%	0%	0%	3%	3%	3%	0%	0%	0%	6%	12%	3%	2%
Strongly Disagree	0%	0%	0%	6%	0%	0%	0%	0%	0%	0%	0%	0%	%
Disagree	0%	0%	0%	3%	0%	3%	0%	0%	0%	9%	0%	0%	1%
Don't Know	0%	0%	41%	29%	21%	0%	0%	6%	0%	18%	3%	0%	10%
No Response	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Strongly Agree	53%	41%	21%	24%	3%	9%	62%	12%	21%	9%	9%	6%	22%
Agree	47%	44%	12%	32%	15%	79%	32%	65%	76%	47%	59%	32%	45%

Disagree	0%	15%	0%	9%	6%	6%	3%	0%	3%	15%	29%	29%	10%
Strongly Disagree	0%	0%	0%	3%	9%	0%	0%	0%	0%	12%	0%	0%	2%
Disagree	0%	0%	0%	0%	9%	3%	0%	15%	0%	0%	0%	6%	3%
Don't Know	0%	0%	68%	32%	59%	3%	3%	6%	0%	18%	3%	26%	18%
No Response	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Strongly Agree	53%	41%	26%	18%	6%	12%	71%	12%	27%	15%	12%	0%	24%
Agree	24%	24%	6%	35%	15%	71%	26%	41%	52%	47%	65%	18%	35%
Disagree	24%	32%	0%	9%	9%	6%	0%	0%	21%	3%	21%	35%	13%
Strongly Disagree	0%	0%	0%	6%	6%	3%	0%	0%	0%	15%	0%	3%	3%
Disagree	0%	0%	0%	0%	12%	6%	0%	35%	0%	0%	0%	12%	5%
Don't Know	0%	3%	68%	32%	53%	3%	3%	9%	0%	21%	3%	32%	19%
No Response	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Strongly Agree	56%	38%	15%	12%	12%	9%	65%	3%	30%	9%	12%	3%	22%
Agree	32%	21%	9%	32%	9%	74%	26%	56%	36%	47%	50%	9%	33%
Disagree	3%	35%	6%	15%	9%	9%	6%	0%	27%	6%	35%	26%	15%
Strongly Disagree	9%	3%	0%	9%	9%	0%	0%	0%	6%	6%	3%	6%	4%
Disagree	0%	3%	0%	0%	9%	9%	0%	29%	0%	3%	0%	15%	6%
Don't Know	0%	0%	71%	32%	53%	0%	3%	9%	0%	29%	0%	41%	20%
No Response	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Strongly Agree	53%	41%	6%	18%	15%	12%	59%	9%	36%	24%	9%	0%	23%
Agree	38%	24%	9%	38%	12%	68%	35%	53%	36%	44%	41%	3%	33%
Disagree	6%	26%	0%	9%	3%	3%	3%	0%	15%	0%	47%	41%	13%
Strongly Disagree	3%	6%	0%	0%	15%	0%	0%	0%	9%	9%	0%	3%	4%

Disagree	0%	3%	0%	3%	9%	15%	0%	26%	3%	0%	0%	6%	5%
Don't Know	0%	0%	85%	32%	47%	3%	3%	9%	0%	24%	3%	47%	21%
No Response	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Strongly Agree	62%	41%	6%	32%	3%	15%	68%	9%	39%	21%	6%	0%	25%
Agree	29%	12%	6%	21%	12%	65%	26%	44%	33%	56%	68%	6%	31%
Disagree	9%	35%	0%	9%	9%	0%	3%	0%	18%	0%	9%	29%	10%
Strongly Disagree	0%	9%	0%	6%	9%	0%	0%	0%	6%	0%	15%	6%	4%
Disagree	0%	0%	0%	3%	6%	12%	0%	35%	0%	6%	0%	18%	7%
Don't Know	0%	0%	88%	29%	62%	9%	3%	9%	3%	18%	3%	41%	22%
No Response	0%	3%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Strongly Agree	65%	47%	9%	21%	15%	12%	65%	9%	36%	24%	9%	15%	27%
Agree	29%	12%	3%	32%	32%	71%	29%	47%	45%	41%	47%	38%	36%
Disagree	3%	32%	0%	15%	3%	0%	3%	0%	15%	3%	35%	12%	10%
Strongly Disagree	0%	6%	0%	0%	6%	0%	0%	0%	0%	6%	6%	0%	2%
Disagree	0%	0%	0%	3%	6%	15%	0%	29%	0%	3%	0%	6%	5%
Don't Know	3%	3%	88%	29%	38%	3%	3%	12%	3%	24%	3%	29%	20%
No Response	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Strongly Agree	71%	41%	9%	24%	3%	9%	68%	9%	45%	24%	9%	9%	27%
Agree	24%	24%	6%	21%	12%	71%	29%	35%	30%	50%	59%	35%	33%
Disagree	3%	29%	3%	21%	0%	0%	0%	0%	21%	0%	26%	12%	10%
Strongly Disagree	3%	3%	0%	0%	24%	0%	0%	0%	3%	6%	3%	3%	4%
Disagree	0%	3%	0%	6%	15%	9%	0%	41%	0%	0%	0%	6%	7%
Don't Know	0%	0%	82%	29%	47%	12%	3%	12%	0%	21%	3%	35%	20%

No Response	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Strongly Agree	79%	56%	26%	9%	3%	15%	62%	12%	36%	35%	3%	6%	29%
Agree	18%	9%	0%	35%	9%	62%	32%	41%	45%	26%	65%	50%	33%
Disagree	0%	26%	0%	21%	9%	0%	3%	3%	12%	3%	18%	9%	9%
Strongly Disagree	0%	9%	0%	0%	15%	0%	0%	0%	3%	3%	9%	3%	3%
Disagree	3%	0%	0%	3%	12%	12%	0%	29%	0%	6%	0%	12%	6%
Don't Know	0%	0%	74%	32%	53%	12%	3%	12%	3%	26%	6%	21%	20%
No Response	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Strongly Agree	74%	42%	6%	24%	3%	12%	50%	6%	39%	21%	6%	6%	24%
Agree	21%	33%	0%	21%	0%	68%	35%	56%	33%	41%	59%	15%	32%
Disagree	3%	12%	0%	15%	12%	0%	9%	0%	12%	3%	26%	21%	9%
Strongly Disagree	0%	6%	0%	9%	12%	0%	0%	0%	3%	12%	6%	12%	5%
Disagree	3%	3%	0%	0%	18%	6%	3%	21%	0%	0%	0%	12%	5%
Don't Know	0%	3%	94%	32%	56%	15%	3%	15%	12%	24%	3%	35%	24%
No Response	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	%
Total	34	33	34	34	34	34	34	34	33	34	34	34	406
Strongly Agree	79%	62%	24%	35%	59%	9%	76%	6%	61%	26%	21%	82%	45%
Agree	12%	12%	15%	15%	3%	79%	21%	79%	27%	47%	56%	9%	31%
Disagree	3%	18%	0%	15%	3%	0%	0%	0%	9%	0%	18%	6%	6%
Strongly Disagree	3%	6%	0%	3%	6%	0%	0%	0%	0%	6%	3%	0%	2%
Disagree	3%	3%	0%	0%	3%	6%	0%	3%	0%	0%	0%	0%	1%
Don't Know	0%	0%	62%	32%	26%	6%	3%	9%	3%	21%	3%	3%	14%
No Response	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407

Q: 18) Think of one example of a CPD you have received. Indicate the nature of the CPD example?													
	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Face-to-face (FTF)	100%	100%	100%	88%	100%	97%	100%	100%	94%	79%	91%	100%	96%
Practical advice	0%	0%	0%	0%	0%	3%	0%	0%	0%	12%	3%	0%	1%
Online	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	%
Combination of FTF & online	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	%
No CPD Received	0%	0%	0%	12%	0%	0%	0%	0%	0%	0%	0%	0%	1%
No Response	0%	0%	0%	0%	0%	0%	0%	0%	6%	9%	0%	0%	1%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Q: 18) How much do you agree with the statements below in relation to the impact of CPD on students' learning outcomes?													
	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Strongly Agree	100%	85%	21%	15%	29%	50%	56%	12%	82%	18%	6%	38%	43%
Agree	0%	6%	29%	50%	41%	41%	38%	79%	12%	29%	82%	50%	38%
Disagree	0%	3%	0%	0%	9%	3%	6%	0%	3%	18%	12%	12%	5%
Strongly Disagree	0%	6%	0%	9%	0%	0%	0%	0%	3%	15%	0%	0%	3%
Disagree	0%	0%	0%	0%	3%	0%	0%	6%	0%	9%	0%	0%	1%
Don't Know	0%	0%	50%	26%	18%	6%	0%	3%	0%	12%	0%	0%	10%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Strongly Agree	62%	41%	24%	21%	15%	0%	62%	3%	30%	26%	12%	3%	25%

Agree	38%	50%	32%	29%	53%	97%	26%	88%	64%	47%	71%	59%	55%
Disagree	0%	6%	0%	15%	12%	0%	12%	0%	6%	0%	18%	32%	8%
Strongly Disagree	0%	3%	0%	6%	3%	0%	0%	0%	0%	9%	0%	3%	2%
Disagree	0%	0%	3%	3%	3%	0%	0%	6%	0%	6%	0%	0%	2%
Don't Know	0%	0%	41%	26%	15%	3%	0%	3%	0%	12%	0%	3%	9%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Strongly Agree	53%	44%	9%	12%	9%	6%	65%	6%	30%	24%	6%	0%	22%
Agree	32%	21%	3%	35%	29%	88%	24%	74%	45%	53%	74%	12%	41%
Disagree	15%	21%	0%	18%	35%	3%	12%	0%	18%	3%	21%	41%	15%
Strongly Disagree	0%	12%	0%	6%	6%	0%	0%	0%	0%	0%	0%	32%	5%
Disagree	0%	0%	0%	3%	0%	0%	0%	12%	0%	6%	0%	9%	2%
Don't Know	0%	3%	88%	26%	21%	3%	0%	9%	6%	15%	0%	6%	15%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Strongly Agree	62%	47%	9%	21%	6%	6%	68%	6%	21%	32%	6%	3%	24%
Agree	21%	21%	6%	29%	24%	88%	21%	76%	67%	44%	71%	3%	39%
Disagree	15%	21%	0%	18%	44%	3%	12%	3%	12%	0%	18%	50%	16%
Strongly Disagree	3%	9%	0%	3%	6%	0%	0%	0%	0%	3%	6%	38%	6%
Disagree	0%	3%	0%	3%	0%	0%	0%	12%	0%	6%	0%	0%	2%
Don't Know	0%	0%	85%	26%	21%	3%	0%	3%	0%	15%	0%	6%	13%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407

Q:19) How satisfied are you with the existing CPD received?

	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Highly satisfied	94%	82%	29%	18%	21%	3%	56%	0%	70%	21%	21%	9%	35%

Moderately satisfied	0%	12%	35%	41%	56%	50%	21%	82%	12%	26%	50%	62%	37%
Somewhat satisfied	0%	3%	0%	9%	18%	0%	18%	9%	3%	12%	21%	15%	9%
Satisfied	3%	3%	32%	0%	3%	44%	3%	6%	3%	18%	9%	6%	11%
Not Satisfied at all	0%	0%	3%	3%	0%	0%	3%	0%	0%	0%	0%	0%	1%
Don't know	0%	0%	0%	21%	0%	0%	0%	0%	0%	9%	0%	6%	3%
No response	3%	0%	0%	9%	3%	3%	0%	3%	12%	15%	0%	3%	4%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407

Q:19.c) Which one of the following statements about exiting CPD do you agree with: [Multiple Answers]

	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
I would like to receive more of the same CPD	74%	68%	35%	71%	82%	0%	3%	9%	79%	47%	41%	71%	48%
I would like to receive less of the same CPD	24%	9%	29%	6%	18%	44%	0%	3%	3%	9%	6%	24%	14%
I don't want to change anything about the existing CPD	3%	9%	9%	0%	0%	3%	0%	9%	6%	9%	12%	0%	5%
I would like to receive more of the same CPD with something extra/different	3%	29%	18%	3%	0%	50%	21%	79%	6%	21%	15%	0%	20%
I would like to receive less of the same CPD with something extra/different	0%	6%	6%	0%	0%	0%	76%	0%	6%	12%	26%	3%	11%
No Response	6%	0%	26%	21%	3%	3%	0%	0%	6%	12%	3%	3%	7%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407

Q: 20) How willing would you be to attend CPD in future?													
	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Extremely willing	79%	76%	12%	18%	6%	0%	32%	0%	70%	12%	18%	18%	28%
Willing	21%	21%	53%	47%	79%	94%	29%	100%	27%	56%	59%	65%	54%
Unwilling	0%	0%	0%	26%	12%	3%	38%	0%	0%	15%	15%	15%	10%
Extremely Unwilling	0%	0%	6%	9%	0%	0%	0%	0%	0%	3%	3%	3%	2%
Don't Know	0%	3%	24%	0%	0%	0%	0%	0%	0%	15%	0%	0%	3%
No Response	0%	0%	6%	0%	3%	3%	0%	0%	3%	0%	6%	0%	2%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Q: 21) To what extent do you feel that teachers should participate in planning their CPD?													
	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Highly interested	94%	85%	44%	21%	18%	50%	56%	9%	67%	15%	21%	50%	44%
Moderately interested	3%	9%	18%	50%	56%	44%	12%	85%	15%	53%	59%	41%	37%
Not interested at all	3%	0%	6%	26%	18%	0%	32%	3%	0%	3%	6%	6%	9%
Don't know	0%	0%	18%	3%	0%	0%	0%	3%	0%	26%	9%	0%	5%
No response	0%	6%	15%	0%	9%	6%	0%	0%	18%	3%	6%	3%	5%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Q: 21.a) To what extent do you feel that teachers CPD should include coaching and mentoring?													
	District												

	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Highly interested	91%	79%	38%	21%	24%	9%	56%	9%	85%	24%	21%	0%	38%
Moderately interested	9%	21%	44%	53%	50%	41%	9%	88%	12%	41%	59%	62%	41%
Not interested at all	0%	0%	0%	24%	21%	47%	35%	3%	0%	6%	6%	18%	13%
Don't know	0%	0%	0%	0%	0%	0%	0%	0%	0%	24%	9%	12%	4%
No response	0%	0%	18%	3%	6%	3%	0%	0%	3%	6%	6%	9%	4%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407

Q: 22) How supportive do you think relevant stakeholders would be in providing on-site CPD opportunities for PSTs?

	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Highly supportive	100%	71%	65%	44%	9%	3%	59%	21%	73%	18%	32%	24%	43%
Moderately Supportive	0%	29%	0%	29%	24%	18%	12%	53%	21%	32%	59%	41%	27%
Somewhat Supportive	0%	0%	0%	24%	29%	56%	9%	6%	0%	3%	6%	3%	11%
Not Supportive at all	0%	0%	0%	3%	9%	0%	6%	0%	0%	3%	0%	3%	2%
Don't Know	0%	0%	0%	0%	3%	6%	3%	21%	0%	3%	0%	26%	5%
No Response	0%	0%	35%	0%	26%	18%	12%	0%	6%	41%	3%	3%	12%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Highly supportive	59%	38%	35%	47%	65%	21%	65%	71%	36%	41%	21%	94%	49%
Moderately Supportive	41%	50%	9%	44%	29%	29%	15%	18%	58%	24%	62%	6%	32%
Somewhat Supportive	0%	6%	0%	6%	0%	47%	0%	0%	3%	9%	18%	0%	7%
Don't Know	0%	3%	0%	0%	3%	0%	0%	12%	0%	3%	0%	0%	2%
No Response	0%	3%	56%	3%	3%	3%	21%	0%	3%	24%	0%	0%	10%

Total	34	34	34	34	34	34	34	34	33	34	34	34	407
.00	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	%
Highly supportive	59%	29%	6%	15%	6%	32%	29%	76%	30%	18%	18%	0%	27%
Moderately Supportive	9%	24%	3%	38%	12%	9%	32%	15%	48%	18%	44%	3%	21%
Somewhat Supportive	32%	29%	0%	35%	6%	50%	3%	3%	15%	9%	35%	3%	18%
Not Supportive at all	0%	6%	0%	6%	6%	0%	3%	3%	3%	6%	0%	3%	3%
Don't Know	0%	6%	0%	0%	26%	0%	0%	0%	0%	6%	0%	41%	7%
No Response	0%	6%	91%	6%	44%	9%	32%	3%	3%	44%	3%	47%	24%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Highly supportive	100%	91%	3%	12%	35%	26%	3%	68%	88%	21%	6%	100%	46%
Moderately Supportive	0%	6%	0%	21%	21%	12%	6%	6%	6%	3%	65%	0%	12%
Somewhat Supportive	0%	0%	0%	26%	0%	47%	12%	12%	0%	24%	21%	0%	12%
Not Supportive at all	0%	0%	0%	15%	0%	0%	32%	0%	0%	0%	6%	0%	4%
Don't Know	0%	3%	0%	18%	15%	3%	18%	3%	0%	3%	0%	0%	5%
No Response	0%	0%	97%	9%	29%	12%	29%	12%	6%	50%	3%	0%	21%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Highly supportive	82%	62%	0%	3%	53%	38%	9%	82%	52%	15%	18%	85%	42%
Moderately Supportive	15%	35%	0%	12%	26%	18%	56%	6%	48%	24%	47%	15%	25%
Somewhat Supportive	0%	0%	0%	35%	0%	44%	3%	0%	0%	0%	32%	0%	10%
Not Supportive at all	0%	0%	0%	26%	0%	0%	0%	0%	0%	0%	0%	0%	2%
Don't Know	0%	3%	0%	15%	0%	0%	6%	0%	0%	3%	0%	0%	2%
No Response	3%	0%	100%	9%	21%	0%	26%	12%	0%	59%	3%	0%	19%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Highly supportive	82%	71%	0%	3%	3%	38%	9%	32%	30%	6%	9%	0%	24%
Moderately Supportive	6%	9%	0%	9%	3%	12%	50%	18%	45%	24%	29%	0%	17%

Somewhat Supportive	9%	15%	0%	32%	12%	44%	3%	3%	12%	6%	47%	0%	15%
Not Supportive at all	0%	0%	0%	29%	0%	0%	0%	6%	0%	0%	6%	0%	3%
Don't Know	0%	6%	0%	18%	9%	3%	6%	21%	0%	6%	0%	62%	11%
No Response	3%	0%	100%	9%	74%	3%	32%	21%	12%	59%	9%	38%	30%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
.00	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%	%
Highly supportive	85%	53%	0%	26%	35%	29%	15%	44%	39%	21%	32%	3%	32%
Moderately Supportive	9%	29%	0%	15%	32%	21%	44%	38%	36%	26%	44%	56%	29%
Somewhat Supportive	3%	15%	0%	12%	0%	44%	3%	3%	0%	3%	12%	0%	8%
Not Supportive at all	0%	0%	0%	24%	0%	0%	6%	0%	12%	3%	9%	3%	5%
Don't Know	0%	3%	0%	15%	3%	3%	6%	3%	0%	0%	0%	18%	4%
No Response	3%	0%	100%	9%	26%	3%	26%	12%	12%	47%	3%	21%	22%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Highly supportive	91%	68%	6%	26%	35%	26%	9%	18%	39%	3%	21%	12%	29%
Moderately Supportive	3%	12%	0%	38%	41%	21%	38%	24%	33%	32%	44%	74%	30%
Somewhat Supportive	3%	6%	0%	15%	0%	44%	15%	3%	0%	0%	32%	0%	10%
Not Supportive at all	0%	9%	0%	3%	0%	0%	6%	6%	12%	0%	0%	0%	3%
Don't Know	0%	3%	0%	9%	0%	3%	3%	26%	0%	3%	0%	9%	5%
No Response	3%	3%	94%	9%	24%	6%	29%	24%	15%	62%	3%	6%	23%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Q: 23) How important do you think it is to collaborate with your peers/colleagues, head teachers and trainers and scholars to learn from each other's experiences and form a learning group?													
District													

	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Highly important	91%	85%	53%	15%	18%	3%	56%	6%	88%	35%	29%	18%	41%
Moderately important	6%	6%	41%	53%	38%	91%	26%	79%	9%	18%	44%	53%	39%
Important	3%	3%	6%	18%	38%	0%	15%	15%	0%	6%	26%	24%	13%
Unimportant	0%	0%	0%	3%	0%	3%	0%	0%	0%	12%	0%	6%	2%
Don't know	0%	0%	0%	12%	0%	0%	0%	0%	0%	3%	0%	0%	1%
No response	0%	6%	0%	0%	6%	3%	3%	0%	3%	26%	0%	0%	4%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407

Q: 24) How much time could you spend to avail of the opportunity of CPD, participate in group study sessions, discuss teaching experiences with peers and colleague and collaborate with colleagues for lesson planning?

	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
1 hour	94%	68%	0%	65%	53%	0%	21%	3%	70%	18%	0%	79%	39%
2 hours	6%	18%	38%	24%	21%	9%	29%	35%	18%	24%	53%	18%	24%
3 hours	0%	9%	59%	0%	0%	26%	26%	50%	0%	15%	41%	0%	19%
Others	0%	0%	0%	0%	0%	9%	0%	0%	0%	9%	3%	0%	2%
Don't Know	0%	0%	3%	0%	6%	35%	0%	6%	3%	29%	3%	3%	7%
No Response	0%	6%	0%	12%	21%	21%	6%	6%	6%	6%	0%	0%	7%
1 Day	0%	0%	0%	0%	0%	0%	18%	0%	3%	0%	0%	0%	2%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407

Q: 25) How frequently do you think CPD, group study sessions, meetings, seminars, working group, collaborative planning and discussions should take place ?

	District												
--	----------	--	--	--	--	--	--	--	--	--	--	--	--

	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Weekly	3%	21%	3%	0%	0%	0%	0%	0%	12%	12%	0%	0%	4%
Fortnightly	0%	3%	6%	0%	0%	0%	3%	0%	0%	3%	0%	3%	1%
Monthly	0%	21%	6%	0%	15%	47%	62%	3%	21%	21%	9%	41%	20%
Bimonthly	0%	9%	15%	0%	6%	6%	9%	3%	0%	3%	12%	18%	7%
Once in a semester	53%	21%	15%	76%	18%	3%	18%	3%	21%	3%	18%	0%	21%
Annually	44%	24%	56%	21%	59%	44%	9%	79%	45%	29%	38%	32%	40%
Don't know	0%	0%	0%	0%	0%	0%	0%	12%	0%	0%	24%	6%	3%
No response	0%	3%	0%	3%	3%	0%	0%	0%	0%	29%	0%	0%	3%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407

Q: 26) What steps could QAED and other stakeholders take to facilitate PSTs to receive on going support and CPD? : [Multiple Answers]

	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
No Response	0%	3%	0%	0%	0%	0%	6%	0%	0%	9%	0%	0%	1%
Train the head teachers to provide coaching and mentoring	91%	85%	59%	100%	94%	50%	100%	94%	100%	74%	41%	100%	82%
Train a colleague/peer to provide support as a critical friend	88%	32%	35%	0%	26%	24%	0%	38%	67%	18%	47%	0%	31%
Provide online sessions using IT facility in cluster center for your support	88%	32%	21%	0%	15%	24%	0%	24%	70%	21%	29%	0%	27%

Arrange seminars	79%	38%	44%	0%	59%	35%	0%	41%	73%	18%	18%	0%	34%
Arrange study groups facilitated by a trainer	97%	59%	32%	0%	32%	50%	0%	44%	76%	32%	32%	0%	38%
Provide opportunities for observing model lessons in your school	79%	26%	21%	0%	9%	41%	0%	15%	61%	18%	29%	0%	25%
Provide opportunities to collaborate with PSTs from other schools for lesson planning and sharing teaching experiences	76%	26%	24%	0%	6%	15%	0%	29%	64%	21%	18%	0%	23%
Provide opportunities of reflection and discussion with a peer group/s and mentors	56%	29%	26%	0%	3%	29%	0%	24%	61%	18%	44%	0%	24%
Provide remote mentors who could be available to PSTs to support them when needed	62%	15%	9%	0%	9%	26%	0%	56%	58%	24%	32%	0%	24%
Provide sample material of lesson plans and assessments for self-study	47%	15%	38%	0%	0%	47%	0%	59%	36%	38%	6%	0%	24%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407

Q: 27) Please select topics that you will be interested to find out more about via CPD in future? : [Multiple Answers]

	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Classroom management	68%	91%	71%	94%	44%	88%	65%	85%	88%	53%	47%	47%	70%

Time management	74%	79%	53%	3%	6%	76%	24%	71%	85%	35%	41%	9%	46%
Teaching reading skills	76%	82%	38%	0%	3%	76%	38%	59%	76%	41%	38%	3%	44%
Teaching writing skills	53%	79%	29%	0%	6%	65%	68%	35%	85%	29%	44%	26%	43%
Multi-grade teaching	26%	53%	6%	82%	79%	88%	100%	82%	42%	35%	47%	18%	55%
Don't Know	0%	0%	12%	0%	0%	0%	0%	0%	0%	3%	0%	0%	1%
No response	0%	0%	0%	3%	0%	0%	0%	0%	0%	29%	3%	6%	3%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407

Q: 28) Do you face any barriers to participate in a CPD?

	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Yes	53%	53%	12%	41%	59%	9%	6%	32%	33%	35%	24%	44%	33%
No	44%	44%	88%	53%	41%	44%	94%	65%	58%	18%	74%	56%	57%
Don't Know	0%	3%	0%	6%	0%	44%	0%	3%	0%	0%	3%	0%	5%
No Response	3%	0%	0%	0%	0%	3%	0%	0%	9%	47%	0%	0%	5%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407

Q:28.a) If yes, what are some of the barriers to receive CPD?

	District												
	Attock	Chakwal	Dera Ghazi Khan	Faisalabad	Lahore	Lodhran	Multan	Muzaffar Garh	Rawalpindi	Shaikhupura	Sialkot	Sahiwal	Total
Yes	9%	24%	0%	35%	38%	9%	0%	18%	12%	12%	6%	15%	15%
No	41%	38%	100%	65%	62%	47%	100%	82%	15%	88%	94%	85%	68%
No Response	50%	38%	0%	0%	0%	44%	0%	0%	73%	0%	0%	0%	17%

Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Yes	15%	6%	0%	6%	9%	0%	0%	15%	9%	18%	9%	3%	7%
No	85%	94%	100%	94%	91%	100%	100%	85%	91%	82%	91%	97%	93%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Yes	3%	6%	0%	9%	3%	0%	0%	0%	3%	9%	3%	3%	3%
No	97%	94%	100%	91%	97%	100%	100%	100%	97%	91%	97%	97%	97%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Yes	21%	6%	0%	3%	0%	3%	0%	6%	9%	15%	3%	3%	6%
No	79%	94%	100%	97%	100%	97%	100%	94%	91%	85%	97%	97%	94%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Yes	15%	21%	3%	0%	3%	47%	0%	9%	9%	3%	3%	3%	10%
No	85%	79%	97%	100%	97%	53%	100%	91%	91%	97%	97%	97%	90%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Yes	6%	3%	0%	0%	0%	3%	0%	9%	3%	0%	0%	18%	3%
No	94%	97%	100%	100%	100%	97%	100%	91%	97%	100%	100%	82%	97%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Yes	3%	3%	0%	3%	9%	0%	0%	12%	3%	18%	0%	3%	4%
No	97%	97%	100%	97%	91%	100%	100%	88%	97%	82%	100%	97%	96%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Yes	0%	6%	9%	3%	0%	6%	0%	6%	3%	0%	0%	3%	3%
No	100%	94%	91%	97%	100%	94%	100%	94%	97%	100%	100%	97%	97%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Yes	6%	3%	0%	6%	0%	3%	0%	3%	0%	12%	0%	0%	3%
No	94%	97%	100%	94%	100%	97%	100%	97%	100%	88%	100%	100%	97%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Yes	0%	0%	0%	3%	0%	3%	0%	6%	3%	6%	0%	3%	2%

No	100%	100%	100%	97%	100%	97%	100%	94%	97%	94%	100%	97%	98%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Yes	6%	3%	0%	0%	3%	44%	0%	0%	0%	0%	0%	0%	5%
No	94%	97%	100%	100%	97%	56%	100%	100%	100%	100%	100%	100%	95%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407
Yes	0%	0%	0%	0%	3%	0%	0%	0%	0%	3%	0%	0%	%
No	100%	100%	100%	100%	97%	100%	100%	100%	100%	97%	100%	100%	100%
Total	34	34	34	34	34	34	34	34	33	34	34	34	407

Annex – D Work Plan

Work Plan (In Weeks)	Jul-18		Aug-18				Sep-18				Oct-18				Nov-18	
	WK 3	WK 4	WK 1	WK 2	WK 3	WK 4	WK 1	WK2	WK 3	WK 4	WK 1	WK2	WK3	WK4	WK1	WK2
Main Activity: Desk Review and Inception Report																
Sub-activity: Instrument design																
Sub- Activity: Inception meeting																
Main activity: Field Work																
Sub-activity: Pilot/Pretesting																
Main activity: Primary Data Collection																
Sub-activity: Conduct of Survey from PSTs																
Sub-activity: Conduct of Interviews																
Main activity: Data cleaning, coding and analysis																
Sub-activity: Data Consolidation and Coding																
Sub-activity: Data Analysis and updating of indicators																
Sub-activity: Development of Draft Report																
Main activity: Submission & Presentation of Draft Report																
Sub-activity: Finalization and submission of Report																
Sub-activity: Presentation of Report																
Key Outputs and Milestones																
Submission of Final Report																
Policy Brief																
Presentation of Main Findings																

Annex – E Data Collection Instruments

The following tools will be used for data collection for this research study.

Quantitative Tools

1. Survey with PSTs

Qualitative Tools

1. In-depth Interviews with PSTs
2. Key Informant Interview with head teachers
3. Key Informant Interview with representatives of QAED & PEELI

Annex - I

Survey Questionnaire for CPD preferences of PSTs in Punjab (CPD)

Study	District	UR/RU	MT/FT	GS/BS	Series NO
CPD					

District: 1st 2 Alphabets, UR: Urban, RU: Rural, MT: Male Teacher, F: Female Teacher, GS: Girls School, BS: Boys School, Serial No: Form No

Full Name of Surveyor: First Name: _____ Last Name: _____

District: _____ Town: _____ Village: _____

Date: ____/____/____ Time: __:__ AM PM

Introduction: My name is _____. I am representing a consulting firm named DevTrio Consultants. We are conducting a research study to understand the preferences of PSTs for CPD options in Punjab and local levels. The information gathered will be used strictly for research purposes and your identity and anonymity will be ensured. The information is important to modify future CPDs you are offered so kindly think carefully and answer the questions. There is no right or wrong question so please answer as you deem fit. Do I have the permission to proceed to asking you relevant questions and record your answers? You are free to withdraw from this research at any time by telling the surveyor. **Thank you.**

Section: 1 TEACHER PROFILE

i) Gender of the respondent Male Female

ii) Qualification _____

ii) Total teaching experience (Years) _____

iii) Teaching experience as a PST(Years) _____

iv) Class you teach _____

v) Subject you teach _____

vi) Total number of CPD received _____

vii) Age group 20-30 (1) 31-40 (2) 41-50 (3) 51-60 Other (5)

viii) School ID _____

ix) Name of the school _____

x) Total no of teachers working in the school: _____

xi) Location of the school: _____

District: _____ City: _____ Village: _____

Section: 2 KEY CHALLENGES PSTs' FACE REGARDING TEACHING IN PRIMARY SCHOOLS

Q: 1) What are some of the key challenges facing PSTs regarding teaching in general and teaching specific subjects in primary schools?

Teaching your class	Teaching specific subjects	
1. _____	English language	<input type="checkbox"/>
2. _____	Mathematics	<input type="checkbox"/>
3. _____	Science	<input type="checkbox"/>
4. _____	Other Subject:	<input type="checkbox"/>
5. _____	Other area of teaching:	<input type="checkbox"/>
6. _____	Don't Know	<input type="checkbox"/>
7. _____	No Response	<input type="checkbox"/>

Section: 3 EXISTING SUPPORT AVAILABLE / RECEIVED AT SCHOOL LEVEL

Q: 2) Do you receive any support (practical or on demand CPD) in lesson planning, concepts and content of lessons/curriculum, classroom management, teaching methodology to overcome problems you face in teaching your class? (If the answer is 'No' proceed to the next section)

Yes NO Don't Know No Response

2.a) If yes, who provides the support and guidance you need?

- | | | | |
|----------------------|--------------------------|-----------------------------|--------------------------|
| Head teachers | <input type="checkbox"/> | Teachers from other schools | <input type="checkbox"/> |
| Fellow teachers | <input type="checkbox"/> | Teachers from college | <input type="checkbox"/> |
| Senior colleagues | <input type="checkbox"/> | No one at all | <input type="checkbox"/> |
| Friends from college | <input type="checkbox"/> | Don't know | <input type="checkbox"/> |
| Someone at home | <input type="checkbox"/> | No response | <input type="checkbox"/> |

2.b) How is the practical CPD provided?

- | | | | |
|------------------------------|--------------------------|--------------------------------|--------------------------|
| Class observations | <input type="checkbox"/> | Providing feedback | <input type="checkbox"/> |
| Coaching | <input type="checkbox"/> | Mentoring | <input type="checkbox"/> |
| Informal discussions | <input type="checkbox"/> | Sharing reading material | <input type="checkbox"/> |
| Sharing sample students work | <input type="checkbox"/> | Demonstration of model lessons | <input type="checkbox"/> |
| Sharing lesson plans | <input type="checkbox"/> | Others (please specify): _____ | |

Section: 4 PAST CPD RECEIVED

Q: 3) Did you receive face-to-face or practical CPD during your induction period?

Yes No Don't know No response

Q: 4) Did you receive face-to-face or practical CPD other than the one during induction period?

Yes No Don't know No response

Q: 5) What was the focus of the CPD you received? (Please tick multiple answers)

- | | | | |
|---|--------------------------|---------------------------|--------------------------|
| a) Teaching methodology | <input type="checkbox"/> | f) Curriculum management | <input type="checkbox"/> |
| b) Interactive teaching | <input type="checkbox"/> | g) Science | <input type="checkbox"/> |
| c) Lesson planning | <input type="checkbox"/> | h) Mathematics | <input type="checkbox"/> |
| d) Classroom management | <input type="checkbox"/> | i) English language | <input type="checkbox"/> |
| e) Time management | <input type="checkbox"/> | j) Information Technology | <input type="checkbox"/> |
| k) Other topics (please specify): _____ | | | |

Q: 6) What was the length/duration of CPD you received in the past? (Please select only one answer)

- | Duration | Tick Here | Duration | Tick Here |
|---|--------------------------|------------|--------------------------|
| a) 2-3 hours | <input type="checkbox"/> | e) 6 days | <input type="checkbox"/> |
| b) 1 day | <input type="checkbox"/> | f) 1 week | <input type="checkbox"/> |
| c) 2 days | <input type="checkbox"/> | g) 2 weeks | <input type="checkbox"/> |
| d) 3 days | <input type="checkbox"/> | | |
| h) Other option (Please specify): _____ | | | |

Q: 7) Which entity/training institute provided you the trainings you attended?

- | | | | |
|-----------------------------------|--------------------------|-------------------------------|--------------------------|
| a) QAED (Previously known as DSD) | <input type="checkbox"/> | b) PEELI | <input type="checkbox"/> |
| c) The British Council | <input type="checkbox"/> | d) International NGOs | <input type="checkbox"/> |
| e) National/local NGOs | <input type="checkbox"/> | f) School principal | <input type="checkbox"/> |
| g) Teacher colleagues | <input type="checkbox"/> | h) Other organizations: _____ | |

Section: 5 RELEVANCE OF EXISTING CPD

Q: 8) Does the existing CPD meet your specific learning needs and provided answers to questions you were looking for regarding teaching your class?

Yes No Don't know No response

(Please give reasons for your answer. If the answer was 'No' please specify the gaps)

Q: 9) Were the ideas, theories, activities presented in the CPD practical for your classroom?

Yes No Don't know No response

Q: 10) How comfortable do you feel to use the newly learnt teaching techniques, ideas, activities in your classroom?

Very comfortable Moderately comfortable Somewhat comfortable Not comfortable at all Don't know

Q: 10.a) How often do you feel the need for further guidance and support when using new teaching techniques, activities and ideas shared during CPD in your classroom setting?

Always Often seldom rarely Not at all Don't know No response

Q: 10.b) What are the barriers in using the new ideas, theories and activities in your class?

1. _____ 2. _____ 3. _____
4. _____ 5. _____ 6. _____

Section: 6 FOLLOW UP FACILITATION

Q: 10.c.) In case you need urgent practical CPD (you have questions regarding teaching your pupils) who do you turn to for guidance?

Person	Tick Here	Person	Tick Here
a) Fellow teachers	<input type="checkbox"/>	b) District cluster subject experts	<input type="checkbox"/>
c) Senior teachers	<input type="checkbox"/>	d) No one	<input type="checkbox"/>
e) Head teacher	<input type="checkbox"/>	f) Don't Know	<input type="checkbox"/>
g) DTE	<input type="checkbox"/>	h) No Response	<input type="checkbox"/>
i) MT	<input type="checkbox"/>	j) Anyone else: _____	

Q: 10.d) Do you receive follow up facilitation after receiving CPD? Yes/No

(If the answer is 'No' proceed to Q: 11)

Yes No Don't know No response

Q: 10.e) If yes, who provides the follow up facilitation after you receive CPD?

Head teacher	<input type="checkbox"/>	Senior teachers	<input type="checkbox"/>
MTs	<input type="checkbox"/>	No one	<input type="checkbox"/>
DTEs	<input type="checkbox"/>	Don't know	<input type="checkbox"/>
Peers	<input type="checkbox"/>	No response	<input type="checkbox"/>
Other: _____			

Q: 10.f) How often is the follow up facilitation provided after a CPD intervention?

Daily	<input type="checkbox"/>	Annually	<input type="checkbox"/>
Weekly	<input type="checkbox"/>	Sometimes	<input type="checkbox"/>
Fortnightly	<input type="checkbox"/>	Never	<input type="checkbox"/>
Monthly	<input type="checkbox"/>	Don't know	<input type="checkbox"/>
Bimonthly	<input type="checkbox"/>	No response	<input type="checkbox"/>

Q: 11.) Do you write action plans?

Yes No Don't know No response

Q: 12) Is your progress monitored? Yes/No (if the answer is 'No' please proceed to the next section)

Yes No Don't know No response

Q: 12.a) If yes, who monitors your progress?

Head teacher	<input type="checkbox"/>	Senior teachers	<input type="checkbox"/>
MTs	<input type="checkbox"/>	No one	<input type="checkbox"/>
DTEs	<input type="checkbox"/>	Don't know	<input type="checkbox"/>
Peers	<input type="checkbox"/>	No response	<input type="checkbox"/>

Other: _____

Q: 12.b) Does the monitor provide feedback about your teaching?

Yes No Don't know No response

Q: 12.c) Is the feedback helpful for you?

Yes No Don't know No response

Section :7 MODES OF CPD RECEIVED

Q: 13) What was the mode of delivery of the CPD you received in the past? (Tick more than one answer)

- | | | | |
|-----------------------------|--------------------------|--|--------------------------|
| Face-to-face (FTF) | <input type="checkbox"/> | Exposure to school visits | <input type="checkbox"/> |
| Online | <input type="checkbox"/> | Group study | <input type="checkbox"/> |
| A combination of FTF/online | <input type="checkbox"/> | Modeling | <input type="checkbox"/> |
| Distance learning | <input type="checkbox"/> | Informal consultations with colleagues/senior teachers | <input type="checkbox"/> |
| Peer-observation | <input type="checkbox"/> | Informal discussions with the head teachers | <input type="checkbox"/> |
| Coaching | <input type="checkbox"/> | Don't know | <input type="checkbox"/> |
| Mentoring | <input type="checkbox"/> | No Response | <input type="checkbox"/> |

Q: 14) In your opinion, which modes of trainings were most useful and effective?

Key: Highly Effective: 1, Effective: 2, Ineffective: 3, Highly ineffective: 4, Don't Know: 5, No response: 6

	1	2	3	4	5	6
Face-to-face (FTF)	<input type="checkbox"/>					
Online	<input type="checkbox"/>					
Combination of FTF & online	<input type="checkbox"/>					
Distance learning	<input type="checkbox"/>					
Peer-observation	<input type="checkbox"/>					
Coaching	<input type="checkbox"/>					
Mentoring	<input type="checkbox"/>					
Exposure to school visits	<input type="checkbox"/>					
Group study	<input type="checkbox"/>					
Modeling	<input type="checkbox"/>					
Informal consultations with colleagues/senior teachers	<input type="checkbox"/>					

	1	2	3	4	5	6
Informal discussions with the head teachers	<input type="checkbox"/>					
Don't know	<input type="checkbox"/>					
No Response	<input type="checkbox"/>					

Q: 15) What challenges did you face when attending the trainings using the following modes of delivery? (please select from the given list of reasons although you may add reasons that are not included in the list)

(Quality of trainings; Trainers' training skills; Infrastructure to support the training; Training environment; Cost; Interaction between participants during trainings; Length of the training; Time constraints; Language of instruction; Topics of trainings; Training schedule; Travelling to training venue; Understanding the contents of trainings; p. Trainers IT skills; Student teachers' IT skills; Infrastructure to support online training; Lack of face to face time; Understanding the contents of trainings)

Key: Don't Know: 1, No Response: 2

MODES OF TRAININGS

KEY CHALLENGES

		1	2
Face-to-face (FTF)	_____	<input type="checkbox"/>	<input type="checkbox"/>
Online	_____	<input type="checkbox"/>	<input type="checkbox"/>
Combination of FTF & online	_____	<input type="checkbox"/>	<input type="checkbox"/>
Distance learning	_____	<input type="checkbox"/>	<input type="checkbox"/>
Peer-observation	_____	<input type="checkbox"/>	<input type="checkbox"/>
Coaching	_____	<input type="checkbox"/>	<input type="checkbox"/>
Mentoring	_____	<input type="checkbox"/>	<input type="checkbox"/>
Exposure to school visits	_____	<input type="checkbox"/>	<input type="checkbox"/>
Group study	_____	<input type="checkbox"/>	<input type="checkbox"/>
Modeling	_____	<input type="checkbox"/>	<input type="checkbox"/>

Informal consultations with _____	<input type="checkbox"/>	<input type="checkbox"/>
Informal discussions with the head teachers _____	<input type="checkbox"/>	<input type="checkbox"/>

Section: 8 QUALITY OF CPD RECEIVED

Q: 16) Think of one example of a CPD you have received. Indicate the nature of the CPD example?

- Face-to-face (FTF)
- Practical advice
- Online
- Combination of FTF & online
- Others, please specify: _____

Instructions: Please indicate your level of agreement with the statements listed below in relation to the CPD indicated above

Key: Strongly Agree: 1, Agree: 2, Disagree: 3, Strongly Disagree: 4, Disagree: 5, Don't Know: 6

Statement	1	2	3	4	5	6
The objectives of the trainings were clearly defined and communicated	<input type="checkbox"/>					
Participation and interaction were encouraged	<input type="checkbox"/>					
The topics covered were relevant to me	<input type="checkbox"/>					
The content was organized and easy to follow	<input type="checkbox"/>					
The trainer was knowledgeable about the training topics	<input type="checkbox"/>					
Statement	1	2	3	4	5	6
The trainer was well prepared.	<input type="checkbox"/>					
The training objectives were met.	<input type="checkbox"/>					
The time allotted for the training was sufficient	<input type="checkbox"/>					
The meeting room and facilities were adequate and comfortable.	<input type="checkbox"/>					

Section: 9 IMPACT OF CPD RECEIVED ON PSTs

Q: 17) Think of one example of a CPD you have received. Indicate the nature of the CPD example?

- Face-to-face (FTF)
- Practical advice
- Online
- Combination of FTF & online
- Others, please specify: _____

How much do you agree with the following statements with respect to impact of CPD indicated above?

Key: Strongly Agree: 1, Agree: 2, Disagree: 3, Strongly Disagree: 4, Disagree: 5, Don't Know: 6

Statement	1	2	3	4	5	6
a) I have increased knowledge of the content of the key learning area/s I teach.	<input type="checkbox"/>					
b) I have increased knowledge of teaching strategies appropriate to the content of the key learning area/s I teach	<input type="checkbox"/>					
c) I have increased knowledge about how students learn the content of the key learning area/s I teach	<input type="checkbox"/>					
d) I have increased understanding of individual differences among students and how to cater for them	<input type="checkbox"/>					
e) I now make clearer links between my teaching goals and the classroom activities I use in my classroom	<input type="checkbox"/>					
f) I now make clearer links between my teaching goals and the methods I use to assess student learning	<input type="checkbox"/>					

g) I am now more creative in my teaching	<input type="checkbox"/>					
h) I now use more effective teaching and learning strategies appropriate to students in my class/es	<input type="checkbox"/>					
i) I am better able to meet the individual learning needs of my students	<input type="checkbox"/>					
j) I integrate information and communication technology into my teaching more effectively	<input type="checkbox"/>					
k) My confidence as a teacher has increased	<input type="checkbox"/>					

Section: 10 IMPACT OF CPD RECEIVED ON STUDENTS

Q: 18) Think of one example of a CPD you have received. Indicate the nature of the CPD example?

Face-to-face (FTF) Practical advice Online Combination of FTF & online

Others, please specify: _____

Q:18 a) How much do you agree with the statements below in relation to the impact of CPD on students' learning outcomes?

Key: Strongly Agree: 1, Agree: 2, Disagree: 3, Strongly Disagree: 4, Disagree: 5, Don't Know: 6

	1	2	3	4	5	6
My students have fewer difficulties in understanding what they are being taught	<input type="checkbox"/>					
My students are learning more purposefully	<input type="checkbox"/>					
My students are more actively engaged in learning activities	<input type="checkbox"/>					
My students demonstrate enhanced learning outcomes	<input type="checkbox"/>					

Section: 11 SATISFACTION WITH EXISTING CPD

Q: 19) How satisfied are you with the existing CPD received?

Highly satisfied Moderately satisfied Somewhat satisfied Satisfied
 Not Satisfied at all Don't know No response

Kindly explain the option selected above:

Q: 19.a) What do you like most about existing CPD?

1. _____ 2. _____ 3. _____ 4. Don't Know 5.No Response

Q: 19.b) What would you change about the existing CPD?

1. _____ 2. _____ 3. _____ 4. Don't Know 5.No Response

Q: 19.c) Which one of the following statements about exiting CPD do you agree with the most

1. I would like to receive more of the same CPD
2. I would like to receive less of the same CPD
3. I don't want to change anything about the existing CPD
4. I would like to receive more of the same CPD with something extra/different
5. I would like to receive less of the same CPD with something extra/different

Section: 12 WILLINGNESS TO RECEIVE CPD IN FUTURE

Q: 20) How willing will you be to undertake CPD in future? (Encircle only one answer)

Extremely willing Willing Unwilling Extremely Unwilling Don't Know

Q: 21) To what extent do you feel that teachers should participate in planning their CPD?

Highly interested Moderately interested Not interested at all Don't know No response

Q: 21.a) To what extent do you feel that teachers CPD should include coaching and mentoring?

Highly interested Moderately interested Not interested at all Don't know No response

Q: 22) How supportive do you think relevant stakeholders would be in providing on-site CPD opportunities for PSTs?

Key: Highly supportive: 1, Moderately Supportive: 2, Somewhat Supportive: 3, Not Supportive at all: 4, Don't Know:5, No Response: 6

	1	2	3	4	5	6
Yourself	<input type="checkbox"/>					
Head teachers	<input type="checkbox"/>					
DTEs	<input type="checkbox"/>					
	1	2	3	4	5	6
MTs	<input type="checkbox"/>					
QAED	<input type="checkbox"/>					
SED	<input type="checkbox"/>					
PEELI	<input type="checkbox"/>					
Peers/colleagues	<input type="checkbox"/>					

Q: 23) How important do you think it is to collaborate with your peers/colleagues, head teachers and trainers and scholars to learn from each other's experiences and form a learning group?

Highly important Moderately important Important Unimportant Don't know No response

Q: 24) How much time could you spend to avail of the opportunity of CPD, participate in group study sessions, discuss teaching experiences with peers and colleague and collaborate with colleagues for lesson planning?

1 hour 2 hours 3 hours other _____ Don't know No response

Q: 25) How frequently do you think CPD, group study sessions, meetings, seminars, working group, collaborative planning and discussions should take place ?

Weekly Once in a semester
 Fortnightly Annually
 Monthly Don't know
 Bimonthly No response

Q: 26) What steps could QAED and other stakeholders take to facilitate you and other PSTs in your school setting? (Multiple answers allowed)

1. Train the head teachers to provide coaching and mentoring
2. Train a colleague/peer to provide support as a critical friend
3. Provide online sessions using IT facility in cluster center for your support
4. Arrange seminars
5. Arrange study groups facilitated by a trainer
6. Provide opportunities for observing model lessons in your school
7. Provide opportunities to collaborate with PSTs from other schools for lesson planning and sharing teaching experiences
8. Provide opportunities of reflection and discussion with a peer group/s and mentors
9. Provide remote mentors who could be available to PSTs to support them when needed
10. Provide sample material of lesson plans and assessments for self-study
11. Other ways that would best suit you and your colleagues, please suggest: _____

Q: 27) Please select topics that you will be interested to find out more about via CPD? (Multiple answers allowed)

Classroom management Multi-grade teaching
 Time management Don't Know

Teaching reading skills	<input type="checkbox"/>	No response	<input type="checkbox"/>
Teaching writing skills	<input type="checkbox"/>	Others: _____	

Section: 13 BARRIERS TO RECEIVING CPD

Q: 28) Are there any barriers in participating in a CPD?

Yes <input type="checkbox"/>	No <input type="checkbox"/>	Don't know <input type="checkbox"/>	No response <input type="checkbox"/>
Time constraint		<input type="checkbox"/> Merit-based nominations	<input type="checkbox"/>
Schedule of CPD		<input type="checkbox"/> School culture	<input type="checkbox"/>
Leadership		<input type="checkbox"/> Required seniority	<input type="checkbox"/>
Lack of encouragement to initiate collaborative CPD at school level		<input type="checkbox"/> Delay in dissemination of information about CPD opportunities	<input type="checkbox"/>
Lack of teacher motivation to participate in CPD		<input type="checkbox"/> Don't know	<input type="checkbox"/>
Lack of support from head teachers/school management		<input type="checkbox"/> No response	<input type="checkbox"/>
Others: _____			

Q: 29) What are the causes, sources and solution of the barriers/challenges you face in attending CPD trainings?

Challenges	Causes	Sources	Solutions
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Q: 30) What steps could QAED, Government of Punjab (GOP) and other training service delivery institutes take to facilitate PSTs to attend CPD trainings?

1. _____
2. _____
3. _____
4. _____
5. _____

Annex - II

In-depth Interview with PSTs (CPD)

Study	District	UR/RU	MT/FT	GS/BS	Series NO
DAL					

District: 1st 2 Alphabets, UR: Urban, RU: Rural, MT: Male Teacher, F: Female Teacher, GS: Girls School, BS: Boys School, Serial No: Form No

Full Name of Surveyor: First Name: _____ Last Name: _____

District: _____ Town: _____ Village: _____

Date: ____/____/____ Time: __:__ AM PM

Introduction: My name is _____. I am representing a consulting firm named DevTrio Consultants. We are conducting a research study to understand the preferences of PSTs for CPD options in Punjab and local levels. The information gathered will be used strictly for research purposes and your identity and anonymity will be ensured. The information is important to modify future CPDs you are offered so kindly think carefully and answer the questions. There is no right or wrong question so please answer as you deem fit. Do I have the permission to proceed to asking you relevant questions and record your answers? You are free to withdraw from this research at any time by telling the surveyor.

Thank you.

SEC.1. Existing issues in teaching primary classes

Q.1: How do like teaching in a primary school?

Q1.a. What challenges do you face in teaching primary classes and improving pupils' learning outcomes?

Q1.b. What are the reasons for those? (Please elaborate)

Prompt- Reasons for challenges-Lack of teachers' content knowledge; lack of expertise in teaching skills; lack of English language competence; large classes; lack of know how of multi-grade teaching; lack of facilities; lack of remedial help for pupils; lack of parental support; lack of practical/on demand CPD for teachers). What are the sources of challenges? **FOR THE INTERVIEWER- (steer the conversation towards CPD) Could CPD help?**

SEC.2. Existing support available to PSTs

Q2. How do you address the challenges you face in teaching primary classes and who provides the assistance to overcome those?

Prompt- By attending CPDs; with the help of head teachers, peers/colleagues/ school visits/self-study/coaching, mentoring; school initiatives, trainings offered by I/NGOs, other organizations, group study, self-study; involving parents; other ways.

Q.2.a. What are various sources of practical/on demand CPD and how often are these options available to you?

Prompt- head teachers, fellow teachers, senior teachers, friends from college, teachers from college, MTs, DTEs or others please specify

Prompt-Class observations , providing feedback, Coaching, Mentoring
Informal discussions, Sharing reading materials, Sharing sample students work
Demonstration of model lessons, Sharing lesson plans

SEC.3. Past CPD Received

Q.3: What are the strengths and weaknesses of the existing CPD, in terms of its quality, selection of topics, relevance and contents, materials used, length, appropriateness, management and CPD facilities?

Prompt- Does the existing CPD meet your specific classroom needs and how important is practical/on demand CPD for you to use newly learnt teaching strategies in your classrooms? Were there any areas for which you think you will require more CPD because your learning needs were different from others participants due to your class/school situation? What are those areas?

Q.4. What is the impact of the CPD on your teaching practice and your pupils?

Prompt- How do you think CPD has helped in your teaching practice? What changes do you see in your teaching practice and knowledge? What changes do you see in your pupils' learning outcomes?

SEC.4. Follow up assistance received after a face-to-face CPD intervention

Q.5. How comfortably do you use newly learnt teaching strategies ideas, theories and activities in your classrooms and who provides the assistance you require in your school after a CPD intervention? (Please elaborate)

Prompt- How frequently do you use newly taught teaching strategies, ideas, activities and theories in your classes? Are there any challenges you face in using the newly learnt teaching strategies?

Q. 6. Is there practical/on-demand CPD available to you and who provides it after face to face CPD intervention?

Q. 6.a. How often is the practical/on-demand CPD provided and how helpful is it?

Q. 7. Do you write action plans and use them for teaching your class? (please elaborate your answer)

Prompt- if yes who checks your action plans? What are the action plans based on? Do you meet your goals?

Q.8. Is your progress monitored and who monitors your progress after a face to face CPD intervention?

Prompt- Is feedback provided to you and is the feedback useful?

SEC.5. Modes of CPD received

Q.9: What are the strengths and weaknesses of existing CPD modalities and what challenges do you face in receiving CPD due to those? (Please give reasons and elaborate).

Prompt- What other modes of CPD delivery could be used to facilitate you? What do you think about online CPD? How important is face-to-face trainings for you and what are its benefits and gaps? Would you prefer to receive more of the same CPD and if not what would you change? What do you think about practical/on-demand CPD in your school?

SEC.6. Barriers to receiving CPD

Q.10. Which organisations offer CPD and what level of support do you receive from different authorities such as the SED, QAED and school management /head teachers, regarding participating in a CPD?

Prompt- Are there any barriers to receiving CPD for PSTs? What are the sources of those barriers? What is the result of those barriers? How could PSTs be facilitated to overcome those challenges?

Q.10.a. How could SED, QAED and PEELI facilitate you to participate in CPD?

SEC.7. Recommendations for change

Q.11. If given an opportunity, what steps would you take to modify the existing CPD and what challenges do you foresee in implementing the suggested changes? (Please elaborate your answer).

Prompt- How interested would you be to have access to CPD within your school/cluster? Who do you think could provide such support system/structure? How supportive do you think school management and others in leadership positions will be to partake in providing support, invest time and energy after school hours and take ownership of their teachers' learning/CPD?

Q.12. How do you think the changes you mentioned could be implemented and whose support would you need to do so?

Prompt- How prepared you think you and your colleagues are to take ownership of your own professional development? Do you think relevant stakeholders have the capacity and would be willing to participate and adopt the changes you have proposed? If not, how will you overcome the challenges?

Annex - III

Key Informant Interview with Head Teacher (CPD)

Study	District	UR/RU	MT/FT	GS/BS	Series NO
DAL					

District: 1st 2 Alphabets, UR: Urban, RU: Rural, MT: Male Teacher, F: Female Teacher, GS: Girls School, BS: Boys School, Serial No: Form No

Full Name of Surveyor: First Name: _____ Last Name: _____

District: _____ Town: _____ Village: _____

Date: ____/____/____ Time: __:__ AM PM

Introduction: My name is _____. I am representing a consulting firm named DevTrio Consultants. We are conducting a research study to understand the preferences of PSTs for CPD options in Punjab and local levels. The information gathered will be used strictly for research purposes and your identity and anonymity will be ensured. The information is important to modify future CPDs you are offered so kindly think carefully and answer the questions. There is no right or wrong question so please answer as you deem fit. Do I have the permission to proceed to asking you relevant questions and record your answers? You are free to withdraw from this research at any time by telling the surveyor. **Thank You**

SEC.1. Existing issues in teaching primary classes

Q.1: In your opinion, how effectively are the PSTs in teaching their classes and the primary school curriculum and how much support and guidance do they require for those?

Prompt- what are some of the key issues that PSTs face in teaching their classes and what are the reasons for those? Low students' learning outcomes; lack of parental support; inadequate practical/on-demand CPD; lack of remedial classes; others

REASONS-lack of content and pedagogical knowledge; dealing with large classes; lack of skills to teach multi-grade classes; Lack of English language proficiency; lack of motivation; others

SEC.2. Existing support available to PSTs

Q2. Who provides the support (practical/on-demand CPD) to overcome the challenges PSTs face in teaching their classes and curriculum and how is the support (practical/on-demand CPD) provided?

Prompt- By attending CPDs; with the help of head teachers, peers/colleagues/ school visits/self-study/coaching, mentoring; school initiatives, trainings offered by I/NGOs, other organizations, informal discussions with head teachers/ friends/ family, group study, self-study; involving parents; other ways.

Q.2.a. How often is the support (practical/on-demand CPD) available to PSTs?

Prompt- head teachers, fellow teachers, senior teachers, friends from college, teachers from college, MTs, DTEs or others please specify

Prompt-Class observations, providing feedback, Coaching, Mentoring
Informal discussions, Sharing reading materials, Sharing sample students work Demonstration
of model lessons, Sharing lesson plans

Q.2.b. Which organisations provide CPD opportunities to PSTs and what level of support do you think they receive from different authorities such as the SED, QAED and school management regarding participating in CPD sessions?

Prompt- what are the sources of hindrances in attending CPD trainings? What is the result of those hindrances? How could PSTs be facilitated to overcome those challenges?

Section: 2 Existing CPD

Q.3. What do you think of the existing CPD in terms of adequacy, quality, relevance, frequency, logistics, quality, CPD facilities and the impact of CPD on PSTs' teaching in their classes?

Prompt- what are the key strengths and weaknesses of existing CPD trainings and their mode of CPD delivery? Do you think teachers change their teaching practice after attending CPD and how long do they sustain the change?

Q.3.a. In your opinion, did the CPD meet your teachers' learning needs and were they practical and appropriate for your school specific situation? (Please support your answer with examples and reasons)

Prompt- Did the existing CPD offer solutions to issues that your school faces in the teaching and learning process? How much do you think your school and teaching staff could benefit from school specific, custom made trainings and on-site mentoring and coaching? (Please give reasons and examples)

Q.4. In your opinion, how comfortably do the PSTs use newly learnt teaching strategies in their classrooms and does the existing CPD meet PSTs' classroom/school specific needs? (Please elaborate)

Prompt- In your opinion, is on-site facilitation needed for PSTs to use newly learnt teaching strategies in their classrooms and provide trainings to address classroom/school specific issues? How frequently do you think on-site support is required to help PSTs make use of the new knowledge learnt during CPD trainings? How important it is for you and your teachers to partake in planning and designing CPD trainings? Would you and your teachers be interested in getting involved in the process of decision making regarding the CPD trainings you and your staff would like to attend? How could this be done in primary schools?

SEC.5. CPD modalities

Q.5: In your opinion, which one of the existing modalities of CPD has been most effective and has had a clear positive impact on PSTs' classroom practice and why? (Please elaborate).

SEC.4. Barriers to receiving CPD

Q.6. Which organisations offer CPD to PSTs and how comfortably do you think PSTs could participate in CPDs?

Prompt- Are there any challenges PSTs face in receiving CPD? What are the sources of barriers in receiving CPD? What is the result of those barriers? How could PSTs be facilitated to overcome those challenges?

Q.6.a. How supportive do you think are authorities such as the SED, QAED and school management in facilitating PSTs to participate in a CPD? (please elaborate)

Q.6.b. How could SED, QAED and PEELI facilitate PSTs to participate in CPD?

SEC.5. Recommendations

Q.7. If given an opportunity, what steps would you take to modify existing CPD and how could QAED and PEELI facilitate the change? (Please elaborate your answer).

Prompt- How willing would you be to spend extra hours in schools, provide leadership and facilitate your teachers to benefit from ongoing mentoring and CPD opportunities? In your opinion, do you and other stakeholders have the capacity to manage the changes you proposed?

What kind of support do you think you will require in implementing the changes in CPD trainings? What steps will you take to encourage your teachers to participate and take ownership of the initiative and develop a culture conducive to collaborative learning for PSTs and help them take ownership of their own learning with the help of their peers and colleagues? Do you think relevant stakeholders would be willing to adopt the changes you suggested?

Q.7.a. How do you think the changes you recommended could be implemented in primary schools and what challenges do you foresee in doing so?

Q.7.b. What mode of CPD delivery would be best?

Prompt- What challenges do you foresee in initiating changes in existing CPD? What steps would you take to initiate those changes? Do you think relevant stakeholders have the capacity and are willing to participate and make use of the changes you propose? If not, how will you overcome those challenges?

Annex - IV

Questionnaire – KIs with Representatives of QAED and PEELI

Full Name of Surveyor: First Name: _____ Last Name: _____

District: _____ Town: _____ Village: _____

Date: ____/____/____

Time: ____:____ AM

PM

Introduction: My name is _____. I am representing a consulting firm named DevTrio Consultants. We are conducting a research study to understand the preferences of PSTs for CPD options in Punjab and local levels. The information gathered will be used strictly for research purposes and your identity and anonymity will be ensured. The information is important to modify future CPDs you are offered so kindly think carefully and answer the questions. There are no right or wrong questions so please answer as you deem fit. Do I have the permission to proceed to asking you relevant questions and record your answers? You are free to withdraw from this research at any time by telling the surveyor. **Thank you.**

Section: 1 Existing challenges in teaching primary classes and sources of professional development

Q.1: In your opinion, what are key issues that PSTs face in teaching their classes and how do they overcome those?

Prompt- lack of content and pedagogical knowledge; dealing with large classes; lack of skills to teach multi-grade classes; Lack of English language proficiency; lack of motivation; lack of parental help;

*Prompt-*How do the PSTs address those issues? By attending CPDs; with the help of headteachers, peers/colleagues/ school visits/self-study/coaching, mentoring; school initiatives, trainings offered by I/NGOs, other organizations, group study, self-study

Q.2.Which organizations offer CPD trainings to PSTs and what level of support do you think they receive from different authorities such as the SED, QAED and school management regarding attending CPD trainings?

Prompt- what are the sources of hindrances in attending CPD trainings? What is the result of those hindrances? How could PSTs be facilitated to overcome those challenges?

Section: 2 Existing CPD

Q.3.a: What do you think of the CPD opportunities currently offered to PSTs in terms of adequacy, quality, relevance, frequency, logistics, quality, training facilities and the impact of CPD on PSTs' teaching in their classes?

Prompt- what are the key strengths and weaknesses of existing CPD trainings and mode of training delivery?

Q.4: In your opinion, how comfortably do PSTs use newly learnt teaching strategies in their classrooms and does the existing CPD meet PSTs' specific classroom/school based needs? (Please elaborate)

Prompt- *In your opinion, is on-site facilitation needed for PSTs to use newly learnt teaching strategies in their classrooms and provide trainings to address classroom/school specific issues? How frequently do you think on-site support is required to help PSTs make use of the new knowledge learnt during CPD trainings?*

Q.5: In your opinion, which one of the existing modalities of trainings has been most effective and has had a clear positive impact on PSTs' classroom practice? (Please give reasons and elaborate).

SEC.5. Recommendations

Q.6: If given an opportunity, what steps would you take to improve CPD trainings and what changes would you introduce in the training delivery system? (Please elaborate your answer).

Q.7: How do you think the changes you mentioned could be implemented best in primary schools and what mode of training delivery could be used to impart such trainings effectively?

Prompt- *What challenges do you foresee in initiating changes in existing CPD? What steps would you take to initiate those changes? Do you think relevant stakeholders have the capacity and are willing to participate and make use of the changes you propose? If not, how will you overcome those challenges?*

Compiled by



DevTrio
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Submitted to



**BRITISH
COUNCIL**

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